

PLANNING FOR RETIREMENT SECURITY: A STUDY OF
WOMEN IN THE MIDDLE YEARS

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CHAPTER I

INTRODUCTION

Americans look to retirement as a time to enjoy life, to relax and to devote energy to activities left out during earlier years. For a large portion of the population this dream will never come true. Many men and women, but especially women, can never afford to enjoy these years. They have no money for leisure and must use what they have for subsistence. They exist on incomes at or below the poverty level.

In light of the sobering situation facing older women, the purpose of this study is to explore some of the factors that contribute to income inadequacy in retirement. Midlife women who are 10 to 25 years from retirement have been surveyed to develop baseline information about their retirement expectations. They have been asked what actions they have taken to meet their retirement needs. The research includes women who plan to retire from paid employment outside the home as well as homemakers whose retirement income will be dependent on their husbands who have been the primary wage earners.

Statement of the Problem

What is the financial situation of female senior citizens? Many are poor. "One in three female-headed households lives in poverty compared to one in 13 male-headed households" ("Women's Employment Needs," 1982, p. 5). Women who are over 65, and especially those who are 65 and single, struggle financially. In 1982, married people 65 and older, had median incomes of \$7,171 compared to singles of the same ages with median incomes of approximately \$6,424. When single men and women 65 years of age and older were compared, men had a median income of \$7,576 compared to women receiving a median income of \$6,128. The total income of 44.9% of all women over the age of 65 fell below the poverty level - \$4,626 for a single person over 65 (Welniak & Fendler, 1983; Welniak & Henson, 1984).

One of the reasons that a substantial portion of older women are poor is that women live longer than men. A woman age 65 is expected to live an additional 18.7 years compared to the same age man who has a life expectancy of 14.3 years (American Council of Life Insurance, 1982). Women frequently marry men who are older, and in second marriages, men, on the average, are 7 to 10 years older. For the average couple, the woman has an almost 70% chance of outliving her husband (Goldman & Lord, 1983). At the same time, she often has fewer financial resources to see her through retirement years. The assets accumulated with her spouse may have been depleted on medical care for her husband who died first. One-third of all widows live below the poverty line during

a period of widowhood that extends for an average of 18 years (Porter, 1980).

On the average, a surviving widow receives \$363.34 per month in Social Security benefits. Additional income in the form of asset income is low for many nonmarried women. Thirty-six percent have no income from assets and an additional 43% get from \$1.00 to \$999 in asset income - the median is \$320 (Fox, 1982). In addition to death of the spouse, substantial increases in separations and divorce have occurred in the past 20 years adding to the further likelihood that a woman will find herself alone in her older years. Thus, women who are moving toward age 65 may find they are suddenly divorced or widowed and may face a drastic drop in income.

The plight of women is affected by a complexity of influences. Two main factors discussed in this research are economic and social-psychological factors. The economic conditions include labor force participation affecting salary and pensions, knowledge about asset accumulation, and availability and understanding of survivor benefits. The social-psychological factors are aspects of the socialization of women in U.S. society, specifically locus of control, facility with math skills, and inclination to take risks.

Economic Influences

Low pay and sporadic labor force participation lead to limited or nonexistent retirement benefits. Many women have limited opportunities to build a secure financial base for

retirement because their wages are low. On the average, women receive fewer dollars for their work hours than men. In 1981, full-time female employees were two to three times as likely as men to earn from \$3,000 to \$5,000; and men, on the other hand, were six times as likely as women to earn \$25,000 to \$50,000 (Women's Bureau, 1983). "The gap between women's wages and men's wages widens with age, so that after age 45 women earn 55 cents for every dollar men earn ("Old' at 40," 1984, p. 4).

The in and out employment patterns of women reduce their eligibility for pensions (private and public) as well as benefit levels (Hungerford & Makela, 1980). Women may find themselves in jobs with no pension plans; they may elect part-time employment with no benefits; or they may move in and out of employment, thus sacrificing access to pension vesting. "About 50 percent of all working women are in jobs with no pension plans" (National Commission on Working Women, 1982, p. 3).

Only one-fifth of those working in private business qualify for pensions. Although over 50% of all women are employed, only 21% are covered by one of the 500,000 private pension plans (Keys, 1979). Many private pension plans require 10 years of continuous service to be partially vested in pension rights. Even a short time out of the labor force could formerly mean the loss of all accrued benefits and credits.

National legislative efforts have alleviated some of the problems affecting older women relating to pension access. In 1984, the Retirement Equity Act (REA) changed provisions in the Employee Retirement Income Security Act (ERISA) of 1974. Three

provisions, in particular, reduced obstacles for women: 1) lowering the age for counting an employee's service for pension credit from age 25 to 21; 2) requiring written agreement of a spouse before a survivor benefit can be declined; and 3) allowing men and women to take maternity leave up to five years without losing vested time counted toward pension eligibility ("Congress Approves Measure," 1984).

Henretta and O'Rand (1980) observe that women make employment choices in response to changes in their husbands' income. They further conclude that both men and women ignore long-run needs such as retirement income and instead choose short-run considerations such as high current income instead of investing current dollars for tomorrow.

In addition to lacking their own pension plans, many women do not receive survivor payments from their husbands' pensions. "Less than 10 percent of widows receive their husband's pension benefits, and women who have been divorced rarely share in retirement benefits at all" (National Commission on Working Women, 1982). Pension plans are considered to belong to the worker and not the spouse. Workers who select survivor plans must choose lower retirement benefits during the remainder of their lives. Many women found at the death of their spouses that they had been left out of a survivor plan, thus their source of pension income stopped. Now the 1984 REA prohibits a worker from declining the survivor benefit without the signature of the spouse ("Congress Approves Measure," 1984). Future survivors may

be spared the shock of discovering they were disenfranchised by their husbands.

After December, 1981, women who earn their own civil service annuities forfeit any entitlements to Social Security benefits as spouses or survivors of persons entitled to Social Security worker's benefits. These benefits are reduced by the amount of their civil service pensions. Educators (Guthrie, 1981) at West Virginia State University say:

Those most immediately hurt by this legislation will be the hundreds of thousands of women who have worked part of their lives as wives and mothers, and part of their lives in government. . . . These women are entitled to 'partial' retirements as government employees--and up to now, have believed they would also be entitled to some benefits as wives or widows or workers covered by Social Security. (p. 1)

This policy to consider all government funded pensions as one pool, reduces government expenditure on one hand but can result in individual hardship on the other hand.

Women who work at home frequently miss the financial planning opportunities such as seminars and programs offered to men during employment hours. Furthermore, women do not seek help in planning their long-range financial needs and goals. Understanding retirement arrangements and alternatives generally stems from exposure at the workplace to various payroll deductions and retirement benefits (Select Committee on Aging, 1980). Women often lack the skills to accumulate wealth to supplement their pension income. Gerner (1980) found that single women who were once married but who face retirement alone are significantly less likely to have accumulated assets than couples, unmarried men and women, and men who have been married.

Even the limited range of assets held by women who are no longer married are generally worth less than those held by others.

Assets are generally a necessary part of adequate retirement income. On the whole, those without income from assets are substantially less well off than those with income from assets. In a national report, people without assets had median total money incomes of \$3,350 compared to those with assets who had median total money incomes of \$7,650. In 1978, almost one-third of the women who were 55 years of age and older received less than \$250 in asset income (Social Security Administration, October, 1981).

Social-Psychological Influences

Looking beyond economic factors, there are social-psychological factors that may play a significant role in the problem of inadequate retirement income for women. Factors within the psyche of women themselves may inhibit their planning and accumulating funds for retirement security. Socially influenced factors such as perceived locus of control, the confidence to take risks, and comfort with math ability may well impact on financial decisions women make and carry out.

People act according to an internal or external locus of control. People who believe they have control over their fate are designated as having an internal locus of control and also score high in self-esteem. Others who think that fate, luck, chance and/or powerful others control their lives have an external locus of control and score low in self-esteem (Fitch, 1970; Harrison,

Guy, & Lupfer, 1981; Ryckman & Sherman, 1973). Persons who have high internal control exhibit more goal-oriented behavior. Retirement planning is based on goal setting and taking charge of one's life. If women expect that other people will take care of them or that luck will guide their lives, they may not make plans or take necessary actions to provide for their own retirement years. This becomes, then, both an individual and a national problem of providing needed resources to support an aging, female population.

In The Cinderella Complex, Dowling (1981) describes women as being socialized into dependency which makes them poor risk takers and encourages women to rely on others to take care of them. This perspective is substantiated by Lopata and Norr (1980) who found that women avoid long-term retirement planning because they expect to be taken care of by their husband's retirement funds coupled with their own Social Security benefits.

On the other hand, several researchers (Markus, 1980; Plunkett, 1980; Serlin, 1980) indicate that for women who are career oriented, employment outside of the home is related to greater independence. Career women reported higher self-esteem than women who were not employed outside the home (Markus, 1980). However, women who worked at home and enjoyed their work rated themselves high on independence and reported higher levels of self-esteem. Other influences such as the Women's Movement may have produced significant differences between cohorts of women. Thus, women who are in their 40s may be economically and

emotionally less dependent than women in their 50s (Bardwick, 1980).

Women are described as poor risk takers and are known to be conservative in their investment choices. Erb (1969) has found that professional women were aware of the need to invest for retirement and that many were saving, but they had been saving in a way that did not keep up with inflation and thus their buying power for future years had been reduced. Risk is generally related to gain, with higher risk takers receiving greater gain. Conservative choices may prevent women from taking financial risks that could substantially increase their assets for retirement living.

Investments involve working with mathematical concepts and traditionally women have not been exposed to as many math courses in school as boys. Fennema and Sherman (1977) have found that most males took from three to four years of high school mathematics compared to girls who completed either one or two years of math.

An extreme lack of self-confidence about computation is called "math anxiety." Fox (1981) reports that more females than males state that they are math anxious, and that these feelings inhibit learning in the classroom. Fox concludes that social attitudes inhibit women from studying mathematics and that remedial work is needed to reintroduce women to the study of mathematics. Being ill at ease with numbers and math applications may inhibit women from pursuing plans for retirement.

Many factors affect women's planning for retirement. Understanding these economic and social-psychological influences is essential if women are to take responsibility for their own retirement security. Research is needed to determine the relationship of these factors to the financial behavior of midlife women as they anticipate the financial needs of their older years.

Lifetime Planning

The theoretical base for this study rests on the general concept of management starting with goal setting and following through to implementation (Deacon & Firebaugh, 1981; Gross, Crandall, & Knoll, 1980). Management principles and procedures apply to all resources but in this study are considered from the retirement and financial management perspective with special emphasis on women's planning for retirement.

Management theorists (Deacon & Firebaugh, 1981; Gross, Crandall, & Knoll, 1980) emphasize the need to set goals, to select priorities, to gather information on which to make decisions, and to incorporate both short and long term plans in the process. Paolucci, Hall, and Axinn (1977) state that in the absence of a conscious effort, people can slip easily into a passive role, letting fate make decisions. Passivity can be overcome when people accept responsibility for their choices and actions. Paolucci et al. go on to say, "Things need not just happen...they can be decided" (p. 1). Although many research studies (Henretta & O'Rand, 1980; Kroeger, 1982; Morrison, 1976)

have found that people do not make long term plans for retirement, theory suggests that people who manage both short and long term needs are more likely to meet their goals.

Financial management, a special application of management principles, is defined as follows by Hallman and Rosenbloom (1978):

. . .the process of determining your total financial objectives, considering alternative plans or methods that are best suited for you in your circumstances, implementing the plans, and then periodically reviewing the personal financial plan and making necessary changes. (p. xvii)

Managing finances, then, is a purposeful, coordinated, and systematic task which starts with deciding what is important, leads to action to support selected goals, and then requires attention to adjusting the plan as changes occur.

Retirement planning for many people has been considered only shortly before retirement is to take place. Hallman and Rosenbloom (1978) state that retirees may receive retirement income from three main sources: employer-sponsored plans, government retirement programs, and individual assets accumulated during working years. However, they suggest that well-balanced plans include diversification so people can rely on retirement income from a number of sources.

Midlife women have a foreshortened amount of time to establish their financial security before retiring if they enter the labor force after raising their children or if they choose not to enter the labor force at all. Furthermore, they must accumulate a larger retirement cushion because they have greater longevity than men. Most separated, divorced, or widowed women

face both a short- and long-range financial crunch because they may be largely on their own.

Statement of Purpose

The purpose of this study is to investigate the degree to which midlife women anticipate their financial retirement needs and the degree to which they are taking steps to provide for those needs. Furthermore, the study seeks to determine the relationship between a) personal, economic, and social-psychological characteristics of women and b) their plans and actions for financial well-being in their older years.

The specific research question addressed in this study is: What is the relationship between women's preparation for financial security in retirement years and current economic factors, personal characteristics, and social-psychological measures? Economic factors are family income level, respondents' income, labor force participation, respondent's occupation, husband's occupation, and respondent's eligibility for a pension. Personal characteristics include education, age, marital status, and dependent children. Social-psychological measures include internal-external locus of control orientation, level of risk taking, and comfort with or fear of math.

Objectives

The specific objectives of the study are:

1. To explore the level of retirement planning by midlife women.

2. To explore the relationship between extent of retirement planning and personal characteristics.

3. To examine the relationship between retirement planning and household economic factors.

4. To assess how women's retirement planning is related to social-psychological factors.

5. To make recommendations for educational programs and policy based on the findings of this study.

Research Questions

1. How does level of retirement planning relate to mid-life women's personal characteristics -- age, education, marital status, and dependent children?

2. What is the relationship between retirement planning of mid-life women and household economic factors -- family income, respondents' income, employment, occupation, spouse's occupation, and eligibility for a pension.

3. How is the level of retirement planning related to social-psychological factors -- locus of control, risk taking, and feelings about mathematics?

Definitions

Assets: Interest, dividends, rent, and money from estates and trusts (Social Security Administration, December, 1981).

Financial Planner: A person who makes investment recommendations based on the client's goals (VanCaspel, 1980). For the purpose of this study, a financial planner is any person

who offers financial advice and is compensated for this advice, including bankers, stock brokers, savings and loan personnel, and financial analysts who work for fee only.

Individual Retirement Account: A retirement tool allowing any wage earner to invest \$2,000 yearly (plus an additional \$250 for an unemployed spouse) in a tax deferred retirement plan (Internal Revenue Service, 1980).

Keogh Plan: A retirement tool for self-employed persons allowing them to invest a maximum of \$7,500 per year in a tax deferred retirement plan (Internal Revenue Service, 1982).

Locus of Control: A construct that derives from social learning theory. Those with an internal locus of control believe they have control over their destinies. Others with an external locus of control believe what happens to them is controlled by events outside of themselves such as luck, chance, and powerful others (MacDonald, 1972).

Retirement Planning: A dynamic process which includes analyzing financial retirement needs, planning long-term objectives to meet the needs, and selecting the appropriate investment choices to meet the needs (Hakala & Delaney, 1983).

Implications of the Study

The ratio of Americans 65 and older compared to the population has moved from 1 in 25 in 1900, to 1 in 9 in 1980, and it is predicted to drop to 1 in 5 by 2030 (American Council of Life Insurance, 1982). This means there will be more people who are not in the work force living on incomes from pensions and

investments and supported by a smaller portion of people who are in the labor force. More children may be supporting aged parents and fewer workers contributing higher levels toward Social Security. Findings from this study can expand options for policymakers by helping people become more aware of issues to be faced in the future. Women and men can decide how to best balance current and future economic needs, and these individual decisions will impact future governmental actions.

If the current life expectancy of women stays the same, Glick (1979) predicts that by the year 2000, 50% of women 65 and over will live alone. Unless women understand the need to plan adequately for their retirement years, they may find themselves living in poverty and placing a larger burden on society to provide a minimal base for their existence.

Adult development theorists (Erikson, 1978; Levinson, 1978) suggest that awareness, intervention, and education can alter one's sense of mastery over environment. By identifying the contributing factors, education and intervention can make a great impact on women who had previously sidestepped responsibility for their future financial needs. Women need to understand the importance of their own retirement planning.

The serious implications for national pension and Social Security plans and for the well being of older women direct this research toward women who need assistance in identifying, planning, and implementing retirement goals. Midlife women have

time to develop financial skills and to accumulate assets to maximize options in retirement years if they are alerted to the factors that help or hinder personal financial planning.

The baseline information from this project can be used by women to understand their own needs and can provide a basis for meeting those needs. Information can help educators in the private and public sectors to develop programs and other activities targeted to midlife women. Women can learn essential planning and management skills to meet the goal of retirement security which will provide them, as Butler (1975) says, with the mental health and economic security to thrive rather than simply survive.

Summary

A significant portion of women over 65 have inadequate resources for their retirement years. In 1982, the total income of more than 40% of women over 65 fell below the poverty line. Many women do not accumulate credits from their own pensions and 90% of the time do not receive survivor benefits from husbands' pensions. Being conservative risk takers, even women who do plan for retirement may select choices that do not provide adequate income in retirement. The purpose of this study is to assess the relationships between midlife women's personal characteristics, economic backgrounds, and social-psychological orientations, and financial planning for retirement. The study is expected to provide information useful in developing programs to help mid-life women plan for financial security in their later years.

This action is needed to help the current cohort of mid-life women avoid some of the hardships experienced by current elderly cohorts.

CHAPTER II

SURVEY OF LITERATURE

Retirement planning is considered by many men and women only shortly before retirement occurs, but this is too late to build an economic base that will adequately supplement pension and Social Security income during retirement. Issues that affect retirement planning are discussed in this chapter, as well as presentation of research findings on the topics relevant to this study.

Certain economic and social-psychological problems relating to retirement are unique to women and impact women to a greater degree than men. Policy decisions that change private pensions and Social Security may affect women differently than men. In this chapter literature about retirement is reviewed for men and women with attention to special problems relating to women.

Retirement Issues for Men and Women

Numerous studies (Chatfield, 1975; Edwards & Klemmack, 1973; Fox, 1977; Hoyt, Kaiser, Peters & Babchuk, 1980; Medley, 1976; Shapiro, Murrell, & Usui, 1980) have found that income of older persons is an important indication of their perception of well being. Income adequacy and goal directedness are significant predictors of life satisfaction (Atchley, 1982). Block (1982)

concluded that the three variables of major importance in predicting retirement satisfaction are: health, preretirement planning and income after retirement. Discussion in this section considers the role of government and the role of the individual in planning for income security in retirement.

Contribution of Government

In the United States, retirement planning is debated as an economic, social, ethical, and political question. The role that Social Security should play in providing income security in old age is not universally supported nor clearly defined. Current contributors wonder what they can expect from Social Security when they are ready to draw benefits.

Many western countries tax workers heavily during their productive years, provide tax dollars to support retirees, and thereby assure income security during retirement. Butler (1975) states that 29 countries included in the western industrialized nations began social security systems before the United States and most of them provide more income for their elderly than the United States. The government of the United States makes no contribution to Social Security, compared to other countries where the government contributes through general tax revenues. The Social Security Administration collects contributions, determines eligibility, and dispenses payments for their programs. Although it is difficult to anticipate political decisions, many people question the existence of Social Security when they retire (Fialka, 1983).

Social security payments in the aggregate make up a substantial expenditure of the federal government. Analysts at the Congressional Budget Office estimated in 1983 that the Social Security program could add \$10 billion to the federal deficit and more in following years (Pear, 1982). As the U.S. moves toward a period of fewer workers supporting more retirees, two workers for every retiree in 2025 ("Your Stake In The Fight," 1981), the problem of greater outflow than inflow of Social Security dollars becomes serious. Obvious solutions are to increase the retirement age, reduce cost of living clauses, and avoid additional entitlements in order to reduce outflow. In order to make these changes palatable to the American public, emphasis has been placed on the improved financial status of the elderly. At the same time, not all elderly persons have seen marked financial improvement. There are some, specifically women, whose financial situations are obscured when the elderly is described as a homogenous group.

Statistics have been used to show that the elderly as a group has improved their economic situation. For example, Gottschalk (1983) states:

Most older people are better off than the older people of 10 or 20 years ago. In the past 13 years, America's senior citizens have received far greater average annual percentage increases in their income than those under 65. (p. 1)

The report of the National Advisory Council on Economic Opportunity (1980) cautions, however, that the statistics are misleading when individuals are considered. Although Social Security benefits were expanded during the 1970s which decreased

the incidence of poverty for most elderly persons, other subgroups of the elderly face severe economic problems. Older women face much higher risks of poverty than older men, and both men and women are much more likely to be poor if living alone instead of being married. In 1976, almost two out of five nonmarried women over 65 were poor, compared to a little more than one-fourth of elderly nonmarried men and less than one-tenth of elderly married couples. "...the implication that poverty among the aged has been nearly eliminated, or that their living standards have dramatically improved is cruelly misleading" (National Advisory Council on Economic Opportunity, 1980, p. 15).

The implications from closer analysis of the elderly poor show that the inequality in life opportunities between men and women increased substantially over the past years. For a large portion of women, retirement planning was not possible because their incomes covered only current living expenses. Even those women who did make retirement plans generally had to start from a lower financial base than men. The National Advisory Council on Economic Opportunity (1980) states that at the end of the sixties, women faced a much greater risk of poverty than men. By 1977 women heading households were about 5.7 times more likely to be poor than men heading families compared to 1967 when women were only 3.8 times as likely to be poor compared to men.

The National Advisory Council on Economic Opportunity (1980) goes on to say that even those aged who have officially moved out of poverty have, in fact, only moved a few hundred dollars above the poverty line.

If we add to the officially poor those aged whose income falls below 125 percent of the poverty line (a threshold which is \$500 below the U.S. Bureau of Labor Bureau of Labor Statistics' 'lower living standard' for an urban retired couple) the number of aged poor would double and include one-fourth of all the nation's aged. (p. 148)

To what degree is there national support for men and women in retirement years? The average monthly Social Security payment for adult men reported in January 1982 was \$461.25 compared to \$291.23 for adult women. When workers were compared, retired working men received an average of \$469.70 and retired working women received \$314.82 (Social Security Administration, 1982). More than one-fourth of the elderly live almost entirely on their monthly Social Security checks. Twenty-six percent depend on Social Security for 90% of their income (Pear, 1982).

In order to consider the economic adequacy of \$291.23 per month, major expenditures of the elderly must be taken into account. The elderly spend three times more than younger persons on health care (Kimmel, 1974). Eighty-five percent of women over 65 have some kind of chronic health problem (Block, Davidson, & Grambs, 1981). The per capita spending in 1982 on health care for the elderly was \$3,140 (Pear, 1982). If one assumes that an elderly woman paid 20 percent of that amount, her share would be \$52.00 per month leaving her \$239.23 for housing, food, clothing and other basic needs. When proposals are made to reduce or change benefits "across the board", equity is ignored as it affects various elderly subgroups such as women.

Responsibility of Individuals

In order to adequately plan for retirement an individual must learn to identify and use options, make use of the friendship network and the linkage system to family members, and must take action early to assure financial security (Jewson, 1982). Researchers (Henretta, & O'Rand, 1980; Kroeger, 1982; Morrison, 1976) indicate that neither men nor women think about retirement very early in their lifetimes.

Henretta and O'Rand (1980) found that men as well as women planned for the short term and did not make long-term retirement plans. Most of the male blue-collar worker respondents chose retirement with a reduced benefit at age 62 and declined a widow's pension to maximize their own current income.

People experience great difficulty in shifting from from current consumption to saving for retirement needs Morrison (1976) concluded. Although people in Morrison's study were thinking about financial adequacy, they had not calculated their retirement needs, had not estimated expected retirement benefits, and had not taken any action to assure income security.

Kroeger (1982) found that serious consideration of retirement came late in life for both men and women. When retirement was actually approaching, men were more likely than women to have thought about retirement for more than a year; thinking about retirement was reported by 58% of the men and 49% of the women.

Although as a group men do not appear to place any more emphasis on retirement planning as a lifetime goal than women,

when retirement comes closer to becoming a reality, men appear to take more positive steps toward making the transition into retirement. Current studies (Block, Davidson, & Grambs, 1981; Kroeger, 1982; Lowenthal, Thurnher & Chiriboga, 1975; Szinovacz, 1982) suggest that even at a late period in life men are more likely than women to make plans, that educational level differentiates between retirement plans of men and women, and that women require more structured opportunities to carry through with retirement plans.

Lowenthal, Thurnher, and Chiriboga (1975) state that most preretirement men had definite plans for their retirement period. Of the preretirement women, half considered their own retirement from paid jobs as their main transition and the other half emphasized their husband's retirement. The unattached working women felt the need for planning. The preretirement women who pictured their spouses' retirement as their main transition left their future up to fate or to their husbands.

Kroeger (1982) states, "Unlike men, women appeared disinclined to do any more or any less preparation during this period when retirement was beginning to take shape as a reality" (p. 110). There were differences between men and women, however, based on education level. College-educated retirees and men and women executives who did not have access to formal retirement programs prepared at essentially the same rate (Kroeger, 1982). Men with high school educations and non-executives were likely to plan either aided by formal programs or through self help. High school educated women were quite different. Most of them did no

planning: 70% of the women high school graduates and 65% of the non-executives had no plans compared to 39% of the male high school graduates and 32% of the non-executives.

Over three-quarters of the men, but only about 40 percent of the women had done some homework on the subject of retirement (Kroeger, 1982). Typically men had been engaged for one to five years in informal retirement preparatory activity. Women, on the other hand, were more likely to have thought about retirement for less than a year.

Women appeared to need more structure than men to learn about and to effect retirement plans. Men were more likely to use informal sources (either alone or in combination with formal sources), whereas women relied more on formal programs. When no formal programs were available, men substituted informal means. Women most often did nothing to prepare themselves for retirement if formal programs were not available. Kroeger (1982) states, "Women who failed to attend retirement programs appear particularly unsure of their retirement expenses. Almost two-thirds of this group had no idea of how much their expenses would be, as compared to only 22 percent of the men" (p. 108).

Although men appear to start earlier and to pursue several different routes in their retirement planning, women are as innately capable of taking charge of their own retirement plans. As Szinovacz (1982) summarizes, "At least two factors are responsible for lack of retirement planning among women: insufficient personal initiative and inadequate access to retirement programs" (p. 226).

Retirement Issues Unique to Women

The 1980s are a time of reevaluation and reassessment. Women's roles have expanded and changed. Working outside the home and divorce are realities for more women than ever before. Retirement benefits in the form of Social Security are changing. What do theorists suggest that women need in order to take charge of their current and future financial needs?

The number of midlife women in itself is significant. It is projected that between 1990 and 2010, as the post-World War II "baby boom" reaches middle age, the number of midlife women will peak with an estimated 36 million aged 45 to 64 at the end of that period (Select Committee on Aging, 1980). Today there are 23 million persons 65 years old and over in the United States and by the year 2000 there will be about 31 million. That means an increase of one-third in the elderly population during the next 23 years. There is likely to be a very large increase between now and the year 2000 of elderly women who eventually become divorced, according to an extension of projections made by Glick (1979). By the year 2000, the proportion of "young-old" women who eventually become divorced is expected to approximately double, going up from about 12 percent in 1975 to 22 percent in the year 2000.

Women can no longer rely entirely on traditional roles to carry them throughout their lives. They must anticipate the possibility of divorce and the even greater likelihood of spending many years alone when they are older. Government

programs such as Social Security may provide only minimal economic support. Women should be aware of and plan for their own economic needs. The following statement made at the U.S. Congressional hearings (Select Committee on Aging, 1978) on midlife women summarizes the need for women to take an active self interest in their own future:

Measures undertaken to fortify the independence of women while still in midlife will help reduce the burden of costs to society later on when they become old. If the risk of economic dependency, which currently is greater for older women than for older men, is reduced, the rising burden of public expenditures can be contained and even reduced in the coming decades. (p. 78)

Legislators and administrative policy makers, the majority of whom are men, have developed policies that overlook the unique ways in which women are affected by economic and social decisions. The observation that women over 45 are on their way to becoming the "fastest growing poverty group in America" (Working Women, 1980, p. 1) suggests that there are factors which affect women in different ways than men. Three general areas examined in previous studies are discussed in this section: economic situations, socialization emphases, and social-psychological traits. All three aspects are considered in this study, but emphasis is mainly on the last two in order to help women better understand personal feelings that may stand in the way of taking charge of their lives.

Economic and Demographic Situations

Women in the United States are of special concern because of the overwhelming incidence of poverty which begins at an early age and carries into senior years. Women who enjoyed an adequate standard of living while younger may suddenly find themselves poor in old age. Women who head families are frequently in low income brackets. In 1976, one of every three of these families was living below the officially defined poverty level, compared with one of 18 husband-wife families. In 1977, the median family income of female-headed families was \$7,211 compared with \$16,350 for husband-wife families. Among families with children, the income differences were even more pronounced; the median income of \$5,942 for families headed by women was only one-third of the income of husband-wife families (Select Committee on Aging, 1980).

The problem of growing old alone is largely a women's issue. While 94% of women and 95% of men in the United States marry, differing male-female mortality rates leave more women widowed. The proportion of women who can expect to become widows has increased since 1960. In the United States, women live an average of 7.9 years longer than men, and they tend to marry men from two to three years older than themselves. Men who remarry in their 40s and 50s tend to marry women who are on the average seven to eight years younger. For the average couple, the woman has an almost 70 percent chance of outliving her husband (Goldman & Lord, 1983). The result is that today 85% of surviving spouses are female. The average age of widowhood in the United States is

56 which leaves roughly one-third of a life span remaining. In addition to the vast number of women who are alone because a spouse has died, there is a smaller but significant number of women who are alone because of separation, divorce or desertion.

In 1978, 67% of nonmarried women 65 and older had annual incomes of less than \$5,000. The median income was \$3,800 (Social Security Administration, December, 1981). These economically deprived older women have been affected by numerous economic factors including their average earnings (if they worked outside the home), pension benefits, survivor benefits and asset accumulation, to name a few.

Average Earnings

Women frequently select positions with no pay (homemakers) or work in occupations with low pay rates. Women end up in double jeopardy; first, because low salary levels make it difficult to make ends meet and save for the future; and in addition, current salary levels are linked to future retirement benefits. In a comparison of 100 occupations, the median weekly earnings of wage and salaried men workers was always higher than for women even for the same occupation. Here are some examples: male accountants earned \$433 per week, women earned \$308. Women computer programmers earned \$329 per week compared to their male counterparts who earned \$488. Male attorneys earned \$574 per week compared to female attorneys who earned \$407. Even for positions which are staffed primarily by women, such as cashiers, women

earned \$166 per week and men earned \$180 per week, on the average (U.S. Department of Labor, 1982).

The earnings problem for women is global. In July, 1980, the following information was presented at the United Nation's World Conference on the Decade for Women: Women represent one-half of the world's population, provide two-thirds of the total work force, earn one-tenth of the income, and own one-hundredth of the property ("World 'Apartheid by Sex'," 1980).

Lifetime earnings (and the pensions that are accumulated and vested) are a function of the type of job and the wages associated with it as well as the length of the labor force participation of the individual. Women have frequently dropped out of the labor force to care for children. Ferber and Birnbaum (1980) explore the impact of this decision. If high-school-educated women drop out of the workforce for 10 years, their lifetime earnings are reduced by 18%. Female college graduates lose 21%. For women who leave the labor force at the birth of the first child, the reduction is 57% for high school graduates and 50% for college graduates compared to women who do not leave the labor force.

Men expect to move into jobs that carry more responsibility with increasingly higher incomes, but many women do not fit this pattern. The earnings gap between men and women increases with age. The National Commission on Working Women (1982) states:

In 1979, full-time women workers who were 45-55 years of age had an average annual income of \$10,935, not much higher than the \$8,902 average annual income of women aged 22-44. By contrast, full-time men workers 45-54 years averaged \$20,465 a year compared to \$10,410 for male workers in their early 20s. The

earnings gap between men and women increases with age, so that by the time women are 45 years old, they are earning about one half of what older men earn. In fact 35 percent of working women 55 years of age or older fall below the poverty line. (p. 1)

Low lifetime earnings are eventually reflected in low pension benefits.

Pension Benefits

Many women qualify for no or very low pension benefits. Twenty-one percent of women are eligible for private pension coverage but only 13% actually receive benefits (National Commission on Working Women, 1982). Price-Bonham and Johnson (1982) found that 55.7% of women in professional occupations and 43.8% of women in nonprofessional occupations had paid into a retirement fund of their own. They say, "In fact, over 50 percent of the women who had not paid into a retirement fund had actually opted not to do so" (p. 133).

Women have a much higher reliance on Social Security than men even though the monthly payments may be quite low. Unmarried women are more likely than either couples or unmarried men to have no income sources other than Social Security. The Social Security Administration (December, 1981) found that 60% of women who are not married depend solely on Social Security while only 46% of the men do so. In 1977, 53% of retired women workers received a primary insurance amount (PIA) of less than \$200. Only 21% of the men received the same PIA. Almost half, 48% of the men had a PIA of \$300 or more contrasted with 16% of the women receiving a PIA of that amount. At the end of 1979, the average

PIA for retired women workers was \$247.80 compared with \$344.50 for men.

Originally designed as a base to which savings and pensions would be added, Social Security has become the sole source of income for the majority of women over 65. The National Commission on Working Women (1982) found that the average single woman retires with less than \$1,000 in the bank. The average Social Security payment to retired women workers in 1981 was below \$4,000 per year. The combination of low wages, low lifetime earnings, and employment in positions with no pension coverage adds up to limited retirement benefits for women.

Survivor Benefits

Full-time homemakers have assumed they would live comfortably in their retirement years, but two factors may negate that assumption 1) divorce and 2) no survivor benefits. More women now than in any other time period are divorced during their mid or later years. It is estimated that about 40% of first marriages of women now 25 to 35 will end in divorce (Select Committee on Aging, 1980). Although women do have access to an ex-husband's Social Security benefits if they had been married for 10 years, ties to any other retirement benefits may end if the marriage ends. The National Commission on Working Women (1982) states that women who have been divorced rarely share in their husbands' benefits.

Even for couples who stay together until the husband dies, the man may not have selected a survivor's plan because it

reduces the amount of retirement benefits he receives while he is living. The Retirement Equity Act, passed in 1984, now requires that a spouse must sign a statement agreeing to give up survivor benefits. In other cases, the spouse's federal survivor benefits may be reduced by the amount of Social Security payments each month.

The total average death benefit received by a widow is \$12,000. This amount includes all income from life insurance, Social Security and pensions. Fifty-two percent of all widows will have used up all available insurance benefits within 18 months and 25% have exhausted this resource within two months. Twenty-five percent of widows never receive all of their husbands' benefits, usually because they lack information to gain access to these benefits (Select Committee on Aging, 1979).

Asset Accumulation

Pensions and Social Security were designed to replace a portion of preretirement income but not the entire amount. People are urged to accumulate their own savings to supplement their economic needs during retirement years. How have women fared in accumulating assets for retirement? Of those aged 65 and older, about one-half reported receiving income from assets, with a median annual amount of \$940. Table 1 shows that differences were marked between men and women and between blacks and whites. In general, those without income from assets are substantially less well off than those with income from assets--median total money

incomes of \$3,530 and \$7,650, respectively (Social Security Administration, October, 1981).

Table 1

Percentage of Aged with Income from Assets

Age	Total	<u>White</u>		<u>Black</u>	
		Men	Women	Men	Women
55-61	61	66	45	23	17
62-64	63	68	51	30	17
65 and older	62	68	56	22	18

Nonmarried women are most likely to have asset income in the form of interest. About one-half of the women age 55 and older receive this type of income. Less than 15% receive dividend income; rent or royalty income is available to no more than 9%, and fewer than 5% have income from estates or trusts (Social Security Administration, October, 1981).

Socialization Factors

Society defines roles which become major guideposts when rearing children. These roles are changed when major events alter societal needs and expectations. What society expects of a woman and what she expects of herself is a complicated network

influenced by historical events, role definitions, and her individual reactions to these factors.

Historical Events and Birth Cohorts

Neugarten and Brown-Rezanka (1978) describe three different age groups of women: those presently exiting from middle age, those now entering that period, and those who will enter it by the end of the 1980s. Major historical events affected aspects of these women's lives. These three age groups respectively lived through: (a) World War I; (b) the Depression; and (c) the baby boom which blended into the era of the feminist movement.

The necessarily different life experiences of these three groups has led to different preparation for and ability to cope with midlife and later years. For instance, the oldest age group has the least education of the three, was born into large families with parents who were frequently foreign born, and entered into adulthood during the Depression which led to delayed marriage and small families. The second age group has more education, although few finished college, was reared in small families, and entered adulthood during a period of economic expansion so that they tended to marry early and have large families. The third group has the highest educational and occupational level, with one-fourth already in professional and technical jobs. Because they plan to have small families and because their life expectancy is expected to be into the 80s, these women will have many child-free years (Select Committee on Aging, 1980).

The oldest group of women comprise the current group of retirees. One-third of them exist with incomes below the poverty line. The promise that many of them received--that they would be taken care of all of their lives if they would perform well as homemakers--has become a cruel myth. The group of interest to this study is the group aged 40 to 55 who are now experiencing midlife. Some of the women have lived through economic constraints during World War II. All of them have lived through the economic expansion of the 50s and have been exposed to some degree to the philosophy of the Women's Movement of the 70s. This research is designed to better understand the retirement planning efforts of the 40 to 55 year old group to lay groundwork which could avoid the retirement income predicament of currently retired women.

Role Definition

When males and females form their gender identity during their childhood years, they typically have understood different truths. Males have valued separation in development. Females, on the other hand, have concentrated on attachment. Women think of themselves as nurturers and centers of relationships offering responsibility and caring (Gilligan, 1980).

Two studies (Henning & Jardin, 1977; Rubin, 1979) have found that highly successful and achieving women do not mention their professional distinction in the context of describing themselves. They may, in fact, regard their professional activities as jeopardizing their sense of themselves. They may experience a

conflict between achievement and care which leaves them unresolved and divided in judgment (Gilligan, 1980).

Results of studies conflict concerning women and their roles. Bardwick (1980) concludes that men and women actually switch original role choices as they grow older. Men shift away from preoccupation with success and achievement and women move past total attention to relationships to become more autonomous, more individual, and greater initiators. Serlin (1980) does not agree that the role shift is developmental and suggests that paid employment outside the home may be an influential factor in the shift of midlife women toward great autonomy. Serlin (1980) states that feelings of self-esteem were higher for women who were employed full-time than for women who thought of themselves as full-time homemakers.

Barnett and Baruch (1980) and Astin (1976) submit that married women staying in the work force have higher levels of energy and a stronger sense of independence. Their findings indicate that when women are involved in multiple roles, including paid worker, the effects on balance are often positive rather than negative. In fact, on the other side, Barnett and Baruch (1980) are concerned that failure to prepare women for occupational competence may result in women becoming developmentally disabled and unable to cope with the circumstances of their lives. Women can be left vulnerable to poverty, psychiatric problems, and diminished well being.

Homemaker Role. Although over 50% of U.S. women are employed in the work force, a substantial portion of women still consider their primary role in the home as manager and caretaker of children and husbands. Theorists (Bardwick, 1980; Barnett & Baruch, 1980; Serlin, 1980) have proposed that homemakers are especially vulnerable to changes in their roles.

Women born in the 1940s and the years before were socialized to be homemakers (Block, Davidson, & Grambs, 1981; Miller, 1976). Women were expected to grow up, get married, and live happily ever after. Those rosy expectations were often shattered by death or divorce, and women experienced difficulty starting over again (White House Mini-Conference on Older Women, 1980).

The Institute on Aging (1982) reports that women are more devastated by divorce than men. Scores on the Langner Psychiatric Symptoms Scale indicated that 40% of both men and women could be considered somewhat impaired after a divorce. However, women scored significantly higher levels of impairment than men. Divorce and its related pain and stress can overshadow the need to plan for future retirement.

Dependence on Husbands. Lack of foresight; powerlessness; an attitude that says, "If I'm good, I'll be taken care of" are several examples of what happens when one person is dependent upon another person. Studies reviewed below show that lack of planning has been disastrous to many women. Yet, many women absolve their responsibility in looking ahead to retirement years because they expect to be taken care of by their husbands.

Lopata and Norr (1980) have found that neither Social Security policies nor retirement plans were matters of everyday concern to women. For the women studied, both retirement plans and attitudes about Social Security policies were low in importance, a fact reflected by the high proportion of 'don't know' responses. A high proportion of women expect to retire early. Most of those in the sample expected to receive Social Security benefits, but viewed their husband's pensions or Social Security benefits as their main source of retirement income. Similarly, Price-Bonham and Johnson (1982) have discovered that 90.4% of the women in professional occupations and 89.4% of the women in nonprofessional occupations were depending upon their husbands' pensions as the major source of retirement income.

Lulled into complacency in their roles as mothers and wives, women ignore the variety of paths their lives may take. Although the likelihood of living alone, widowed or divorced, puts women at risk, there are psychological factors that may impede their progress toward independence and self-responsibility.

Social-psychological Factors

Numerous factors external to women affect retirement opportunities, e.g. low-paying jobs, time out of the labor market, lack of exposure to information, etc. It appears that there may also be internal factors that inhibit women's perceived ability to take charge of their own retirement planning. Some of these factors include locus of control, inclination against taking risks, and fear of mathematics. Overcoming psychological

blocks to a woman's belief in her own ability is one way educators can help women take charge of their lives.

Locus of Control

Individuals who believe in their own abilities, plan ahead, and take charge of their lives are said to have an internal locus of control. Others who act according to what they think other people expect, fail to plan because they think they have no control over their lives, and believe that luck determines their fate are considered external in their locus of control. Locus of control has been found to be related to masculine/feminine traits, self-esteem, task performance, and numerous other behavioral situations (Brown, Heltsley, & Warren, 1982; Gierszewski, 1983; Harrison, Guy & Lupfer, 1981; Lefcourt, 1981; Lefcourt, 1982; MacDonald, 1972). It would appear that internal or external locus of control could also influence retirement planning.

MacDonald (1972) states, "All of the research points to the same conclusion: people are handicapped by external locus of control orientations" (p. 44). Women as a group may be more inclined toward an external locus of control. Bardwick (1980) states:

A larger number of women compared to men will evade an evaluation of their lives, because any assessment heightens their perception that they do not determine their life style, but, relatively powerless, are limited to responding to the directive and initiatives of others. (p. 17)

Dua (1967) theorizes that the attitudes of externals are unrealistically rooted in past experiences. They do not expect to

succeed because they have not succeeded in the past. They have not experienced past successes because they have not learned effective methods of producing change. Internals seem to acquire more knowledge about their problems or the task before them. Consequently, they are in a better position to cope with the problems they have. This research project examines the relationships between locus of control orientation and active, purposeful retirement planning. Having an internal locus of control suggests a greater inclination toward planned risk taking. McInish (1982) has found that female investors are significantly more external than male investors which indicates much greater dependence on others to advise and make decisions relating to investments.

Risk Taking

Intertwined with locus of control, risk taking relates to a woman's willingness to take risks to optimize return. Erb (1969) has found in her research that although professional women were aware that they should be planning for retirement and said they were saving, their dollars were invested in the safest choices possible which offered the lowest risk and the lowest return. Erb's major conclusions are: 1) the majority of women stated the need to save for retirement and old age as their primary investment goal, and 2) they were saving, but in a way that made them highly vulnerable to the problems of inflation, and consequently, to problems of reduced purchasing power and income during the retirement years.

Women are conservative asset holders. There is no evidence that they are aware that better investment performance coupled with lower purchasing price could bring substantially higher returns. Women value dividends and interest and cite safety as their chief investment consideration. They do not highly value and may not understand the tax advantages of capital gains. There is no evidence that these women apply standards of performance to investment goals (Erb, 1969).

Nichols (1981) and Bardwick (1980) conclude that women are conservative in their inclination to take risks. Nichols observes that women tend to think in terms of pennies, rather than thousands. Although women are great bargain hunters and shoppers, they do not 'think big,' and often lose out because of it. Insurance and investment decisions are ignored or left to husbands. Many women feel safe with a conservative approach to money and don't realize that when taxes and inflation are considered, conservative decisions lessen opportunities to accumulate assets for retirement. Bardwick (1980) suggests that risk taking may be an even greater problem with one group of women: aging housewives who are psychologically dependent and not significantly involved in activities outside of the home.

Related to risk taking and financial decisions is an ability or inability to adequately deal with and to be willing to use mathematics. Women have been known to shy away from mathematics because they feel inadequate and incompetent.

Fear of Mathematics

Tobias (1978) coined the phrase "math anxiety" to describe people who develop a fear of numbers. This fear has been attributed in particular to women. Numerous writers and researchers, including Brocklehurst (1979), Dowling (1981), Fennema (1980), and Parsons (1980) have described the fear of math syndrome and express concern that women stop using math because they think they're not good at it.

Casserly (1975) cautions about the use of terms associated with mathematics facility. Math anxiety, she says, is pathological, rare, and actually blocks someone from learning math. Math anxiousness, on the other hand, is a healthy response to learning anything new. A third term is equally important to consider, math avoidance. This relates to the perception that ability is limited; without encouragement from parents and teachers the challenge of mathematics is not attempted. The choices to avoid mathematics made by girls and women during their formative educational experiences are likely to have consequences throughout their adult years.

Lack of verbal skills does not seem to prevent men's success, but lack of mathematics skills keep women from doing a number of things. Girls generally get better grades than boys throughout their school years, but more boys than girls score high on the mathematical portion of the Scholastic Achievement Test (Benbow & Stanley, 1983). Four boys for every girl score 600 or above; and for higher scores--700 and above--there were 13 boys for every girl. The grade situation is repeated in college

where the Carnegie Commission on Higher Education (1973) found that women received better grades in all subjects, but the participation of women in mathematics courses and in fields requiring mathematics was much lower than boys.

At the college level Sells (1978) and also Ernest (1976) have determined that two to seven times as many boys were entering the university with four years of mathematics than girls. This lack of mathematics preparation substantially reduces the educational opportunities for women in fields which require mathematical training. Lack of confidence, regardless of ability, can affect the persistence and diligence that women apply in using mathematical concepts for the rest of their lives.

Without attempting to determine whether women suffer from math anxiety or math avoidance, this study assesses women's perception of math facility as it relates to retirement planning. It is probable that mathematics skill building opportunities would be an essential ingredient in programs designed to help women plan for their retirement.

Need for Research

The present retirement literature provides a limited amount of information about the retirement preparation of women.

However, those who thought about and planned for retirement were consistently more satisfied with retirement when it arrived.

Szinovacz (1982) summarizes the research by stating:

Anticipation of retirement consistently predicted retirement adjustment for all occupational ranks, and among those who looked forward to retirement, persons with high exposure to information were consistently

more satisfied with retirement than those with low exposure. (p. 98)

The middle years of life traditionally have been a neglected area of study and even as some researchers began to pursue the concept of adult development, it was done largely in the male domain (Gilligan, 1980). This research gap may reflect, in part, the myth that the middle years--roughly the ages 40 to 65--are the 'stable' years. However, people do not live rigid, unchanging lives after reaching adulthood. As Bardwick (1980) explains, "Throughout the adult years there is an ebb and flow, a regular alternation of stable phases lasting about seven to ten years, with intervening periods of evaluation-transition lasting some four to five years" (p. 35).

All periods of life present change and challenge, and midlife can be the most dynamic and constructive period of all because roles and situations are particularly complex, volatile, and challenging during these years. These are also the years to plan, to accumulate assets, and to take responsibility for retirement. Research is needed to determine to what degree midlife women are facing these challenges and if not, why not.

Need for Formal Programs

At least as far as estimates of retirement expenses are concerned, the lack of preretirement preparation leaves women much worse off than men. One obvious policy implication of these results is the need to establish formal retirement programs for employed women and to establish joint husband and wife programs at a time long before retirement is a reality. Since women are

less likely than men to obtain retirement information on their own, their retirement preparation seems highly related to the provision of formal retirement programs at the workplace. Women in the lower income groups who are especially vulnerable to financial losses at retirement should be targeted for early preretirement programs providing them with information on how to estimate post retirement income and expenses, as well as how to plan financially for their retirement (Kroeger, 1982).

Summary

Men and women both face issues in the transition to retirement, but women must deal with those issues from a different vantage point. Women are less likely to have an adequate base of Social Security or pension income than men. Women live longer and thus must have a financial base that spreads over a longer time period. Research studies report that women are more dependent, less likely to take risks, and may not be confident of their mathematical skills. Studies have shown that women are less likely than men to have made plans for their retirement years.

This research study assesses women who are currently 40 to 55 years of age. They have 10 to 25 more years of asset accumulation opportunities before they reach the retirement mark of 65. A better understanding of the planning strengths and weaknesses of these women can provide a basis to help them take the steps needed to prepare economically for retirement.

The problems surrounding women as they grow older must be dealt with in two ways, 1) from society with changes in work opportunities, pension plan availability and vesting, and opportunities for women to access education and career development opportunities, and 2) from inside women themselves. The focus of this project is on the second emphasis. What can we learn about women that enhances or inhibits their plans for retirement?

CHAPTER III

METHODOLOGY

The objective of this study was to ascertain the degree to which women from 40 to 55 years of age are taking active responsibility for their retirement years. A sample of Stillwater, Oklahoma, women was selected from the voter registration list of Payne County. The women were surveyed by a mailed questionnaire and asked about their retirement plans and their orientation toward risk taking, use of mathematics, and locus of control. Specific details of the methodology are given in this chapter.

The mail survey method was selected to gather data about women's plans for financial security in retirement. The long range objective of the study was to provide baseline data that could be used for retirement programming for women in order to effectively develop needed program content. Compton and Hall (1972) state that surveys "describe current practices or beliefs with the intent of making intelligent plans for improving conditions or processes in a particular local situation" (p. 139). Gathering information about current retirement planning practices of women is the first step in the process of developing programs to meet needs.

Development of the Instrument

Survey Method

A mailed questionnaire was selected as the survey instrument for several reasons. The questionnaire contained questions requesting personal information concerning income level which could be regarded by some respondents as highly personal. The anonymity of a mailed questionnaire was expected to elicit greater candor from the respondents, thus producing more valid data than would result from other methods, such as personal interviews or case studies (Yu & Cooper, 1983).

Generally, surveys using mailed questionnaires are less expensive to conduct than telephone or personal interviews (Dillman, Dillman & Makela, 1984; Tedin & Hofstetter, 1982). Less cost per respondent allows a larger sample to be included in a study. Sudman and Bradburn (1984) suggest that members of special groups often lead busy lives and are difficult to schedule for an interview, but if the questions are relevant, they will complete a questionnaire at a time convenient to them.

Lifetime earnings estimates show a relationship between years of education and expected lifetime earnings (Women's Bureau, 1983). It was anticipated that the education level of respondents to this study would be higher than average because of the selection criterion restricting the sampling units to areas with average income levels at twice the poverty level. For groups with higher levels of education and greater experience with forms and questionnaires, the mailed questionnaire is appropriate.

People with lower education levels find questionnaires more difficult to interpret and they fear looking stupid, therefore they do not respond (Sudman & Bradburn, 1984).

Response to mailed questionnaires in large metropolitan cities is lower than in smaller areas because of language difficulties and suspicion (Sudman & Bradburn, 1984). Researchers working in Stillwater, Oklahoma, with a population of 40,000 could anticipate receiving above average cooperation using a mailed questionnaire.

The problem of getting "socially desirable responses" appears to be less when mailed questionnaires are used than when people respond to a personal interview (Compton & Hall, 1972). If questions are nonthreatening and are not perceived as having a "right" answer, mailed questionnaires elicit as valid or more valid results than other methods.

Three studies (McDonagh & Rosenblu, 1965; Sudman & Bradburn, 1984; Wallace, 1954) suggest that the amount and substance of data from mailed questionnaires can be quite similar to that collected by more direct, personal methods. In fact, Sudman and Bradburn (1984) say: "When mail procedures are used appropriately, they can be expected to produce results ranging from almost as good as to substantially better than those that can be obtained by more costly methods" (p. 33).

The principal drawback to mailed questionnaires is the potentially lower response rate compared to telephone or personal interviews. Dillman, Dillman, and Makela (1984) and Janssens and Pessemier (1980) indicate that appropriate techniques for

questionnaire follow-up can increase response rates. Response rates above 60% can be consistently produced by using Dillman's (1978) Total Design Method (TDM).

Questionnaire Design

Several factors are important when mailed questionnaires are used. They include level of education of respondents, length of the questionnaire, and degree of interest or relevance to the recipients. Sudman and Bradburn (1982, 1984) suggest the following ways to design a questionnaire that will encourage high cooperation.

Groups with higher education levels have been found to provide higher response rates to mailed questionnaires than individuals with lower levels of education (Sudman & Bradburn, 1982). With either group it is important to have the questionnaire piloted by respondents similar to the sample. "Even with well-developed, simplified questionnaires, many respondents do not understand a question in the way it is intended by the researcher" (Sudman & Bradburn, 1982, p. 122).

Length was once considered by researchers to be detrimental to high response rate. Berdie and Anderson (1974) and Linsky (1975) suggest instead that interesting, relevant questions are more important than length. Even with interesting questions, questionnaires should be no longer than 12 pages or approximately 125 items (Dillman, 1978). Erdos and Morgan (1970) consider six pages the limit. Determination of appropriate length is highly related to the degree the respondents will find the questions

pertinent to them. The higher the degree of interest, the longer the questionnaire can be.

Interesting questions with a compelling flow keep respondents on the task of answering the questions. The sequence of questions is important. The first few questions should be interesting but easy to answer. Levine and Gordon (1958) state that respondents tend to become discouraged when they must answer complex or personal questions at the beginning of a questionnaire.

Sudman & Bradburn (1982) suggest that questions should be as specific as possible. Memory cues can help respondents remember events that might otherwise be forgotten. Time periods, such as "in the past 12 months" or "since you were married," can eliminate ambiguity. Each question should contain only one concept. If several questions relate to one idea, the most general question should be asked first followed by more specific questions. Questionnaires that are interesting, concise, and follow a logical flow receive higher response rates. These principles have been observed in the construction of the questionnaire used in the present study.

Pilot Test

A preliminary version of the retirement planning questionnaire was given to 15 women in the designated age range for their comments. Based on their comments, several questions were changed because of unclear wording; or in other cases, the responses were not sufficiently inclusive. The pilot group did

not judge the questionnaire as too long and predicted that other recipients would find the topic and questions pertinent and interesting.

Reading Level

After making changes suggested by the pilot group, reading levels were determined for the four questionnaire scales based on the Fog Index (Writing for 4H, 1976). The following steps were used to determine reading levels:

1. A sample of 100 words was used for each scale.
2. The difficult words were counted (words with three or more syllables).
3. The sentences were counted and divided into the number of words in the sample.
4. The number of difficult words was added to the answer in step 3 and multiplied by .4. The answer was the approximate grade-in-school reading level.

The math, locus of control, and risk scales were scored as containing reading levels of approximately 7th to 8th grade and were considered easy to read. (See Table 2.) The retirement scale reading level was just above the junior year in high school (11th grade). The pilot test indicated that the reading level was appropriate for the target population.

Table 2

Reading Levels for the Retirement, Math, Locus of Control,
and Risk Scales

<u>Scales</u>	<u>Reading level</u>
Retirement scale	11.2
Math scale	8.0
Locus of control scale	7.6
Risk scale	6.8

Questionnaire Format and Appearance

Booklets are the suggested method for assembling a questionnaire (Dillman, 1978; Sudman & Bradburn 1982). Several points are made in favor of booklets. Pages are less likely to be lost. Most important, the booklet looks professional and, therefore, it is more likely to suggest that the research project is legitimate.

The questionnaire appearance and design can affect both the response rate and accuracy of the research findings. The questionnaire should be attractive, easy to complete, have adequate space for responses and be legible (Dillman, 1978). The questionnaire should look easy and utilize substantial white space (Sudman & Bradburn, 1982). When the questionnaire is long, it should look as short as possible through printing, use of both sides of the paper and double columns (Levine & Gordon, 1958).

The questionnaire was printed in booklet format on cream colored paper with black ink. The booklet cover had a simple map outline of Oklahoma with faces of three people. The title, "Considering Retirement", was printed in bold letters, followed by the names of the researchers in smaller print. Plenty of white space surrounded the sketch and the title to encourage the recipients to proceed through the booklet. Inside the booklet, questions for subsections of the sample, e.g. employed women, were grouped together and set apart by a box outline. Respondents could easily skip a section which did not pertain to them. (See questionnaire in Appendix A.)

Questionnaire Contents Pertaining to Research Questions

Table 3 shows how the questionnaire gathers information to test the research questions (Labaw, 1980). The questionnaire items are matched with the concepts from the research questions. (See Appendix A.)

Data Collection

Sample

The emphasis in this study is on women who are close enough to retirement to be aware of its reality but far enough away to still have time to take action; therefore, women from 40 to 55 were selected as the sample. A second major consideration was to

Table 3

Questionnaire Items Relating to Personal Characteristics,
Economic Factors, and Social-psychological Factors

Research concepts	Questionnaire items
Personal characteristics	
Marital status	33
Education	36
Age	40
Dependent children	37-39
Economic factors	
Family income	34
Respondent's earnings	35
Labor force participation of respondent	16
Respondent's pension eligibility	3, 17
Respondent's occupation	42
Spouse's occupation	44
Social-psychological factors	
Math anxiety scale	1-10
Risk taking scale	11-20
General risk	13, 14, 15, 20
Financial risk	12, 16, 17
Internal-external locus of control scale	21-31
Internal	22, 25, 28
Powerful others	23, 27, 29
Chance	21, 31, 32

identify a group of women who potentially had sufficient financial resources to make retirement planning a possibility. Women with too few resources could not be expected to defer dollars from current living expenses to making investments for retirement; therefore, the sample was first stratified by income level and age before names were drawn from the voter registration records.

The first level of stratification was income. Census data were available at the Stillwater City Planning Office giving median family income for census tracts. Stillwater was divided into 10 tracts and each tract had up to four block groups.

Family income at the block level was extrapolated to precincts so as to fit voter registration information. Stillwater had 21 precincts and in some cases a census block was located in more than one precinct. Using a map of Stillwater, the blocks were superimposed on voter precincts and median family incomes for each precinct were thereby determined.

The poverty level for 1979 (the year that census data was collected) for a family of four was \$7,412 (U. S. Bureau of the Census, 1984). The cut-off income level for this study was set at \$14,824 which was twice the poverty level. This amount was estimated to be sufficiently above basic needs to potentially provide surplus resources for retirement planning.

All precincts which had at least one block group that reported a median family income below \$14,824 were eliminated. From the remaining precincts, the sampling frame was created. All of the names of registered women voters between the ages of 40

and 55 whose names appeared in precincts 4, 5, 9, 10, 13, 15, 16, 19, 20, and 21 were compiled as the sampling frame. Women who had not voted in either the 1984 primary or the general election in November were removed from the sampling frame. The sampling frame contained 800 names; every other name was drawn to provide the total potential sample of 400 names.

Mailing Procedure

Several days prior to the first mailing, a short announcement appeared in the Stillwater NewsPress describing the retirement study. The purpose of the news feature was to alert readers that they might be contacted to participate and to lend credence to the study.

A modified version of Dillman's (1978) Total Design Method was followed. The first mailing was a packet which included a cover letter signed by both research directors, a questionnaire printed in booklet form, and a stamped return envelope with the respondent's mailing address attached in the upper left hand corner (See Appendix A for a copy of the letter and the questionnaire).

Recommendations of other survey researchers were also followed. The cover letter indicated sponsorship of Oklahoma State University (Jones & Lang, 1982). Three appeals (Yu & Cooper, 1983) were included: social utility i.e., emphasizing the need for the research; the importance of the recipients' input; and a request to help the researchers with this project. In addition, an incentive was offered.

Incentives, prepaid and promised, have been linked to higher response rates (Baumgartner & Heberlein, 1984; Tedin & Hofstetter, 1982; Yu & Cooper, 1983). As an incentive to complete the questionnaires, respondents were offered a \$1.00 bill and a summary of the results if they would complete and return the questionnaires.

Anonymity was not a major enhancement in previous studies (Yu & Cooper, 1983); however, promises of confidentiality received a larger return in higher-income areas (Baumgartner & Heberlein, 1984). Confidentiality for responses was assured in the cover letter, promising that names would not be attached to questionnaires or used in any way. The addresses appearing on the return envelopes helped to identify respondents who were to receive incentives, but the envelopes were discarded as soon as the incentives were mailed.

The packets were mailed to 400 women. One week following the mailing, thank you/reminder postcards (See Appendix B) were sent to all households. The postcards thanked everyone who had already returned their questionnaires and encouraged everyone else to complete and mail their questionnaires. A telephone number was provided for people who had lost their questionnaires. The cards were personally signed by the research directors.

A follow-up packet was sent three weeks after the first mailing. This mailing procedure was the same as the first except for a slightly different cover letter (See Appendix B for a copy of the second cover letter). Anticipating that nonrespondents might feel that their responses were immaterial, the follow-up

cover letter emphasized that even if women had done little retirement planning, their responses were important to the study. No identification was attached to the return envelope this time to assure people who might be concerned about confidentiality that names would not be associated with the questionnaires. Women who wanted to receive the \$1.00 and the summary of results were instructed to write their names and addresses on the return envelope.

Response Rate

Within the first week following the first mailing, seven questionnaires were returned without forwarding addresses and 120 useable questionnaires were returned for an initial 31% response rate. Following the postcard mailing, an additional 57 useable questionnaires were received and one unforwardable packet, increasing the response rate to 46%. Several people called for information about the project and one irate phone call questioning the project was admirably handled by the secretary. Three weeks after the first mailing, a second packet was mailed to everyone who had not responded. An additional 45 questionnaires were returned.

To summarize, the total response breakdown is as follows: of 400 mailed packets, 12 were unforwardable and 222 were returned for a final response rate of 57% (See Table 4). This rate compares favorably with Yu and Cooper's (1983) survey of 23 studies with a weighted average response rate of 48.8%. Of the 222 responses, 2 were removed from the study because the women

were not in the designated age range. The total number of respondents for the study was 220.

Table 4

Summary of Responses to Questionnaire

<u>Mailing procedure</u>	<u>Responses</u>
Total packets mailed	400
Returned (moved with no forwarding address)	<u>-12</u>
Valid sample	388
Response to initial mailing	120
Response following reminder	57
Response following second mailing	<u>45</u>
Total completed questionnaires	222
Response rate: 57%	
Questionnaires removed (out of age range)	<u>2</u>
Total useable responses	<u>220</u>

Data were entered in the Oklahoma State University computer system. The data were checked in two ways for errors. First, a sample of data was checked against the questionnaires. An error rate of less than one percent was found. The errors were corrected and the remainder of the data was accepted. Second, a printout of all frequencies showed three responses out of determined range. These data were corrected.

Creation of Scales: Math Anxiety, Risk Taking,
Locus of Control, Retirement Planning

In order to assess the concepts of math anxiety, risk taking, locus of control, and retirement planning, questions were developed to provide measurement tools. The locus of control scale had been developed and tested by Levenson (1982). Questions for the other three scales were initially developed from a review of literature. The data were analyzed with the SPSSx statistical analysis program (Nye, 1983).

Scale scores were compiled by summing scores for respondents answering all questions for each scale. For those respondents answering at least 8 of 10 questions, equivalent mean scores were substituted for missing responses.

Validity and Reliability

Instrument validity and reliability issues must be addressed by every researcher. Two types of validity are discussed in relation to the instrument used in assessing retirement planning of midlife women: content validity and construct validity.

Content validity, also referred to as face validity, must begin with the instrument design. "Rather than test the validity of measures after they are constructed, one should ensure validity by the plan and procedures of construction" (Nunnally, 1978, p. 92). Questionnaire items were developed from an extensive literature review to meet this criterion. Nunnally goes on to suggest that if people in positions of responsibility and

potential users agree that ideas are sound, the instrument should contain a high degree of content validity. These suggestions were followed by consultation with faculty knowledgeable about instrument construction and the subject under study. Comments from a pilot test with women similar to the research sample were used to make changes that strengthened the content validity.

Construct validity is concerned with the ability to interpret data related to an abstract idea or construct. The internal consistency of the questionnaire was evaluated by factoring the four series of questions related to 1) retirement planning, 2) math anxiety, 3) risk taking, and 4) locus of control. Factor analysis, through high loadings of the questions on all of the scales, indicated support for construct validity within the instrument. "If all the proposed measures correlate highly with one another and correlate much less with the members of other clusters, it can be concluded that they all measure much the same thing" (Nunnally, 1978, p. 102). Pearson's correlation indicates high internal scale correlation and low correlations with the other scales.

Reliability refers to measurement that produces consistent responses on repeated applications. A major source of error occurs when an instrument does not contain a sufficient number of items. Error which might be due to limited sampling of items is determined by coefficient alpha. For this research, Cronbach's Alpha was used and met the standard of reliability of .70 or higher (Nunnally, 1978) for all four scales. An additional check was made by correlating two questions (numbers 2 and 65) asking

about satisfaction with retirement planning. The two questions had a correlation of .80.

The next section describes the factor analysis procedure. Following this discussion is a more complete description of the development and factor analysis results for each scale.

Factor Analysis

Cattell (1978) states that ". . . the purpose of factor analysis is to find a new set of variables, fewer in number than the original variables, which express that which is common among the original variables" (p. 16). Although factor analysis can be used for many purposes, in this study, it was used to determine concept relationships in each of four scales. Three of the four scales--the risk, math, and retirement planning scales--were developed as new instruments for this study. The fourth scale was developed by Levenson (1982) to refine the concept of internal-external locus of control first identified by Rotter (1966).

The first step in the principal components factor analysis procedure was to identify the degree to which the variables supported (loaded on) the overall concept for each scale. A variable loading of .30 or above on the first unrotated factor indicated support for the overall scale concept (Nunnally, 1978). Eigenvalues show the degree of common variance accounted for by the factor (Rummel, 1969). Eigenvalues of 1.0 or greater were retained for rotation (Kass & Tinsley, 1979).

The varimax procedure rotated the variables to determine loadings on separate factors. Underlined loadings in Tables 5, 6, 6, and 8 indicate items which were loaded at least .30 and were at least two times larger on one factor than any other (Nunnally, 1978). The decision of which items fit into a factor is, as Cattell (1978) calls it, "...deciding which to call separate clouds in a stormy sky" (p. 46). The new variables were assumed to represent associated but separate influences and were further used to interpret the responses of midlife women toward retirement planning.

Math Anxiety Scale

Concern has been expressed by researchers (Ernest, 1976; Sells, 1978; Tobias, 1978) that math anxiety limits choices for young and adult women. It was conceivable that fear of math could also limit women from financial and retirement planning. This possibility prompted development of a math anxiety scale to explore this relationship.

Two sources provided inspiration for the scale used in this study: Tobias (1978) and Aiken (1963). Many of the questions were patterned after Aiken's scale with two major changes. Words were substituted to clarify meanings, and questions with more than one concept were simplified to a single idea. A 10-item scale was developed with five questions written as positive items and five as negative items (See Appendix A, questions 1-10 on page 162¹⁶²).¹⁶⁶

The questions were answered on a seven-point scale ranging from 1 "strongly agree" to 7 "strongly disagree." Items 1, 5, 6,

8, and 9 (See Table 5) were recoded so that high scores showed comfort with math and low scores indicated anxiety.

When factor analyzed, the math scale yielded only one factor (Table 5). All of the math scale items loaded at least .71 on the unrotated factor. This factor was called math anxiety and explained 67% of the item variation. Cronbach's Alpha indicated a reliability for the scale of .94.

Mean scores of the individual items for the math scale ranged from 4.4 to 5.5. There was little variation of means among the items.

Scores for the 10 math questions were summed to create one math score. The lowest possible score was 7 and the highest score 70. The respondents' scores ranged from a low of 10 to a high of 70. The mean score was 48.4. The math scale scores were used as an independent variable in a multiple regression analysis to better understand the possible impact of fear of math on women's retirement planning.

Risk Taking Scale

Statements such as the following are common in the popular literature: "Many otherwise successful women hesitate to take responsibility for managing their money, and they won't take the risks necessary to make it grow" (Siverd, 1982, p. 87).

No previously constructed scales of financial risk taking were found that were satisfactory for this study. A risk taking scale was developed with assistance from an Oklahoma State University statistician. Questions about financial risk were based

Table 5

Factor Loadings for Math Anxiety Scale

Scale items	<u>Unrotated</u>	
	<u>\bar{X}</u>	<u>I</u>
*1. Mathematics is interesting to me.	4.4	.83
2. I do not like mathematics.	5.1	.83
3. When I hear the word math, I have a feeling of distaste.	5.3	.82
4. I approach math with fear that I will not be able to figure things out.	5.2	.77
*5. I feel competent when attempting mathematics.	4.5	.82
*6. I have a good feeling toward mathematics.	4.4	.91
7. It makes me nervous to even think about having to do a math problem.	5.5	.70
*8. I am at ease when using mathematics.	4.4	.86
*9. I enjoyed studying mathematics in school.	4.4	.83
10. I never liked math, it was one of my most difficult subjects.	5.1	.71

*Questions scored in reverse.

on risk assumptions written about women. For example, the Siverd quotation above prompted the question: "I am comfortable taking financial risks."

There are 10 risk questions in the questionnaire (See Appendix 1, p. 6). Responses were scored on a seven-point Likert scale ranging from 1 "strongly agree" to 7 "strongly disagree." Questions 11, 12, 16, 17, and 18 were recoded so that high scores indicated propensity toward risk taking and low scores described conservative risk takers (Table 6).

Table 6 shows the factor analysis of the risk taking scale. Loadings were .36 or above on the unrotated scale items which indicated cohesion of the 10 risk items to explain attitudes toward risk pursuit or aversion. Scale items explained 42% of the item variance with a Cronbach's Alpha reliability of .84.

Two factors were extracted when the items were rotated. Underlined loadings indicate items which were loaded at .30 or greater and were at least two times larger on one factor than the other. Three items formed Factor I, which related to feelings about taking risks in general, and were called "general risk." Three items loaded on Factor II and related to financial risk taking. Factor II was called "financial risk." High scores on both factors indicated a willingness to take risks. Low scores described people who were not comfortable trying new things or taking chances.

Table 6

Factor Loadings for Risk Taking Scale

Scale items	\bar{X}	Unrotated	Orthogonal rotation	
		I	I	II
*11. I like to take risks.	3.3	.79	.48	.64
*12. I would rather invest in stocks than a passbook savings account.	3.3	.46	-.08	<u>.75</u>
13. I avoid activities with unknown outcomes.	3.8	.58	<u>.63</u>	.18
14. I put off making decisions because I don't like to make mistakes.	4.7	.36	<u>.73</u>	-.24
15. It is better to be safe than to take a chance.	4.1	.63	<u>.62</u>	.27
*16. I am comfortable taking financial risks.	3.0	.71	.29	<u>.71</u>
*17. I am willing to risk losing my money if I stand to make greater gains.	3.0	.67	.25	<u>.71</u>
*18. I like to try new things even if I am uncertain about what will happen.	3.9	.76	.56	.53
19. I tend not to take chances.	3.8	.75	.66	.39
20. I'd rather stick with the way things are than face failure.	4.3	.71	.63	.38

*Questions scored in reverse.

Item means ranged from 3.0 to 4.7. Nine of the 10 items were within 0.8 of the midpoint.

Three variables created from the risk taking questions were included in the multiple regression analysis: 1) summed scores on all 10 items as a measure of overall risk taking; 2) summed scores for items 13, 14, and 15, as "general risk;" and 3) summed scores for items 12, 16, and 17 as "financial risk." The possible range for the total risk taking scale started with a low of 7 to a high of 70. The respondents scored from 13 to 70 with a mean score of 37.2. "General risk" scores fell in a range of 4 to 21 (compared to a possible range of 4 to 28) with a mean score of 12.6. For "financial risk" the actual range of 3 through 21 was the same as the potential range. The mean score was 9.3.

Locus of Control Scale

An existing scale developed by Levenson (1982) was used for this research project. The Levenson scale refined Rotter's (1966) internal locus of control instrument by including three different components of locus of control: 1) internal--belief in personal control over events, 2) powerful others--belief that powerful others control one's life, and 3) chance--belief in the randomness of events.

In order to keep the retirement questionnaire at a manageable length, Levenson's 24-item scale was shortened. Four items from each of the three subscales were randomly selected for a 12-item scale (See Appendix A, questions 21-32, page 167).

To maintain consistency with the math and risk scales, questions were answered by selecting from a scale of 1 "strongly agree" to 7 "strongly disagree." Questions 21, 24, 31, and 32 were recoded so that higher scores indicated higher internal control over one's life. Low scores indicated an external locus of control, with life events being controlled by powerful others and chance.

Factor analysis (Table 7) revealed that of the 12 items, all but item 24 loaded at the .30 level on the unrotated factor. The remaining 11 items supported the general concept of locus of control. The factor explained 33% of the variation with a Cronbach's Alpha of .76.

When orthogonally rotated, the locus of control scale divided into three factors similar to the Levenson scale factors. Using the established criterion of a minimum loading of at least .30 and approximately double the loading on other factors, nine items loaded three each on the three factors. Three items did not meet the criteria to identify them as loading on any one factor.

Factor I, "powerful others," contained three questions, 23, 27, and 29. Factor II, "internal," included items 21, 31, and 32; and items 22, 25, and 28 loaded on Factor III, the "chance" factor. The three items in each case were the same as those in Levenson's work.

For the overall measure of locus of control, responses to all questions except 24, which loaded too low to be included, were summed. Respondents could have scored from 11 to 77. The actual range of scores was from 27 to 77 with a mean score of 58.4.

Items means ranged from 3.3 to 6.1, a wider variation among items than was found for the math anxiety and risk taking scales.

Underlined loadings on Table 7 indicate the variables which were retained for factor subscales. Questions 21, 31, and 32 were summed and used to measure the concept "internal." The "internal" scale had a potential low of 3 and a high of 21. With a mean score of 17.7, the respondents scored from 8 to 21. A high score on the internal scale indicated a belief in one's ability to control life events.

The "powerful others" scale was scored by summing questions 23, 27, and 29. Scores ranged from 3 to 21 with a mean score of 14.6. Respondents scoring high on this scale believed that they, not others, were in charge of their lives.

Sums of questions 22, 25, and 28 measured the subscale called "chance." Respondents' chance scale scores covered the possible range of 3 to 21. The mean score was 15.1. A high score on the chance scale described women who did not agree that chance controlled their lives. The three measures of locus of control were used in the multiple regression analysis to assess whether or not the perception of personal control of the women respondents is related to retirement planning.

Table 7

Factor Loadings for Locus of Control Scale

Scale items	<u>Unrotated Orthogonal rotation</u>				
	<u>X</u>	<u>I</u>	<u>I</u>	<u>II</u>	<u>III</u>
*21. When I make plans, I am almost certain to make them work.	5.6	.44	.04	<u>.72</u>	.15
22. Often there is no chance of protecting my personal interests from bad luck happenings.	5.1	.55	.06	.15	<u>.84</u>
23. In order to have my plans work, I must make sure that they fit in with the desires of people who have power over me.	4.4	.56	<u>.66</u>	.04	.14
*24. How many friends I have depends on how nice a person I am.	3.8	-.13	-.46	.40	.02
25. I have often found that what is going to happen will happen.	4.3	.44	.21	-.11	<u>.65</u>
26. My life is chiefly controlled by powerful others.	5.7	.78	.63	.41	.28
27. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	5.0	.71	<u>.65</u>	.23	.26

(table continues)

Scale Items	<u>Unrotated</u>		<u>Orthogonal Rotation</u>		
	<u>\bar{X}</u>	<u>I</u>	<u>I</u>	<u>II</u>	<u>III</u>
28. It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	5.6	.76	.37	.37	<u>.62</u>
29. Getting what I want requires pleasing those people above me.	5.2	.66	<u>.82</u>	.10	.07
30. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	5.2	.61	.53	.03	.40
*31. When I get what I want, it's usually because I worked hard for it.	6.1	.34	.07	<u>.71</u>	-.07
*32. My life is determined by my own actions.	6.1	.54	.22	<u>.72</u>	.10

*Questions scored in reverse.

Retirement Planning Scale

The retirement planning scale consisted of 12 concepts from the questionnaire, a combination of specific retirement planning questions and general financial planning questions. The questions were developed from management theory (Deacon & Firebaugh, 1981; Gross, Crandall, & Knoll, 1980) which develops the rationale and procedure for managing any type of resource, and from financial and retirement planning literature (Hallman & Rosenbloom, 1978; Hogarth, 1984).

Corresponding to the management process, questions were created in relation to goals, expectations, information seeking, and implementation. The retirement scale consisted of selected questions from the first 65 questions in the questionnaire (See Appendix 1). Table 8 shows the questionnaire items that relate to the retirement scale.

The scale was scored in the following manner:

"Yes" answers for expecting to have investments and savings, questions 8 and 9, were scored 1 point each and summed as one variable.

Question 12 pertaining to retirement planning as a goal was scored 1 point for "yes, but not too important" and 2 points for "yes, very important."

Question 13 asked "have you decided how many dollars you'll want to live on each month when you retire?" A "yes" response received 1 point.

Table 8

Questionnaire Items Relating to Retirement Planning Scale

<u>Concepts</u>	<u>Questionnaire items</u>
Retirement planning scale	
Goals	12, 23
Anticipated resources	8-9
Long-range planning	13, 14, 15, 25
Information seeking	26, 28, 30, 32-41, 42-47
Implementation	48-63

Any answer from 1 through 5 on question 14 estimating portion of preretirement salary covered by pension and Social Security received 1 point.

A "yes" response to question 15 indicating estimation of needed investment dollars received 1 point.

Question 23 asked "is saving and/or investing a goal of yours?" Scores were 1 point for "yes, but not too important" and 2 points for "yes, very important."

Responses 2 and 3 to question 25 about figuring net worth were scored 1 point and response 4 got 2 points.

Questions 26 (articles read), 28 (TV programs watched), and 30 (seminars attended) were scored the same way. If a respondent selected 2, 3 or 4 as their answer, they received 1 point.

Questions 32-41 asked about consulting with professionals. Each "yes" answer received 1 point and the total points were summed as one variable. Questions 42-47 about informal discussions and 48-63 concerning having assets were scored exactly as 32-41 and each set was summed to create two variables.

The retirement scale items were further investigated through factor analysis shown on Table 9. Factor loadings on the unrotated factor loaded above .30 indicating that all of the items related to the concept of financial planning for retirement. The items explained 30% of the variation. Reliability reported by Cronbach's Alpha was .69.

When rotated, four factors were extracted. Underlined items indicate those which were retained as factors for further analysis. Factor I included items 8-9 and 48-63 and related to having and expecting to have investments. Factor I was labeled "investments." Items 12 and 23 loaded on Factor II which was called "goals." Factor III consisted of one item, 14, and was not used separately in further analysis. Factor IV was called "information" and contained items 26, 30, and 42-47.

Four variables were used in the multiple regression analysis. An overall indication of retirement planning was used by summing the responses to all 12 items. The subscale "investments" was a summation of scores assigned to responses to items 8-9 and

Table 9

Factor Loadings on Retirement Planning Scale

	<u>Unrotated</u>	<u>Orthogonal rotation</u>				
<u>Scale items</u>	I	I	II	III	IV	
8-9. Expect to have investments and/or savings income in retirement.	.53	<u>.76</u>	.10	.02	.02	
12. Retirement planning is an important goal.	.58	.06	<u>.79</u>	.09	.23	
13. Decided how many dollars will be needed in retirement.	.52	.00	.47	.67	-.01	
14. Project percentage of retirement income provided by social security and pension(s).	.34	.11	-.19	.74	.15	
15. Estimated dollars needed in addition to pension.	.62	.18	.51	.60	-.01	
23. Saving and/or investing are important goals.	.62	.32	<u>.69</u>	-.01	.18	
25. Frequency of figuring net worth.	.66	.54	.12	.46	.19	
26. Read financial management articles.	.48	.17	.21	-.07	<u>.69</u>	
30. Attended financial management programs/seminars.	.38	-.07	-.03	.31	<u>.69</u>	
32-41. Consulted with financial planning professionals.	.61	.62	.05	.09	.38	
42-47. Discussed financial management with nonprofessionals.	.53	.23	.21	.02	<u>.62</u>	
48-63. Current assets held.	.64	<u>.80</u>	.19	.08	.04	

48-63. "Goals" included items 12 and 23; and "information" summed responses to items 26, 30, and 42-47.

The lowest possible score on the complete retirement scale was 0 and the highest possible score was 46. The respondents' scores ranged from 2 to 31 with a mean of 15.3. The possible range for "investments" was 0 to 18; respondents ranged from 0 to 14. The mean was 6.8. "Goals" had a possible range of 0 to 4 and the respondents scored in that range with a mean score of 2.9. For "information" the range of respondents' scores matched the possible range of 0 to 8. The mean was 2.9.

Multiple Regression

Multiple regression was selected as the statistical procedure to analyze the retirement planning data so that the contribution of each economic, personal, and social-psychological variable could be considered and compared. The purpose of multiple regression is to analyze "the collective and separate contributions of two or more independent variables to the variation of a dependent variable" (Kerlinger & Pedhazur, 1973, p. 3).

Relationships between the dependent and independent variables presented in Chapter IV are: simple correlation, beta values, and explained variation. The correlation, r , indicates the strength of the relationship between the contributing or independent variable and the dependent variable. The correlation is independent of the interaction of variables in the multiple regression equation.

Beta standardizes data in order to make different units of measurement comparable, and beta values are based on the total equation. In Chapter IV, beta relationships between independent and dependent variables which are significant are given. As each independent variable is introduced into the multiple regression equation, an analysis of variance is performed to determine its statistical significance. Significance relates to the whole equation.

Explained variation is a function of each added independent variable as it contributes explanation in relation to all of the other contributing variables. After the first variable has been added, successive variables contribute to the left over unexplained variation.

The variables shown in Table 3 were used in the multiple regression analyses. The retirement scale was used as a dependent variable as were three segments of the scale: investments, goals, and information. Four multiple regression analyses were used to examine the relationship between the independent variables and the four dependent variables.

The independent variables included the personal, economic, and social-psychological factors listed in Table 3. The following is a complete list of the independent variables (the questionnaire item number appears in parenthesis with the variable description. (See Appendix A for the questionnaire):

Total family income (34) used responses 1 through 6.

Labor force participation of respondent (16) combined missing, 4 and 5=0, not employed, and 1 through 3=1, employed.

Respondent's pension (3 and 17) was scored 1 for no pension and 2 if a pension was expected.

Respondent's occupation (42) was divided into two dummy variables. Professional equaled 1 and all other categories equaled 0; and clerical equaled 1 and all other categories equaled 0.

Spouse's occupation (44) also was divided into two dummy variables. Professional equaled 1 and all other categories equaled 0; and manager equaled 1 and every other category equaled 0.

Marital status (33) was divided into a series of 3 dummy variables: Married=1, divorced and separated=1, and remarried=1. All other categories in each case equaled 0.

Education (36) used responses 1 through 6, indicating less than high school through graduate degree.

Age was an interval level response ranging from 40 to 55.

Number of dependent children (37-39) was summed for each respondent. Interval level responses ranged from 0 to 6.

Scoring for the math, risk, locus of control scales and the additional variables associated with these scales was explained in the sections describing the scale development and factor analysis. Math provided one variable, risk furnished three variables, and four variables were associated with locus of control. Frequency checks were made for the recoded and newly created variables to assure that correct data was extracted for the multiple regression analysis.

Summary

A mailed questionnaire was developed to assess goals and practices of midlife women concerning their retirement planning. The questionnaire was revised after pilot group respondents made suggestions for improvement. The reading level of the components of the questionnaire ranged from 7th to 11th grades and was considered appropriate for the designated sample.

A sample of 400 names was drawn from voter registration records of women between the ages of 40 and 55 who lived in precincts with a median income level of at least twice the official poverty level. Women who lived in precincts with median income levels below \$14,824 were not included.

Questionnaires were mailed to the 400 women with a cover letter explaining the purpose of the project and offering incentives of \$1.00 and a copy of the results for all participants. Two hundred and twenty-two questionnaires were returned for a response rate of 57%.

The questionnaire contained four scales and other questions. The dependent variable was the retirement planning scale. Three scales, math anxiety, risk taking, and locus of control were used as independent variables. The scales were analyzed for validity and reliability; and statistical analyses including factor analysis and multiple regression were used. Chapter IV describes the sample, their responses concerning retirement planning, and the results of the multiple regression analyses.

CHAPTER IV

FINDINGS

This chapter describes the research findings and is divided into three sections. The first part describes the personal characteristics of the respondents. The second section addresses the retirement planning process. Respondents' answers are described as they relate to goal setting, long-range planning, anticipated resources, information seeking, and implementation. The last section provides the outcome of the multiple regression analyses.

Personal, Labor Force, and Economic Characteristics of the Sample

Personal Characteristics

The 220 women in the sample live in Stillwater, Oklahoma, a town with approximately 40,000 residents. The ages and minimum income level of the respondents have been preselected in the sampling process so as to establish a sample of women old enough (determined as age 40) to consider retirement and yet young enough to have time to make and follow through with retirement plans (no older than 55) and to have enough resources to make financial planning feasible.

Table 10 presents a summary of the respondents' age and education. A slightly larger portion of the respondents (40%) are in the younger age group, 40-to-45 years of age, compared to the other two segments, 46-to-50 and 51-to-55 years of age. The two older groups contain approximately the same proportion of the

Table 10

Age and Education

	n	%
Age		
40-45	91	40
46-50	64	30
51-55	65	30
Missing	<u>5</u>	<u>2</u>
	220	100
Education		
Less than high school	2	1
High school	26	12
Some college or post-secondary training	62	28
College degree	39	18
Some graduate work	18	8
Graduate degree	72	33
Missing	<u>1</u>	<u>*</u>
	220	100

*Less than 1%.

sample, 30% each. The mean age of the sample is 47.1 years of age, and the median age is 47.0.

Although the economic base of Stillwater is diverse, the major employer is Oklahoma State University. Association with the University may account in part for the high level of education of the sample; 33% of the respondents have graduate degrees. Another 8% have some graduate work, and 18% have bachelors degrees. Twenty-nine percent have some years of college or post secondary training, and 12% have high school degrees. Overall, 86% of the group has had at least a few years of college.

Two-thirds of the women are married and have been married only once (Table 11). Fifteen percent are remarried, and another 14% are divorced. Five percent of the women are currently widowed, separated, or have never married.

Approximately two-thirds of the families have at least one child who is financially dependent on them; however, most of the children are older. Only 20% of the women have dependent children who are under 13 years of age. Thirty-seven percent have dependent children who are from 13 to 18 years old, and another 37% report supporting one or more children who are over 18.

Table 11

Marital Status and Dependent Children of Respondents

	n	%
Marital Status		
First marriage	145	66
Remarried	33	15
Divorced	30	14
Never married	3	1
Widowed	6	3
Separated	<u>3</u>	<u>1</u>
	220	100
Families with Dependent Children		
No dependent children	69	31
One or more dependent children	<u>131</u>	<u>69</u>
	220	100
Number of Dependent Children 12 and Under		
None	175	80
1 or more	<u>45</u>	<u>20</u>
	220	100
Number of Dependent Children 13 to 18		
None	138	63
1 or more	<u>82</u>	<u>37</u>
	220	100
Number of Dependent Children over 18		
None	139	63
1 or more	<u>81</u>	<u>37</u>
	220	100

Labor Force Participation

A work profile of the respondents would describe them as full-time employees, working in professional or clerical positions (See Table 12). Fifty percent of the women are employed

Table 12

Work Status and Type of Occupation

	n	%
Work Status (N=220)		
Self-employed	31	14
Full-time employee	109	50
Part-time employee	40	18
Full-time homemaker	35	16
Unemployed	<u>5</u>	<u>2</u>
	220	100
Respondents' Occupations (N=177)		
Professional and technical	77	44
Managers	19	11
Sales workers	18	10
Clerical	55	31
Other	<u>8</u>	<u>4</u>
	177	100

(table continues)

	n	%
Respondents' spouses' occupations (N=169)		
Professional and technical	100	59
Managers	45	26
Sales workers	11	7
Craftsmen	8	5
Other	5	3
	169	100

full-time. Another one-third are employed part-time or self-employed, and 2% are currently unemployed. Sixteen percent are full-time homemakers.

The employed respondents are largely employed in professional or clerical positions--44% professional and 31% clerical. Most of the spouses, 59%, are working as professionals, or as managers, 26%.

Economic Characteristics

Table 13 indicates that approximately three-fourths of the group report a 1984 before-tax household income level at \$25,000 or above. Incomes between \$50,000 and \$74,999 are reported by 26%, and 9% receive over \$75,000.

Eighty-six percent of the women earn part of the household income. Thirty-one percent earn from \$5,000 to \$12,499, and 32% provide from \$12,500 to \$24,999. Sixteen percent of the group earn \$25,000 or more.

Table 13

Income: Total Household and Respondents' Contributions

	n	%
1984 Before-tax household income		
No earnings reported	10	4
\$5,000 to \$12,499	12	6
\$12,500 to \$24,999	26	12
\$25,000 to \$37,499	42	19
\$37,500 to \$49,999	54	24
\$50,000 to 74,999	57	26
\$75,000 or more	<u>19</u>	<u>9</u>
	220	100
Respondents' contributions to household income		
No earnings reported	31	14
\$Less than \$5,000	16	7
\$5,000 to \$12,499	69	31
\$12,500 to \$24,999	71	32
\$25,000 to \$37,499	22	10
\$37,500 to \$49,999	7	3
\$50,000 to 74,999	3	2
\$75,000 or more	<u>1</u>	<u>1</u>
	220	100

Retirement Planning Process

Retirement planning includes a variety of choices and actions. The following section describes midlife women and their involvement in the process of retirement planning. Responses are provided as they relate to the sequential planning process: goal setting, long-range planning, anticipated sources, information seeking, and implementation.

Goal Setting

Shorter range goals of saving and investing are important to a larger portion of the group than longer range goals of retirement planning, 62% say planning for savings and investments are very important, while 46% say retirement planning is very important (Table 14). At the same time, both saving and investing and retirement planning goals are important to most of the group. Ninety-three percent agree that saving and investing are important compared to 87% stating that retirement planning is important. Thirteen percent do not think that retirement planning is important.

Table 14

Importance of Retirement, Investment and Savings Goals

	<u>Retirement planning</u>		<u>Saving/investing</u>	
	n	%	n	%
No	28	13	12	6
Yes	89	41	68	31
Yes, very important	103	46	138	62
Missing	—	—	<u>2</u>	<u>1</u>
	220	100	220	100

Long-range Planning

Many studies have indicated the difficulty of long-range planning. The following tables indicate the degree to which this group of midlife women have thought about and are developing plans for retirement.

About one-half of the respondents (45%) plan to retire before age 65 (Table 15). About one-fourth, 25%, expect to retire at age 65 or older, and 10% don't plan to retire. Almost one-fifth, 19%, are not sure when they want to retire.

Table 15

Expected Age of Retirement

	<u>n</u>	<u>%</u>
Before 55	18	8
55-59	31	14
60-64	52	23
65-69	41	19
Over 70	12	6
No plans to retire	21	10
Don't know	42	19
Missing	<u>3</u>	<u>1</u>
	220	100

In order to balance today's needs with retirement needs, an estimate of retirement expenses and income is necessary. Table 16 indicates that a large proportion of these midlife women, 83%, do not know how many dollars they will want for living expenses during retirement. Only 15% of the women had made an income level projection.

Table 16

Planned How Many Dollars Needed in Retirement

	<u>n</u>	<u>%</u>
Yes	34	15
No	182	83
Missing	<u>4</u>	<u>2</u>
	220	100

A basic retirement planning step is to identify sources of retirement income such as pensions and social security and then project how much should be added from savings and investments. As mentioned previously, most of these women, 81%, have not used this step. Only 19% have combined sources and made projections for supplemental income needs (Table 17).

Table 17

Have Estimated Dollars Needed in Retirement to Provide
Preretirement Standard of Living

	<u>n</u>	<u>%</u>
Yes	42	19
No	<u>178</u>	<u>81</u>
	220	100

Whether they think they have carefully planned or are involved in wishful thinking, in Table 18 almost one-half of the group, 48%, states that their retirement plans are adequate. Nine percent consider their plans very adequate, and 42% either consider their retirement plans inadequate or simply don't know about the adequacy.

Table 18

Adequacy of Retirement Plans

	n	%
Very adequate	19	9
Adequate	105	48
Inadequate	79	36
Don't know	14	6
Missing	<u>3</u>	<u>1</u>
	220	100

When asked why retirement planning is not of high concern, 135 respondents provided insight reported in Table 19 about retirement planning considerations. The largest portion of the respondents, 30%, said there was no extra money. Twenty-eight percent expected to be covered by their spouse's retirement

percent expected to be covered by their spouse's retirement income, and 20% said they hadn't taken the time to do any planning.

Table 19

Reasons for Being Unconcerned about Retirement

	N=135	%
No extra money	40	30
Expect to be covered by spouse's pension or Social Security	38	28
Haven't taken the time to plan	27	20
Other reasons	12	9
Too far away to be interested	10	7
Expect inheritance	5	4
Don't know how to get started	<u>3</u>	<u>2</u>
	135	100

Anticipated Resources

About three-fifths of the group who are employed state they will be eligible for retirement income as employed workers (see Table 20). On the other hand, more than 80% of the respondents expect that their spouse's pension will provide a source of

retirement income for them. Of the divorced women, 35% report they will be able to draw benefits from their former spouse's social security or pension which means that two-thirds will not have access to this source. Larger percentages of the respondents named social security, savings, investments, and spouses' pensions as retirement income sources than their own pensions.

Table 20

Expected Sources of Retirement Income

	n	%
As an employee (n=163)		
Own pension	94	58
As a spouse (n=178)		
Spouse's pension	144	81
As divorced spouse (n=40)		
Spouse's pension/Social Security	14	35
Other sources (n=220)		
Social Security	188	86
Savings	169	77
Investments	153	70
Inheritance	82	37
Employment	52	24
Other	24	11
Children	3	1

The vast majority of the women (86%) expect to draw social security benefits when they retire. Other anticipated sources of retirement income selected by most of the recipients are savings, 77%, and investments, 70%. About one-third expect an inheritance, and one-quarter plan to work during retirement years. Only 1% expect that their children will provide financial support during retirement.

Pensions and social security (Table 21) provide the base for most retirement plans. Approximately one-half of the respondents

Table 21

Percentage of Preretirement Income Expected to be Covered
by Pension(s) and Social Security

	n	%
1-20%	12	6
21-40%	16	7
41-60%	35	16
61-80%	26	12
81-100%	15	7
Doesn't apply	5	2
Don't know	104	47✓
Missing	<u>7</u>	<u>3</u>
	220	100

have estimated the portion of the retirement dollars they expect to be covered by these two sources. Nineteen percent project that 61% or greater of their preretirement income will be covered by these sources. Twenty nine percent expect less than 60% and a substantial, 47%, simply don't know what to expect.

Because of the high likelihood that women will be widowed at some point in the future, part of planning must take into consideration the possibility of access to survivor's benefits. Respondents were asked (Table 22) if they knew what percentage of their spouse's pension they would receive if they were widowed. Of the respondents who were married and could consider a survivor's benefit, most, 63%, did not know what they would receive.

Table 22

Knowing Percentage of Spouse's Pension Would be Received
if Widowed

	N=174	%
Yes	65	37
No	<u>109</u>	<u>63</u> ✓
	174	100

Information Seeking

In order to better understand the financial knowledge bases of the recipients, they were asked about their sources of financial management information (Table 23). The group is most likely to get their information from print sources, 31% had read from one to two articles in the past month about financial management. Twenty-three percent had read more than three sources but a substantial portion, 40%, had read nothing. Even fewer used television as a source of financial management information with 72% indicating that they had watched no programs about personal financial management during the month. Six percent had watched three or more programs.

Another source of financial information is seminars and classes. During the previous year, 22% had attended from one to two meetings and 2% had gone to three or more programs. Seventy-four percent had attended no meetings during the year.

Table 23

Sources and Frequency of Obtaining Financial Information

	<u>Articles read</u>		<u>TV programs watched</u>		<u>Meetings attended</u>	
	<u>monthly</u>		<u>monthly</u>		<u>yearly</u>	
	n	%	n	%	n	%
None	89	40	160	72	165	74
1-2	70	31	37	17	47	22
3-4	28	13	8	4	2	1
5 or more	21	10	4	2	3	1
Don't remember	8	4	8	4	1	1
Missing	<u>4</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>1</u>
	220	100	220	100	220	100

When asked about financial discussions with people, three-fourths had talked with their spouses about financial management during the past month (Table 24). On the other hand, fewer than one-third had discussed finances with anyone else, acquaintance or professional.

Approximately 30% had discussed financial planning with four categories of professionals: accountants, tax sheltered annuity representatives, bankers, and life insurance agents. Fewer than 10% of the sample indicate a financial consultation with the credit union, financial planners, or lawyers.

Table 24

Discussions with Acquaintances and Professionals

	n	%
<hr/>		
Acquaintances (past month)		
Spouse	162	74
Friend	66	30
Relative	64	29
Co-worker	47	21
Other	11	5
Neighbor	10	4
Professionals (past year)		
Accountant	71	32
Tax sheltered annuity representative	70	32
Banker	66	30
Life insurance agent	62	28
Broker	42	19
Credit union	20	9
Lawyer	17	8
Fee and commission financial planner	14	6
Other	10	5
Fee-only financial planner	8	4

For those who are employed, a source of retirement benefit information is through the personnel office. Some companies sponsor seminars, others provide one-on-one information with benefits officers, and other companies do little to help employees establish retirement plans. Whether due to lack of available information or limited initiative on the part of the respondents, most have not sought retirement planning help at their places of employment. Seventy-eight percent (Table 25) have not attended a program about retirement benefits, and 83% have not talked with a benefits officer.

Table 25

Knowledge of Employee Retirement Benefits

	n	%
Attended a program at work about retirement benefits		
Yes	36	22
No	<u>129</u>	<u>78</u>
	165	100
Met with benefits officer about retirement benefits		
Yes	28	17
No	<u>136</u>	<u>83</u>
	164	100

Implementation

Over 80% of the respondents indicate at least some saving efforts. About one-half save from 1 to 10% of their total family income (Table 26). Approximately one-tenth each save from 11 to 15%, 16 to 20%, and more than 20%. Fourteen percent indicate they are not currently saving.

Table 26

Percentage of Income Saved

	<u>n</u>	<u>%</u>
None	31	14
1-5%	67	30
6-10%	46	21
11-15%	25	11
16-20%	21	10
More than 20%	23	11
Missing	<u>7</u>	<u>3</u>
	220	100

The asset most commonly held by this group of women is life insurance, 85% have some type of life insurance coverage (Table 27). Savings accounts are next in order of selection, 75% have

savings accounts. IRAs are held by 56%. Fewer than one-third indicate that they have stocks, rental property, mutual funds, bonds, limited partnerships, profit sharing plans, Keogh plans, and/or deferred compensation.

Table 27

Portion of Women Having Retirement and Financial Assets

	n	%
Life insurance	186	85
Savings account	165	75
IRA	122	56
Pension	111	51
Certificates of deposit	96	44
Tax sheltered annuity	86	39
Money market account	85	39
Stocks	71	32
Rental property	62	28
Mutual funds	46	21
Bonds	43	20
Limited partnerships	27	12
Profit sharing plan	26	12
Other	18	8
Keogh	12	6
Deferred compensation	10	5

Table 28 indicates interest in evaluating progress toward financial goals by use of net worth statements. Forty percent compile a net worth statement once a year; 5% figure their net worth quarterly, and 14% every two years. Almost-two fifths never figure their net worth.

Table 28

Frequency of Figuring Net Worth

	n	%
Never	85	39
Every two years	32	15
Once a year	90	40
Four times a year	10	5
Missing	<u>3</u>	<u>1</u>
	220	100

Analysis of Research Questions

The SPSSx statistical program is used to analyze the data. The forward/enter procedure enters each independent variable in order of its contribution to explained variance for each of the four dependent variables. Variables are added as long as they are

significant at the .05 or below level. Additional variables are included in the discussion if they contribute at least one-half percent to the explained variation. (For readers interested in the correlation of all variables, the correlation matrix is presented in Table 34, Appendix C.)

The retirement planning construct is comprised of four dependent variables. The first dependent variable incorporates the entire retirement planning scale. Three factors--goal setting, information seeking, and asset accumulation--also are used as dependent variables. Although the three factor variables correlate highly with the retirement variable, .61, .65, and .82 respectively, they are correlated only moderately with each other, from .29 to .36, thus indicating the desirability of examining separately each factor's relationship to the independent variables. Twenty-two independent variables are used in four multiple regression analyses to determine their explanatory power in relation to all four aspects of retirement planning.

The tables in this section present findings on five sets of relationships between the dependent and independent variables: simple correlation (r), beta values when all 22 variables are in the equation, beta values for variables that are statistically significant at the .05 level, beta values for variables considered substantive which added at least .5% to explained variation, and cumulative explained variation (R^2).

Retirement Planning Scale

Eight independent variables make substantive contributions to the explained variation in the retirement planning scale dependent variable (Table 29). Household income, the single best predictor, is significant at .05, and explains 14% of the variation. The next three variables also are statistically significant at the .05 level and provide the following additional amounts of explained variation: financial risk, 6%; expected pension, 3%; and chance, 3%. Four more variables listed in Table 29 each offer at least .5% to explained variation.

The first four variables, two economic and two social-psychological, contribute a total of 26% to the explained variation. The next four variables raise the explained variation to 29%, and the remaining 14 variables contribute 1% additional explained variation. Of the eight variables to first enter the equation, five are social-psychological, two are economic variables, and one is a personal variable.

Fourteen of the theoretically interesting variables do not contribute statistically nor substantively to the analysis. Of the personal variables, education, marital status, dependent children, and age, only age offers any explanation to the variation in retirement planning scores. Respondents' employment, occupational status, and earnings, and occupational status of their husbands contribute very little to explained variation. Three social-psychological variables, powerful others, general risk, and locus of control, make unappreciable contributions, although locus of control is significantly correlated with retirement planning.

Table 29

Relationship of Personal, Economic, and Social-psychological Factors
to Retirement Planning Scale by Multiple Regression Analysis

Independent variables	r^1	B, total		B, significant		Cumulative
		model	at	.05	.5% to R^2	R^2
Household income	<u>.37</u>	.37		.30	.37	.139
Financial risk	<u>.32</u>	.25		.21	.25	.198
Pension expected	<u>.17</u>	.18		.17	.18	.231
Chance	<u>.29</u>	.17		.17	.17	.257
Risk-overall	<u>.20</u>	-.16			.20	.267
Internal	<u>.16</u>	.11			.11	.278
Math anxiety	<u>.19</u>	.09			.09	.284
Age	.08	.08			.08	.290
Respondents earnings	<u>.23</u>	.06				-
Employment	.02	-.07				-
Remarried	-.00	-.05				-
Manager-husband	.10	.03				-
Clerical-respondent	-.09	-.00				-
Powerful others	.11	.00				-
Dependent children	.00	.01				-
Education	.12	.06				-
Divorced	<u>-.14</u>	.01				-
Professional-respondent	.09	.01				-
Professional-husband	.07	.00				-
General risk	.04	.03				-
Married	.12	-.09				-
Locus of control-overall	<u>.24</u>	-.18				.304

¹Underlined correlations significant at $p < .05$.

Goal Setting Scale

The goal setting scale (Table 30) has one independent variable, internal, which is significant at the .05 level. Internal is the single best predictor of goal setting and explains 8% of the variation.

Seven variables each explain at least an additional .5% variation and all together the eight variables explain 16.2% of the variation in goal setting. Of these eight, four are social-psychological variables--internal, financial risk, overall risk, and math anxiety. Three variables are personal--age, divorced, and education; and one variable--respondents' earnings--is economic. Explained variation for all 22 variables is 17.6%.

Table 30

Relationship of Personal, Economic, and Social-psychological Factors
to Goal Setting Scale by Multiple Regression Analysis

Independent variables	r^1	B, total model	B, significant at $\angle .05$	B, contributes $\geq .5\%$ to R^2	Cumulative R^2
Internal	<u>.28</u>	.28	.28	.26	.079
Respondents' earnings	<u>.16</u>	.12		.11	.094
Age	.12	.12		.11	.109
Financial risk	.13	.11		.27	.121
Divorced	.12	.13		.15	.137
Risk-overall	.06	-.19		-.18	.151
Education	-.05	-.08		-.09	.157
Math anxiety	<u>.15</u>	.08		.08	.162
Manager-spouse	.06	.05			-
Powerful others	.09	-.00			-
Remarried	.03	.01			-
Clerical-respondent	.00	.01			-
Pension expected	.03	.03			-
Dependent children	-.08	-.01			-
Household income	.04.	.05			-
Chance	.12	.03			-
Employment	.12	.06			-
Professional-respondent	.04	.01			-
Professional-spouse	-.10	-.04			-
General risk	-.01	.08			-
Married	-.12	-.06			-
Locus of control	<u>.18</u>	-.39			.176

¹Underlined correlations significant at $p \angle .05$.

Information Seeking Scale

Information seeking is composed of three items from the retirement planning scale which ask about exposure to financial information through books, seminars, and conversations with relatives, friends, and coworkers. Table 31 shows financial risk as most highly correlated with information seeking, $B=.25$. Alone it explains 6% of the variation. Math anxiety is also statistically significant and adds 2% to explained variation.

Five additional variables each offer a minimum of .5% explained variation. The five are three economic variables--pension expected, household income, and managerial spouse--and two social-psychological variables--overall risk and chance.

The total explained variation of all seven variables is 12.6%. The explained variation when all 22 variables are included is 16.5%.

Investing Scale

Table 32 reports the independent variables that contribute to the explanation of investing. The investment scale has four independent variables which are significant. The variables include household income, pension expected, chance, and financial risk. The best predictor, household income, explains 16% of the variation, and another economic variable, pension expected, raises explained variation to 21%. The next two significant contributors are social-psychological variables, chance and

Table 31

Relationship of Personal, Economic, and Social-psychological Factors
to Information Seeking Scale by Multiple Regression Analysis

Independent variables	r^1	B, total model	B, significant at $\angle .05$	B, contributes $\geq .5\%$ to R^2	Cumulative R^2
Financial risk	<u>.25</u>	.25	.24	.33	.063
Math anxiety	<u>.15</u>	.13	.13	.10	.081
Pension expected	.12	.12		.12	.094
Risk-overall	<u>.14</u>	-.17		-.17	.105
Chance	<u>.18</u>	.10		.09	.114
Household income	<u>.16</u>	.09		.08	.121
Manager - husband	.11	.07		.07	.126
Dependent children	.09	.07			-
Powerful others	.12	.08			-
Locus of control-overall	<u>.14</u>	-.18			-
Clerical-respondent	-.06	-.00			-
Remarried	-.00	-.00			-
Employment	-.01	-.05			-
Age	-.03	.01			-
Divorced	-.06	.04			-
Education	.09	.07			-
Professional-respondent	.02	-.06			-
Respondents' earnings	.13	.10			-
Professional - husband	.03	.08			-
General risk	.01	-.04			-
Internal	-.00	.01			-
Married	.10	.32			.165

¹Underlined correlations significant at $p \angle .05$.

Table 32

Relationship of Personal, Economic, and Social-psychological Factors
to Investing Scale by Multiple Regression Analysis

Independent variables	r^1	B, total model	B, significant at .05	B contributes .5% to R^2	Cumulative R^2
Household income	<u>.40</u>	.40	.36	.30	.162
Pension expected	<u>.21</u>	.21	.21	.20	.206
Chance	<u>.23</u>	.17	.13	.11	.234
Financial risk	<u>.23</u>	.13	.13	.23	.249
Education	<u>.20</u>	.12		.19	.261
Age	.11	.15		.10	.280
Risk-overall	<u>.15</u>	-.13		-.11	.286
Dependent children	-.05	-.08		-.09	.291
Divorced	-. <u>.23</u>	-.08		-.08	.296
Professional-respondent	<u>.17</u>	.06			-
General risk	.06	.09			-
Internal	.09	.05			-
Remarried	.03	-.01			-
Manager-spouse	.05	-.03			-
Math anxiety	<u>.14</u>	.05			-
Employment	.05	-.01			-
Powerful others	.02	-.04			-
Clerical-respondent	-.09	.04			-
Respondents' earnings	<u>.19</u>	.03			-
Professional-spouse	.12	-.02			-
Married	<u>.14</u>	-.22			-
Locus of Control-overall	<u>.15</u>	.17			.315

¹Underlined correlations significant at p .05.

financial risk. These four variables explain 25% of the variation in investing.

A total of nine variables make substantial contributions to the investing scale. In addition to the four variables already mentioned, education, age, overall risk, dependent children, and divorced marital status offer greater understanding to the investing construct. The nine substantive variables provide 30% explained variation. When the remaining 13 variables enter into the multiple regression equation, they raise the cumulative R^2 to 32%.

Summary

The midlife women respondents can be described as highly educated (33% have graduate degrees), married (81%), and employed (82%). Over one-half (59%) have total family incomes of greater than \$37,499 per year. Most of the respondents themselves, 70%, earn less than \$24,999.

Responses are described as they relate to the planning process. Most of the respondents consider financial planning and retirement planning important goals. Spouse's pensions and Social Security are anticipated retirement resources for the majority. Although almost one-half (45%) of the women want to retire before age 65, most of them have little information about retirement

income requirements to know if this is a realistic expectation. Seeking financial information is not pursued to a great extent by very many of the women. Only 23% read three or more articles a month about financial management, and 40% read no articles. Seventy-eight percent have never attended a program at work about retirement, and 83% have never met with a benefits officer to discuss retirement benefits.

The majority of women indicate they have life insurance, savings accounts, IRAs, and pensions. Fewer than one-half have other types of assets.

The last section shows relationships between the four dependent variables and the 22 independent variables. Economic and social-psychological variables are statistically significantly related (at the .05 level) to explaining the dependent variables. When substantive contributions are included (variables which add at least .5% explained variation), personal variables are also involved.

In Chapter V, implications related to the research questions and to the planning model will be discussed. Recommendations for education, practical application, and research are made for educators, financial planning practitioners, policy makers, and researchers.

CHAPTER V
IMPLICATIONS AND RECOMMENDATIONS
FOR FURTHER STUDY

Although the situation for retirees has improved, many people, especially women, find they must live in poverty when they are older. Improvements in the economic status of seniors have been attributed to the cost of living adjustment in Social Security benefits (Schulz, 1984); however the cost of these benefits has resulted in political debate and changes which could alter the economic security of older persons. Lack of planning and self responsibility for future retirement income leaves one's retirement status to the benevolence of Congress, which may or may not be supportive of social retirement plans.

Lack of assurance about future retirement benefits from Social Security and/or pensions, makes necessary some measure of planning if individuals are to achieve financial security in retirement. The purpose of this study was to assess the degree to which women in their middle years, 40 to 55 years of age, were taking charge of their retirement plans. Women in this age range were deemed old enough to potentially be concerned about retirement and still young enough to have time to make plans.

Income level is an important component of retirement planning. In order to defer current income to the future there must be financial resources above a subsistence level; therefore, women were included in the study if their household incomes were expected to be at least twice that of the official poverty level.

Five objectives were posed in Chapter I. The objectives were:

1. To explore the level of retirement planning by midlife women.
2. To explore the relationship between extent of retirement planning and personal characteristics.
3. To examine the relationship between retirement planning and household economic factors.
4. To assess how women's retirement planning is related to social-psychological factors.
5. To make recommendations for educational programs and policy based on the findings of this study.

Responses from the midlife women's sample will be discussed as they relate to the research questions. The final section makes recommendations for educators, financial planning practitioners, policymakers, and researchers.

Level of Retirement Planning

The level of retirement planning evidenced by the respondents can be segmented into positive and not so positive examples of substantive, well balanced planning and action. As a group, these women have a great deal "going for them." They

are highly educated, have ample financial resources, and their children are about to leave home (if they haven't already). Most of the women are employed and have access to pensions.

Is there a problem? Potentially. The first problem is the fact that economic conditions fluctuate, thus causing stress on fixed incomes. Second, most people do not want to make drastic adjustments in their lifestyles at any time, including retirement. Neither Social Security, nor private pensions nor a combination of the two are totally adequate replacements for preretirement income. A balance of Social Security, pension benefits, and assets are needed for a comfortable level of living. Based on these considerations, how do these women meet the five steps of the planning process: goal setting, long-range planning, anticipated resources information seeking, and implementation?

Goal Setting

As a first step, the women are on the right track to retirement planning as they support the notion of the importance of retirement planning; 87% think it is important or very important. Only 13% do not think that retirement planning is an issue. An even greater percentage of the respondents, 93%, feel that investing and saving is important. These two concepts are closely linked. Although not directly linked to retirement, accumulating assets through saving and investing can provide the resources needed in retirement. High marks, then, would be given

the midlife women in identifying the need to set aside a portion of current income for future needs.

Goal setting is also a separate dependent variable in the multiple regression equation (Table 31). Two independent variables are positive and significant contributors in the goal setting process: internal locus of control, and respondents' earnings. Women who believe that they are in charge of their lives are also women who set goals relating to savings, investments, and retirement planning. In addition, women who have larger amounts of their own resources are more aware of the importance of setting financial goals.

Six other independent variables predict goal setting behavior in women: age, financial risk taking, divorced marital status, overall risk taking, education, and math anxiety. Older women are more likely to identify goal setting for retirement purposes as being important. Women who are oriented toward taking financial risks are more likely to be goal setters. Divorced women, more than women in other marital situations, are goal directed.

A surprising finding, supporting the idea that women may consider themselves risk takers in general but not when finances are concerned, is a negative relationship between general risk taking and goal setting. Women scoring higher on the overall risk taking scale are less likely to identify goal setting as important. Another surprising negative relationship exists between education and goal setting. More highly educated women are less goal directed. Although not shown in the preceeding

pages, a scatterplot of earnings by education shows that higher levels of education do not correspond with higher earnings for this sample. Those with higher levels of education may be largely employed at Oklahoma State University and generally feel that they will be taken care of by their university pensions.

The last variable contributing substantively to understanding of goal setting behavior is math anxiety. The relationship supports the proposition that math anxiety may inhibit retirement planning behavior. Women who feel comfortable with math have more interest in setting financial goals.

Overall, high interest in the first step of the planning process, goal setting, is shown by the midlife women. The next step is long-range planning.

Long-range Planning

In order to know how to achieve future income security it is necessary to make long-range plans. Although the respondents are high in goal setting concern, they are low in the amount of long-range planning they have done. A little less than one-half, 45%, plan to retire before they are 65. When asked if they knew what they would need as a financial base, 83% do not know how many dollars they will need. About the same proportion, 81%, have made no estimates about how many dollars from investments will be needed to supplement pension funds to maintain their preretirement standard of living.

Expecting to retire early and yet not knowing what their retirement income will be, most of the group, 57%, feel their

retirement plans are adequate. The lack of knowledge to support retirement expectations causes concern about the real adequacy of this group's retirement plans.

Anticipated Resources

Most of the midlife women, 86%, expect to draw Social Security retirement benefits. Most of those who are married expect to receive benefits from their spouse's pension. It is not known whether the respondents expect to continue to collect benefits as survivors or whether their spouses' pension benefits will be available only while he is alive. An issue to be pursued is whether spouses plan to opt for survivors benefits or whether, if both are employed, they plan to draw the higher worker-only pension benefit. When asked what portion of their spouse's pension they would draw if widowed, 63% do not know the answer.

Of those employed, 58% expect to have their own pensions. When the entire sample is considered, however, 57% do not have their own retirement plans upon which to depend. Counting totally on spouse's pension or spouse's Social Security may place women in jeopardy for economic security. At the same time, 24% of the group plan to work during senior years. It should be brought to the attention of midlife women that ill health might prohibit labor force participation in older years. Considering this possibility is an aspect of contingency retirement planning.

The fact that 77% expect to have savings and 70% expect investments fits the importance of savings and investment goals expressed by the respondents. There is considerable discussion

currently about the "sandwich generation" of adults who are supporting both aging parents and adult children. This sample definitely does not plan to be supported by children. Only 1% of the group answer that this is an expectation.

About one-half of the group can estimate the portion of preretirement income which will be replaced by Social Security and pension benefits. The other half do not know. This piece of information is at the core of a well conceived retirement income plan. In order to reach goals, it is important to have specific needs in mind. By knowing what must be achieved, definite steps can be planned and accomplished.

Information Seeking

In the planning process, after goals are established, a plan is made as it relates to anticipated resources, and then information is gathered in order to implement the plan. The information gathering practices of the respondents leave grave concerns about how they are making financial decisions. When asked about sources of financial management information, a substantial portion, 40%, of the group have read no articles in the past month; 72% have watched no television programs; and 74% have not attended a seminar in the past year.

Another source of financial information is contacts with professionals. Fewer than one-third of the group have met in the past year with a professional in the financial management field. Thirty-two percent each have met with an accountant and a tax sheltered annuity representative. The latter contact is also an

indication that a large portion of the respondents are employed at Oklahoma State University where tax sheltered annuities are an integral (and non-elective) part of their pension plan.

Fewer than one-tenth of the group have met with someone from the credit union, an attorney, or a financial planner. It appears that the respondents may be taking the path of least resistance and investing resources based on convenience. They may be overlooking the advantages available from contacts with other professionals such as financial planners.

It is frequently said that people are reluctant to talk about money. The responses from this sample suggest that there may be some truth to the statement. Most of the group who are married, 74%, discuss financial management with their spouses. It is not known if the discussion relates to planning or to more mundane issues such as balancing the checkbook or joining a health club. On the other hand, fewer than one-third have discussed financial planning with friends, relatives, co-workers, or neighbors. Although many "hot tips" do not work out, it may be that women are losing an opportunity for an increased base of financial choices by not discussing finances with other people.

Employees were asked about information sought at work. Seventy-eight percent have never attended a program about retirement benefits, and 83% have never met with a benefits officer concerning retirement. In order to adequately plan for retirement, it is essential to first know what you will have.

Information seeking is a subscale from the overall retirement scale which was used as a dependent variable in a

multiple regression analysis. Two independent variables made significant contributions toward predicting those women who are oriented toward seeking information: financial risk and math anxiety.

Financial risk is the best single predictor. Women who feel comfortable taking financial risks are also directed toward getting information. This belies the notion that risk is without forethought. In this case, women who want to take financial risks also want information on which to evaluate their decisions. Math anxiety is positively related to information seeking. Respondents most comfortable with math are most likely to seek information.

Five other variables provide explanation about the information seeking activity of midlife women. The women who expect to have a pension are more likely to seek information. Overall risk has a negative relationship with information seeking. In this case, it can be said that the more risk averse a person, the more likely they will seek information. However, it should be pointed out that although the correlation of general risk with information is negative, when risk is entered into the regression model, the beta value is positive. This leaves a question about the stability of the relationship between risk and information seeking. Believing in self direction rather than chance, having higher levels of household income, and having a husband employed as a manager are all predictors of information seeking.

Implementation

The best laid plans are useless without implementation. Savings efforts of a substantial portion of the group, 32%, are over 10% of their current household income. Another 30% save from 1 to 5%, and 14% are currently not saving.

When asked which assets are being selected, the four types selected by at least one-half of the group are: life insurance, savings accounts, IRAs, and pensions. Two of these choices, life insurance and pensions, may be related to employment without requiring decisions or contributions from the employees. The high level of those with savings accounts, 75%, raises the question of whether respondents are giving up greater returns for their dollars for the sake of safety. The percentage, 56%, of those with investments in IRAs is a positive indicator of personal financial responsibility.

One of the ways to evaluate the success of a plan is to periodically review assets and liabilities with a net worth statement. Forty percent of the respondents develop a net worth statement at least once a year, and 5% figure net worth four times a year. Over one-half, 54%, compute net worth every two years or less. Use of financial planning tools including net worth statements provide valuable evaluation of financial progress.

The third subscale used as a dependent variable is an investing scale. Nine independent variables relate to a woman's investing propensity. The first four are statistically

significant and include household income, pension expected, chance, and financial risk. The best predictor is household income. Higher levels of household income lead to greater investing. Also women who expect pensions are more likely to invest. Having a pension may make women more aware of their own financial needs and work in a positive fashion rather than simply providing an impression that everything is taken care of.

The next two significant variables are social-psychological ones. Those who have more positive feelings about being in control of their lives as opposed to chance and those who consider themselves financial risk takers are also more likely to be investors.

The next two variables which make substantive contributions are education and age. Higher amounts of education and being older point toward higher investing. On the other hand, being a general risk taker, having dependent children at home, and being divorced have negative consequences for investing. Whether having children is a "legitimate" reason for limited investing or used as an excuse, there is often a perception that resources are too scarce when children are present to defer for investments. In the case of divorced women, it may be that they have reduced levels of income and have no resources to invest, or they may have relied on their spouse's leadership in making investment decisions and now are not sure how to proceed.

In the following section, the contributions of three types of variables, personal, economic, and social-psychological are considered as they related to retirement planning.

Relationships Between Personal, Economic, and
Social-psychological Characteristics
and Retirement Planning

The entire retirement planning scale and the three retirement planning subscales, goal setting, information seeking, and investing, are influenced by different sets of characteristics. Contributions of independent variables which add statistically significant input as well as substantive contributions of at least .5% to explained variation form predictive relationships with the four dependent variables.

In Table 33, contributing independent variables for each of the dependent variables are summarized. Groups of explanatory variables are different for each of the dependent variables indicating a very complex interrelationship between variables which are linked to overall retirement planning and variables which relate to components of the planning process.

Knowing household income, availability of a pension, psychological orientation toward financial risk, chance, internal ability to control one's life, propensity toward comfort with math, and age would best describe the woman most inclined toward retirement planning. As will be suggested in the recommendations section, psychological inclinations may work as inhibitors toward taking action and can be turned into a more positive orientation with identification and suggested strategies.

Goal setting is the first step in the financial/retirement planning process. Active goal setters are described with a

Table 33

Personal, Economic, and Social-psychological Variables with Statistical and Substantive Contributions to Retirement Planning, Goal Setting, Information Seeking, and Investing Scales

	Retirement	Goal	Information	
	Planning	Setting	Seeking	Investing
<u>Personal Variables</u>				
Age	X	X		X
Divorced		X		X
Education		X		X
Dependent Children				X
<u>Economic Variables</u>				
Household Income	X*		X	X*
Pension Expected	X*		X	X*
Respondents' Earnings		X		
Manager - Husband			X	
<u>Social-psychological Variables</u>				
Financial Risk	X*	X	X*	X*
Chance	X*		X	X*
Risk - Overall	X	X	X	X
Internal	X	X*		
Math Anxiety	X	X	X*	

*Statistical Significance $p < .05$.

different set of characteristics than those related to overall retirement planning. Goal setters feel they are in control of their lives, are positively orientated toward financial risk and math. They have higher personal incomes, are older, have higher levels of education, and, if divorced, are more directed toward setting goals.

Implications, then, are first to identify older women, with more education, and higher earnings to offer retirement planning information. At the same time, other women without the benefit of these personal and economic characteristics, can learn to expand their psychological perspectives to be more aware of their ability to take charge of their lives. Goal setting sets the stage for the rest of the planning process, and women must be approached through a variety of appeals because of the differences in their perspectives.


Information seeking is deemed important in the planning process to build a basis for well-founded decisions. Predictors are similar to the overall retirement scale but most influential are positive attitudes toward financial risk and math. Again, the possibility arises that the aversion to risk and math may inhibit the process of seeking a better understanding of finances and prevent adequate retirement planning. One explanatory variable, not in the previous equation, is a husband who has a managerial position.

The investing, or implementation stage of planning, is most highly influenced by household income and expected pension. It is noteworthy that respondents' income is not included. The

possibility is raised that the retirement planning done by women is as a result of actions by their husbands or through plans developed for them by their employers. Psychological variables show up strongly in the investing relationship with positive attitudes toward chance, overall risk, and financial risk influencing level of investing. Having dependent children, and being divorced have negative influences on investing.

Household income explains the greatest amount of variation for two dependent variables, retirement planning and investing. This relationship supports the conjecture that higher income households have greater resources to be diverted to the long-term goal of retirement planning.

On the other hand, middle and lower-income earners indicate that they are less likely, on their own, to shift funds from current to future expenditures. This study suggests strong support for the Social Security program. The forced deferral aspect of Social Security assures that those who cannot or will not take the necessary steps to save for retirement will be provided some support. Although this study focuses on women who conceivably have sufficient economic resources to defer a portion to retirement, retirement policy should continue to be multifaceted to meet the needs of a diverse society. Options such as IRAs and Keogh plans are positive retirement planning incentives for those who can afford them. These are no substitutes, though, for a social insurance program for people who will never have excess income for retirement planning.



One of the most surprising findings is the limited explanatory power of some of the characteristics that had been expected to be influential. Respondents' earnings are involved only with goal setting. Although having dependent children is frequently given as a reason that excess funds are not available for retirement or financial planning, its importance is seen only in relation to investing. Education has been found closely linked to employment status and income level, and it is important in two of the four scales, goal setting and investing. A stronger link was expected between education and overall retirement planning and information seeking. Respondents' occupation and being remarried are not predictors in any of the four scales.

In three analyses, the largest number of independent variables included as statistically significant or substantial contributors are social-psychological variables. This finding expands the boundaries of current research which have often focused on linking economic--income, employment, occupation--and personal--education, marital status, age--characteristics as major predictors for decision making. This study makes it clear that within the rational, decisionmaking framework are individual social-psychological characteristics which may either enhance or inhibit the decisions and actions that people take. Everyone involved in the retirement planning process should reappraise their methods of interacting with clients and students to include more tools for self appraisal relating to locus of control, risk taking, and math competence. These data indicate a substantial

psychological influence on retirement planning and its component steps.

Knowing the characteristics of women who are more likely to be involved in retirement planning as well as the converse, those characteristics of women who are not involved, leads to the next section, recommendations for educators, financial practioners, policy makers, and researchers.

Recommendations for Educators, Financial Practioners, Policymakers, and Researchers

The high education and income levels of the sample place a limitation on generalization from this study. However, findings from the study point the way for some recommendations for specific groups.

Recommendations are targeted toward four separate groups which at first glance may appear somewhat arbitrary distinctions. Academicians, practioners, and legislators are all educators, and at the same time have policy and research considerations to guide them. However, the opportunities for reaching people and the methods used may differ and thus suggestions are targeted to each group.

Educators

Seven areas, in particular, are recommended for program development by educators: 1) intervention programs designed to improve personal responsibility and effectiveness; 2) knowledge

of cash flow, investing, and financial evaluation tools to expand financial capabilities; 3) providing tools to make retirement projections; 4) information which incorporates resource management; 5) principles relating to risk management and safety; 6) working cooperatively with business to develop retirement planning programs; and 7) working with financial professionals to build trust with individuals and families.

1. Self help information has caught the public eye through magazine articles and books. Techniques which have sought to rid people of destructive habits transfer to the area of money management and retirement planning. Studies have indicated successful intervention methods in the areas of motivation development (McClelland, 1965), locus of control (MacDonald, 1972), risk taking (Ager, White, Mayberry, Crist, & Conrad, 1985; Morscher & Jones, 1982), math anxiety (Tobias, 1978), and neuro-linguistic programming (Waddell, 1985). Programs on financial and retirement planning should not overlook the importance of individuals' personal and psychological perspectives that they bring to the entire process.

Extension educators, in particular, have tremendous opportunities for providing public information through the media. In addition to consumer financial information, techniques concerning value identification and communication as well as suggestions for self motivation should be included in outreach efforts.

2. Researchers (Catalano & Dooley, 1983; McFarlane, Norman, Streiner, Roy, & Scott, 1980; Minkler, 1981; Pearlin, Lieberman,

Menaghan, & Mullan, 1981) have linked health status and life satisfaction to economic stability. In addition, Migliaccio and Cairo (1981) determined in their review of retirement preparation literature that "adequate planning has a beneficial influence on satisfaction, life style and health after retirement" (p. 31).

Teaching women (and men) to use tools and strategies to take control of their financial situations at all stages of the life cycle is a mandate for educators. Strategies include knowledge of various aspects of financial decisions such as insurance, investments, retirement planning, and estate planning. Tools include cash flow management and net worth statements. Last of all, and equally important, is the ability to question and select ethical, professional advisors. By using these, people can "find" money which can be invested for their futures.

3. Current planning suggestions (Collins, 1980; Duncan, Mitchell, & Morgan, 1984; Engel, 1985; Trunzo, 1984) can be used as a basis for developing additional tools such as retirement income/needs predictors so that people can make plans based on best judgment estimates. Retirement planning is so complicated that most people avoid analysis and simply hope for the best.

4. More emphasis on the concept of resource management needs to be shared through educational programs. In addition to money, time, other people, community resources, etc., can be used to expand resources to meet needs.

5. Women have often invested most of their money in conservative, interest-bearing investments (Hira, 1985; Johnson & Widdows, 1985) and overlooked the importance of a

well-balanced portfolio of assets. Learning to balance safety and asset diversity can be accomplished cooperatively with financial planning professionals.

6. Educators can also work with business to develop retirement planning programs. Prentis (1980) has found that businesses assumed lack of interest in retirement issues on the part of their employees and did not hold regularly scheduled pre-retirement programs. Programs can be coordinated with personnel offices and presented at times when employees are available such as during lunch or at breaktime.

7. Educators have an important joint role to play with financial planning professionals. As one faculty member mentioned, "I am not anxious about math, but I certainly am about dealing with people who sell financial products." Trust is the key to financial planning. Financial planners must be client rather than product oriented, and consumers must be able to trust the information they are given. Educators can help people learn to ask questions that will determine if suggestions are truly going to meet their needs. By better understanding the qualities and characteristics of ethical financial planners, educators can help consumers shop for appropriate advice. On the other hand, educators can help financial planners understand the personal needs of consumers so that planners are better able to identify ways of meeting consumers' needs.

Too often, educators have defined their roles as advocates for consumers and at the same time adversaries of business. It behooves educators to work with business to raise and maintain

ethical standards to be able to provide a much needed service, that of financial planning, to consumers. By supporting the need for competent financial planners and taking a stand against unscrupulous financial planners, educators and financial planners together can build the trust needed to help people plan for their own economically secure futures.

Financial Planners

1. The first suggestion for financial planners is the reverse of the last suggestion made for educators. Financial planners should seek cooperative efforts with educators. Fear of "ivory tower" academic perspectives often separates practioners from educators; and yet, both have much to contribute to the area of financial planning. Joint efforts can add considerable depth to the planning process.

2. One of the ways that practioners can help educators is to support research efforts such as this one, which can lead to a better understanding of the needs and desires of consumers. Research puts both practioners and educators on firmer grounds for making statements such as "women are conservative risk takers" and sets the stage for taking affirmative action toward change.

3. Financial planners need to be sensitive to the psychological perspectives of women who want to be involved in the planning process. Far too frequently, women say "we had a meeting with a financial planner, and I was treated as if I knew nothing and hadn't the intellect to learn." Women may be

uninformed but they can learn if treated with respect and sensitivity.

4. Dealing with clients should be a cooperative effort. As mentioned in a brochure distributed by Integrated Resources, Inc. (1985), people feel they can make their own decisions about investments. Therefore, people should be treated with dignity and given information which outlines the positive and negative aspects. Selling rather than informing raises suspicion. By giving clients information and respect, they will be able to make well thought out and appropriate decisions.

Policymakers

Three areas stand out as recommendations for policymakers:

1. It is important to recognize that not everyone has or will ever have sufficient funds to defer for retirement. Individual efforts are not substitutes for a strong Social Security and private pension system for many people. Efforts to change public retirement programs must continually recognize that low income levels during employment years have little opportunity to improve during retirement.

2. For middle and upper income people, similar to the ones toward whom this study was directed, who potentially do have surplus income, incentives such in IRAS, Keoghs, and tax-sheltered annuities, can work as a catalyst toward insuring economic security.

3. Prentis (1980) states that public support for older persons comes too late to help people to be better prepared. As

a component of services about aging, programs should target midlifers who still have time to take steps to develop a stronger financial base for retirement. Seniors could be used as resource persons through the Retired Senior Volunteer Program (RSVP). Seniors could be compensated for helping younger people achieve a better understanding of economic and personal issues that arise during retirement years.

Researchers

Research provides the basis for intervention and change rather than acting strictly on common sense or isolated examples. Further, research is needed to strengthen our understanding of individual actions and needs in the area of financial and retirement planning.

1. Although people may indicate a desire to plan for retirement, they may not act. A better understanding of motivation and ways to increase motivation is needed.

2. Women, in particular, may not take charge of their own financial futures. Research on women is needed to better understand women's personal needs. Furthermore, research is needed to identify better methods for reaching women concerning the topic of retirement planning.

3. This study supports the proposition that women may be risk takers in general but not where finances are concerned. Research about the potential for increasing risk tolerance is needed to understand the impact of trying to alter this perspective.

4. Research can provide a better understanding of the similarities and differences between women and men, and the ways they approach retirement planning. Comparative studies are needed.

5. Recent deregulation of the financial services industry has created an environment where consumers face a myriad of choices of financial instruments. Research investigating marketing practices and consumer decisionmaking within the deregulated financial environment is needed.

6. Olson (1981) suggests that corporate interest in retirement planning programs for employees has overlooked the importance of evaluating program effectiveness. In addition to encouraging retirement planning programs at work sites, evaluation of programs to determine effectiveness is needed to avoid using ineffective methods.

Summary

Retirement planning is a necessary component of financial management and economic security. Women, in particular, need to incorporate retirement planning into their repertoire of skills. Characteristics found in this study that enhance retirement planning are sufficient household income, positive orientation toward taking financial risks, personal belief in control over one's destiny, and comfort with mathematics.

Opportunities abound for educators, financial management practitioners, policymakers, and researchers to provide much needed information to women and men about retirement planning.

As Schulz (1985) states: "The evidence is clear: the overwhelming bulk of the population does not save sufficiently for old age" (p. 172). Through cooperative efforts, economic security during retirement years is an achievable goal.

BIBLIOGRAPHY

- Ager, C.L., White, L.W., Mayberry, W.L., Crist, P.A., & Conrad, M.E. (1985). Creative aging. In H. Cox (Ed.), Aging (4th ed., pp. 40-44). Guilford, CO: Dushkin Publishing Group, Inc.
- Aiken, L. R., Jr. (1963). Personality correlates of attitude toward mathematics. Journal of Educational Research, 56, 476-480.
- American Council of Life Insurance. (1982). DataTrack 9. Washington, D.C.: Author.
- Astin, H.S. (1976). Continuing education and the development of adult women. The Counseling Psychologist, 6(1), 55-60.
- Atchley, R.C. (1982). The process of retirement: Comparing women and men. In M. Szinovacz (Ed.), Women's retirement: Policy implications of recent research (pp. 153-168). Beverly Hills: Sage Publications.
- Bardwick, J.M. (1980). The seasons of a woman's life. In D. McGuigan (Ed.), Women's lives: New theory, research and policy (pp. 35-57). Ann Arbor: University of Michigan.
- Barnett, R., & Baruch, G. (1980). Toward economic independence: Women's involvement in multiple roles. In D. McGuigan (Ed.), Women's lives: New theory, research & policy (pp. 69-83). Ann Arbor: University of Michigan.
- Baumgartner, R. M., & Heberlein, T.A. (1984). Recent research on mailed questionnaire response rates. In D.G. Lockhart (Ed.), Making effective use of mailed questionnaires (pp. 65-76). San Francisco: Jossey-Bass.
- Benbow, C.P., & Stanley, J.C. (1983, December 2). Sex differences in reasoning ability: More facts. Science, 1029-1031.
- Berdie, D.R., & Anderson, J.F. (1974). Questionnaires: Design and use. New Jersey: The Scarecrow Press. Inc.

- Dillman, D.A., Dillman, J.J., & Makela, C.J. (1984). The importance of adhering to details of the total design method (TDM) for mail surveys. In D.C. Lockhart (Ed.) Making effective use of mailed questionnaires (pp 49-64). San Francisco: Jossey-Bass Inc., Publishers.
- Dowling, C. (1981). The Cinderella complex. New York: Summit Books.
- Dua, P.S. (1967). Comparison of the effects of behaviorally oriented action and psychotherapy reeducation on introversion-extraversion, emotionality, and internal-external control. Journal of Counseling Psychology, 19, 253-260.
- Duncan, G.J., Mitchell, O.S., & Morgan, J.N. (1984). A framework for setting retirement savings goals. Journal of Consumer Affairs, 18, 22-46.
- Edwards, J.N., & Klemmack, D.L. (1973). Correlations of life satisfaction: A re-examination. Journal of Gerontology, 28, 497-502.
- Engel, R.M. (1985, July). A raccoon coat, a personal computer and a fully funded trust. Financial Planning, pp. 189-191.
- Erb, C. (1969). Savings and investment decisions in the retirement plans of working women. Unpublished doctoral dissertation, University of Wisconsin, Madison.
- Erdos, P.L., & Morgan, A.J. (1970). Professional mail surveys. New York: McGraw-Hill.
- Erikson, E.H. (Ed.). (1978). Adulthood. New York: W.W. Norton & Company, Inc.
- Ernest, J. (1976). Mathematics and sex. American Mathematical Monthly, 83, 595-614.
- Fennema, E. (1980). Sex-related differences in mathematics achievement: Where and why. In L.H. Fox, L. Brody, & D. Tobin (Eds.), Women and the mathematical mystique (pp. 76-93). Baltimore: The Johns Hopkins University Press.
- Fennema, E., & Sherman, J. (1977). Sex-related differences in mathematics achievement: Spatial visualization and socio-cultural factors. American Educational Research Journal, 14, 51-71.
- Ferber, M.A., & Birnbaum, B.J. (1980, Summer/Fall). Economics of the family: Who maximizes what? Family Economics Review, 13-16.

- Block, M.R. (1982). Professional women: work pattern as a correlate of retirement satisfaction. In M. Szinovacz (Ed.), Women's retirement: Policy implications of recent research (pp. 183-194). Beverly Hills: Sage Publications.
- Block, M. R., Davidson, J. L., & Grambs, J. D. (1981). Women over forty visions and realities. New York: Springer Publishing Co.
- Brocklehurst, N. (1979). Women and math: Overcoming avoidance. The College Board Review, 111, 22-24,33.
- Brown, J. J., Heltsley, M. E., & Warren, R. D. (1982). Planning in low-income families: influence of locus of control and dyadic consensus on realistic standard setting. Home Economics Research Journal, 11, 67-75.
- Butler, R.N. (1975). Why survive? Being old in America. New York: Harper & Row, Publishers, Inc.
- Carnegie Commission on Higher Education. (1973). Opportunities for women in higher education. New York: McGraw Hill.
- Catalano, R., & Dooley, D. (1983). Health effects of economic instability: A test of economic stress hypothesis. Journal of Health and Social Behavior, 24, 46-60.
- Cattell, R.B. (1978). The scientific use of factor analysis in behavioral and life sciences. New York: Plenum Press.
- Chatfield, W.F. (1975). Environmental factors associated with life satisfaction of the aged. Unpublished doctoral dissertation. West Virginia University.
- Collins, R.A. (1980). Estimating the benefits of individual retirement accounts: A simulation approach. Journal of Consumer Affairs, 14, 124-141.
- Compton, N.J., & Hall, O.A. (1972). Foundations of home economics research--A human ecology approach. Minneapolis: Burgess Publishing Co.
- Congress approves measure expanding benefits for women. (1984, August 10). Denver Post, p. 15.
- Deacon, R.E., & Firebaugh, F. M. (1981). Family resource management: Principles and applications. Boston: Allyn and Bacon, Inc.
- Dillman, D.A. (1978). Mail and telephone surveys: The total design method. New York: Wiley-Interscience.

- Fialka, J. J. (1983, February 22). Older Americans. What social security means to the retired and the about-to-be. Wall Street Journal, p. 1.
- Fitch, G. (1970). Effects of self-esteem, perceived performance and choice on causal attributions. Journal of Personality and Social Psychology, 16, 311-315.
- Fox, A. (1982). Earnings replacement rates and total income: Findings from the retirement history study. Social Security Bulletin, 45(10), 3-23.
- Fox, J.H. (1977). Effects of retirement and former work life on women's adaptation in old age. Journal of Gerontology, 32, 196-202.
- Fox, L.H. (1981). The problem of women and mathematics. New York: Ford Foundation.
- Gerner, J. (1980). Marital status affects elderly women's financial assets. Consumer News Service. Ithaca: New York State Cooperative Extension.
- Gierszewski, S. (1983). The relationship of weight loss, locus of control, and social support. Nursing Research, 32(1), 43-47.
- Gilligan, C. (1980). Restoring the missing text of women's development to life cycle theories. In D. McGuigan (Ed.), Women's lives: New theory, research and policy (pp. 17-34). Ann Arbor: University of Michigan.
- Glick, P.C. (1979). The future marital status and living arrangements of the elderly. The Gerontologist, 19, 301-309.
- Goldman, N., & Lord, G. (1983). Sex differences in life cycle measures of widowhood. Demography, 20(2), 177-195.
- Gottschalk, E.C., Jr. (1983, February 17). Older Americans, the aging made gains in the 1970s, outpacing rest of population. Wall Street Journal, p. 1.
- Gross, I.H., Crandall, E.W., & Knoll, M.M. (1980). Management for modern families (4th ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Guthrie, A.G. (1981). Women: Little-noticed Social Security provision may reduce your pension. Morgantown, WV: West Virginia University, Cooperative Extension Service.
- Hakala, D.R., & Delaney, M.M. (1983). Financial planning for retirement. Boston: Allyn and Bacon, Inc.

- Hallman, G.V., & Rosenbloom, J.S. (1978). Personal financial planning. New York: McGraw-Hill Book Company.
- Harrison, B.G., Guy, R.F., & Lupfer, S.L. (1981). Locus of control and self-esteem as correlates of role orientation in traditional and nontraditional women. Sex Roles, 7, 1175-1187.
- Henning, M., & Jardin, A. (1977). The managerial woman. Garden City, NY: Anchor Press.
- Henretta, J.C., & O'Rand, A.M. (1980). Labor-force participation of older married women. Social Security Bulletin, 43(3), 10-16.
- Hira, T.K. (1985). Determinants of household asset ownership. In Social and economic resources: Managing in a complex society. Proceedings of the Southeastern Regional Association of Family Economics-Home Management, 14, 5-10.
- Hogarth, J.M. (1984). A study of the early retirement incentive program of the New York State Employees Retirement System: Preliminary report. Ithaca, NY: Cornell University, Department of Consumer Economics and Housing.
- Hoyt, D.R., Kaiser, M.A., Peters, G.A., & Babchuk, N. (1980). Life satisfaction and activity theory: A multidimensional approach. Journal of Gerontology, 35, 935-941.
- Hungerford, N.I., & Makela, C.J. (1980, November). Economic pressures on women. Paper presented at the Twentieth Annual Conference of the Western Regional Home Management-Family Economics Educators, Newport Beach, CA.
- Institute on Aging. (1982). Divorce in late life: Emerging trends and problems. Portland, OR: Portland State University.
- Integrated Resources, Inc. (1985). Direct from investors...marketing tips. New York: author.
- Internal Revenue Service. (1980). Tax information on individual retirement arrangements (IRS Publication 590). Washington, D.C.: Author.
- Internal Revenue Service. (1982). Tax information on self-employed retirement plans (IRS Publication 560). Washington, D.C.: Author.
- Janssens, D., & Pessemier, E.A. (1980). Response rates in mail surveys: A review and survey (Krannert Graduate School of Management, Paper No. 7114). West Lafayette, IN: Purdue University.

- Jewson, R.H. (1982). After retirement: An exploratory study of the professional woman. In M. Szinovacz (Ed.), Women's retirement: Policy implications of recent research (pp. 169-182). Beverly Hills: Sage Publications.
- Johnson, D.P., & Widdows, R. (1985). Planning and targeting investment programs to meet audience needs. In Social and economic resources: Managing in a complex society. Proceedings of the Southeastern Regional Association of Family Economics-Home Management, 14, 70-75.
- Jones, W. H., & Lang, J. R. (1982). Reliability and validity effects under mail survey conditions. Journal of Business Research, 10, 339-353.
- Kass, R.A., & Tinsley, H.E.A. (1979). Factor analysis. Journal of Leisure Research, 11(2), 120-138.
- Kerlinger, F.N., & Pedhazur, E.J. (1973). Multiple regression in behavioral research. New York: Holt, Rinehart and Winston, Inc.
- Keys, M. (1979). Women and retirement income. Aging and Work, 2, 266-270.
- Kimmel, D.C. (1974). Adulthood and aging. New York: John Wiley.
- Kroeger, N. (1982). Preretirement preparation: Sex differences in access, sources, and use. In M. Szinovacz (Ed.), Women's retirement: policy implications of recent research (pp. 95-112). Beverly Hills: Sage Publications.
- Labaw, P.J. (1980). Advanced questionnaire design. Cambridge, MA: Abt Books.
- Lefcourt, H.M. (Ed.). (1981). Research with the locus of control construct. Vol 1. Assessment methods. New York: Academic Press.
- Lefcourt, H.M. (1982). Locus of control Current trends in theory and research. (2nd ed). Hillsdale, NJ: Lawrence Erlbaum Erlbaum Associates, Publishers.
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H.M. Lefcourt (Ed.), Research with the locus of control construct. Vol 1. Assessment Methods (pp. 15-63). New York: Academic Press.
- Levine, S., & Gordon, G. (1958). Maximizing returns on mail questionnaires. Public Opinion Quarterly, 22, 568-575.
- Levinson, D.J. (1978). The seasons of a man's life. New York: Ballantine Books.

- Linsky, A.S. (1975). Stimulating responses to mailed questionnaires: A review. Public Opinion Quarterly, 39, 82-101.
- Lopata, H.Z., & Norr, K.F. (1980). Changing commitments of American women to work and family roles. Social Security Bulletin, 43(6), 3-14.
- Lowenthal, M.F., Thurnher, M., & Chiriboga, D. (1975). Four stages of life: A comparative study of women and men facing transitions. San Francisco: Jossey-Bass.
- MacDonald, A.P., Jr. (1972). Internal-external locus of control change-techniques. Rehabilitation Literature, 33(2), 44-47.
- Markus, H. (1980). Work, women and well-being: A cognitive approach. In D. McGuigan (Ed.), Women's lives: New Theory, Research and Policy (pp. 269-282). Ann Arbor: University of Michigan.
- McClelland, D.C. (1965, November-December). Achievement motivation can be developed. Harvard Business Review, pp. 6-12, 20-22, 178.
- McDonagh, E., & Rosenblu, A.L. (1965). A comparison of mailed questionnaires and subsequent structured interviews. Public Opinion Quarterly, 29, 131-136.
- McFarlane, A.H., Norman, G.R., Streiner, D.L., Roy, R., & Scott, D.J. (1980). A longitudinal study of the influence of psychosocial environment on health status: A preliminary report. Journal of Health and Social Behavior, 21, 124-133.
- McInish, T. H. (1982). Individual investors and risk-taking. Journal of Economic Psychology, 2, 125-136.
- Medley, M.L. (1976). Satisfaction with life among persons sixty-five years and older: A causal model. Journal of Gerontology, 34, 254-263.
- Migliaccio, J.N., & Cairo, P.C. (1981). Preparation for retirement: A selective bibliography, 1974-1980. Aging and Work, 4, 31-41.
- Miller, J. B. (1976). Toward a new psychology of women. Boston: Beacon Press.
- Minkler, M. (1981). Research on the health effects of retirement: An uncertain legacy. Journal of Health and Social Behavior, 22, 117-130.

- Morrison, M.H. (1976). Planning for income adequacy in retirement: The expectations of current workers. The Gerontologist, 16, 538-543.
- Morscher, B., & Jones, B.S. (1982). Risk-taking for women. New York: Everest House Publishers.
- National Commission on Working Women. (1982, February). News about the 80%. Women at Work. Washington, D.C.: Center for Women Policy Studies.
- National Advisory Council on Economic Opportunity. (1980). Critical choices for the 80's. Washington, D.C.: Superintendent of Documents.
- Neugarten, B.L., & Brown-Rezanka, L. (1978). Midlife women in the 1980s. In Select Committee on Aging, House of Representatives, Ninety-Fifth Congress, Second Session, Women in midlife--Security and fulfillment, Part I, (Committee Publication No. 95-170, pp. 23-38). Washington, D.C.: Superintendent of Documents.
- Nichols, M.J. (1981, July/August). Entrepreneur's corner. Executive Female, pp. 16-17.
- Nie, N.H. (1983). SPSS^X User's Guide. New York: McGraw-Hill Book Company.
- Nunnally, J.C. (1978). Psychometric theory (2nd ed). New York: McGraw-Hill Book Company.
- 'Old' at 40: Women in the workplace. (1984). Ann Arbor: University of Michigan, Institute of Gerontology.
- Olson, S.K. (1981). Current status of corporate retirement preparation programs. Aging and Work, 4, 175-187.
- Paolucci, B., Hall, O.A., & Axinn, N. (1977). Family decision making: An ecosystem approach. New York: John Wiley & Sons.
- Parsons, J. (1980). The effects of teachers' expectancies and attribution of students' expectancies for success in mathematics. In D. McGuigan (Ed.), Women's lives: New theory research and policy (pp. 373-380). Ann Arbor: University of Michigan.
- Pear, R. (1983, January 19). Elderly as a class no longer poor. The Denver Post, pp. C1-2.
- Pearlin, L.I., Lieberman, M.A., Menaghan, E.G., & Mullan, J.T. (1981). The stress process. Journal of Health and Social Behavior, 22, 337-356.

- Plunkett, M.W. (1980). Meanings of work for mothers. In D. McGuigan (Ed.), Women's lives: New theory, research and policy (pp. 95-100). Ann Arbor: University of Michigan.
- Porter, S. (1980, October 12). Older women battle inequities. The Denver Post, p. 7.
- Prentis, R.S. (1980). White-collar working women's perception of retirement. The Gerontologist, 20, 90-95.
- Price-Bonham, S., & Johnson, C.K. (1982). Attitudes toward retirement: A comparison of professional and nonprofessional married women. In M. Szinovacz (Ed.), Women's retirement: Policy implications of recent research (pp. 123-138). Beverly Hills: Sage Publications.
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, 1, Whole No. 609.
- Rubin, L. (1979). Women of a certain age: The midlife search for self. New York: Harper & Row.
- Rummel, R.J. (1969). Understanding factor analysis. Journal of Conflict Resolution, 11, 444-477.
- Ryckman, R., & Sherman, M. (1973). Relationship between self-esteem and internal-external locus of control. Psychological Reports, 32, 1106.
- Schulz, J.H. (1985). The economics of aging (3rd ed.). Belmont, CA: Wadsworth Publishing Co.
- Select Committee on Aging, House of Representatives, Ninety-fifth Congress, Second Session. (1978, December). Women in midlife security and fulfillment, Part I (Committee Publication No. 95-170). Washington, D.C.: Superintendent of Documents.
- Select Committee on Aging, House of Representatives, Ninety-sixth Congress, First Session. (1979, May 7-8.) National policy proposals affecting midlife women (Committee Publication No. 96-195). Washington, D.C.: Superintendent of Documents.
- Select Committee on Aging, House of Representatives, Ninety-sixth Congress, Second Session. (1980, March). The status of mid-life women and options for their future (Committee Publication No. 96-215). Washington, D.C.: Superintendent of Documents.
- Sells, L.W. (1978). Mathematics--A critical filter. The Science Teacher, 45(2), pp 7-15.

- Serlin, E. (1980). Emptying the nest: Women in the launching stage. In D. McGuigan (Ed.), Women's lives: New theory, research and policy (pp. 133-146). Ann Arbor: University of Michigan.
- Shapiro, S.A., Murrell, S.A., & Usui, W.M. (1980). Formal and social activity related to life satisfaction among older men and women: Replication and extension of a causal model. Presented at the annual meeting of the Gerontological Society, San Diego.
- Siverd, B. (1982, March). Risk taking equals self-worth plus net worth. Working Woman, pp. 87-89.
- Social Security Administration. (1981, December). Income of the population 55 and over, 1978 (Publication 13-11871). Washington, D.C.: Superintendent of Documents.
- Social Security Administration. (1981, October). Income and resources of the aged, 1978 (Publication 13-11727). Washington, D.C.: Superintendent of Documents.
- Social Security Administration. (1982, May). Monthly Benefit Statistics. Washington, D.C.: Superintendent of Documents.
- Sudman, S., & Bradburn, N. (1982). Asking questions: A practical guide to questionnaire design. San Francisco: Jossey-Bass.
- Sudman, S., & Bradburn, N. (1984). Improving mailed questionnaire design. In D. Lockhart (Ed.) Making effective use of mailed questionnaires (pp. 33-48). San Francisco: Jossey-Bass.
- Szinovacz, M. (1982). Conclusion: Service needs of women retirees. In M. Szinovacz (Ed.), Women's retirement: Policy implications of recent research (pp. 221-234). Beverly Hills: Sage Publications.
- Tedin, K.L., & Hofstetter, R. (1982). The effect of cost and importance factors on the return rate for single and multiple mailings. Public Opinion Quarterly, 46, 122-128.
- Tobias, S. (1978). Overcoming math anxiety. New York: W.W. Norton.
- Trunzo, C.E. (1984, December). How to simplify your financial life. Money, pp. 46-49.
- U. S. Bureau of the Census. (1984). Statistical abstract of the United States 1984 (104th ed). Washington, D.C.: Superintendent of Documents.

- U.S Department of Labor. (1982, March 7). 1981 weekly earnings of men and women compared in 100 occupations. Bureau of Labor Statistics News. Washington, D.C.: Superintendent of Documents.
- VanCaspel, V. (1980). Money dynamics for the 1980s. Reston, Virginia: Reston Publishing Co., Inc.
- Waddell, F.E. (1985). The use of neuro-linguistic programming (NLP) in post-secondary family finance. In Social and economic resources: Managing in a complex society. Proceedings of the Southeastern Regional Association of Family Economics-Home Management, 14, 39-43.
- Wallace, D. (1954). A case for and against mail questionnaires. Public Opinion Quarterly, 18, 40-52.
- Welniak, E., & Fendler, C. (1983). Money income and poverty status of families and persons in the United States: 1982 (Current Population Reports, Consumer Income, Series P-60, No. 140). Washington, D.C.: U.S. Bureau of the Census.
- Welniak, E. J., & Henson, M. F. (1984). Money income of households, families and persons in the United States: 1981 (Current Population Reports, Consumer Income Series P-60, No. 142). Washington, D.C.: U.S. Bureau of the Census.
- White House Mini-Conference on Older Women. (1980, October 9-10). Issue papers. Des Moines, Iowa.
- Women's employment needs grow to critical new levels in 1980s. (1982, February). Home Economics Washington Dateline, 5-7.
- Women's Bureau. (1983). Time of change: 1983 handbook on women workers (Bulletin 298). Washington, D.C.: Superintendent of Documents.
- Working Women. (1980). Vanished dreams: Age discrimination and the older woman worker. Cleveland, OH: National Association of Office Workers.
- "World 'apartheid by sex'--What progress against it?" (1980, July 13). The Denver Post, p. 10.
- Writing for 4H. (1976). Stillwater, OK: Cooperative Extension Service, Southern Region 4-H Literature Educational Materials Committee.

Your stake in the fight over Social Security: (1981, November).
Consumer Reports, pp. 503-510.

Yu, J., & Cooper, H. (1983). A quantitative review of research
design effects on response rates to questionnaires. Journal
of Marketing Research, 20, 36-44.

APPENDIXES

APPENDIX A
QUESTIONNAIRE AND INITIAL MAILING

Retirement Study Beginning

In the next few days, more than 400 local women between the ages of 40 and 55 will be receiving a questionnaire about retirement planning.

According to Dr. Sharon Nickols, Oklahoma State University director of the Family Study Center of the College of Home Economics, "Retirement Plans of Midlife Women," is the first study in Stillwater to determine what women are doing or not doing about retirement.

"Retirement planning for women is a topic new to many women. The study is interested in the extent to which women are planning for retirement, as well as some potential obstacles

that may get in the way of planning," Dr. Nickols said.

Dr. Nickols is hopeful local women will cooperate in the study, since information obtained can help them focus on retirement needs; help educators provide useful retirement information, and assist financial planners in understanding the special financial needs of women.

Dr. Nickols and Judy McKenna, a graduate student, will co-direct the research project. Ms. McKenna is in the OSU Department of Housing, Interior design and Consumer Studies. The study will form part of her doctoral dissertation.



Oklahoma State University

COLLEGE OF HOME ECONOMICS
FAMILY STUDY CENTER

STILLWATER, OKLAHOMA 74078
114 HOME ECONOMICS WEST
(405) 624-6696 or 6697

March 26, 1985

Hello:

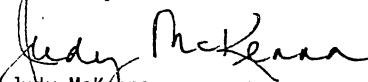
We are writing to ask for your help in a very important research project coordinated by the Family Study Center at Oklahoma State University. The purpose of the research project is to better understand what women are or are not doing about retirement planning. We are interested in your personal experiences whether they are extensive or limited.

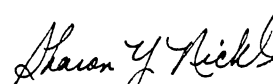
Please complete the attached questionnaire and return it to us by April 4th. It should take only about 18.5 minutes. We would like to show our appreciation to those who return their questionnaires by sending a summary of the results and a \$1.00 bill. One dollar is not as much as we would like to send, but as Will Rogers said: "Our problem is not what is the dollar worth in London, Rome, or Paris, or even what it is worth at home. It's how to get hold of it, whatever it's worth."

Please return the completed questionnaire in the enclosed envelope, then we will mail the \$1.00 right away. We will send a summary of the results when the study is completed. All of your answers will be held in strict confidence and your name will not be attached to the questionnaire or used in any way.

We urge your participation. In order for us to feel confident about the results of this study, your input is extremely important. If you have questions, feel free to contact us at the Family Study Center.

Sincerely,


Judy McKenna
Research Associate


Sharon Y. Nickols
Director

JM,SYN/dm1
enclosures





CONSIDERING RETIREMENT

For Information Contact:

Judy McKenna or Sharon Y. Nickols
Family Study Center
114 Home Economics West
Oklahoma State University
Stillwater, OK 74078

CONSIDERING RETIREMENT

FAMILY STUDY CENTER
Oklahoma State University

The purpose of this questionnaire is to better understand what you think about retirement. Your participation is extremely important and greatly appreciated.

Circle the one answer that best fits you.

1. At what age do you plan to retire? Circle your response.
 1. Before 55
 2. 55-59
 3. 60-64
 4. 65-69
 5. Over 70
 6. No plans to retire
 7. Don't know
2. How adequate do you feel your retirement plans are?
 1. Very adequate
 2. Adequate
 3. Inadequate
 4. Don't know
- 3-11. What sources of income do you expect to have when you retire? Circle "yes" for all that apply to you. Circle "no" for the answers that do not apply.
 3. Yes No Own pension
 4. Yes No Spouse's pension
 5. Yes No Children
 6. Yes No Social Security
 7. Yes No Inheritance
 8. Yes No Investments (for example, stocks, real estate)
 9. Yes No Savings (for example, passbook savings, certificates of deposit)
 10. Yes No Employment
 11. Yes No Other: _____
(please explain)
12. Is retirement planning one of your goals?
 1. No
 2. Yes, but not too important
 3. Yes, very important
13. Have you decided how many dollars you'll want to live on each month when you retire?
 1. No
 2. Yes
14. During retirement years, what percentage of your family's preretirement salary will be covered by pension(s) and Social Security?
 1. 1-20%
 2. 21-40%
 3. 41-60%
 4. 61-80%
 5. 81-100%
 6. Doesn't apply (not eligible)
 7. Don't know
15. Have you estimated how many dollars from investments you will need in addition to your pension funds to provide a standard of living similar to what you'll have before retirement?
 1. No
 2. Yes

16. What is your current work status?
1. Self-employed
 2. Full-time employee
 3. Part-time employee
 4. Full-time homemaker, no paid employment
 5. Unemployed, looking for employment

If employed, please answer questions 17-20.
If you are not employed at this time skip to question 21.

17. Will you be eligible for retirement income from your employer?
1. No
 2. Yes
 3. Don't know
 4. Doesn't apply (not employed)
18. Did the retirement benefits offered by your employer influence you when you selected your present job?
1. No
 2. Somewhat
 3. A great deal
 4. Doesn't apply (not employed)
19. Have you attended a program at work about retirement benefits?
1. No
 2. Yes
 3. Doesn't apply (not employed)
20. Have you met with a benefits officer at work about retirement benefits?
1. No
 2. Yes
 3. Doesn't apply (not employed)

If you are married, please answer question 21.
If you are not married, skip to question 22.

21. Do you know what percentage of your spouse's pension you would receive if you were widowed during retirement?
1. No
 2. Yes
 3. Doesn't apply (not married)

Answer question 22 if you are currently divorced, others should skip to question 23.

22. Will you receive benefits from your former spouse's pension or Social Security?
1. No
 2. Yes
 3. Don't know
 4. Doesn't apply (not divorced)

23. Is saving and/or investing a goal of yours?
1. No
 2. Yes, but not too important
 3. Yes, very important

24. Approximately what percentage of your (total family) income do you currently save?

1. None
2. 1-5%
3. 6-10%
4. 11-15%
5. 16-20%
6. More than 20%

25. How often do you figure your net worth to measure progress toward financial goals?

1. Never
2. Every two years
3. Once a year
4. 4 times a year

26. How many articles did you read in the past month about personal financial management?
(Articles in newspapers, magazines, books, newsletters, etc.)

1. None
2. 1-2
3. 3-4
4. 5 or more
5. Don't remember

27. Please list personal financial management publications you read.

_____	_____
_____	_____
_____	_____

28. How many television programs about personal financial management did you watch in the past month?

1. None
2. 1-2
3. 3-4
4. 5 or more
5. Don't remember

29. Please list the television programs on personal financial management that you watched.

_____	_____
_____	_____
_____	_____

30. How many programs, seminars, and/or classes did you attend in the past year about personal financial management and investing?

1. None
2. 1-2
3. 3-4
4. 5 or more
5. Don't remember

31. Who offered these programs?

32-41. During the past year, did you consult with any of the following about financial planning?
Circle "yes" for all that apply. Circle "no" for those that don't apply.

- 32. Yes No Banker
- 33. Yes No Broker
- 34. Yes No Life insurance agent
- 35. Yes No Fee-only financial planner
- 36. Yes No Fee and commission financial planner
- 37. Yes No Lawyer
- 38. Yes No Accountant
- 39. Yes No Credit Union
- 40. Yes No Tax sheltered annuity representative
- 41. Yes No Other: _____

(please list)

42-47. In the past month did you discuss financial management with any of the following?
Circle "yes" for all that apply. Circle "no" for those who don't apply.

- 42. Yes No Spouse
- 43. Yes No Relative
- 44. Yes No Neighbor
- 45. Yes No Co-worker
- 46. Yes No Friend
- 47. Yes No Other: _____

(please list)

48-63. Which of the following do you have? Circle "yes" for all that apply. Circle "no" for those which don't apply.

- 48. Yes No Pension
- 49. Yes No Individual Retirement Account
- 50. Yes No Keogh Plan (self-employed persons)
- 51. Yes No Tax-sheltered annuity
- 52. Yes No Life insurance
- 53. Yes No Profit sharing plan
- 54. Yes No Deferred compensation
- 55. Yes No Savings account(s)
- 56. Yes No Money market accounts
- 57. Yes No Certificates of deposit
- 58. Yes No Stocks
- 59. Yes No Bonds
- 60. Yes No Mutual funds
- 61. Yes No Rental property
- 62. Yes No Limited partnerships
- 63. Yes No Other: _____

(please explain)

64. Do you feel your retirement plans are satisfactory?

- 1. Very satisfactory
- 2. Satisfactory
- 3. Unsatisfactory
- 4. Very unsatisfactory

65. If retirement planning is not an important concern to you right now, please circle the one answer that best describes the reason.

- 1. Too far away for me to be interested
- 2. I expect an inheritance
- 3. No extra money to save or invest
- 4. I expect to be covered by my spouse's pension and/or Social Security
- 5. I don't know how to get started
- 6. Just haven't taken the time to plan
- 7. Other: _____

(please explain)

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67-69 _____ Code Number

Mathematics is one of the elements of financial planning. How do you feel about your math skills?

Circle the number from 1 (strongly agree) to 7 (strongly disagree) that <u>best</u> expresses your feelings about each statement.							
	Strongly Agree						Strongly Disagree
1. Mathematics is interesting to me.	1	2	3	4	5	6	7
2. I do not like mathematics.	1	2	3	4	5	6	7
3. When I hear the word math, I have a feeling of distaste.	1	2	3	4	5	6	7
4. I approach math with fear that I will not be able to figure things out.	1	2	3	4	5	6	7
5. I feel competent when attempting mathematics.	1	2	3	4	5	6	7
6. I have a good feeling toward mathematics.	1	2	3	4	5	6	7
7. It makes me nervous to even think about having to do a math problem.	1	2	3	4	5	6	7
8. I am at ease when using mathematics.	1	2	3	4	5	6	7
9. I enjoyed studying mathematics in school.	1	2	3	4	5	6	7
10. I never liked math, it was one of my most difficult subjects.	1	2	3	4	5	6	7

The following set of questions asks about your feelings toward taking risks.

Circle the number from 1 (strongly agree) to 7 (strongly disagree) that <u>best</u> describes how you feel about each statement.							
	Strongly Agree						Strongly Disagree
11. I like to take risks.	1	2	3	4	5	6	7
12. I would rather invest in stocks than a passbook savings account.	1	2	3	4	5	6	7
13. I avoid activities with unknown outcomes.	1	2	3	4	5	6	7
14. I put off making decisions because I don't like to make mistakes.	1	2	3	4	5	6	7
15. It is better to be safe than to take a chance.	1	2	3	4	5	6	7
16. I am comfortable taking financial risks.	1	2	3	4	5	6	7
17. I am willing to risk losing my money if I stand to make greater gains.	1	2	3	4	5	6	7
18. I like to try new things even if I am uncertain about what will happen.	1	2	3	4	5	6	7
19. I tend not to take chances.	1	2	3	4	5	6	7
20. I'd rather stick with the way things are than face failure.	1	2	3	4	5	6	7

The next set of questions asks about your feelings about life situations.

Circle the answer that <u>best</u> expresses how you feel.		Strongly Agree					Strongly Disagree	
21.	When I make plans, I am almost certain to make them work.	1	2	3	4	5	6	7
22.	Often there is no chance of protecting my personal interests from bad luck happenings.	1	2	3	4	5	6	7
23.	In order to have my plans work, I must make sure that they fit in with the desires of people who have power over me.	1	2	3	4	5	6	7
24.	How many friends I have depends on how nice a person I am.	1	2	3	4	5	6	7
25.	I have often found that what is going to happen will happen.	1	2	3	4	5	6	7
26.	My life is chiefly controlled by powerful others.	1	2	3	4	5	6	7
27.	People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	1	2	3	4	5	6	7
28.	It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	1	2	3	4	5	6	7
29.	Getting what I want requires pleasing those people above me.	1	2	3	4	5	6	7
30.	Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	1	2	3	4	5	6	7
31.	When I get what I want, it's usually because I worked hard for it.	1	2	3	4	5	6	7
32.	My life is determined by my own actions.	1	2	3	4	5	6	7

Now just a few questions about you. Circle just one answer for each question.

33. I am:

1. Single - never married
2. Single - widowed
3. Single - divorced
4. Married - 1st marriage
5. Married - separated
6. Remarried

34. Last year (1984) my total family income before taxes was:

1. \$5,000 to \$12,499
2. \$12,500-\$24,999
3. \$25,000-\$37,499
4. \$37,500-\$49,999
5. \$50,000-\$74,999
6. \$75,000 or more

35. Last year (1984) I earned:

1. \$5,000 to \$12,499
2. \$12,500-\$24,999
3. \$25,000-\$37,499
4. \$37,500-\$49,999
5. \$50,000-\$74,999
6. \$75,000 or more

36. How many years of school have you completed?

1. Less than 12
2. High school
3. Some college or post-secondary training
4. College degree
5. Some graduate work
6. Graduate degree

37-39. If you have children who are financially dependent on you now, please list how many you have in each age group.

- _____ 37. Under 12
- _____ 38. 13-18
- _____ 39. Over 18

40-41. What is your birth date? ____/____/____
Month Day Year

42-43. If employed, what is your occupation? _____

44-45. If married and your spouse is employed, what is your spouse's occupation?

46-48. If you have had some experiences with retirement planning that you think might be interesting to this study, please give your comments here:

49-51. Last of all, what are your greatest concerns about your financial situation during retirement?

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67-69 _____ Code Number

Please return the questionnaire in the addressed, stamped envelope to the Family Study Center, Oklahoma State University, 114 HEW, Stillwater, OK 74078.

Thank you for your help!

APPENDIX B
FOLLOW-UP MAILINGS

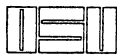
On the 26th of March, a Considering Retirement questionnaire was mailed to you.

Thanks to all of you who have returned the questionnaire. A \$1.00 will soon reach you.

If the questionnaire is on the bottom of a stack of papers, we urge you to get it out, circle the answers and send it back to us. We want to know what you think! If you need another questionnaire, please call 624-6696.

Sharon Y. Nickols

Judy McKenna



Oklahoma State University

FAMILY STUDY CENTER

STILLWATER, OKLAHOMA 74078
114 HOME ECONOMICS WEST
(405) 624-6696 or 6697

April 16, 1985

Hello:

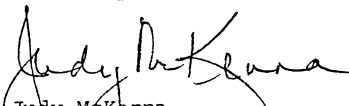
When we first started talking to women about retirement planning, many said "you don't want my answers, I really haven't done anything." We do want everyone's answers whether you have done a great deal of retirement planning or, like our first contacts, have done very little. To obtain a complete understanding of women and retirement planning we want to hear from everyone, so we urge you to spend the short time it will take to fill out the enclosed questionnaire and send it back to us.

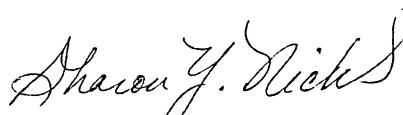
Responses are completely anonymous. If you do not want to receive the \$1.00 or the summary of results, simply mail the completed questionnaire in the enclosed envelope. We will contribute your \$1.00 to the Salvation Army.

If you would like to receive \$1.00 and a copy of the results, please write your name and address in the upper left hand corner of the return envelope. You will receive the \$1.00 shortly after we receive the questionnaire and the results late this summer.

We value your thoughts and want to hear from you.

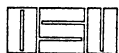
Sincerely,


Judy McKenna
Research Associate


Sharon Y. Nickols
Director

JM,SYN/dml
enclosures





Oklahoma State University

FAMILY STUDY CENTER

STILLWATER, OKLAHOMA 74078
114 HOME ECONOMICS WEST
(405) 624-6696 or 6697

April 9, 1985


Hello:

We wish we were sending \$100.00 to express how much we appreciate your cooperation. But, it's one dollar that's enclosed. Our thanks are just as sincere.

We should achieve a better understanding of the retirement planning efforts of women because of your assistance. We thank you.

Sincerely,


Sharon Y. Nickols


Judy McKenna

SYN, JM/dm1
enclosure



APPENDIX C
CORRELATION MATRIX OF DEPENDENT AND INDEPENDENT VARIABLES

Table 34

Correlation Matrix for Retirement Planning, Goal Setting, Information Seeking, and Investing Scales and 22 Independent Variables

	House- hold Income	Respon- dents Earnings	Employ- ment	Pension Expected	Professional Respondent
Household Income					
Respondents' Earnings	<u>.17</u>				
Employment	-.08	<u>.56</u>			
Pension Expected	-.00	<u>.37</u>	<u>.26</u>		
Professional - Respondent	-.03	<u>.31</u>	<u>.28</u>	<u>.26</u>	
Clerical - Respondent	-.07	-.05	<u>.24</u>	-.03	<u>-.45</u>
Professional - Spouse	<u>.32</u>	-.06	-.02	.02	.05
Manager - Spouse	.12	-.09	-.09	-.09	-.13
Age	.13	-.08	-.02	-.11	<u>-.15</u>
Education	.02	<u>.27</u>	<u>.14</u>	.22	<u>.56</u>
Dependent Children	-.00	.02	-.01	.07	.12
Married	<u>.40</u>	<u>-.27</u>	<u>-.19</u>	-.09	-.06
Divorced	<u>-.48</u>	<u>.18</u>	.12	.02	<u>.14</u>
Remarried	.07.	.13	.08	.06	-.05
Math Anxiety	.12	<u>.20</u>	.08	.11	<u>.15</u>
Risk	<u>.14</u>	<u>.18</u>	-.01	.04	.07
General Risk	.01	<u>.15</u>	.03	.12	.08
Financial Risk	<u>.22</u>	.13	.00	-.05	.04
Locus of Control	.11	<u>.19</u>	.03	-.01	.05
Internal	.04	<u>.14</u>	.03	.00	.09
Powerful Others	.04	.12	.02	-.10	-.05
Chance	<u>.14</u>	<u>.16</u>	.01	.07	.13

(table continues)

	Cleri- cal - Respon- dent	Profes- sional - Spouse	Mana- ger - Spouse	Age	Educa- tion
Household Income					
Respondents' Earnings					
Employment					
Pension Expected					
Professional - Respondent					
Clerical - Respondent					
Professional - Spouse	-.03				
Manager - Spouse	-.03	-.47			
Age	.12	-.06	.13		
Education	-.40	.02	-.14	-.28	
Dependent Children	-.11	.25	-.20	-.49	.25
Married	.01	.42	.11	.07	-.08
Divorced	-.04	-.36	-.21	-.10	.18
Remarried	.00.	-.08	.13	-.02	-.08
Math Anxiety	-.09	-.05	.03	-.02	.14
Risk	-.16	-.07	.05	-.18	.18
General Risk	-.05	-.11	-.00	-.21	.19
Financial Risk	-.15	-.01	.12	-.11	.09
Locus of Control	-.07	-.01	.09	-.08	.12
Internal	-.11	-.02	.05	.02	.06
Powerful Others	-.01	-.04	.03	-.09	-.00
Chance	-.12	.04	.10	-.05	.22

(table continues)

	Depen-				Math
	dent				
	Child-	Mar-	Di-	Remar-	Anx-
	ren	ried	vorced	ried	iety
Household Income					
Respondents' Earnings					
Employment					
Pension Expected					
Professional - Respondent					
Clerical - Respondent					
Professional - Spouse					
Manager - Spouse					
Age					
Education					
Dependent Children					
Married	.09				
Divorced	-.02	-. <u>59</u>			
Remarried	-.11	-. <u>58</u>	-. <u>17</u>		
Math Anxiety	.11	-.12	.10	.07	
Risk	. <u>16</u>	-.05	.02	-.01	.12
General Risk	.10	-.11	.08	.02	.09
Financial Risk	. <u>15</u>	.11	-.12	-.07	.07
Locus of Control	.01	-.06	.01	.09	. <u>20</u>
Internal	-.02	-. <u>16</u>	.02	. <u>15</u>	. <u>18</u>
Powerful Others	-.01	-.07	.07	.01	.10
Chance	.06	.01	-.05	.07	. <u>22</u>

(table continues)

	Risk	Gen- eral Risk	Finan- cial Risk	Locus of Control	Inter- nal	Power- ful Others
Household Income						
Respondents' Earnings						
Employment						
Pension Expected						
Professional - Respondent						
Clerical - Respondent						
Professional - Spouse						
Manager - Spouse						
Age						
Education						
Dependent Children						
Married						
Divorced						
Remarried						
Math Anxiety						
Risk						
General Risk	<u>.75</u>					
Financial Risk	<u>.76</u>	<u>.32</u>				
Locus of Control	<u>.30</u>	<u>.16</u>	<u>.24</u>			
Internal	<u>.15</u>	.06	.06	<u>.55</u>		
Powerful Others	<u>.21</u>	.12	<u>.17</u>	<u>.82</u>	<u>.22</u>	
Chance	<u>.30</u>	<u>.16</u>	<u>.29</u>	<u>.79</u>	<u>.28</u>	<u>.45</u>

1Underlined correlations are significant at $p < .05$.

VITA

Judy Sheaks McKenna

Candidate for the Degree of

Doctor of Philosophy

Thesis: PLANNING FOR RETIREMENT SECURITY:
A STUDY OF WOMEN IN THE MIDDLE YEARS

Major Field: Home Economics

Biographical:

Personal Data: Born in Lawrence, Kansas, November 7, 1941, the daughter of John F. and Mary Ellen Sheaks. One son, Casey Patrick, born July 30, 1971.

Education: Graduated from Southeast High School, Wichita, Kansas, in May, 1959; received Bachelor of Arts Degree from the University of Kansas in May, 1963; received Bachelor of Science Degree from Colorado State University in Home Economics in May, 1977; received Master of Science Degree from Colorado State University in Home Economics in August, 1978; received Certified Financial Planning designation from the College for Financial Planning in Denver, Colorado in 1983; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in December, 1985.

Professional Experience: Personnel Supervisor, Macy's Department Store, Kansas City, Missouri, June, 1963, to October, 1964; Recreation Specialist, U.S. Army, Munich, Germany, December, 1964, to October, 1965; Owner/manager, The Crewel Cupboard, Lawrence, Kansas, October, 1971, to May, 1972; Bookkeeper, Nellingen Thrift Shop, Nellingen, Germany, May, 1973, to May, 1975; Extension Specialist, Consumer Sciences & Housing Department, Colorado State University, October, 1978, to present.

Professional Organizations: American Home Economics Association, American Council on Consumer Interests, International Association of Financial Planners, Association of Financial Planning and Counselling Educators, Omicron Nu, Epsilon Sigma Phi, Sigma Xi, Gamma Sigma Delta, Phi Kappa Phi, Phi Upsilon Omicron, Leadership Fort Collins.