1988

Socioeconomic and process variables influencing households' satisfaction with future plans, financial status and quality of life

Olive Mwihaki Mugenda

Iowa State University

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Socioeconomic and process variables influencing households' satisfaction with future plans, financial status and quality of life

Mugenda, Olive Mwihaiki, Ph.D.
Iowa State University, 1988
Socioeconomic and process variables influencing households' satisfaction with future plans, financial status and quality of life

by

Olive Mwihaki Mugenda

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY Major: Family Environment

Approved:

Signature was redacted for privacy.

In Charge of Major Work

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For the Major Department

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For the Graduate College

Iowa State University
Ames, Iowa

1988

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INTRODUCTION

Quality of life, though difficult to define, is a concept that elicits much interest and has stimulated much research in recent years. Most people have a strong personal interest in their own quality of life and often an active concern for the quality of life of certain other people—family members and friends (Andrews, 1986).

The term quality of life refers to a person's judgement of quality covered in such measures as crowding, income levels, health, finances, and other life domains (Campbell, Converse, & Rodgers, 1976). Quality of life may also refer to privately known and privately evaluated aspects of life. Gerson (1976) defined quality of life as the degree to which an individual succeeds in accomplishing his/her desires despite the constraints put upon by nature or social order.

Andrews (1986) outlines three interests in quality of life research that are more evident now than a decade ago. First, there is a lot of interest in describing the quality of life of particular national groups, defined demographically or culturally, and comparing them with each other. Second, there is interest in how time-related phenomena link to quality of life, that is the use of time, and the effects of age, period and cohort. Third, there is a new interest in studying social and psychological dynamics of well-being. A fourth interest which has persisted for a longer period
relates to how quality of life relates to sociodemographic variables (for example, income, education, and age).

The present study focuses on some of the interests outlined above. The study seeks to identify the socio-demographic factors that influence satisfaction with quality of life. It goes further to investigate some of the process and subjective variables that contribute to satisfaction with quality of life. The study uses family resource management system theory proposed by Deacon and Firebaugh (1987). The theory helps to show that in addition to socioeconomic factors (inputs), the process of transformation (throughput) is also important in determining the outcome or output.

The objectives of this study are threefold: To

1. identify the demographic and economic factors that influence satisfaction with quality of life.

2. study the causal relationship between communication, money management practices, satisfaction with financial status, and satisfaction with quality of life.

3. ascertain whether net worth, financial planning and satisfaction with future plans contribute to one's satisfaction with quality of life.

Theoretical Background

This study uses family resource management system, described by Deacon and Firebaugh (1987), as a theoretical
base. Family resource management system is composed of inputs, throughputs, and outputs.

Specific forms of inputs entering into the system are classified as resources and demands. Demands are either goals or events that require action. Goals are defined as value based objectives that give direction and orientation to action. Events are unexpected or low probability occurrences that require action. Resources are means of meeting demands and may either be material or human. Throughput is defined as transformation of matter, energy and/or information by a system from input to output (Deacon & Firebaugh, 1987). The final component of the management system is output. Deacon and Firebaugh (1987) define it as met demands. Output could be in the form of satisfaction derived as a result of achieving a desired end.

In this study, the input component of the management system is comprised of sociodemographic factors and economic factors. The throughput component is comprised of the transformation processes of communication and money management practices, and financial planning. Financial planning consists of such future plans as having life insurance, financial goals, retirement plans, and written future plans. The output component of the managerial system is comprised of satisfaction with financial status, quality of life, and future plans (retirement and estate planning).
Explanation of Dissertation Format

The format of this dissertation has been approved by the Graduate Faculty at Iowa State University. The research is presented in manuscript form suitable for publication in professional journals. The dissertation consists of an introduction that briefly discusses the various ways in which quality of life has been studied. The introduction also consists of a theoretical background on which the two manuscripts are based.

Two manuscripts follow in Sections I and II. The first section assesses the causal relationship between communication, money management practices, satisfaction with financial status, and quality of life. The manuscript was written for submission to Home Economics Research Journal. The second section investigates the effect of net worth, financial planning and satisfaction with future plans on satisfaction with quality of life. The second manuscript was written for submission to the Journal of Consumer Affairs.

The final section summarizes the whole research and presents overall findings. Conclusions, recommendations for future research, and implications for educators, financial planners and counselors are included here.
REVIEW OF LITERATURE

The concepts which will be discussed in this section are: 1) communication, 2) money management practices, 3) net worth and satisfaction with financial status, 4) financial planning, and 5) satisfaction with quality of life.

Communication

Communication is a very broad concept. It is quite accurate to speak of communication whenever an event in one system affects, influences or alters an event in another system. Communication may be viewed as how people exchange feelings and meanings as they try to understand one another and come to see problems and differences from the other persons point of view. Bienvenu (1970, p. 26) defined communication as:

"The process of transmitting feelings, attitudes, facts, beliefs and ideas between living beings. It is not limited to words, but also through listening, silences, facial expressions, gestures, touch, and all the other nonlanguage symbols and clues used by persons in giving and receiving meanings."

Deacon and Firebaugh (1987, p. 105) define communication as "using messages to engender meaning in the minds of others." Communication may be verbal or nonverbal, and both types of communication are important in families with varying proportions depending on the subject of communication. There are various ways in which communication in relation to
financial management and quality of life has been studied. Swift (1985) studied frequency of communication and how it affects solvency status of families. Berry and Williams (1987) looked at frequency of communication and how it relates to income satisfaction and satisfaction with quality of life. Savage (1980) studied ease of communication, satisfaction with communication, and how they affect quality of life.

Gilbert (1976) makes an important point that communication should not be characterized by those who communicate and those who do not. Rather, the content (what is said), the valance (positiveness or negativeness of the content), and the frequency of communication are the variables that are critical to communication.

Communication is an important component of the family resource management system (Deacon & Firebaugh, 1987). Effective communication is essential for sharpening goals, clarifying standards involving more than one person, and for discussing satisfaction and dissatisfaction with outcomes (Deacon & Firebaugh, 1987). Communication is also important in management because when system members communicate effectively, the chances of meeting goals of the system are enhanced.

The type of communication differs depending on the family system. When a system is a closed system, whereby the
family system tries to avoid changes and seeks to keep "status quo", communication is likely to be focused on decisions and instructions. When a system is an open system whereby the family system is flexible and willing to make changes, communication is likely to be primarily in the form of information sharing, giving advice or counsel (Deacon & Firebaugh, 1987).

Barriers from outside or within the family may interfere with communication among family members. Discrepancies between communicators in age, status, education, values and language are potential communication barriers within the family. Deacon and Firebaugh (1987) argue that adjustment to life cycle changes provide constant potential for development of communication barriers because each member is moving through his or her own life changes. There should be continuing efforts to keep channels open to minimize interference and the development of communication barriers.

Most studies dealing with communication focus on marital communication. Navran (1967), in his effort to investigate the relationship between marital satisfaction and communication, found that happily married couples talked more to each other. Savage (1980) found that employment of wives leads to lower level of ease of communication while education leads to higher level of ease of communication with their partners.
Swift and Hira (1987) studied the interaction patterns in various finance areas. Their findings indicated that money managers who communicated more were likely to be younger, married, more educated and residing in larger households. Swift and Hira (1987) also found that the more the money managers communicated, the higher their solvency status. The writers argued that the managers who communicated frequently would have the benefit of greater amounts of information and that therefore would represent solvent households.

**Financial Management Practices**

Financial management can be thought of as planning the use of financial resources and then implementing the plans to meet family demands. The planning and implementing functions of management translate individual aspirations and resources into spending and saving patterns (Deacon & Firebaugh, 1987). Jacobsen (1976) points out that financial management practices involved managing money to meet the need for food, clothing, medical, shelter, entertainment, insurance, and education. Financial management is an integral part of every family's activity and each family has its unique management techniques. Researchers differ in the way they operationalize financial management practices. Ferber and Francesco (1972) proposed that financial management decisions involve money management, saving, spending, and asset management.
Guadagno (1981), utilizing factor analysis, found four domains of financial management: handling money, paying bills, budgeting, and keeping records. In her study, Mueller (1983) used seven variables to measure money management tasks. They were 1) financial goals classification, 2) division of responsibility, 3) saving practices, 4) credit card practices, 5) bill payment patterns, 6) strategy of meeting event demands, and 7) record keeping. In their study of financial management practices of low income urban families, Schnittgrund and Baker (1983) used budgeting, saving behavior and the use of credit as their measurement of financial management practices. Researchers on management practices have found significant relationships between financial management practices and socioeconomic characteristics.

**Socioeconomic factors**

**Household income** Whether money or nonmoney, household income influences financial management practices a great deal. Williams, Hall, and Deck (1976) found that families with steady income had fewer and less intense financial problems compared to those with undependable fluctuating income. In his study, Richards (1967) examined the financial management practices of consumers. He found that the poor spend more of their income than others do on the basic needs. This study also reported that on the
average, the poor did not buy durable goods as frequently as higher income families, and that they had little or no savings.

Richards' findings were supported by Dollar (1982) who found that households with higher income levels tend to save a large proportion of their income and figure out net worth more effectively than households with lower levels of income. Sahlberg (1977) studied the factors that influence family financial planning and found that as the level of net worth increased, the households tended to make longer range spending plans which were often written plans. Sahlberg suggested that low net worth or high debt might motivate planning to increase net worth.

**Education**

Some studies have supported the notion that education influences financial management practices. People with little formal education have inadequate conceptual tools for planning and making decisions. Jacobsen (1976) and Romino (1970) found that the education of the wife was related to the practice of credit usage, savings, insurance purchases, and record keeping. Among wives with more education, the practice of saving was more frequent than among wives with less education. This finding was supported by Mueller (1983) and Dollar (1982).

Other studies have found a negative relationship between education and management practices (Huguley, 1976; Sahlberg,
Brimmer (1981) found that a larger proportion of the bankrupts completed high school education or had been to college. This was supported by Hira and Mugenda (1987b) who found that the education level of the bankrupts was comparable to the educational level of the general population. These findings show that high educational level does not guarantee good management practices.

**Household size and marital status**

Household size and marital status are other factors that affect management practices. Dollar (1982) found a negative relationship between household size and saving practices. This finding could be related to the inadequacy of income which occurs in large households. Marital status has also been associated with money management practices. Mueller (1983) found that married money managers were more likely to share the decision making responsibilities with their partners.

**Age**

Age has been found to be related to management practices. Mueller (1983) found that older money managers had fewer financial goals than the younger ones probably because the older ones may have met most of their goals. Mueller (1983) also found that the older money managers incurred credit finance changes less frequently. Huguley (1976) found a negative relationship between age and management practices while Wetters (1976) did not find any significant relationship.
Employment

Employment of money managers has been found to be strongly related to management practices, especially the practices of setting financial goals (Sullivan, 1982). However, having a secure job should not be construed to mean that one will have better management practices. Hira and Mugenda (1987b) and Sullivan (1982) found that out of those respondents who had declared bankruptcy, 72 percent were employed.

Financial Planning

An important component of financial management practices is financial planning. Harris (1970, p. 1) defines planning as "the arrangement of parts according to a design; a mode of procedure; a process; a way; a method." Deacon and Firebaugh (1987) defined planning as a series of decisions about future standards and/or sequences of action. Financial planning for future needs is important because to provide present needs and neglect the future is only a partial accomplishment. One of the dependent variables in this study is satisfaction with future plans and it focuses on estate and retirement planning.

Estate Planning

Estate planning is defined as the "disposition of assets and affairs in the way best calculated to protect ones family now and in the future" (Harris, 1970, p. 1). Whitney (1979) outlines the estate planning process to include 1)
development of pertinent facts, 2) identification of problems in an existing plan (if any), 3) formulating a tentative plan consistent with one's situation, 4) testing one's estate plan, 5) implementing the plan, and 6) periodic review of the plan. There has been a misconception that estate planning is for the older couples, or just for the very wealthy people (Harris, 1970). Contrary to this, the young family with young children is urgently in need of advice as to the best means of protection for the family in the event of the head of household's untimely death. Likewise a family of modest means has need to plan in order to increase the estate and transmit the maximum amount. Harris (1970, p. 9) summarizes the importance of estate planning by observing that:

"The larger your unplanned estate, the greater amount one pays probate and administration expenses. The smaller your unplanned estate, the more serious becomes any reduction in the net amount available to your family."

Harris (1970) outlines the objectives of estate planning to be (1) to arrange the affairs of the family unit so as to obtain the maximum benefits of principal and income for the family and to the fullest extent possible, pass on the family property with the least diminution and (2) to protect the family unit and achieve economic and mental security. This means the accumulation of assets sufficient to insure protection and to dispose of them in a manner best calculated to preserve the family relationship.
Harris (1970) stated the advantages of estate planning as 1) avoiding the burden of taxes as much as possible, 2) to be certain that one's property is disposed of in the way one desires rather than leaving the decision to the state, and 3) to retain assets and transfer them to one's beneficiaries with the least shrinkage possible. Having a will is essential in estate planning because one is able to provide for those that one wishes to share in the estate, select the best person suited to manage the estate, and give the executor powers of management and investment that an administrator does not have (Harris, 1970).

Retirement planning

Retirement refers primarily to the final phase of the occupational life cycle. Even though age 65 is generally accepted as a desirable age for retirement, most people in the U.S. retire before they are 65 years old (Ware, 1984). Atchley (1976, p. 1) defines retirement as "a condition in which an individual is forced or allowed to be employed less than full time, and in which one's income is derived at least in part from a retirement pension earned through prior years of service as a job holder." Retirement planning is another way of planning for the future. It includes financial planning, creative use of leisure, legal aspects, health, housing and work opportunities (Atchley, 1976). Financial planning for retirement involves examining one's financial
condition since this determines largely when one can retire and how to live thereafter (Ware, 1984). In determining one's financial status, one should examine total income, expenses and assets. Ware (1984) suggests that it is also important to figure out one's net worth (assets minus liabilities). Even if age 65 is generally accepted as the desirable retirement age, retirement planning should be done earlier in life so that one is well prepared when retirement finally comes or when early retirement becomes necessary. Many specialists think that between age 40 and 55 is the best time to start retirement planning because this is the period when most people have their first opportunity to make appreciable savings (Ware, 1984). However, Ware (1984) goes further to say that there is no set age to begin planning. One should think about it at whatever age and continue adjusting plans to fit one's needs on retirement day.

Retirement planning is very crucial if one is to be financially secure in retirement. Ramsey (1984) noted that financial adequacy in retirement is a direct result of financial planning during most of the individual's working life or at least during the later portion. This suggestion was further supported by Ware (1984) who says that sufficient income to live in comfortable dignity does not guarantee a happy retirement but it increases the chances. Furthermore, Ware (1984) found that the lack of financial security because
people did not earn enough, plan well or save enough for their retirement needs is one of the biggest problems among a majority of older citizens. Atchley (1976) found that adjustment to retirement is greatly enhanced by sufficient income. He noted that making financial plans for retirement may help to ensure sufficient income in retirement.

Despite the advantage of retirement planning, many people do not plan. Johnson and Strother (1962) found that even though plans concerning activities after retirement tended to vary with age, the majority of respondents in their study had not made any plans even in the highest categories of age. Monk (1971) observed that even though the majority of people in his study were making financial plans, the assortment of assets was a symptom of affluence and of saving rather than a deliberate preparation for retirement.

There are various factors associated with lack of retirement planning. (1) Just like in estate planning, there is the misconception that retirement planning is for those who are about to retire. (2) Some people state the unpromising economic situation in the country as a hindrance to planning. (3) Some people have doubts as to whether they will ever make it to retirement age and (4) lack of sufficient income to warrant any planning (Monk, 1971). Dennis (1984) did a study of minorities and concluded that unemployment, lack of education, health problems, and ignorance
all lead to lack of planning for retirement. However, very few studies have been done using the general population.

A few studies have looked at causes of satisfaction with retirement planning. Ware (1984) observed that a 'retirement income gap' can lower the satisfaction with retirement plans and hence life satisfaction. A retirement gap refers to the disparity or gap between retirement income and expenses. If such a gap shows up while retirement plans are made, the family tries to work towards closing the gap. If the gap cannot be closed or narrowed, then dissatisfaction with retirement plans follows. It is important to identify the factors that predict satisfaction with financial planning in order to help people be better planners.

**Net Worth**

Net worth is derived from subtracting family's liabilities from its assets (Williams & Manning, 1972; Mueller, 1983; Berry & Williams, 1987). Net worth is an important element in a family's economic well-being because it is a major indicator of family financial strength and security at a particular point in time. As Williams and Manning (1972) observed, net worth is a fund and not a flow as is income. Net worth is a better picture of a family's position than total assets because it shows how assets are reduced by liabilities. A positive net worth has a higher value of assets than liabilities. As the ratio of liabilities to
assets increases, economic strength decreases (Williams & Manning, 1972).

Pennock and Armstrong (1966, p. 3) observed that "net worth is usually a product of past income and future prospects of the family." If a family's income in the past exceeds its expenditure, its net worth increased (Williams & Manning, 1972).

Other terms that have been used to describe the combination of assets and liabilities are "balance sheets, net assets and financial statements" (Williams & Manning, 1972, p. 104). Researchers have also used different ways to estimate households' finances at a given point. Hira and Mueller (1987) used a family's debt to income ratio to ascertain a household's solvency status. In their study of the elderly, Weisbrod and Hansen (1968) recognized the inadequacies of the single-dimensional money income measure to assess relative and absolute economic welfare. They noted that an income-net worth measure (where income and net worth are both used to assess the economic welfare) is especially appropriate for assessing the economic welfare of the elderly. They argued that since most older people have higher ratios of net worth to current money income, as well as shorter life expectancies, their economic position will be best reflected by the inclusion of net worth.

Projector and Weiss (1969) criticized the income-net
worth measure proposed by Weisbrod and Hansen (1968) because it does not apply to all age groups. They argued that with a sample of varying ages, it would be difficult to assess life expectancy and to include it in calculation of income-net worth measure. Projector and Weiss (1969) also argued that in addition to net worth, spending and saving behavior of consumers must be taken into account when estimating their financial status. However, for the general population, net worth is a better measure of one's financial status than income or assets because it excludes debts. Net worth is also less likely to fluctuate from year to year as would income.

A few studies have been done to ascertain the factors that influence net worth accumulation and change. In a study conducted by the Federal Reserve Board during 1962 and 1963, age of family head, size of income, home ownership status, and self employment were found to be positively associated with net worth position. Williams and Manning (1972) examined the changes in family net worth over a two year period. They concluded that net worth change can not be said to be merely a result of past income and future prospects. In their study, neither past income nor perceived and anticipated progress were found to be significantly associated with net worth change. However Williams and Manning (1972) found that high current income, increased real estate assets and
farm assets, and decreased percentage of durable goods expenditure obtained by use of credit were significantly associated with increased net worth. Williams and Manning (1972) also found that highest net worth was found in the middle age group, that is between 40 and 44 years.

Foster (1981) explored the relationship between a wife's earnings and family net worth accumulation. She found that family income made the greatest contribution to explained differences in net worth. Contrary to Williams and Manning's study, Foster (1981) found that a family's net worth is to a large measure a result of past saving behavior. She also found that another contributor to the total variance in net worth was home ownership status. Families who were homeowners had higher net worth than nonhomeowners. When controlled for other factors, net worth was found to be higher among working wife families.

Foster and Metzen (1981) did a study with net worth as a dependent variable. Their major finding was that absolute amount of income had the most important influence on net worth. They also found that wife's earnings made an important contribution to family net worth position.

Satisfaction with Financial Status

Researchers have used different ways to measure satisfaction with financial status. Some have used one item to measure satisfaction (Hafstrom & Dunsing, 1973), while others
have used several items and computed a satisfaction index. Winter, Bivens, and Morris (1984) measured satisfaction by summing up three satisfaction scores. In their study, satisfaction index included scores on satisfaction with current total family income, satisfaction with present level of living, and satisfaction with current savings. Hafstrom and Dunsing (1973) did a study which focused on the respondents' satisfaction with their level of living. They found that the respondents' perception of the adequacy of family income and home ownership were the most important factors in explaining satisfaction with level of living. The more adequate the homemaker reported family income to be, the more satisfied the homemaker was with the level of living.

Hira and Mugenda (1986) studied the factors that influence households' satisfaction with level of living and level of assets. The results showed that age was positively related to households' satisfaction with level of living and level of assets. Income and amount saved were also positively related to satisfaction level. The money managers with high level of income and savings reported more satisfaction with their level of living than those with low income and savings.

Berry and Williams (1987) used income satisfaction as one of their dependent variables. They found that family income, perceived future financial security, and disagreement
over family finances explained 36 percent of the variation in income satisfaction for the wives model. Family income and perceived future security explained 35 percent of the variation in income satisfaction for husbands. Berry and Williams also found that net worth had no measurable effect on income satisfaction.

Winter et al. (1984) analyzed the factors that affect the changes in family's financial situation and the effect of reported changes on their satisfaction level. They used family satisfaction with financial well-being as their dependent variable. They found that households who reported a high level of income were more satisfied with family financial situation than those who reported low levels of income. Size of wealth and employment status also contributed to high satisfaction with financial situation. Hira and Mueller (1987) studied the influence of selected socioeconomic factors and management practices on households' solvency status. Their findings show that money management practices were more significant in predicting households' solvency status than socioeconomic factors. The results show that the manner in which a family allocates its human and material resources greatly influences its economic well-being.
Quality of Life

Definition

Researchers have had problems in reaching a consensus on defining the concept of quality of life. One contributing factor is the fact that quality of life is a concept that permits many different definitions, and for which there is no widely agreed upon index that allows researchers to monitor changes in that quality. Quality of life can be defined as a "sense of well-being, a dynamic blend of satisfactions that differ from one person to another and changes over time" (The Quality of American Life in the Eighties, 1980, p. 11). This definition presumes that Maslow's two levels of needs must be met. These are first tier needs or deficiency needs which must be met to ensure human survival. These deficiency needs include freedom from hunger, poverty, sickness, illiteracy, and other hazards of life. The first tier needs can be met by the provision of specific goods and services. The second tier of needs has to do with growth needs and the satisfaction and enjoyment of nonmaterial ends. Gerson (1976) defined quality of life as the degree to which an individual succeeds in accomplishing his/her desires despite the constraints put upon by nature or social order.
Measurement

Quality of life has been used synonymously with concepts like life satisfaction, global well-being, and subjective well-being (Diener, 1984; Verwayen, 1984). Quality of life may be seen as a broader concept because, together with subjective measures, it also incorporates objective measures of well-being. While earlier research equated quality of life with level of material well-being, much attention has been focused on the inclusion of some subjective measures (Diener, 1984). In recent years, there have been attempts to study dimensions of well-being such as change in feelings of personal satisfaction with various domains. However the understanding of the relationship between objective and subjective responses and the development of reliable indicators by which to measure advances in individual and social well-being are still relatively underdeveloped (The Quality of American Life in the Eighties, 1980).

Lack of consensus about the definition of quality of life has made it increasingly hard to measure it. Economic indicators, social indicators and subjective indicators have all been used to measure quality of life. Economic indicators include factors like income and assets, and are mostly used to assess the achievement and satisfaction with Maslow's first tier needs (The Quality of American Life in the Eighties, 1980). Social indicators of quality of life have
been defined as "the operational definition or part of the operational definition of any one of the concepts central to the generation of an information system descriptive of the social system (Carlisle, 1972, p. 25). This definition differentiates a social indicator from just any social science variable by making it a characteristic of the social system. Andrews and Withey (1976) also note that social indicators in a given study should be limited yet comprehensive set of coherent and significant indicators that can be monitored over time and that can be disaggregated to the level of the relevant social system. Andrews and Withey (1976) compiled a list of life concerns which helped to identify social indicators. The list included concerns about health, family life, marriage, and job accomplishment. Researchers who use social indicators focus on the development of social indicators that are aggregate, objectively measured indices argued to be related to fundamental social goals (Juster & Courant, 1986). Subjective measures have been used by various researchers (Campbell et al., 1976; Berry & Williams, 1987). Most subjective measures mainly deal with perceptions, aspirations, and expectations. Berry and Williams (1987) used satisfaction with income and marriage as subjective indicators of quality of life. Researchers who use subjective measures assume that utility can be measured ordinally. In attempting to measure quality
of life, it is important to incorporate economic, social and subjective indicators.

**Satisfaction with quality of life**

The concept of satisfaction has some problems which should be mentioned. First, satisfaction is a highly personal experience which is heavily influenced by individuals' past experience, and current expectations. Hence, individual needs differ greatly from one person to another and what will satisfy one person may be unsatisfactory to the other.

Secondly, some individuals may find the same circumstances thoroughly unsatisfactory at one stage of life but quite acceptable at another. However, Campbell et al. (1976) notes that differences in level of need does not invalidate the meaning of satisfaction as a measure of fulfilled need.

Satisfaction with quality of life has been measured in various ways. Cantril (1965) assessed the respondents' satisfaction with various specific domains of life using an eleven-point scale with best possible situation on one extreme and worst possible situation on the other extreme. Campbell et al. (1976) assessed the respondents' satisfaction with specific areas of their lives. Some of these areas included health, financial, and social status. Campbell et al. (1976) also used a one item general measure of satisfaction with overall quality of life.

In their study, Campbell et al. (1976) also used a
"Semantic differential items scale" which was developed by Osgood, Suci, and Tannenbaum (1954). This method of measurement consists of opposite adjectives placed at the extremes of a 7-point scale. A list of descriptive items are provided and the respondents choose among the less or more pleasurable adjectives.

Satisfaction with quality of life and demographic factors

**Education**

Education is probably the most important single factor shaping one's life in a modern society. One's educational level sets the limits to the type of career one enters, how much money one earns, and how much social prestige one possesses. Inglehart and Rabier (1986) found that subjective well-being varies somewhat with education. The more educated are happier and more satisfied with their lives than the less educated. Campbell et al. (1976) also found a positive relationship between education and a sense of well-being. Campbell (1981) suggests that although education may serve as a resource for a person, it may also raise aspirations and alert the person to alternative types of life. Bradburn and Caplovitz (1965) found that education seemed to interact with other variables like income. Several studies have found no significant effect of education on quality of life when other socioeconomic factors are controlled (Spreitzer & Snyder, 1974).
Household size There is very little literature on the influence of household size on satisfaction with quality of life. Some research has been done on the effect of the number of children. Campbell et al. (1976) found that number of children was not correlated with reported life satisfaction.

Age A great deal has been written about the relativity between age and subjective well-being. Earlier studies found that young people were happier than older people (Bradburn & Caplovitz, 1965; Wessman, 1957). In some studies, researchers have found no relationship at all between age and quality of life (Andrews & Withey, 1976; Spreitzer & Snyder, 1974). However other studies have found age to be positively related to satisfaction with quality of life (Cantril, 1965; Jackson, Chatters & Neighbors, 1986; Campbell et al., 1976). Ortiz and Arce (1986) reported that older respondents were more satisfied with quality of life than younger respondents but the differences were not significant. These varied findings may be due to the fact that (1) some researchers use very narrow age ranges so that the correlations reflect the ups and downs within those few years; (2) some studies do not control for other factors that tend to covary with age; and (3) the large-scale studies have been cross-sectional and not longitudinal, and therefore may reflect differences in cohort groups and not age
differences (Martinson, Wilkening & McGranahan, 1984).

**Marital status** Another factor that might be expected to have a major impact on satisfaction with quality of life is marital status. Married people have been found to be more satisfied than single ones. Inglehart and Rabier (1986) found that the married people were more satisfied with life than single ones although the differences were modest. In their study, separated persons had the lowest rank in quality of life satisfaction. Similar findings were reported by Ortiz and Arce (1986). In their study on satisfaction with quality of life among blacks, Campbell et al. (1976) found that single, separated and divorced blacks were significantly less happy and less satisfied with their lives in general.

**Employment status and occupation** Campbell et al. (1976) found that unemployed people were the unhappiest group even when income differences were controlled, suggesting that unemployment has a devastating impact on subjective well-being for many persons that goes beyond the obvious financial difficulties involved (Diener, 1984). Some researchers have found a positive relationship between employment and satisfaction with quality of life. Inglehart and Rabier (1986) reported that in the 1970s and 1980s, executives and professionals ranked highest on both life satisfaction and happiness. However in their study of black Americans, Jackson et al. (1986) did not find any
relationship between employment and satisfaction with quality of life.

Gender  A lot of studies have found little difference in global happiness or satisfaction between the sexes (Andrews & Withey, 1976; Campbell et al., 1976; Gurin et al., 1960). Among black Americans, Jackson et al. (1986) found no relationship between gender and satisfaction with quality of life. On the other hand, Campbell et al. (1976) reported that black women respondents were more negative than the rest of the sample population in their overall sense of well-being and in their satisfaction with various domains of life. Inglehart and Rabier (1986) did a study of ten nations including the U.S.A. and Britain and found that despite very substantial objective differences in career opportunities, personal income and opportunities for self-expression, women were not less satisfied with their lives than men. A few studies have reported interaction between gender and age. Medley (1980) and Spreitzer and Snyder (1974) found that younger women were more satisfied with life than younger men, and older women were less satisfied than older men. Diener (1984) points out that in general the differences in satisfaction between sexes is never great.

Satisfaction with quality of life and economic factors

Economic factors discussed in this section include income, net worth, financial assets and satisfaction with
financial situation. Income has been found to predict sense of well-being. Respondents with low income were found to be dissatisfied with their well-being (Strumpel, 1978; Campbell et al., 1976). Campbell also found that the relationship between income and well-being was a conditional one that only occurred at certain educational levels. Campbell et al. (1976) found that a sense of well-being was strongly related to income when college graduates were removed from the sample. The relationship was nonexistent among people who had college degrees. In their study, Berry and Williams (1987) found that income was the most important predictor of satisfaction with quality of life among husbands while for wives sample income was second to marital satisfaction in predicting satisfaction with quality of life. Different results have been found by other researchers. According to Bradburn and Caplovitz (1965) income made little difference on the satisfaction with quality of life for young families. In their study, Inglehart and Rabier (1986) found that income only explains a very small part of the variance in subjective well-being among most European public.

Campbell et al. (1976) looked at the objective financial situation and the satisfaction with financial situation and how the two are related to sense of well-being. They found that the relationship between satisfaction with resources and the sense of well-being was considerably stronger than the
more remote relationship between the objective resource and the sense of well-being. This finding was similar to the one reported by Spreitzer and Snyder (1974). They found that one's perception of financial adequacy more than objective economic indicators was a substantially stronger indicator of quality of life satisfaction. Abdel-Ghany (1977) studied a sample of the elderly and found that economic factors which predicted satisfaction with quality of life were income and financial assets. However comparing social indicators and economic indicators, social indicators were the most important predictor of quality of life satisfaction among the elderly. Berry and Williams (1987) used net worth as one of their independent variables. They found that net worth was positively related to satisfaction with quality of life.

**Process variables**

Most studies on quality of life have focused on objective and subjective indicators of well-being. Very few studies have looked at the effect of process or dynamic variables such as management practices, communication and financial planning on satisfaction with quality of life (Berry & Williams, 1987). Berry and Williams (1987) studied the relationship between personal money management and satisfaction with quality of life. Various activities performed by husbands and wives were summed to come up with a composite scale of personal money management. Their results showed
that there is a positive relationship between personal money management and quality of life. Hira and Mueller (1987) found that money management practices were positively related to household solvency status.

Walker, Trembley and Parkhurst (1984) found that perceived money management quality was positively associated with satisfaction with quality of life while the actual money management practices were not. The authors concluded that families who were using effective money management practices did not necessarily enjoy a higher quality of life satisfaction unless they realized that they are using the resources in the best way possible.

Berry and Williams (1987) used frequency of communication as one of their independent variables. They found that frequency of communication was significantly related to satisfaction with quality of life. The higher the level of communication, the lower the perceived future financial security and the higher the satisfaction with quality of life. Frequency of communication was however not significantly related to income satisfaction (Berry & Williams, 1987).

Savage (1980) studied the relationship between ease of communication, satisfaction with communication and satisfaction with quality of life. The findings indicated that satisfaction with quality of life for husbands was positively
related to ease of communication but this relationship was not significant for the wives. Savage (1980) also found that satisfaction with communication was positively related to satisfaction with quality of life for both husbands' and the wives' models.

There is evidence that frequency of communication predicts marital satisfaction (Gilbert, 1976). There is also evidence that marital satisfaction predict satisfaction with quality of life (Berry & Williams, 1987). These findings indicate that there could be an indirect relationship between communication and satisfaction with quality of life via marital satisfaction or other intervening variables.

Financial planning consists of estate and retirement planning and any planning intended to cater for future expenses and emergencies. While no studies have been done using satisfaction with estate planning as a predictor of life satisfaction, Ware (1984) found that satisfaction with retirement planning is a predictor of life satisfaction.
SECTION I

ASSESSING THE CAUSAL RELATIONSHIP BETWEEN COMMUNICATION, MONEY MANAGEMENT PRACTICES, SATISFACTION WITH FINANCIAL STATUS AND QUALITY OF LIFE

Introduction and Purpose

Analysis of the sources and determinants of well-being has been a central concern of social scientists. For a long time economists have associated increased individual and societal well-being with larger real output (production of goods and services) (Juster & Courant, 1986). Social scientists have attempted to measure well-being in a broader sense (namely quality of life). Quality of life can be defined as a sense of well-being, a dynamic blend of satisfaction that differs from one person to another (The Quality of American Life in the Eighties, 1980). Gerson (1976) defined quality of life as the degree to which an individual succeeds in accomplishing his/her desires despite the constraints put upon by nature or social order.

Researchers have approached measurement of quality of life in two ways: by developing direct subjective assessment of satisfaction with quality of life using surveys of the population (Andrews & Withey, 1976; Campbell et al., 1976; Campbell, 1981), and by focusing on the development of "social indicators, which are aggregate, objectively
measured indices argued to be related to fundamental social goals" (Juster & Courant, 1986, p. 148). Quality of life is a very broad concept. As a result, there has not been consensus on the proper definition or measurement. It is however important to include economic, social, and subjective indicators when studying satisfaction with quality of life because all these factors contribute a great deal to the satisfaction with quality of life.

Theoretical Background

Systems theory provides the theoretical background for this study. A system is an integrated set of parts that functions to accomplish a set of goals (Deacon & Firebaugh, 1987). Though there are various types of systems, this study focuses on family resource management system proposed by Deacon and Firebaugh (1987). In the family resource management system, the family is viewed as a system with two subsystems: namely, personal and managerial subsystems. Through the management system, individuals and families strive to accomplish their goals by the acquisition and use of resources. The family resource management system is composed of inputs, throughputs, and outputs. Specific forms of inputs entering the family system are classified as resources and demands. Demands are either goals or events that require action. Goals are defined as value-based objectives that give direction and orientation to action.
Events are unexpected or low-probability occurrences that require action. Resources are means for meeting demands and may either be material or human (Deacon & Firebaugh, 1987). Throughput is defined as transformation of matter, energy and/or information by a system from input to output. For the management of home and personal affairs, throughput constitutes planning and implementing. The transformation process includes decision making, the process of evaluation in choosing or resolving alternatives, and communication, the process of using messages to engender meanings in minds of others. The final component of the management system is output. Deacon and Firebaugh (1987) define output as met demands. Output could be in the form of satisfaction derived as a result of achieving a desired end. Feedback is the portion of output that reenters a system as input to affect succeeding output. Feedback may be positive, involving changing goals and standards; or negative, decreasing deviation from goals and standards (Gross, Crandall & Knoll, 1980).

In this study, the input component of the family managerial system is composed of demographic factors, material resources (income, savings, and net worth), and human resources (education and financial knowledge). The throughput component is comprised of transformation processes which include money management practices and
communication. The output component is characterized by satisfaction with financial status and quality of life.

Review of Past Studies

Demographic factors have been found related to quality of life. Campbell et al. (1976) found that marital status was a significant predictor of satisfaction with quality of life. In their study, married respondents reported greater satisfaction as compared with the single respondents. This finding was later supported by Inglehart and Rabier (1986). Diener (1984) and Campbell et al. (1976) found that the employed respondents were more satisfied with their quality of life than to the unemployed ones. However Jackson et al. (1986) did not find any significant relationship between employment and quality of life. No relationship has been found between gender and satisfaction with quality of life. Inglehart and Rabier (1986) reported that women were not less satisfied than men despite substantial objective differences in career opportunities, personal income or opportunity for self-expression. These findings were consistent with other studies by Andrews and Withey 1976; Campbell et al., 1976; Jackson et al., 1986.

Among the economic factors that affect satisfaction with quality of life, income has been found positively related to satisfaction with quality of life (Campbell et al., 1976; Berry & Williams, 1987). Campbell et al. (1976),
however, noted that the relationship between income and satisfaction with quality of life was a conditional one, occurring in certain educational levels.

Net worth has also been found to be positively related to satisfaction with quality of life (Berry & Williams, 1987). A few subjective factors have been studied in relation to satisfaction with quality of life. Abdel-Ghany (1977) found a positive relationship between satisfaction with financial assets and satisfaction with quality of life. Spreitzer and Snyder (1974) found that high perception of financial adequacy was a significant predictor of satisfaction with quality of life.

Some researchers have focused on process variables and how they are related to quality of life. Berry and Williams (1987) found a positive relationship between money management practices and quality of life satisfaction whereas Walker, Trembley and Parkhurst (1984) found a positive relationship between satisfaction with quality of life and perceived money management quality. Communication is an important planning tool that enables a household to realize goals (Deacon & Firebaugh, 1987). Berry and Williams (1987) found that large amount of communication leads to more satisfaction with quality of life.
Purpose of the Study

Review of literature shows that not many studies have been done using process variables yet such factors are very important in translating the inputs (income, net worth, goals) into output (satisfaction). Berry and Williams (1987) also noted that, although many studies have focused on social and economic indicators, not many studies have been done using subjective factors. The purpose of this study is to examine socioeconomic, subjective, and process variables that influence satisfaction with quality of life. The hypothesized relationships are shown in Figure 1.

Specific objectives of this study are: To
(1) identify the socioeconomic factors that influence communication and money management practices of the money manager.
(2) identify socioeconomic factors that influence satisfaction with financial status and quality of life.
(3) explore the subjective factors that lead to satisfaction with quality of life.
(4) ascertain whether process variables (communication and management practices) are significant predictors of satisfaction with financial status and quality of life.
Procedures

Data collection

The data used in this study were collected in 1986 as a follow-up study of households' solvency status done in a Midwestern town in 1982. The 1982 study sample was an area sample of housing units designed to represent all housing units in the selected town. The main characteristic of an area sample is that the sample units consist of small areas of land called segments, rather than of individual elements of interest such as households (Mueller, 1983). The final sample size in the 1982 study consisted of 201 cases. Three of the cases were omitted because of incomplete information reducing the sample size to 198 cases (Mueller, 1983).

Of 198 respondents, 164 were available for the present (1986) follow-up study. One hundred thirty-two respondents agreed to be interviewed. Of these, 9 were omitted from the study because of incomplete information reducing the sample size to 123. The interviews were done by trained interviewers under the supervision of Iowa State University's Statistical Laboratory. The interview schedule had questions related to money management practices, retirement
and estate planning, knowledge of financial practices, satisfaction with financial status and quality of life, net worth, and socioeconomic characteristics. The unit of analysis was the household.

**Sample characteristics**

Descriptive statistics show that the typical money manager in this study was a female (66 percent) with a mean age of 49 years. The average number of years spent in school by the money manager was 12 years. Most of the money managers were married (72 percent) and employed either part-time or full time (62 percent). Almost all the money managers (91 percent) reported living in one to four member households. The average number of household members was two, and 35 percent of the money managers belonged to this category. Results also show that the average net annual income for each household was $24,500 and the median net income was $20,700. This compared very well to the average household income of U.S. households which was $24,897 in 1986. The average net worth was $100,824, and the median net worth was $65,850. Other findings show that, among the money managers who reported monthly debt payments, the average amount paid on debts every month was $331.

Most money managers (71 percent) reported that they had financial difficulties. In all satisfaction items, the ranges on the satisfaction scale were skewed toward the
satisfied end of the scale, with 82 percent of the money managers reporting that they were 'satisfied' or 'extremely satisfied' with their overall quality of life.

Definition of variables

Independent variables

Independent variables used in this study included demographic and economic characteristics, financial knowledge, and whether households had financial difficulties. Demographic variables included household size, age, sex, educational level, marital and employment status of the money manager. Economic factors included income, net worth, monthly debt payments, and 1986 savings. Income was defined as a household's net income in 1986, and savings was defined as the amount of 1986 income saved. Monthly debt payments was operationalized by asking the money manager the approximate total monthly debt payment, including credit cards and personal loans. It did not include mortgage payments.

Household net worth was defined as the total assets minus total liabilities. Net worth was operationalized by first summing the assets of each household and then separately summing the liabilities. The liabilities of each household were then subtracted from respective summed assets of the household. Four positive net worth outliers were truncated to the highest net worth value, and one negative net worth outlier was truncated to the lowest net worth.
Money managers' financial knowledge was operationalized by making an index of 22 items, which asked the money manager's knowledge in the areas of credit management practices, financial planning and investments. The reliability of the index was alpha = .61. Financial difficulties was operationalized by asking the respondents, "Have you had financial difficulties in the last five years?" Financial difficulties was treated as an exogenous variable because first, it was a psychological measure of households' financial difficulties and not a household measure. Second, it measures a past experience. Age, household size, financial knowledge, educational level, income, 1986 savings, monthly debt payments and net worth were treated as continuous variables, whereas employment status, marital status, sex, and financial difficulties were treated as dummy variables.

Dependent variables

Evaluation of financial status was measured by computing an index out of five items. The items were (1) How frequently do you pay finance charges obtained by use of credit cards? (2) Do you think your credit rating is (a) poor, (b) good or (c) very good? (3) In making your payments on large debts you may have had in 1986, did you generally (a) get behind in payments, (b) make payments as
scheduled or (c) make larger or more frequent payments? (4) Thinking about your family's current financial situation, how deeply in debt do you think you are? (a) way over your head, (b) enough to feel uncomfortable, (c) very little. (5) Compare your current financial status to five years ago, would you say you are (a) worse off, (b) same or (c) much better off. The reliability of this composite was alpha = .61.

Communication was defined as the frequency and nature of communication about money matters with spouse, friends, professionals, and family members. A communication composite was made by summing up two indices. The first index was computed by summing up the frequency of communication with different people. The second index was made by summing up the different reasons why communication was carried out. Indices 1 and 2 were then summed to make an overall communication index.

Money management practices was operationalized by computing an index out of three items. These were: How often does someone (1) estimate the household's income and expenses, (2) review and evaluate family's spending habits, or (3) figure the household's net worth? The lowest number in a 6-point scale represented the least preferred situation, and the highest number represented the best situation. The best timing for evaluating different
practices differed depending on the activity in question. The reliability was alpha = .60.

Satisfaction with financial status was measured by summing up the responses of six items and computing a satisfaction index. The items were: How satisfied are you with your (1) level of living, (2) current level of savings, (3) ability to stay out of debt, (4) level of assets, (5) ability to pay back what you owe, and (6) financial preparation to meet large emergency expenses? The responses were recorded on a 5-point likert type scale: (1) extremely dissatisfied, (2) dissatisfied, (3) neutral, (4) satisfied, (5) extremely satisfied. The reliability of this composite index was alpha = .81.

Satisfaction with quality of life was operationalized by asking the money manager, "How satisfied are you with your overall quality of life?" The responses were recorded on a 5-point likert scale ranging from extremely dissatisfied to extremely satisfied.

Method of Analysis

Frequency analysis was done to provide the descriptive statistics (means, median, and standard deviations). Pearson product-moment correlation was done to determine the direction and strength of the relationship between dependent and independent variables. Pearson correlation also helps to detect the presence of multicollinearity, a necessary
Path analysis was used to analyze the relationship between exogenous and endogenous variables. Path analysis is concerned with estimating the magnitude of the linkages between variables and using those estimates to provide information about the underlying causal processes (Berry & Williams, 1987). A path analytic approach involves the construction of a model consisting of a limited number of exogenous and endogenous variables. The model is represented by a set of structural equations that represents the causal processes assumed to operate among the variables under consideration. Path analysis yields path coefficients which are the standardized regression coefficients. The residual variation, or the part of variance unexplained in the model, provides a measure of the strength of the unknown covariate and is calculated by the square root of one minus the multiple correlation (Marsden, 1981), or

$$\sqrt{1 - R^2}$$

As Asher (1970) points out, the objective of path analyses is to estimate the relative importance of alternative paths of influence of the independent on the dependent variables.

In the present study, there are 12 exogenous variables and five endogenous variables. A fully recursive model was
hypothesized. A fully recursive model means that there is a hypothesized path from each exogenous variable to each endogenous variable and also among the endogenous variables. After the analysis of the full hypothesized model, a reduced model will be presented showing only the significant paths.

Results

The variables entered into the path model were selected on the basis of correlation results, previous literature, and theory. Table 1 shows the results of all exogenous and endogenous variables. The results show that each exogenous variable was correlated with at least one endogenous variable. Even though employment status was correlated with communication ($r=.33$, $P<.001$) and satisfaction with financial status ($r=-.22$, $P<.05$), the analysis of the full model shows that it was not a significant predictor of any dependent variable and hence it was omitted from the reduced model. Education was correlated with communication ($r=.23$, $P<.005$) but was also omitted from the reduced model because it was not a significant predictor of any dependent variable.

Table 1 about here

Figure 2 shows the path diagrams resulting from the analysis of the reduced version of the path model. To
select the variables entered in the regression analysis of the reduced model, the criterion of a significant level of .05 was employed for each of the variables.

The results show that household size and having financial difficulties had a negative relationship with evaluation of financial status. This indicates that larger households and households that reported presence of financial difficulties had a negative evaluation of their financial status. Results also show that the married money managers evaluated their financial status more negatively as compared with the single money managers (b=-.23, P<.05).

Sex of the money manager was negatively related to financial evaluation (b=-.21, P<.007) denoting that female money managers evaluated their financial status more positively. As expected, income was positively related to the evaluation of finances denoting that households with higher net incomes had a positive evaluation of their financial situation, compared to households with low income.

Results also show that there were four variables that significantly predicted communication about money matters, explaining 39 percent of the variance (R^2=.39). There was a positive relationship between financial knowledge and
communication, denoting that the money managers who were more knowledgeable about financial matters communicated more. Monthly debt payments and household size were also significant predictors of communication. Money managers who lived in larger households and who paid large monthly debts communicated more about money matters. Older money managers communicated less about money matters compared to young money managers. This finding could be explained by the fact that the older money managers may already have established a pattern of handling finances and, hence, had less need for communicating.

There were only two significant predictors of money management practices. The positive relationship between money management practices and communication (B=27, P<.005) indicates that the money managers who communicated more were more likely to utilize money management practices. Financial knowledge was also a significant predictor of money management practices (B=.18, P<.05) denoting that the money managers who had more knowledge about finances did more money management activities.

Results of the fourth regression where satisfaction with financial status is the dependent variable show that seven exogenous variables predicted half of the variance for this endogenous variable (R²=.50). As can be seen from the reduced model, net worth and savings are positively related
to satisfaction with financial status, which shows that high net worth and high savings lead to more satisfaction with financial status. These findings are consistent with other findings by Hira and Mugenda (1986) and Hafstrom and Dunsing (1973). Large monthly debt payment led to less satisfaction with financial status. However, in a random sample, high monthly debt payments should not always be associated with dissatisfaction with financial status because it could also be a sign of household progression. Further results show that evaluation of finances was positively related to satisfaction with financial status (Beta=.47, P<.005). This finding indicates that money managers who had a positive evaluation of their financial status reported higher satisfaction with their financial status. Similar findings were reported by Berry and Williams (1987) who found that perceived future security contributed positively to satisfaction with income.

An interesting finding was the negative relationship between money management practices and satisfaction with financial status (B=-.17, P<.05) and between financial knowledge and satisfaction with financial status (B=-.18, P<.05). Probably being more knowledgeable about finances and doing more money management activities reveals the real situation that a family is facing, which could lead to dissatisfaction especially if other factors come into play,
for example, inadequate finances and/or negative or low net worth. These findings show that economic factors: net worth, savings, less debts, and absence of financial difficulties are the main determinants of households' financial satisfaction.

The results of the final equation where satisfaction with quality of life was the dependent variable show that marital status, age, and household size were the demographic factors that were significant predictors of satisfaction with quality of life. The married, female money managers who lived in small households sizes reported more satisfaction with quality of life than unmarried male money managers. These results are consistent with previous findings. Inglehart and Rabier (1986) and Ortiz and Arce (1986) found that married people were more satisfied with quality of life, than single ones. Campbell et al. (1976) found that satisfaction with financial status was positively related to the respondents' sense of well-being.

Further results show that income contributed positively to satisfaction with quality of life ($B = .44, P < .005$), denoting that money managers with higher household income reported more satisfaction with quality of life than money managers who came from low income households. Previous results have found either income or net worth as significant predictors of satisfaction with quality of life. Berry and
Williams (1987) found that net worth and income contributed to satisfaction with quality of life. Campbell et al. (1976) also found a positive relationship between income and satisfaction with quality of life. The amount of income saved in 1986 was related negatively to satisfaction with quality of life ($B = -0.31$, $P < 0.005$). This finding sounds contradictory to the ones mentioned above by Berry and Williams (1987) and Campbell et al. (1976), but could suggest that saving a large proportion of a household's income does not necessarily lead to higher satisfaction with quality of life. Probably those who save a large proportion of their income are not able to utilize their income or savings in a way that may contribute to their quality of life. It is also important to note that this variable refers to the amount of income saved in 1986, and not the overall households' savings. The process variables (communication and management practices) and some economic variables (monthly debt payments and net worth) did not affect satisfaction with quality of life directly. Calculation of direct and indirect effects was therefore done to check for indirect relationships. The full model was used to calculate direct and indirect effects.

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Table 2 about here

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Table 2 shows the direct, indirect and total effects of exogenous and endogenous variables on satisfaction with quality of life. Results show that monthly debt payments and net worth have strong indirect effects on satisfaction with quality of life mainly through satisfaction with financial status. Results also show that communication influences satisfaction with quality of life through money management practices and satisfaction with financial status. Money management practices also influence satisfaction with quality of life through satisfaction with financial status. In this study, satisfaction with financial status is therefore an important intervening variable.

Conclusion

The main findings of this study were that there was more communication about money matters in larger households, and in households who had larger monthly debt payments. This is an important finding because households who are highly indebted need to communicate so as to manage their resources more effectively. Communication and financial knowledge were significant predictors of money management practices. Unlike the present results, previous studies have found income, net worth, and education to be positively related to money management practices (Williams et al., 1976; Sahlberg, 1977; Mueller, 1983). However in these previous studies, researchers have used specific management
practices such as credit use, budgeting, saving practices and record keeping, as dependent variables instead of using a composite scale (Echols, 1969; Schnittgrund & Baker, 1983; Guadagno, 1981; Caudle, 1962). The differences in measurement of management practices as a dependent variable could explain the differences in the results. Economic factors (savings and net worth) significantly predicted differences in satisfaction with financial status. These results are supported by another finding in this study which shows that large monthly debt payments lead to less satisfaction with financial status. It is important to note that even though communication and management practices are recommended as important planning tools (Deacon & Firebaugh, 1987), they were not significant in explaining differences in satisfaction with financial status. Economic factors were the main predictors of satisfaction with financial status.

The main demographic predictors of satisfaction with quality of life were sex, marital status, and household size. Female, married money managers living in smaller households reported more satisfaction with quality of life. Among economic factors, income and satisfaction with financial status contributed positively to satisfaction with quality of life. Unlike satisfaction with financial status, satisfaction with quality of life was predicted not only by economic factors, but also by demographic variables. This
finding is justifiable considering the broad definition of quality of life.

Calculation of indirect effects showed that some economic variables (net worth and monthly debt payments) and process variables (communication and money management practices) influenced quality of life indirectly through satisfaction with financial status.
REFERENCES


Figure 1. Hypothesized fully recursive path model
Table 1. Pearson product-moment correlation of all variables

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Figure 2. Reduced model showing all the significant paths

* P < .05
** P < .005
Table 2. Direct and indirect effects of exogenous variables on satisfaction with quality of life

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* p<.05.  
+ strong indirect effects.
SECTION II

INFLUENCE OF NET WORTH, FINANCIAL PLANNING, AND SATISFACTION WITH FUTURE PLANS ON HOUSEHOLDS' SATISFACTION WITH QUALITY OF LIFE

Theoretical Background

The major objective of this study is to ascertain if net worth, financial planning, and satisfaction with future plans affect a person's satisfaction with overall quality of life.

Systems theory provides the theoretical background for this study. A system is an integrated set of parts that function to accomplish a set of goals (Deacon & Firebaugh, 1981). Though there are various types of systems, this study focuses on family resource management system proposed by Deacon and Firebaugh (1987). In the family resource management system, the family is viewed as a system with two subsystems, namely personal and managerial subsystems. Through the management system, individuals and families strive to accomplish their goals by the acquisition and use of resources. The family resource management system is composed of inputs, throughputs and outputs (Deacon & Firebaugh, 1987). Specific forms of inputs entering the family system are classified as resources and demands. Demands are either goals or events that require action. Goals are defined as value based objectives that give
direction and orientation to action. Events are unexpected or low probability occurrences that require action. Resources are means for meeting demands and may either be material or human (Deacon & Firebaugh, 1987). Throughput is defined as transformation of matter, energy and/or information by a system from input to output. For the management of home and personal affairs, throughput comprises planning and implementing. The transformation process also includes decision making, the process of evaluation in choosing or resolving alternatives, and communication, the process of using messages to engender meanings in minds of others. The final component of management system is output. Deacon and Firebaugh (1987) define output as met demands. Output could be in the form of satisfaction derived as a result of achieving a desired end. Feedback is the portion of output that reenters a system as input to affect succeeding output. Feedback may be positive, involving changing goals and standards; or negative, decreasing deviation from goals and standards.

In this study, inputs are characterized by the demographic characteristics (age, marital status, household size and employment status), material resources (net worth, income and savings), and human resources (financial knowledge and education). Throughput is characterized by financial planning and output is represented by satisfaction with
future plans and quality of life.

Review of Previous Studies

Net worth is calculated by subtracting a household's assets minus liabilities. A few studies have been done to determine factors that influence net worth accumulation and change. In a study done in 1964 by the Federal Reserve Board (Survey of Financial Characteristics of Consumers, 1964), age of family head, size of income, home ownership, and self employment were positively associated with net worth position. Williams and Manning (1972) found that the highest net worth occurred in the middle age group, that is between 40 and 44 years. Foster and Metzen (1981) found that family income made the greatest contribution to variation in net worth and that a family's net worth was to a large measure a result of past saving behavior.

Planning has been defined by Harris (1970, p. 1) as the "arrangement or disposition of parts according to a design; a mode of procedure; a process; a way, a method." Deacon and Firebaugh (1987, p. 76) say that "planning is a series of decisions about future standards and/or sequences of action." Estate planning, which is part of financial planning, is defined as the disposition of assets and affairs in the way best calculated to protect one's family now and in the future (Harris, 1970). The objectives of estate planning are: first, to arrange the affairs of the family unit so as to
obtain the maximum benefits, for example, of principal and income for the family and second, to protect that family unit and achieve economic and mental security. This means accumulation of assets sufficient to insure protection and to dispose of them in a manner best calculated to preserve the family relationship. Retirement planning includes financial planning, creative use of leisure, legal aspects, health, housing, and work opportunities (Atchley, 1976). Ramsey (1984) noted that financial adequacy in retirement is a result of financial planning during most of an individual's working life or at least the latter portion. Although sufficient income to live comfortably in the future does not guarantee happy retirement, it does influence the chances. Despite the importance of retirement planning, most families do not plan (Monk, 1971). Monk (1971) also made the observation that even though most people in his study were making some financial plans, the planning was a symptom of affluence or saving practices but not deliberate preparation for retirement. Ware (1984) notes that if there is a gap between retirement income and expenses that can not be closed or narrowed, dissatisfaction with retirement plans follows.

Quality of life can be defined as a "sense of well being" or the degree to which an individual succeeds in accomplishing his desires despite the constraints put upon by nature or social order (Gerson, 1976). Demographic factors
that have been found to affect satisfaction with quality of life include marital status (Campbell, Converse, & Rogers, 1976; Ingelhart & Rabier, 1986); employment status (Diener, 1984; Campbell et al., 1976); and gender (Inglehart & Rabier, 1986; Jackson, Chatters, & Neighbors, 1986). Economic factors that have been found to influence quality of life are income (Campbell et al., 1976; Berry & Williams, 1987); net worth (Berry & Williams, 1987); assets (Abdel-Ghany, 1977); and financial adequacy (Spreitzer & Snyder, 1974).

Purpose of the Study

Review of literature shows that although many studies have been done to identify the socioeconomic factors influencing satisfaction with quality of life, not many researchers have explored the effect of process variables found within the throughput component of the family managerial model. The main purpose of this study is to explore whether net worth, financial planning, and satisfaction with future plans influence satisfaction with quality of life. Figure 1 shows the hypothesized relationships in this study.

The specific objectives are to:

1) identify demographic and economic factors that influence households net worth,

2) identify socioeconomic characteristics of money managers who reported presence of financial planning,

3) identify socioeconomic factors that lead to
satisfaction with future plans,

4) determine whether net worth, financial planning and satisfaction with future plans contribute to satisfaction with quality of life, and

5) ascertain if financial difficulties and financial knowledge predict satisfaction with financial status and quality of life.

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Figure 1 about here

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Procedures

Data collection

The data used in this study were collected in 1986 as a follow-up in a 1982 study of households' solvency status in a Midwestern town in 1982. The sample was an area sample of housing units designed to represent all housing units in the town. The main characteristic of an area sample is that the sample units consists of small areas of land called segments, rather than of individual elements of interest such as households (Mueller, 1983). The final sample size in the original study consisted of 201 cases. Three of the cases were omitted because incomplete information reducing the sample size to 198 cases (Mueller, 1983).

Out of 198 subjects, 164 were available for the 1986 follow-up study, 132 respondents agreed to be interviewed.
Out of these, 9 were omitted from the study due to incomplete information reducing the sample size to 123. The interviews were done by trained interviewers under the supervision of Iowa State University's Statistical Laboratory. The interview schedule had questions related to money management practices, retirement and estate planning, financial knowledge, satisfaction with financial status and quality life, net worth, and socioeconomic characteristics. The unit of analysis was the household.

Sample characteristics

Descriptive statistics show that the typical money manager in this study was a female (66 percent) with a mean age of 49 years. The average number of years spent in school by the money manager was 12 years. The majority of the money managers were married (72 percent) and employed either part time or full time (62 percent). Almost all the money managers (91 percent) reported living in households with 1 to 4 members. The average number of household members was two, and 35 percent of the money managers belonged in this category. Results also show that the average net income for each household was $24,500 and the median net income was $20,700. The net income for this sample compared well to the average net income for U.S. households which was $24,897 in 1986. The average net worth was $100,824, and the median net worth was $65,850. Other findings show that out of those money
managers who reported monthly debt payment, the average amount paid on debts every month was 331 dollars.

The majority of money managers (71 percent) reported that they had some financial difficulties in the last five years. In all satisfaction items, the ranges on the satisfaction scale was skewed toward the satisfied end of the scale, with 82 percent of the money managers reporting that they were 'satisfied' or 'extremely satisfied' with their overall quality of life.

Definition of variables

Independent variables The independent variables in this study included demographic and economic characteristics, financial knowledge, and financial difficulties. Demographic variables included age, sex, marital status, employment status and household size. Economic factors included 1986 income, 1986 savings and monthly debt payments. Income was defined as a household's net income in 1986; 1986 savings referred to the amount of income saved during 1986. Monthly debt payment was the total monthly payments on the respondent's debts. It was operationalized by asking the money managers "Thinking of all the debts you now have, including credit card and loans, what is your approximate total monthly payment to these debts?" It did not include mortgage payments.

Financial difficulties was operationalized by asking the
respondents, "Have you had financial difficulties in the last five years?" Financial difficulties was treated as an exogenous variable because first, it is a psychological measure of financial difficulties and not an objective measure, and secondly, it measures a past experience.

Money managers' financial knowledge was operationalized by making an index of 22 items, which asked the money manager's knowledge in the areas of credit management practices, financial planning and investments. The reliability of the index was alpha = .61. Age, household size, financial knowledge, educational level, income, 1986 savings and monthly debt payments were treated as continuous variables, whereas employment status, marital status, sex, and financial difficulties were treated as dummy variables.

Dependent variables Net worth was operationalized by first summing the assets of each household and then separately summing the liabilities. The liabilities for each household were then subtracted from the respective summed assets of the household. Four positive net worth outliers were truncated to the highest net worth value. One negative net worth outlier was truncated to the lowest net worth value. The financial planning index was computed from six items asking the money managers to identify financial planning actions. The items were: (1) Do you have financial goals? (2) Do you have life insurance? (3) Do you have an
IRA or Keogh? (4) Do you have other retirement funds? (5) Has someone reviewed your total financial plans including retirement plans? (6) Did the financial review contain a written plan? The responses were categorized as yes or no. The reliability of this composite variable was alpha = .61.

Satisfaction with financial plans was measured by computing an index by combining three items: How satisfied are you with (1) retirement plans, (2) plans you have made for distributing your assets and belongings when you die, (3) plans you have made to meet emergency expenses? The responses were recorded on a 5-point Likert scale: (1) Extremely dissatisfied, (2) Dissatisfied, (3) Neutral, (4) Satisfied, (5) Extremely Satisfied. The reliability of the satisfaction index was alpha = .70.

Satisfaction with quality of life was measured by asking the money manager, "How satisfied are you with your overall quality of life?" The responses were recorded on a 5-point Likert scale ranging from extremely dissatisfied to extremely satisfied.

Method of analysis

Frequency analysis was done to provide the descriptive statistics (means, median, and standard deviations). Pearson product-moment correlation was done to determine the direction and strength of the relationship between dependent and independent variables. Pearson correlation also helps to
detect the presence of multicollinearity, a necessary step while selecting variables to enter into the path model.

Path analysis was used to analyze the data. Path analysis is concerned with estimating the magnitude of the linkages between variables and using those estimates to provide information about the underlying causal processes (Berry & Williams, 1987). A path analytic approach involves the construction of a model consisting of a limited number of exogenous and endogenous variables. The model is represented by a set of structural equations that represent the causal processes assumed to operate among the variables under consideration. Path analysis yields path coefficients that are the standardized regression coefficients. The residual variation or the part of variance unexplained in the model, provides a measure of the strength of the unknown covariate and is calculated by the square root of one minus the multiple correlation (Marsden, 1981), or

\[ \sqrt{1 - R^2} \]

As Asher (1970) points out, the objective of path analyses is to estimate the relative importance of alternative paths of influence of the independent on the dependent variables. In the present study, there are 11 exogenous variables and 4 endogenous variables. A fully recursive model was hypothesized. A fully recursive model means that
there is a hypothesized path from each exogenous variable to each endogenous variable and also among the endogenous variables. After the analysis of the full hypothesized model, a reduced model will be presented showing only the significant paths.

Results

Table 1 shows the correlation results of all exogenous and endogenous variables. Even though employment status was significantly correlated with various endogenous variables, the results of the full model showed that employment status was not a significant predictor of any dependent variable and hence was omitted from the reduced model.

---

Figure 2 shows all the significant paths leading to the four endogenous variables. Results show that 52 percent of the variation in net worth was explained by the variables entered in the model. The amount of income saved in 1986, monthly debt payment, marital status, age, and education of the money manager were all positively related to net worth. The money managers who were older, married and had high monthly debt payments reported high net worth. These results are consistent with results of previous studies where savings and age have been positively related to net worth (Williams &

The money managers who scored high on financial knowledge and who reported high education level had higher net worth. Household size was negatively related to net worth denoting that the money managers who lived in large households had less net worth.

Results also show that money managers who reported more financial planning activities were young, married, and had high incomes and more financial knowledge. Income is therefore an important economic factor influencing financial planning. An explanation why high income may lead to more financial planning activities is that some plans require monthly contributions for example, contributions towards retirement. Income being a predictor of financial planning is a logical finding because the more income a household has, the more that household is able to engage in various financial plans (such as retirement plans or life insurance plans) as opposed to when a household has just enough income to live on. Money managers who scored high on financial knowledge reported doing more financial planning activities. Lack of knowledge may, therefore, contribute to lack of financial planning. Age was negatively related to financial
planning indicating that more of the older money managers had less financial plans. In this sample 52 percent of the money managers were over the age of 45 years and the mean age was 49 years. The older managers may already have met most of their financial goals and were already living according to plans made during their younger years and hence reported fewer activities related to financial planning. This suggestion is supported by the finding that age was a very significant predictor of satisfaction with future plans. The older money managers reported being more satisfied with their future plans than the younger managers.

Financial planning was positively related to satisfaction with future plans, denoting that the more financial planning activities reported, the more satisfied the money managers were with their future plans. Net worth and financial difficulties were the two economic factors that influenced satisfaction with future plans. The money managers who had high net worth and those who reported no financial difficulties were more satisfied with their future plans. Money managers who lived in large households reported less satisfaction with future plans. All the significant predictors of satisfaction with future plans explained 48 percent of its variation.

The final regression of satisfaction with quality of life yielded an $R^2$ of .34, denoting that 34 percent of the
variation in satisfaction with quality of life was explained by the variables in the model. Results show that income was the only economic variable that significantly predicted satisfaction with quality of life. This finding supports previous findings by Campbell et al. (1976), and Berry and Williams (1987). Among the demographic variables that significantly predicted satisfaction with quality of life are martial status, household size and sex. The married, female money managers who lived in small households reported higher satisfaction with quality of life. These results support previous findings by Inglehart and Rabier (1986) who found that married people were more satisfied with their quality of life. Satisfaction with future plans (subjective variable) was positively related to satisfaction with quality of life denoting that money managers who were satisfied with their future plans reported more satisfaction with quality of life. The amount of income saved in 1986 was negatively related to satisfaction with quality of life. This finding suggests that saving a large proportion of a household's income does not necessarily lead to high satisfaction with quality of life. Probably saving a large amount of 1986 income affected the fulfillment of certain immediate needs and hence the dissatisfaction with quality of life. Another important point to remember is that this variable refers to amount of income saved in 1986 and not the overall household's savings.
From these results, two important observations were made. First, net worth and age were very significant predictors of satisfaction with future plans which was subsequently a significant predictor of satisfaction with quality of life. Secondly, contrary to previous studies, net worth and age did not have significant direct effects on satisfaction with quality of life. These observations triggered the necessity to check for the indirect effects of exogenous and other endogenous variables on satisfaction with quality of life. Table 2 shows the direct, total effects and indirect effects of exogenous variables on satisfaction with quality of life through net worth, financial planning, and satisfaction with future plans. The full model was used for the calculation of direct and indirect effects.

Table 2 shows that there is a strong indirect effect of net worth on satisfaction with quality of life through satisfaction with future plans, as opposed to the direct effects. There is also a fairly strong indirect effect of financial planning on satisfaction with quality of life through satisfaction with future plans. Results also show that though there is no significant direct effect of age on satisfaction with quality of life, there is a very strong
indirect effect of age on satisfaction with quality of life through net worth and satisfaction with future plans. Most of the indirect effect is, however, through satisfaction with future plans.

Conclusions

The economic predictors of net worth were household income and amount of income saved in 1986 while the demographic variables that influenced net worth were household size, sex, age, and education of the money manager. Money manager's financial knowledge also contributed positively to the household's net worth.

Income and financial knowledge were important predictors of the financial planning. This finding shows that lack of financial knowledge could be a hindrance to financial planning, and this has important educational implications for financial counselors and educators. An effort should be made to teach household members various methods of financial planning. The educational materials should also include information on the importance and advantages of financial planning.

Forty-eight percent of the variation in satisfaction with future plans was explained by six of the variables hypothesized. Older, married money managers, living in small households reported more satisfaction with future plans. Among the economic factors, net worth and absence of
financial difficulties significantly predicted satisfaction with future plans. Further results show that the more financial planning activities reported, the greater the reported satisfaction with future plans. Results also showed that money managers who were married, had high income, and were satisfied with their future plans reported more satisfaction with quality of life. On the other hand, money managers living in large households reported less satisfaction with quality of life. The calculation of indirect effects showed that even though age did not directly affect satisfaction with quality of life, there was a strong indirect effect of age on satisfaction with quality of life through satisfaction with future plans and net worth. There was also a strong indirect effect of net worth on satisfaction with quality of life through satisfaction with future plans.
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Figure 1. Hypothesized fully recursive path model
Table 1. Pearson product-moment correlation of all variables

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Figure 2. Reduced model showing all the significant paths
Table 2. Direct and indirect effects of exogenous variables on satisfaction
with quality of life

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*P < .05.

+ = strong indirect effects.
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The major objectives of this study were to (1) identify the demographic and economic factors that influence satisfaction with quality of life, (2) study the causal relationships between communication, money management practices, satisfaction with financial status and satisfaction with quality of life, and (3) ascertain whether future planning, and satisfaction with future plans contribute to one's satisfaction with quality of life.

The data used in this study were collected in 1986 as a follow up study of household's solvency status done in a Midwestern town in 1982. The sample consisted of 123 personal interviews. The unit of analysis was the household.

Path analysis was used to analyze the data. The objective of path analysis is to estimate the relative importance of alternative paths of influence of the independent on the dependent variables. A path analytic approach involves the construction of a model consisting of a number of exogenous and endogenous variables that represent the causal processes assumed to operate among the variables under consideration. Path analysis yields path coefficients which are the standardized regression coefficients.
Conclusions and Implications

Assessing the causal relationship between communication, money management practices, satisfaction with financial status and quality of life

There were five main conclusions in the first manuscript. First, money managers who had high income, and had no financial difficulties, evaluated their financial status more positively. However, money managers who reported financial difficulties and who lived in large households reported a more negative evaluation of their households' financial status.

Second, communication about money matters was prevalent in larger households and households with high debts. This was an important finding because it supports the need for communication about money matters especially when there are financial inadequacy and difficulties in a household. Communication helps families to discuss and solve problems by evaluating various options involved in handling their finances.

Third, the main determinants of money management practices were financial knowledge and communication. This finding has important implications for the financial educators and counselors. Since financial knowledge helps people to carry out money management practices, it is important to teach and increase household's knowledge and
awareness of financial matters.

Fourth, satisfaction with financial status was mainly influenced by economic factors mainly savings and net worth. The results imply that unless there is enough income either cash, savings or nonmoney income, there will be less satisfaction. However, it is important to teach families financial management practices and planning methods which may help them to use their income better and subsequently help to increase their financial satisfaction.

Fifth, satisfaction with quality of life was predicted by income (economic factor) and satisfaction with financial status (subjective variable). The demographic variables that were significant predictors of satisfaction with quality of life are marital status and household size. These results support other quality of life studies which have found that satisfaction with quality of life is determined by a wide variety of variables since it is a concept which constitutes many life domains.

Sixth, calculation of indirect effects showed that the process variables (communication and money management practices) do not directly influence quality of life. Rather, the process variables influence quality of life indirectly through satisfaction with financial status.
The influence of net worth, financial planning and satisfaction with future plans on satisfaction with quality of life

Three main conclusions were drawn from the second manuscript. First, net worth was predicted significantly by savings, financial knowledge, age, education, monthly debt payment and household size. Money managers who lived in large households had less net worth compared to money managers who lived in small households. Older, more educated money managers reported high net worth compared to young and less educated ones. Money managers who reported high monthly debt payments had high net worth, denoting that households with high net worth may feel comfortable borrowing more.

Second, income and financial knowledge were significant predictors of financial planning. Age had a negative relationship with financial planning implying that younger managers did less financial planning activities. These findings indicate that lack of financial knowledge may hinder families from doing any financial planning. Financial educators and counselors have an important task of educating families especially the younger families about the importance of early planning for the future.

Third, satisfaction with future plans was determined by financial planning activities and by demographic factors.
(age, marital status, household size). Since future planning influences satisfaction with future plans which subsequently influences satisfaction with quality of life, it is important for educators to teach families the advantages and importance of financial planning. The educational materials should also include various strategies of planning for the future. Calculation of indirect effects showed that age and net worth had an indirect effect on quality of life through satisfaction with future plans.

Recommendations

The following recommendations are made as a result of this study.

1. Financial counselors and educators should emphasize the importance of communication about money matters in households since communication influences the way households manage their money. The emphasis should be placed not only on the frequency of communication but also on the nature of communication. Families should be encouraged to seek advice and help by talking to various people like spouses, family members and professionals depending on the nature of their problem.

2. Financial counselors and educators should teach students and clients general financial knowledge because this helps them to carry out money management activities. Money management activities in turn help households get the
most out of their limited resources.

3. Educators and financial planners should emphasize the importance of planning for the future by all households, including the young and low income households. This recommendation is based on the results that money managers most likely to plan for the future are the older ones who come from high income households.

4. This study supports the previous literature in showing that quality of life is a broad concept which can be measured more effectively by including a wide variety of concepts. It is recommended that future research measure satisfaction with quality of life by computing an index based on various items representing a variety of life domains, for example, health, status, social life, finances, and marital status.

5. It is also recommended that future research should test the feedback component of the family resource management system.
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termination to accomplish this goal.
APPENDIX: QUESTIONNAIRE
Follow-up Study of Household Money Management in Marshalltown, Iowa

Iowa State University

Hello, my name is (your name), and I am representing Iowa State University. Is (name of subject) at home? Recently we sent a letter to you regarding a research study we are working on which is a follow-up to a study we began in 1982. Did you receive our letter? Do you remember being interviewed in 1982? What we are doing now is trying to learn more about how families in Marshalltown are coping with the economic situation today by evaluating changes in their money management habits.

I need to ask you a few questions first.

1.a. Are you currently the person who manages the money in this household?
   1 = Yes —> I'd like to come in and talk to you now.
   0 = No

   b) Who is? ______________________

   I'd like to interview (name). Is he/she at home now?

Before we begin, I'd like you to know that Iowa State University appreciates your continued help with our research efforts. Any information you provide will be kept strictly confidential and all information will be released as statistical summaries only. If a question seems too personal, you may choose not to answer it, but all questions we ask are critical to the success of a project of this nature.
2. In this first series of questions we'd like some information about members of this household. We consider household members to be anyone who was living here on October 1, 1986. This includes anyone who was visiting and has no other home or anyone who is away at college. Let's begin with you, then give me the first name of your (husband/wife), if married, then any children beginning with the oldest and ending with the youngest. Then we will list any other household members.

a) What is (person's) first name?
b) Is (person) male or female?
c) How old was (person) on his/her last birthday?
d) What is (person's) relationship to you?
e) What is (person's) marital status? Is (he/she) married, divorced, legally separated, widowed, or single, never married?

[IF NEVER MARRIED, GO TO g]
f) What was the month and year of (person's) present or most recent marriage?
g) What is the highest grade of school (person) completed? Include college, vocational or technical training.
h) Is (person) employed full-time (35 hrs. or more per week); part-time; unemployed but looking for work; unemployed, not looking for work; retired; disabled; or a student.

[IF NOT CURRENTLY EMPLOYED GO TO j]
i) What is (person's) primary occupation, that is, what kind of work does he/she do? We don't want the name of the company, just the type of work. [GO TO NEXT PERSON]
j) What has been (person's) primary occupation most of his/her adult life? That is, what kind of work did he/she do? We don't want the name of the company, just the type of work.
<table>
<thead>
<tr>
<th>(a) Household Member</th>
<th>(b) Sex</th>
<th>(c) Age</th>
<th>(d) Relationship to respondent</th>
<th>(e) Marital Status</th>
<th>(f) Marriage</th>
<th>(g) Grade</th>
<th>(h) Employment status</th>
<th>(i) Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>First name</td>
<td>M</td>
<td>F</td>
<td></td>
<td>Married</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Respondent)</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Divorced</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Spouse)</td>
<td>1</td>
<td>0</td>
<td></td>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>Widowed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td>Never married</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Now we'd like to ask some questions about record keeping and money management practices.

3. In your household who has the major responsibility for (task)?

<table>
<thead>
<tr>
<th>Task</th>
<th>Respondent</th>
<th>Spouse</th>
<th>Both</th>
<th>Nobody</th>
<th>Other—WHO?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Bill paying</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td>(10)</td>
</tr>
<tr>
<td>b) Budgeting</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td>(11)</td>
</tr>
<tr>
<td>c) Balancing the bank statement</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td>(12)</td>
</tr>
<tr>
<td>d) Keeping records of household expenses</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td>(13)</td>
</tr>
</tbody>
</table>

[CARD 1]

Would you look at Card 1 and tell me ...

4. How often do you save (type of record)?

<table>
<thead>
<tr>
<th>Type of Record</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
<th>Other—EXPLAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Receipts for major purchases or expenses</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Receipts for daily or weekly expenses</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Receipts for monthly bills</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. How often does someone compare ...

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Usually</th>
<th>Always</th>
<th>Other—EXPLAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Checking account records with the monthly statement?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Credit card receipts to the monthly statement?</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. How often does someone estimate the household income and expenses? Would you say ...

0 = Never
1 = Yearly
2 = Quarterly
3 = Monthly
4 = Biweekly
5 = Weekly
6 = Daily
7 = Other (specify) _______________________

7. How often does someone review and evaluate your family's spending habits? Would you say ...

0 = Never
1 = Less often than yearly
2 = Yearly
3 = Twice a year
4 = Every 3-4 months
5 = Monthly
6 = Weekly
7 = Daily
8. How often does someone figure your net worth, which is the value of your total assets minus your total debts? Would you say ...
   0 = Never
   1 = Less than every 5 years
   2 = Every 2-5 years
   3 = Once a year
   4 = Twice a year
   5 = Four times a year
   6 = Monthly

9. Do you usually pay your monthly bills as they are due?
   0 = No
   1 = Yes (Go to Q. 11.a)

10. How frequently do you put off paying your bills. Would you say ...
    1 = Seldom
    2 = Sometimes
    3 = Frequently
    4 = Always

11.a) Sometimes people are faced with unusual or unexpected situations, such as an accident or medical emergency which cause additional expenses. During the last year did you have any unexpected situations which caused unusual expenses?
    0 = No (Go to Q. 12)
    1 = Yes

   b) About how much did this cost? $ ________

   c) From what source did you get the money to meet this expense?

   [IF BORROWED ASK:]

   d) Who did you borrow from? ________________________
12. If a large expense occurred such as purchasing a household appliance, furniture or vacation, would you usually pay for it by ...

1 = Using your current income
2 = Taking money from savings
3 = Using a credit card
4 = Borrowing to make the purchase

13. When yearly expenses such as real estate taxes, household insurance, life insurance, or auto insurance premiums are due, do you usually pay for them by ...

1 = Using your current income
2 = Taking money from savings
3 = Borrowing to pay the bill
4 = Some other method (specify) ___________________

14. In making payments on large debts you may have had in 1986, did you generally ...

1 = Get behind in payments
2 = Make larger or more frequent payments than scheduled
3 = Make payments as scheduled
4 = Not applicable (No debts)

Now we'd like to ask a few questions about your future financial situation.

15. First of all, has someone ever reviewed your total financial situation? This would include evaluating insurance coverages, retirement planning, tax planning, as well as income and spending.

0 = No (Go to Q. 19.a)
1 = Yes
16. Who did this review? Was it ...
   1 = You
   2 = Your spouse
   3 = Both you and your spouse
   4 = The entire family, including children
   5 = A professional advisor (Who?) ___________________________

17. When was this most recently done? Would you say ...
   1 = More than 3 years ago
   2 = 2-3 years ago
   3 = 1-2 years ago
   4 = 6 months to 1 year ago
   5 = Within the last 6 months

18. Did this review include a written plan for the future?
   0 = No
   1 = Yes
19.a. Do you have any financial goals?  

0 = No (Go to Q. 20)  
1 = Yes  

b. What are these goals?  

[List each in col b) and ask c) for each]  

c. How are you planning to achieve this goal?  

<table>
<thead>
<tr>
<th>Goal</th>
<th>How achieve?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. a. In the next 5 years, do you expect that your household's financial situation will ...  

1 = Get better  
2 = Get worse, or will it  
3 = Stay the same (Go to Q. 21)  

b. What do you think will cause the change?  

__________________________________________  

__________________________________________  

(71)
21. Now we'd like to know a little bit about who you communicate with regarding your household's finances.

FOR EACH PERSON/GROUP ASK QUESTION a)

CARD 2  a) Would you look at Card 2, column a. Listed there are some response categories. Tell me, how frequently do you talk with (person) about your money matters?

[IF NEVER, GO TO NEXT PERSON]

b) In column b, are listed some reasons you might talk to people about your money matters. Would you tell me which of these are the reasons you talk with (person) about your money matters?

CHECK EACH ONE THEY USE

<table>
<thead>
<tr>
<th>Person</th>
<th>a)</th>
<th>b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Your husband/wife</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Friends or co-workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Your parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Your children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Your in-laws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other relatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. A professional advisor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Others? who?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5-10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11-16)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>(17-22)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(23-28)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>(29-34)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(35-40)</td>
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<td></td>
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<tr>
<td>(41-46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(47-52)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[IF NOT MARRIED, GO TO Q. 26]

22. Do you and your (husband/wife) ever argue about money? (53)
   0 = No (Go to Q. 25)
   1 = Yes

23. How often do you argue about money? Would you say ... (54)
   4 = Seldom
   3 = Sometimes
   2 = Often
   1 = A great deal

24. When arguments over money occur, how are these arguments resolved? (55-56)

25. When you or your (husband/wife) want to purchase a necessary item for the household or a family member, what is the largest amount you feel you can spend without talking it over with your (husband/wife)? (59-62)
   $___

26. Over the past five years, have you had any financial difficulties? (5)
   0 = No (Go to Q. 28)
   1 = Yes
27. a) Now please think about those times when you were having financial difficulties. Would you look at Card 2, column a, again, and tell me when you were having financial difficulties, how frequently did you talk to your (person) about the situation?

[IF NEVER, GO TO NEXT PERSON]

b) In column b, are those reasons you may have talked to someone about your financial difficulties. Would you tell me which of these were the reasons you talked with (person) when you were having financial difficulties?

[CIRCLE YES OR NO FOR EACH]

<table>
<thead>
<tr>
<th>Person</th>
<th>Never (6-11)</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
<th>To get advice or info</th>
<th>Help resolve problem</th>
<th>Discuss</th>
<th>To inform others</th>
<th>Other-Specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Your husband/wife</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>(6-11)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Friends or co-workers</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Your parents</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Your children</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Your in-laws</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Other relatives</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. A professional advisor</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Others? who?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In this next section we would like to know some of your opinions about money management, finances and the use of credit.

28. I am going to read a series of statements. After I read a statement, would you tell me if you think it is true, false or you are not sure. Here is the first statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>True</th>
<th>False</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) A person needs a will only if there is a large estate to be left to their heirs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) Retirees need 70 to 80% of current income to maintain the same standard of living during retirement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) Social Security records of earnings should be checked for errors at least every five years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) If a person dies without a will, his/her assets are distributed according to state law.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) All credit card companies offer a no interest plan if you pay your bills in 30 days.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) To have a good credit rating one must make purchases on credit and make payments according to the credit contract.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) Marital status can be used by a lending institution in determining whether or not credit is granted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) There is no federal legislation or regulation dealing with credit card billing errors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) Borrowing money to purchase an item decreases money available for future spending.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) Insurance is a way to reduce the risk of a financial disaster.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k) All financial risks can be covered by insurance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>l) Insurance costs can be reduced by having high deductible clauses in your contracts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>m) Life insurance needs vary with age and the size of a family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Statement</td>
<td>True</td>
<td>False</td>
<td>Not sure</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>n) Term insurance is the best form of life insurance protection available for one's dollar.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o) A person is more likely to reach their financial goals by planning for the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>p) Not many families have large enough assets to be concerned about financial planning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>q) A person is more likely to make better financial decisions if they base those decisions on their financial records.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>r) A budget provides only for expected expenses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>s) The interest one pays on a home mortgage is directly deductible from the amount of income tax one pays.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>t) One should stick with investment decisions because of the costs involved in making changes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>u) Having different types of investments and savings decreases financial risk.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>v) One should pre-plan an amount to save or invest each month.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Many people have credit cards and use them in different ways. We are interested in knowing about the credit cards your family might have.

29. About how many different credit cards do you and other members of your family use?

[IF NONE, GO TO Q. 34]

30. People use credit cards for many different reasons. We would like you to think about all of the reasons you and other household members use credit cards.

Do you use credit cards because (reason)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) they are more convenient than carrying cash or writing checks?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>b) you want to establish a credit rating?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>c) it makes sense; you have free money for a month or two until you are billed?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>d) you want to buy an item and don't have the money for it at this time?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>e) it's an easy way to borrow money?</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>f) any other reasons? (specify)</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
31. Do you ever pay for (item) with credit cards?

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) clothing</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>b) furniture or major appliances</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>c) medical expenses, including doctor fees, prescriptions, etc.</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>d) vacation expenses</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>e) items for remodeling your home or apartment</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>f) groceries or meals at a restaurant</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>g) gasoline</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>h) any other things (specify)</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

32. How frequently do you have to pay finance charges on purchases made with credit cards? Would you say ...

0 = Never
1 = Seldom
2 = Sometimes
3 = Usually
4 = Always

33. Approximately how much would you feel comfortable owing on all credit cards at one time?

$_________
34. Who generally makes the arrangements for credit obligations or contracts, such as buying a home or taking out a loan of any type? Would you say ...

1 = You
2 = Your husband/wife
3 = Both of you [ASK Q.35 FOR SUBJECT]
4 = Other family members
5 = A professional advisor
8 = Has never obtained credit [ASK Q.35 FOR SUBJECT]

[INSERT PERSON FROM QUESTION 34]

35. We would like to know how knowledgeable (Person in Q.34) is about various aspects of borrowing money. How knowledgeable is (person) about (aspect)? Would you say very knowledgeable, somewhat knowledgeable, or not very knowledgeable?

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Very knowledgeable</th>
<th>Somewhat knowledgeable</th>
<th>Not very knowledgeable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) annual interest rates charged?</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>b) where to go to borrow money?</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>c) the legal responsibilities of the borrower and the lender?</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>d) the actual total costs of borrowing money?</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

36. Do you think your credit rating is ...

1 = Very good
2 = Good
3 = Fair
4 = Poor
37. In this last part of the interview, we would like some information about your assets, as well as about debts you may have. This information is strictly confidential and will only be used to calculate averages for the entire study.

a) First, does anyone in your household have \( \text{(type of asset)} \)?

(If yes to a), ask b)

b) What is the approximate value for all \( \text{(assets)} \) owned by household members?

<table>
<thead>
<tr>
<th>Asset</th>
<th>a) Have</th>
<th>b) Approximate value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checking accounts</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Saving accounts/money market accounts</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Stocks or stock mutual funds</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Bonds or bond mutual funds</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Autos, trucks, other vehicles</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>An IRA or KEOGH</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Other retirement fund</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Annuities</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>A home</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Farm land or other real estate such as rental property</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Recreational equipment, RV, Snowmobiles, Boats</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Personal possessions such as jewelry, antiques and other collectibles</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>The cash value of life insurance policies</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>A business or partnership</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
<tr>
<td>Any other assets? (specify)</td>
<td>Yes: 1</td>
<td>$<strong><strong><strong><strong>,</strong></strong></strong></strong></td>
</tr>
</tbody>
</table>
38. Are you a ...

1 = Home owner (Q. 40)
2 = Renter
3 = Living rent free (Q. 43)
4 = Other (specify) ________________

39. [RENTERS ONLY]
   How much do you pay in rent per month?  (48-51)
   $ __________ (Q. 43)

40. Do you have a mortgage on your home?  (52)
   0 = No (Go to Q. 43)
   1 = Yes

41. a) Approximately how much do you owe on your mortgage?  (53-58)
   $ __________
   b) What is your total monthly payment?  (59-62)
   $ __________
   c) Does this payment include taxes and insurance?  (63)
   0 = No
   1 = Yes
   9 = Don't know

42. a) Do you have a second mortgage?  (64)
   0 = No (Q. 43)
   1 = Yes
   b) What is your payment on this second mortgage?  (65-68)
   $ __________
43.a) Do you and other family members have health insurance (include medicare)?
   0 = No
   1 = Yes → b) Does your policy include major medical?
       0 = No
       1 = Yes (Go to Q. 44)
       9 = Don't know

c) Do you have major medical insurance?
   0 = No
   1 = Yes
   9 = Don't know

44. Do you and other family members have disability insurance?
   0 = No
   1 = Yes

45.a) Do you have automobile insurance?
   0 = No
   1 = Yes → b) Does it have a deductible clause?
       0 = No
       1 = Yes

46.a) Do you have homeowner's or renter's insurance?
   0 = No
   1 = Yes → b) Does it have a deductible clause?
       0 = No
       1 = Yes
47. Does anyone in your family have life insurance policies? (13)

0 = No (Go to Q. 48)
1 = Yes

a) (Do/Does) (person) have life insurance?
   [IF YES TO a), ASK b), c) & d)]

b) What is the total dollar amount of life insurance (person) has?

c) How much of this is term insurance?

d) How much is whole life insurance?

<table>
<thead>
<tr>
<th>Person</th>
<th>(a) Have?</th>
<th>(b) $ All insurance</th>
<th>(c) $ Term</th>
<th>(d) $ Whole life [universal]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>You</td>
<td>1</td>
<td>0</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>Your (husband/wife)</td>
<td>1</td>
<td>0</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>Your children</td>
<td>1</td>
<td>0</td>
<td>$_________</td>
<td>$_________</td>
</tr>
</tbody>
</table>

[C AND D = B]

48.a) In the past 2 years have you reviewed the amount of life insurance you and other household members have? (68)

0 = No (Go to Q. 49.a)
1 = Yes

b) Did this cause you to change the amount of insurance you have? (69)

0 = No (Go to Q. 49.a)
1 = Yes
c) Did you increase or decrease the amount you have?  
1 = Increase  
2 = Decrease  

49.a) Do you have a written will?  

___ Yes -> Has it been reviewed in the last 5 years?  
___ No  
0 = No  
1 = Yes  
8 = N.A., just established  

[IF MARRIED:]  
b) Does your spouse have a written will?  

___ Yes -> Has it been reviewed in the last 5 years?  
___ No  
0 = No  
1 = Yes  
8 = N.A., just established
50. We will now ask questions about the types of debt your family might have.

a) Do you currently owe money on any (type of debt)?

[IF YES, ASK b]

b) What is the total amount you currently owe?

<table>
<thead>
<tr>
<th>Type of debt</th>
<th>a) Owe?</th>
<th>b) Total owed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Credit or charge cards such as Visa, Master Charge, Sears, Penneys or oil companies</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>2) Home improvement loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>3) Home furnishing loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>4) Automobile or other vehicle loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>5) Educational loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>6) Consolidation loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>7) Outstanding hospital, medical or dental expenses</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>8) A loan on life insurance</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>9) Other personal or nonbusiness loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
<tr>
<td>10) Business loans</td>
<td>Yes: 1</td>
<td>$_<strong>,</strong>_____</td>
</tr>
<tr>
<td></td>
<td>No: 0</td>
<td></td>
</tr>
</tbody>
</table>

51. Thinking of all the debts you now have, including credit cards and loans, what is your approximate total monthly payment on these debts?  

$___,_______  [DO NOT INCLUDE MORTGAGE]
52. a) Would you tell me the approximate net income (take home pay) received by all members of your household in 1986? Include wages, salaries, business income or farm income, as well as social security, retirement or child support payments. 

$__________ [PROBE FOR ESTIMATES] 

b) How much of this income will you save during 1986?

$__________

CARD 3 

53. Look at card 3, which lists various expenses a household might have. Please think about your monthly household expenses and tell me, in an average month, what do you estimate your total family expenses to be?

$__________

In this final section of the questionnaire, we would like your opinion on some questions.

54. Thinking about your family’s current financial situation, we would like to know how deeply in debt you feel you are. Would you say you are ...

4 = Not at all in debt
3 = Very little
2 = Just enough to feel uncomfortable
1 = Way over your head

55. a) How would you compare your current financial situation to the way things were five years ago. Are you ...

1 = Better off
2 = Worse off or
3 = The same as 5 years ago (Go to Q.56)

b) What has caused this change?

________________________________________________________ [PROBE] ——(11,12)

________________________________________________________ [PROBE] ——(13,14)
56. Would you look at Card 4. Please tell me how satisfied you are with (situation). Would you say you are extremely dissatisfied, dissatisfied, satisfied, extremely satisfied or neutral.

<table>
<thead>
<tr>
<th>Situation</th>
<th>Extremely dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Extremely satisfied</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>the way your family manages money?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>your family's present level of living?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the amount you currently have in savings?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>your ability to stay out of debt?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>your ability to pay back the money you owe?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the current level of your assets?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the willingness of family members to discuss money matters?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>how prepared you are financially to meet large emergency expenses?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the planning you have done for retirement?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the plans you have made for distributing your assets and belongings when you die?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>the overall quality of your life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

Iowa State would like to thank you for your time and cooperation in this study. Your money management practices and opinions are valuable to us.

End Time _____ : _____

[Rate the quality of the interview]

5 = Excellent  
4 = Good         
3 = Average      
2 = Fair         
1 = Poor

Explain why ____________________________________________

(26)