Planning behavior, life satisfaction, and locus of control among elderly Iowans

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Planning behavior, life satisfaction, and locus of control among elderly Iowans

Rubio, Maria de Lourdes, Ph.D.
Iowa State University, 1987
Planning behavior, life satisfaction, and locus of control among elderly Iowans

by

Maria de Lourdes Rubio

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

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CHAPTER I. INTRODUCTION

Purpose of the Study

The purpose of this study is to examine the relationship between the self-assessment of control over life, life satisfaction, and planning activity among a random sample of individuals 60 and over in the state of Iowa. The general hypothesis tested is that, when socioeconomic and demographic variables are controlled, those who report high levels of control over their lives and low levels of life satisfaction are more apt to have plans for the future than those who report low levels of control over their lives and high levels of life satisfaction. Alternate hypotheses are also tested with present and future life control deficits. Present control deficit is a measure of the discrepancy between how much control over their life the individuals feel they have and how much they presently want. Future control deficit is an indicator of the difference between how much control individuals have in the present and how much they anticipate having in two years.

Importance of the Study

Individuals throughout their lives possess a variety of resources that they use to meet the demands, the goals and events, of life. The quality of life of an individual is related to the way those resources are managed.

Planning, along with goal-setting, implementing plans, and evaluating the outcome, is one of the essential processes in management.
Planning helps to make decisions in the present with the anticipation of some future outcome (Gross, Crandall, & Knoll, 1980; Kochen & Barr, 1986; Koontz, 1958; Mayer, 1985; Ozbekhan, 1969; Rothschild, 1976). Deacon and Firebaugh (1981) define planning as "a series of decisions about future standards and/or sequences of action--whether for a single, specific task or for meeting lifetime goals" (p. 60).

Plans are the outcome of the planning process (Deacon & Firebaugh, 1981; Hogarth & Makridakis, 1981; Olson & Beard, 1985). Plans help to shape and control the future, are means to reach ends (Ewing, 1968), and serve as checkpoints to indicate to the individual if the actions needed to bring about the goal(s) are being carried out (Ewing, 1972; Steidl, 1970).

Planning is affected by several factors. Some of these are the time orientation of the individuals, the feeling of internal versus external control of events, foresight ability, and the environment in which people live (Deacon & Firebaugh, 1981; Ozbekhan, 1969; Paolucci, Hall, & Axinn, 1977).

The feeling of control over life is a personality dimension that is viewed as strongly influencing the planning process. It relates to the perception of the consequences of one's actions. Some individuals feel that what happens to them is the result of their own behavior while others interpret the consequences as a result of fate, luck, or chance (Rotter, 1966). The results of various studies indicate that men, individuals with higher education, whites, and those with a higher socioeconomic status show a tendency to see their experiences as a
consequence of their actions (Joe, 1971; Staats & Experimental Psychology Class, 1974; Powell & Vega, 1972; Nehrke, Hulicka, & Morganti; 1980). The results of studies also indicate that the influence of age on control over life is a controversial issue. The results of a longitudinal study (Lachman, 1986) indicate a decline in the feeling of control with age.

The age composition of the population of the United States has changed dramatically throughout this century. The proportion of individuals in the 60 and over age category has greatly increased, not only in absolute numbers but also in percentage; it is one of the fastest growing groups in the population as a whole (Schulz, 1985). At the turn of the 20th century there were about 3 million individuals aged 65 and over who represented 4.1% of the population. By 1975, this number had increased to over 22 million and represented 10.5% of the total population of the country. It is estimated that by the year 2000 the elderly will be 12.2% of the population and that there will be about 31 million of them. The fastest growing portion of the elderly population, as well as in the total population, are those in the 75 and over age group (Harris & Cole, 1980).

The rapid growth of the elderly population has created new problems. An important one is a shift in the age distribution of the dependent population, from children to persons aged 65 and over. In terms of societal interests, more money is transferred to the elderly than to children because the latter are usually seen as the parents' responsibility (Schulz, 1985).
As individuals grow older, some aspects of life change; there may come a time when adjustments need to be made. One of the most important adjustments occurs when an individual can no longer perform the activities necessary for daily living. It is important for family members, gerontologists, adult educators, and policy makers to be able to distinguish those individuals who are making plans for the time when assistance of some sort may be needed.

Those individuals who make plans for such an eventuality and willingly move to a different living arrangement might adapt better to the new situation when the change occurs than those who do not make any plans. The elderly people who have plans for health problems are relieving their family members of the strain and implications of the necessary decisions. This could also imply that they either have made or are making the necessary adjustments to be able to cope with the expenses those adjustments entail.

Educators dealing with adults might be interested in being able to differentiate planners from nonplanners. Such differentiation could indicate the target audience for programming efforts regarding housing and health care alternatives, for both planners and nonplanners.

As a greater percentage of the population ages, it becomes important to have policies that will delineate the role and the responsibilities of the state and the role of individuals and families in caring for elderly individuals. If the elderly do not have any relatives to care for them in case of a long illness, or the relatives cannot be the caretakers, then the long-term care of these frail elderly
people becomes a social problem. Thus, an understanding of factors associated with planning could inform policy makers regarding the need for planning and for the funding of those plans from sources external to the family.

Review of Literature

This section includes a review of the literature on planning. It includes a definition of planning and factors that have been suggested to affect the planning process, especially locus of control and life satisfaction. Planning among the elderly is emphasized.

Definition of planning

Planning is a word with many definitions. Koontz (1958) defines it as "the conscious determination of courses of action designed to accomplish purposes" (p. 48). Mayer (1985) defines it as a "process of selecting and designing a rational course of action to achieve a future state of affairs" (p. 4) and Nickell, Rice, and Tucker (1976) state that it is "devising a scheme to reach goals" (p. 39) and define it as "planned activity directed toward accomplishing desired ends" (p. 79).

To other writers, planning offers guidance to decisions and actions so that such activities can affect the future in a consistent and rational manner and in a way that is desired by the manager (Ewing, 1968). Ozbekhan (1973) offers several definitions for planning; he defines it as "the definition of the purpose of the change(s) one wishes to effect in the object" and also as "the design of the actions which
will change the object in the manner that has been previously defined" (p. 65).

Gross et al. (1980) give a broad definition of planning that focuses on the family. According to these authors, "planning is deciding on the family's future lines of action" (p. 201).

Deacon and Firebaugh (1981) give a more specific definition of planning, it is the definition adopted for this study. To them, "Planning is a series of decisions about future standards and/or sequences of action—whether for a single, specific task or for meeting lifetime goals" (p. 60). The standards that result are "specific qualities and/or quantities representing what is desired" (Deacon & Firebaugh, 1981, p. 61). The process of standard setting includes goal clarification and the assessment of resources (Deacon & Firebaugh, 1981).

Planning behavior and its outcome

Planning is an integral, essential, and unique process of management. Despite the importance given to management as a tool to help families and individuals meet their goals, most of the literature in the area comes from business management. Nevertheless, this literature can help to clarify the general process of management (Gross, 1966).

In reviewing literature from business management, there are some basic differences between businesses and families to keep in mind. Businesses have a complex hierarchy of management while families
typically do not (Olson & Beard, 1985). Management in families is shared by various family members, and communication among family members is a natural and ongoing activity (Gross et al., 1980).

Management encompasses several processes. It includes goal setting (Gross et al., 1980; Nickell et al., 1976; Koontz, 1958), planning, and implementing the plans (Deacon & Firebaugh, 1981; Gross et al., 1980). Planning is a very important and significant concept that is vital to management (Bitondo, 1986; Gross et al., 1980).

According to Ozbekhan (1973), human beings are capable of purposeful action. They are capable of voluntarily generating action toward preconceived results to change the environment.

Planning is a process that involves a vision of the future (Gross et al., 1980; Kochen & Barr, 1986; Koontz, 1958; Mayer, 1985; Ozbekhan, 1969; Rothschild, 1976). It essentially deals with the future consequences of present decisions and behavior, what can be done today to be ready for an uncertain tomorrow (Ewing, 1972; McCaskey, 1977; Ozbekhan, 1969). Planning is based on being able to anticipate the future (McCaskey, 1977) and the desired outcome before any action is taken (Goetz, 1949; Miller, Galanter & Pribram, 1965; Ozbekhan 1969) in order to have control over the actions (Alexander, 1986). Planning provides a framework within which decisions can be made (Alexander, 1986; Beck, 1982); decision making is facilitated when the situation is understood (Cushman, 1986).

An image of a desired outcome implies that there is a discrepancy between an individual's current situation and where the individual wants
to be. Thus, there is an unmet goal to be achieved and individuals are willing to allocate their resources to achieve it. Planning is human activity that is guided by an intention (Ozbekhan, 1969) as humans try to master the environment (Sachs & Medetz, 1979).

If an individual decides to act upon something with the intention of changing it, the individual would do it because rationally the future outcome is more desirable than the present state (Ozbekhan, 1969). Planning is a conscious and deliberate process. Individuals perceive that with appropriate intervention the situation could get better (Kochen & Barr, 1986). The anticipated outcome will mean an improvement over the present state of the situation (Ozbekhan, 1969). Thus, planning is perceived as making a positive contribution toward the attainment of goals (Koontz, 1958) and toward a condition that is judged as being more desirable than the present (Ozbekhan, 1973). McCaskey (1974) refers to this type of planning as "planning with goals" (p. 282).

According to McCaskey (1974), in planning with goals it is assumed that individuals constantly seek to attain goals and, further, that most people can state their goals. By doing so, the focus is narrowed and energy is efficiently used. Individuals know what they want to accomplish and they spend less time exploring alternatives, once they have started to move toward the attainment of goals. This mode of action reduces flexibility but does not necessarily imply a rigid process. At the same time, it may make the individuals less aware of new goals and opportunities.
Planning toward goals can be successful under some circumstances. It is useful when individuals want to narrow their focus, thus reducing the need for information. It is advantageous when there is the need to concentrate on an efficient use of resources by deciding to ignore other possibilities (McCaskey, 1974). This type of planning can also be successful in a stable environment which can be controlled and when resources are greatly constrained. Then it is efficient because it concentrates on goals (McCaskey, 1974).

Most of the literature depicts planning as a process that follows goal setting (Deacon & Firebaugh, 1981; Seidl, 1970); nevertheless, this is not the only way of planning. McCaskey (1974, 1977) talks about different types of planning suited to different situations.

Planning with goals is not appropriate before the individual "has decided who it is or what it wants to do" (McCaskey, 1974, p. 287) nor when individuals cannot agree upon the goal that they want to pursue. Under these circumstances the result is a situation in which the goals are vague and almost meaningless. Planning with goals is not appropriate when the environment is uncertain and constantly changing, whether it be due to technological, social, economic, legal, or any other type of changes (McCaskey, 1974).

When the above circumstances are present, a more intuitive type of planning is needed. McCaskey (1974, 1977) suggests a type of planning that is open to the alternatives that may be encountered in the future. It is a type of planning that anticipates the future in terms of symbols rather than goals. Consequently planning is done in terms of domain and
direction, or planning without goals.

Domain is the area in which the individual chooses to operate. It "marks his or her boundaries for action and commitment" (McCaskey, 1977, p. 457) as the individual constantly interacts with the environment. Direction is what the individual wants to become; it is a symbolic expression (McCaskey, 1977).

Directional planning is more stressful to individuals than planning with goals. It relies on constant feedback from the environment and it is energy intensive because information constantly must be processed (McCaskey, 1974).

On the other hand, Edwards (1970) sees the same process, the one through which individuals seek to become what they want to be, as part of the goal-setting activity of family members. To her, a goal-complex is the result of the goal setting behavior, with some goals, such as self-actualization, being very comprehensive and enduring.

Home management scholars have tried to identify planning styles among families. Beard and Firebaugh (1978) developed an 86-item instrument to measure morphostatic and morphogenic planning behavior among families. In their study, morphostatic planning behavior was characterized by relatively closed boundaries, rigid standard setting and sequencing, a high commitment to current system structure, and a resistance to dealing with the effects of change. In contrast, morphogenic planning behavior was characterized by relatively open boundaries, flexible standard setting and sequencing, a low level of commitment to current system structure, and a willingness to deal with
the effects of change. The instrument was tested with 252 homemakers. The results of their findings "did not support the assumption that morphostatic and morphogenetic behaviors are necessarily at opposite ends of a continuum" (p. 203).

Buehler and Hogan (1986) carried on a study based on the instrument developed by Beard and Firebaugh. The behaviors that Beard and Firebaugh called morphogenetic, morphostatic, and random, Buehler and Hogan called resource-centered, goal-centered, and constrained, respectively. The study was conducted with 203 single parents, both men and women. Their results "indicate two distinctive planning styles: resource-centered and goal-centered" (p. 359). The ones who used the resource-centered style "changed their resource structure to accommodate their demand structure" (p. 359), that is, they could find ways to accommodate their resources in order to meet their demands. Those who mainly used the goal-centered style "changed their demand structure to comply with the limits of their current resource structure" (p. 359), in other words, they adapted the goals so that these could be met with existing resources.

Plans are the outcome of the planning process (Deacon & Firebaugh, 1981; Hogarth & Makridakis, 1981; Olson & Beard, 1985). As such, plans have a future orientation (Koontz, 1958; Rothschild, 1976).

Plans are means to reach ends (Ewing, 1968) as well as checkpoints. They are a means to tell the individual if the actions needed to bring about the desired goal(s) are being carried out. Plans commit today's resources toward future results (Ewing, 1972), and serve to provide
organized routes to be followed (Steidl, 1970).

The presence of plans serves as an indicator that individuals have gone through a planning process. They indicate that, one way or another, individuals have tried to anticipate the future and have delineated a way to deal with it in the present so that they feel comfortable with it. Regardless of whether the plans are rational, realistic, or specific, the fact that the individual has them could be an indicator that current resources are being allocated to attain a desired state in the near or distant future.

Factors that affect planning

Planning skills differ among individuals due to differences on some personality dimensions. Different authors suggest different personality aspects that affect planning skills.

Deacon and Firebaugh (1981) state that time orientation influences planning. Individuals differ in the time perspective in which they locate their important life experiences. Future-oriented individuals think a lot about the future and even rehearse it mentally while those with a past orientation prefer to reflect upon past experiences and their responses to them (Cottle, 1976). How individuals are socialized makes a difference in time perception. Men are expected to deal with the future while women are expected to be concerned with present behavior (Deacon & Firebaugh, 1981). An interest in planning is related to valuing the future (Gross, 1966).

Foresight ability influences planning. Foresight, as defined by
Berger, Guilford, and Christensen (1957) is "an awareness of possible future events that have a relation to a present situation" (p. 28). The results of a study done by these authors "seem to confirm the existence of more than one kind of foresight" (p. 28), that is, perceptual and conceptual foresight, which were found to be factors distinct from each other. Perceptual foresight is the ability "to project to the future from the present" (Deacon & Firebaugh, 1981, p. 65) while conceptual foresight relates to being able to anticipate the needs or the consequences of problem experiences (Deacon & Firebaugh, 1981).

Planning is affected by knowledge of all kinds, if the process is going to be able to guide behavior (Miller et al., 1965). It requires a realistic assessment of the resources available (Olson & Beard, 1985), not only of material goods and assets, but also of the strengths and the limitations of the individuals (Ewing, 1972). Knowledge about the constraints also becomes very important (Alexander, 1986; Kochen & Barr, 1986) as does a clear image of the desired outcome (Miller et al., 1965). It is essential to have an understanding of what is potentially achievable (Olson & Beard, 1985).

Level of education was used as an indicator of knowledge by Brown, Heltsley, and Warren (1982), in their study of 120 couples selected from among participants in the Expanded Nutrition Program in two midwestern towns. They found a positive and significant path between the education levels of the husbands and planning. Planning in this study was operationalized as "reality of standards: frequency with which expectations are met..." (p. 70).
Rational planning is based on information about the facts that guide the decision making process when the selected alternative is chosen (Alexander, 1986). To Mayer (1985) rationality is the most prominent characteristic of planning. By rationality he means the use of reason as opposed to impulse, prejudice, or coercive power.

The social environment in which the individual lives is a factor affecting planning. The social values of the environment influence the preferences of a person (Ozbekhan, 1969).

A feeling of being in control of events also influences planning and decision making (Deacon & Firebaugh, 1981; Paolucci et al., 1977). Individuals classified as internally oriented believe that what happens to them is the consequence of their own doing while those who are externally oriented believe that what happens to them is heavily dependent upon circumstances, fate, luck, and powerful others (Rotter, 1966). Those who have what Hogarth and Makridakis (1981) call "illusions of control" (p. 127) are more effective decision makers than the ones who do not possess that quality (Hogarth & Makridakis, 1981).

Locus of control The behavior of individuals is, in part, the result of personality characteristics. One of these is locus of control. It has been suggested that the relationship between an individuals' perceptions of the consequences of behavior might affect future behavior (Rotter, 1966; Rotter, 1982). Locus of control refers to how individuals perceive the consequences of their actions. Some individuals feel that the reinforcement or the reward of their behavior
is dependent upon their actions, while others feel that it is controlled by forces outside themselves, such as fate, luck, or chance (Gergen & Gergen, 1986; Rotter, 1966). The former have been described as having a belief in internal control while the latter believe in external control (Rotter, 1966; Rotter, 1982).

**Factors affecting locus of control**

There is a tendency for sex and socioeconomic differences to be manifested in whether individuals are internally or externally oriented. Women tend to be more external and men tend to be more internal (Joe, 1971; Staats & Experimental Psychology Class, 1974). Nevertheless, Molinari and Niederehe (1984) in their study of 305 male and female university undergraduate students and 117 community residents aged 58 and over did not find any difference in locus of control associated with sex.

In his review of research, Joe (1971) also reports that differences in socioeconomic class make a difference. Individuals who belong to the lower classes and to minority groups have higher expectations of external control. The explanation given is that these individuals feel that they have limited environmental and material opportunities.

Variables usually considered indicators of socioeconomic class have been reported in several studies. In their study with female teachers, Powell and Vega (1972) report that blacks indicate a tendency toward being more external than do whites. Nehrke et al. (1980) found a significant relationship between education and internality in a sample of 99 male residents in a Veterans Administration Domiciliary. Higher
income and internal locus of control have also been found to be associated (Brown et al., 1982).

If Joe's explanation is taken as a valid one, that is, if individuals who perceive themselves as having less access to the opportunities in society manifest a tendency toward more external locus of control, then it is not surprising that women exhibit a more external locus than men. Until recently, women had restricted access to opportunities when compared to men.

Besides sex, socioeconomic differences, and perceived locus of control, other studies indicate that there are additional variables that influence how individuals react and interact with the environment. Those who believe that they can control the outcome of their behavior have been reported as striving more for achievement. The control that is felt influences the strategy preferences in confronting problem-solving and risk-taking situations (Joe, 1971). In his longitudinal study of 102 owners of small businesses and their reaction to flooding, Anderson (1977) reported that the owners who are externally oriented are more likely to experience high stress, to use fewer task-oriented coping behaviors, and to use more defensive kinds of coping behaviors than owners who are internally controlled. In his study of 64 elderly individuals Kuypers (1972) also reported that those who are internally oriented are higher on coping measures than those who are externally oriented. The internally oriented respondents are significantly more objective, more intellectual, and more logical in their analyses than the ones who are externally oriented. Individuals with an external
orientation have been identified as being less able to show constructive responses in overcoming frustration while the ones with an internal orientation are more constructive (Joe, 1971).

The differences between those individuals with an orientation toward an external locus of control and the ones that have an internal orientation also extend to their reactions to their own performances. Those who are internally oriented tend to become more internally oriented when their performance is good and to show no change in their locus of control when their performance is poor. Those who have an external orientation tend to become more externally oriented when their performance is poor (Anderson, 1977). Individuals with an external orientation have been reported to be more concerned with fear of failure than with achievement per se (Joe, 1971). A review of several studies indicates that individuals with an internal orientation have a greater tendency to seek information and to adopt behavior patterns that facilitate personal control over their environment (Joe, 1971).

In their sample of 120 low-income couples, Brown et al. (1982) did not find a direct significant influence of locus of control on planning. The influence of locus of control on planning was through dyadic consensus, a measure of marital adjustment.

Based on the research on locus of control, it could be expected that those who feel a sense of control over their lives would be individuals most likely to make plans for the future. There has been no research on the relationship between planning behavior and deficits in locus of control either current or anticipated. Individuals who report
a feeling of complete control over their lives may manifest different behavior if they anticipate a loss in the future. By the same token, individuals reporting less control in the present than they anticipate in the future may be planning for a time when they will enjoy an increased sense of control. Both of these propositions are tested in this study.

Life satisfaction Planning is a common and deliberate process of acting upon something with the intention of changing it. Thus, it implies that individuals perceive a gap between their present situation and a more satisfying state that can be achieved by acting upon the present state (Ozbekhan, 1969). In fact, individuals are in a continuous and dynamic state of evaluation of current situations to discover the presence of such gaps or deficits (Morris & Winter, 1975, 1978). An assumption that underlies the development of evaluations by individuals is that humans react to the results of the evaluations (Andrews & Withey, 1976).

Planning, as a process that guides behavior, relies upon information and information processing. The results of the evaluation process carried on by individuals about their present situation is one kind of information that is processed.

If the result of this information processing is a negative gap between the present and a future state, then individuals will be motivated to act (Morris & Winter, 1978; Ozbekhan, 1969). Speare (1974) refers to this gap as a state of dissatisfaction. According to Speare
(1974), dissatisfaction is a necessary but not a sufficient condition conducive to action. Individuals will begin to search for alternatives once they have passed their tolerance level for dissatisfaction. This tolerance level is relative to the individual's expectations (Speare, 1974).

Winter and Morris (1978) suggest that this state of satisfaction/dissatisfaction intervenes between the individuals' evaluations and their propensity to act in a way so that the gap between the present and the future state can be reduced. Nevertheless, the process must meet certain conditions. If individuals are going to be motivated to act, the deficit must be perceived as salient. Action cannot occur unless the constraints can be overcome (Morris & Winter, 1978).

The evidence is mixed as to whether the state of satisfaction or dissatisfaction is shown empirically to be an intervening condition between a salient deficit in the various life domains and a propensity to act. A longitudinal study with 700 respondents conducted by Speare (1974) found that satisfaction is strongly related to a desire to change residence. In turn, the desire to move is strongly related to the actual mobility that followed.

Similar results were obtained by Bross (1975). Her sample included 327 homeowners. The findings in this study are that housing satisfaction is significantly related to desire, or propensity, to move. Crull (1979, 1986) also reports on the role of satisfaction as an intervening variable related to housing satisfaction and the propensity
to act, in this case to move. On the other hand, Harris (1976) reports that satisfaction with housing quality is not significantly related to a desire nor an expectation of residential adaptation behavior.

As a result of a study with 485 individuals, Winter and Morris (1978) have suggested that satisfaction as an intervening variable "is most successful in domains over which individuals and families exercise direct control and less well in domains where social and economic conditions outside the family greatly affect the family's ability to make changes" (p. 19). Their findings indicate that their model with satisfaction as an intervening variable works best for the use of leisure time. The model has limited use in financial situations and housing and is least effective for education.

Many of the studies (Andrews & Withey, 1976; Campbell, Converse, & Rodgers, 1976; Conner, Powers, & Bultena, 1979; Edwards & Klemmac, 1973; Fengler, 1984; Knapp, 1976; Larson, 1978; Medley, 1976; Spreitzer & Snyder, 1976) on life satisfaction look at satisfaction as a dependent variable and have tried to identify its significant predictors. Because the focus of this study is on life satisfaction as an independent variable research was examined that use the variable in this manner.

If planning takes place to improve conditions at some future point in time, then it can be hypothesized that the level of satisfaction with current conditions ought to be related to planning behavior. Those individuals with lower levels of satisfaction should be more likely to have plans than those with higher levels of satisfaction.
Planning elderly individuals

Planning among the elderly seems to be guided by an uncertainty about what crises will occur as well as uncertainty about when they will occur, termed, respectively, "event uncertainty" and "time of event uncertainty" by Kulys and Tobin (1980). Personality characteristics (Gurin, Veroff, & Feld, 1960; Kulys & Tobin, 1980) and available resources (Heyman & Jeffers, 1965; Kulys & Tobin, 1980) also seem to play a role in the planning behavior of elderly individuals.

In their study of 180 community volunteers aged 60-94 who were not institutionalized, bedridden, or socially isolated, Heyman and Jeffers (1965) found that 50 percent of the respondents were either moderately or very concerned about the possibility of an illness that would keep them in bed for a long time. Nevertheless, 25 percent did not have any financial plans nor plans for living arrangements. The majority (64%) of the respondents reported having some financial plans. In many instances these plans did not go beyond stating that they believed, and some were just hoping, to be able to cope by means of their current income. Only 8 percent of the sample reported specific plans in case of a long-term illness.

When confronted with the issue of how they would manage at home in case of a long illness, 26 percent had anticipated that they would have to make different living arrangements. The respondents who were usually certain about this fact included those who were either living alone or with a spouse in poor health. The remaining 76 percent thought that they would not need to move from their current dwelling. These
Individuals were relying on receiving assistance from a spouse, other relatives, or hired help.

The only statistical difference regarding the degree of concern or of planning in case of a long-term illness was between males and females. There was a tendency for more men than women to indicate some financial planning. A similar trend was also found by Spence (1968). Occupational category, age, race, and self-assessment of health were not significantly related to being concerned about a long-term illness. The degree of concern over a long illness was not significantly related to planning; in fact the individuals with the poorest health were among the "not very concerned" group, leading the authors to question if the possibility was too uncomfortable to be faced.

In their study of 60 individuals aged 70 and over, Kulys and Tobin (1980) also found that the percentage of individuals having any "actual preparations" to deal with anticipated problems was lower than the ones who anticipated the event. The individuals in the sample were capable of managing their own affairs and did not have the support of a spouse. The 24 men and 36 women were either widowed, separated, divorced, or single.

In the study, 13 percent of the respondents anticipated serious health problems in the next five years, 18 percent anticipated problems with living arrangements, and 8 percent anticipated financial problems. The respondents that the researchers report as having some planning responded to whether they had "thought" (p. 119) about what they would do if they were faced with a serious problem in any of the three areas
mentioned above. It was reported that 43 percent had some planning in
the case of health and 42 and 13 percent in the case of living
arrangements and finances, respectively; while only 8, 15, and 5 percent
of the individuals had any "actual preparations" (p. 119) to deal with
problems in the areas of health, living arrangements, and finances,
respectively.

In his study of 226 residents of San Francisco aged 60 and over,
Spence (1968) asked the individuals if they planned ahead for the things
they would be doing next week or the week after. The responses of 62
percent of the individuals indicated that they did plan ahead, at least
for a two-week period. Plonk and Pulley (1977) obtained similar results
in their study of 50 couples in which at least one spouse was 50 years
old or over. They report that 39 of the couples made financial plans,
of which 34 were mental plans and 5 were written plans. Nevertheless,
among the 39 couples who had plans, only 14 had made a yearly spending
plan.

Several explanations have been given for the low future orientation
of the elderly. Heyman and Jeffers (1965) suggest that the lack of
concern about a long-term illness could be due to the fact that the
subjects in their study had considerable security in three important
areas of life: social, financial, and domestic.

Gurin et al. (1960) found a tendency for older people to worry less
than younger ones. Only 6 percent of those in the 21-34 age category
reported that they never worried, in contrast to 17 percent of those
aged 55 and over. This latter age group also had the lowest percentage,
27, of "very happy" people and the highest of "not too happy."

According to the authors the problems of old age seem to be problems of apathy rather than anxiety and insecurity.

Kastenbaum (1963) has suggested that the elderly's personal view of the future, which is bound to the individual's life span, differs from that of younger people. In his study with 48 respondents, 24 elderly and 24 younger adults, he found that the elderly had a tendency to anticipate fewer important events and experiences.

One evidence of planning among elderly individuals is the presence of a will, essentially a plan for the disposal of possessions upon one's death. A will is a written document of legal form in which individuals, prior to their death, "specify the recipients and the conditions of receipt of their possessions through a testamentary disposition" (Bryant & Snizek, 1975, p. 219). Research about the presence of a will (a plan) can serve as an indication of socioeconomic and demographic characteristics associated with other types of plans, as well.

Engler-Bowles and Kart (1983) place at 30 percent the proportion of individuals dying intestate, that is without having a will. The proportion of individuals dying testated increases with age (Dunham, 1963; Engler-Bowles & Kart, 1983; Sussman, Cates & Smith, 1970) probably because dying is less likely to happen when the person is young (Sussman et al., 1970).

Drawing up a will is associated with holding assets, such as bank savings and investments (Sussman et al., 1970) and wealth (Dunham, 1963; Rosenfeld, 1979). In fact, a great proportion of capital transmitted at
death is through wills (Dunham, 1963). The dwelling is the chief holding of intestate decedents (Sussman et al., 1970).

Occupation is a better predictor of testacy than education. Individuals prone to have a testament are those who are in professional, managerial, and administrative occupations (Rosenfeld, 1979; Sussman et al., 1970) and proprietors (Dunham, 1963).

Women are more likely to have a will than men (Dunham, 1963; Sussman et al., 1970). Sussman et al. (1970) interpret this finding to be a consequence of greater longevity rather than of a greater propensity toward will making.

The results of research seem to indicate that having definite plans in case of a long term illness is not a common practice among elderly individuals. In fact, planning for a distant future is not widely practiced either.

It has been suggested that the planning behavior of this group of people is influenced by an uncertainty about whether the event will occur, uncertainty about the timing of its occurrence, and the anticipation of fewer life events and experiences. The results of research seem to indicate that the sex of the individual is the only sociodemographic variable associated with some sort of planning. Men seem to have more plans than women.

Planning for the disposal of possessions upon death is done by having a will. The presence of a will is associated with wealth and assets beyond the individual's dwelling. More women than men have wills, but this fact is because women have greater longevity.
Locus of control and aging  Many studies (Brothen & Detzner, 1983; Cicirelli, 1980; Lumpkin, 1985) have examined locus of control among the elderly as a dependent variable. Because the present study seeks to examine locus of control as an independent variable, the studies that are reviewed used the variable in this manner.

The aging process is one that is accompanied by many changes. The changes affect all aspects of living. One of the recent concerns is whether one of these changes is a change in control over life. Lachman (1986) does suggest that the control orientation of individuals is not static. It may change over time due to different situations, or in response to accidental happenings or natural events. Nevertheless, the evidence is mixed as to whether locus of control changes as individuals age.

In their study with males aged 50 and over, Nehrke et al. (1980) did not find any significant difference in locus of control among persons aged 50-59, 60-69, and seventy and over. Similarly, Molinari and Niederehe (1984) report that the elderly were not higher in internality than the younger population while Staats and Psychology Class (1974) report a significant increase in internal locus of control in the older group. The latter included persons up to 60 years of age. A different study did find that the elderly perceive themselves as living in predictable environments (Ryckman & Malikiosi, 1975).

Most of the studies that have measured the effect of age on locus of control have been cross-sectional. In longitudinal studies the trend does seem to be toward a decline in internality (Abel & Hayslip, 1987;
The feeling of control over life among elderly individuals is affected by the perceived choice they have in the decision-making process. In a sample of 30 nonsenile residents of a small nursing home, Janoff-Bulman and Marshall (1982) report that those who perceived they had the greatest choice in the decision to relocate to the nursing home also reported less negative change in the control felt over their lives.

In their study with 139 residents of a retirement village, Hale, Hedgepeth, and Taylor (1985-86) report that those with an external orientation of control are significantly different in their level of psychological distress. While older women have higher levels of distress the association is not reported for older men.

The differences found between the elderly with an internal locus of control orientation and the elderly with an external orientation seem to follow the same basic trends as those in the general population. Among the elderly, those that are more internal also tend to be happier, healthier, and better adjusted (Lachman, 1986; Reid & Ziegler, 1981). The trend among the aged also seems to be that internality is associated with higher levels of intellectual functioning (Lachman, 1986).

Conceptual Model

A review of the literature indicates that planning is a purposeful process which involves a desire to change the present situation. The process essentially deals with the future consequences of present decisions and behavior.
Plans are the outcome of the planning process. Plans serve as a means to indicate to individuals whether the actions taken are appropriate to reach the desired ends. Plans are a way to commit current resources to results desired in the future at the same time that they provide organized routes to be followed.

Several factors affect the planning behavior of individuals. Of interest in the present study are locus of control and life satisfaction among elderly individuals.

Locus of control deals essentially with the perception of control over the consequences of actions. Individuals who perceive that the consequences depend upon their own behavior are considered to be internally oriented. Those who perceive that the consequences are due to fate, luck, or powerful others are referred to as being externally oriented.

Life satisfaction is considered to be an indicator of an individual's self-perception of the gap between the present and some desired state. It has been suggested that those who reach, or go beyond, their tolerance level for the discrepancy are motivated to take action to reduce the gap.

Planning among elderly individuals seems to be guided by an uncertainty about the future, personality characteristics, and available resources. Planning for a distant future does not seem to be a practice in this population group. The evidence is mixed as to whether locus of control and satisfaction are indicators of a propensity to act among those aged 60 and over.
The basic conceptual model for this study (Figure 1) is based upon the literature on planning, life satisfaction, and locus of control among the elderly. The overall hypothesis is that the control-over-life variables and life satisfaction are predictors of the presence of plans when selected demographic and socioeconomic variables are controlled.

Figure 1. Conceptual model
CHAPTER II. THE PROCEDURES

This chapter describes the methodology followed to do the study. It contains a description of the sampling and data collection procedures, the models to be tested in the study, and the definition and operationalization of all the variables together with their descriptive statistics. Finally, it has a description of the statistical analysis of the data.

The Data

The data for this study come from research on the Housing Needs and Preferences of Elderly Iowans. That study, conducted by researchers in the Department of Family Environment at Iowa State University, was funded by the Iowa Department of Elder Affairs. The population of the study consists of all Iowans aged 60 and over who were living in households at the time of the study.

The sample was stratified by age (60-74 and 75 and over) and by place of residence (rural and urban). Urban was defined as those cities with a population of over 20,000 and their surrounding vicinities as defined by the U.S. Bureau of the Census.

The selection process was done in three stages, at both the urban and rural levels. First, cities and counties were selected with probabilities proportional to their sizes in terms of estimated numbers of eligible households. At the urban level, the three largest cities in Iowa (Cedar Rapids, Davenport, and Des Moines) were with certainty
selected along with six others out of thirteen possible urban areas. At the rural level 16 counties were selected. Secondly, within each sample location, telephone exchanges were selected with probabilities proportional to their sizes, where size was determined by the number of groups of 100 potential telephone numbers associated with a specified 3-digit prefix coupled with the first two digits of the 4-digit suffix. Finally, within each one of these groups, telephone numbers were selected at a rate such that the previously specified overall sampling rate was maintained. No more than one person per household was included in the sample. In those households containing more than one person aged 60 and over, the individual aged 75 and over was preferred. If more than two persons aged 60 and over lived in the household, the oldest one was preferred.

Initial contact with the members in the sample was done by telephone. Their cooperation in the study was sought. Once their willingness to participate was obtained, a letter was mailed indicating the potential dates that the interviewer would visit them. The data were collected by trained interviewers during the summer of 1986.

The questionnaire used in the interviews was developed in the Family Environment Department, College of Family and Consumer Sciences, Iowa State University. Before its final use in the study it was pretested on selected individuals aged 60 and over who were not in the sample.

The sample consists of 277 persons aged 60 and over. There were four cases with incomes above three standard deviations above the mean.
These cases were deleted from the analyses, so that this study is based on a sample of 273 respondents.

The Models

This study has three parallel models that differ only in one of the independent variables. The presence of plans is the dependent variable in all models, and all models included age, sex of the respondent, income, self-assessed health rating, level of physical assistance needed, a set of household size-marital status dummy variables, and life satisfaction as the independent variables.

Figure 2. Model 1
In the first model, current control over life is used as an independent variable (Fig. 2). In the other two models, a control deficit variable is used. In the second model, the control deficit variable is current deficit (Fig. 3); future control deficit is used in the third model (Fig. 4).

**Specific hypothesis**

It is hypothesized that having plans for health problems is positively related to current control over life, age, level of physical
assistance needed, household income, being a male, and not being married, and negatively related to a deficit, either present or future, of control over life, household size, health rating, and life satisfaction.

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**Figure 4. Model 3**

**The Variables**

**The dependent variable**

In this study, the dependent variable is whether or not the individual is a planner. It is a dichotomous variable defined as
whether or not the individual has plans for when it is time to move from the current dwelling or for when the respondent is not able to take care of himself or herself for a long period of time. If there is a plan for either of these situations, the individual is considered a planner. Planners are defined as those who indicated positive responses to either or both of the following questions: "Do you have a definite plan for a time when you would have to move from this dwelling?" and "Do you have a definite plan for a time when you would not be able to take care of yourself?". The vast majority of the respondents, 82.1%, do not have any plans and are scored 0. The remainder, scored 1, have plans for either or both circumstances.

This variable is a very rough indicator of plans. It does not specify the type of plans that the respondents had, how they had arrived at those plans, the standards they had set, or if they had a specific sequence to follow and a time perspective in which the plans were to be implemented. Nevertheless, the presence of plans indicates that some sort of planning process has occurred.

The independent variables

Locus of control
Three different locus of control variables are used in this study: current control over life, present control deficit, and future control deficit. All measure the amount of control the respondents feel they have over their lives.

Three questions were asked dealing with this topic. One was oriented to how much control the respondent felt over life right now,
that is, at the time the study was done. The second asked how much
control the individual would like to have over life right now, that is,
when the data were collected. The third one dealt with how much control
the individual expected to have over life in two years. The responses
were registered in a Likert scale. Each scale ranged from 1, no
control, to 7, complete control.

Current control over life is how much control the individual feels
over life right now. The mean for this variable is 6.282; the median
and the mode are 7; and the standard deviation is 1.81. Almost two-
thirds (65.2%) selected 7, complete control, as their response. Less
than one-sixth (14.3%) reported 6 as their selected response.
Approximately the same number of respondents chose 5 (8.4%) and 4,
(8.8%), and the rest (3.4%) indicated 3 or less as their selected
answer.

Present control deficit is defined as the difference between the
amount of control the individuals feel they have over their lives right
now and the amount of control they want to have over their lives right
now. It was operationalized by subtracting the amount of control the
respondents feel they would like to have right now from the amount of
control they feel they have right now. Thus, the positive end of the
scale stands for those who presently have more control than they want
over their lives, while the negative end represents less control than
desired. The range for this variable is from -4 to 1. The mean is
-.414 and the standard deviation is .912. Almost one-fourth, 23.4%, of
the respondents have a present deficit while 74.4% feel that they
presently have the amount of control over their lives that they would like to have. Only 3 individuals (1.1%) feel they have more control than they would like to have.

Future control deficit is the difference between how much control over their lives the respondents expect to have in two years and the amount of control they feel they have right now. It was operationalized by subtracting the amount of control the persons feel they have right now from the amount of control they expect to have in two years. Thus, the positive end of the scale represents those who expect to have more control over their lives in two years, while the negative end represents an expected deficit. The range for this variable is from -4 to 4. The mean is -.103 and the standard deviation is .980. About one-eighth (12.1%) of the respondents are anticipating more control over their lives in two years. The majority (71.4%) expect to have the same amount of control and the remainder (16.5%) anticipate losing some control over their lives in two years.

Life satisfaction Life satisfaction is the individuals' self-assessment of how satisfied they are with four aspects of their lives. The aspects included are satisfaction with the level of physical activity, the number of people they see or talk to, physical health, and psychological health. The items were scored from 1, extremely dissatisfied, to 7, extremely satisfied. A scale was constructed by adding the scores of the four items. The mean for the scale is 22.73, the standard deviation is 3.40 and it has a Cronbach's alpha coefficient
of reliability of .7035. Additional scale statistics are given in the Appendix, Table A-1.

Sociodemographic variables  Age was operationalized by asking the respondents the month and year of their birth. The responses were transformed into age as of January 1, 1987. The age of the respondents ranges from 60 to 96. The mean is 70.949 and the standard deviation is 7.916. For this study, this variable is treated as a dichotomy, coded 0 for those individuals aged 60-74 (67%) and 1 for those 75 and over (33%). The rationale for choosing age 75 as a dividing point is that it is used to differentiate between two age categories of old age. Those under 75 years of age, the "young-old", are one category and the "old-old", those aged 75 and over, are the other (Schwartz, Snyder, & Peterson, 1979). Because the sample for this study was selected to reflect the two different age groups, there were sufficient individuals in the 75 and older category to dichotomize in this fashion.

Health status is the individual's self-assessment of health status, and it is based on the question "How would you rate your health? Is it ..." Potential responses were poor, 1; fair, 2; good, 3; or excellent, 4. The responses range from 1 to 4 with a mean of 2.848 and a standard deviation of .756. About one fourth, 26.7%, of the respondents rate their health as poor or fair. Over half (57.1%) report having good health while about one-sixth (16.1%) assess their health as excellent.

Household income is the total yearly income of the household. It was operationalized by asking the respondents if they had received any
income, and amount received, from different sources during 1985. The amounts given as responses in the different sources were converted to a yearly income and summed. Total yearly income had to be estimated for the 46 (17%) respondents who did not supply all the needed information. In order to find the predictors of income a regression equation was run in which the independent variables were the 16 sources of income included in the questionnaire, the value of the house, education, marital status, sex and age of the respondent, and income adequacy. The results were used to select the significant predictors of income. A regression equation was then used to estimate income for those cases in which there were missing data.

The total annual income has a range from $-5,815.41 to $121,000.00. The mean income is $21,568.011 and the standard deviation is 18,999.929. The median is $16,200.00 and the mode, $34,000.00. A little over one-fourth (25.3%) have an income between $-5,815.41 and $9,210.00; an additional fourth (24.9%) have incomes between $9,288.00 and $16,000.00; 24.9% have incomes between $16,200.00 and $26,500.00, and the remainder (24.9%) have incomes above $26,533.00.

Household size is the number of persons who are currently living with the elderly respondent. The number of household members ranges from 1 to 7 with a mean of 1.846 and a standard deviation of .882. The median and the mode are 2. About half, 50.9%, of the respondents live in two-person households. The rest, 49.1%, live in households that do not have two individuals. This category includes those that live alone (35.9%) and those who live with more than two people (13.2%).
Marital status refers to the respondents' civil status, whether they are married, divorced, separated, widowed, or single and never married. Over half (57.4%) are married, the rest, 42.6%, are not currently married. This category includes the ones that are widowed, the never married, and the ones that are divorced. This variable is treated as a dichotomy. All respondents not currently married are coded 0; all married respondents are coded 1.

Because of their high correlation, .6074, marital status and household size were combined into a set of six dummy variables. Three of these included the respondents who are not married but who live in one-person (35.9%), two-person (4.8%), and three-or-more-person (1.8%) households. The other three groups include the respondents who are married and are living in one-person, (0.0%), two-person (46.2%), and three-or-more-person (11.4%) households. In the analyses, the omitted category is the group of respondents who are not married and live alone.

Level of physical assistance needed refers to the respondent's own evaluation of the kind of physical assistance required to perform seven selected activities. The activities included were meal preparation, using the toilet, bathing, getting out of a chair, walking up or down stairs, doing housework, and doing shopping. The items were scored 0, if no assistance was needed; 1, if needed the assistance of a person; 2, of a device; 3, of a person and a device; and 4, if the activity could not be performed at all. To operationalize the concept, a scale was computed by adding the scores of all these items. The scale has a mean of .597, a standard deviation of 2.242, and a Cronbach's alpha
coefficient of reliability of .8142. Additional scale statistics are give in the Appendix, Table A-2. As indicated by the mean, the individuals in this sample are not in need of much help to perform selected daily living activities.

Sex of the respondent is a dichotomous variables. It is coded 0 for females (56.8%) and 1 for males (43.2%).

The Analysis

The analysis of the data includes several steps. The first one was to run the frequency distributions. The missing data were recoded to the appropriate measure of central tendency. Total annual income was estimated for respondents with missing data as previously described.

The second step was to do preliminary analyses of the relationships between each pair of variables. Cross-classification tables were used for this purpose. Next a Pearson correlation matrix was calculated.

These analyses were followed by a series of logistic regressions. The continuous variables were grouped in order to test for independence among all the variables, dependent and independent, in the three models. The chi-square test for independence was used, using logistic regression analysis. Affifi and Clark (1984) recommend logistic regression analysis when the dependent variable is a dichotomy and the "individual is to be classified into one of two populations" (p. 287). In this case, the linear probability models are often unrealistic and lead to biased and inconsistent estimates (Hanushek & Jackson, 1977). To solve the inconsistency of the estimates, logistic regression is based on the
logarithm of the odds of being in one of two categories.

Either logit or logistic regression can be used to analyze the data when the dependent variable is a dichotomy. Logistic transformation is better suited when the independent variables are quantitative and logit when the independent variables are categorical (Agresti & Finlay, 1986). Logistic analysis can be used with a combination of discrete and continuous variables as exogenous variables.

Afifi and Clark (1984) present the logistic function as:

\[
P = \frac{1}{1 + e^{c-z}}
\]

Where

- \( P \) is the probability of being in one of the categories;
- \( e \) is residual;
- \( c \) is the coefficient alpha, in multiple linear regression analysis;
- \( z \) is the coefficient beta in multiple linear regression analysis.

Next, a set of logistic regressions were performed to identify if the groups in the household size-marital status set of dummy variables were significantly different from each other. Finally, a typology of the respondents was developed based on the three control-over-life variables and it was related to planning behavior. A set of logistic regressions were performed to identify if any of the groups in the typology were significantly different from one another.
CHAPTER III. THE ANALYSES

The objective of this chapter is to present the results of the analyses of the three conceptual models. First, the degree of linear association between the variables is examined by a Pearson correlation matrix. Then logistic regression is used to ascertain the effect of the control-over-life variables and life satisfaction on the presence of plans. Finally, a typology is developed to categorize the respondents according to the three control-over-life variables and the typology is used in the logistic regression. This study can be considered an exploratory one because very little research has been done about the planning behavior of people and much less about planning behavior of the elderly. For that reason, a significance level of .10 is used in all statistical analyses.

Pearson Correlation

An analysis of the degree of linear association among the exogenous variables indicates that the correlation among them is not a problem (Table 1). Only relationships significant at the .10 level or less are discussed in this section.

The presence of plans is correlated with several of the independent variables, but most of them indicate a negative correlation. The respondent's age and being not married living alone are positively correlated with the presence of plans. The respondent's sex, self-
assessed health rating, being married living in a two-person household, being married and living in a three-or-more-person household, and life satisfaction have a negative linear association with the presence of plans. Those who are older, are women, assess their health lower, are not married living alone, anticipate higher losses in control over their lives in two years, and are less satisfied with their lives are more apt to have plans than the others.

Life satisfaction is significantly correlated with several of the independent variables. Health rating, household income, as well as all of the control-over-life variables are positively related to life satisfaction. The level of physical assistance needed has a negative correlation.

Higher levels of life satisfaction are reported by those who rate their health higher, have a higher income, need less physical assistance, feel they have more control over their lives, and who report higher scores in both present and future control deficits. Lower levels of life satisfaction are reported by the respondents who rate their health lower, have a lower income, need more physical assistance, feel less control over their lives, do not feel they have the amount of control they want now, and anticipate losing control in two years.

Self-assessed health rating and being not married living alone are significantly and positively associated with current control over life, while being married living in a two-person household has a negative correlation. Those who rate their health higher and who are not married and live alone report high levels of control over their lives, while
Table 1. Pearson correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Age of the respondent</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Health rating</td>
<td>-.15&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Income</td>
<td>-.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.25&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
<td></td>
<td></td>
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<tr>
<td>4 Physical assistance</td>
<td>.29&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.23&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Sex of the respondent</td>
<td>-.17&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.00</td>
<td>.15&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.07</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>6 Not married-1 person</td>
<td>.30&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.06</td>
<td>-.29&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.13&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.42</td>
<td>--</td>
</tr>
<tr>
<td>7 Not married-2 person</td>
<td>.14&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.02</td>
<td>-.01</td>
<td>.02</td>
<td>-.13&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.17&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>8 Not married-3 person</td>
<td>.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.04</td>
<td>-.00</td>
<td>.06</td>
<td>-.06</td>
<td>-.10&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>9 Married-2 person</td>
<td>-.24&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.04&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.25</td>
<td>-.10&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.36&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.69&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>10 Married-3 person</td>
<td>-.20&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.06</td>
<td>.05</td>
<td>-.09&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.27&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>11 Current control</td>
<td>.04</td>
<td>.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.01</td>
<td>-.04</td>
<td>-.03</td>
<td>.10&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>12 Present deficit</td>
<td>.09&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.27&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.04</td>
<td>.02</td>
<td>-.07</td>
<td>.08&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>13 Future deficit</td>
<td>-.13&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.10&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-.06</td>
<td>-.03</td>
<td>.00</td>
</tr>
<tr>
<td>14 Life satisfaction</td>
<td>-.08</td>
<td>.56&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.19&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.23&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>15 Presence of plans</td>
<td>.20&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.13&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.01</td>
<td>-.01</td>
<td>-.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.27&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> p < .10.<br><sup>b</sup> p < .05.<br><sup>c</sup> p < .01.
<table>
<thead>
<tr>
<th></th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>-.03</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.21^c</td>
<td>-.13^b</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.08^a</td>
<td>-.05</td>
<td>-.33^c</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.02</td>
<td>.06</td>
<td>-.10^b</td>
<td>-.03</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.01</td>
<td>.06</td>
<td>-.13^b</td>
<td>.05</td>
<td>.77^c</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.03</td>
<td>.01</td>
<td>-.00</td>
<td>.01</td>
<td>-.34^c</td>
<td>-.36^c</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.01</td>
<td>-.02</td>
<td>.02</td>
<td>-.04</td>
<td>.25^c</td>
<td>.28^c</td>
<td>.12^b</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-.10^b</td>
<td>.01</td>
<td>-.15^c</td>
<td>-.11^b</td>
<td>.02</td>
<td>-.01</td>
<td>-.11^b</td>
<td>-.14^c</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>
those who are married and living in a two-person household report lower levels of control.

The age of the respondent, the health rating, and being not married living alone are positively correlated with present control deficit, while being married living in a two-person household has a negative correlation. Those who are older, rate their health higher, and are not married living alone report less difference between the amount of control disclosed and desired than the ones who are younger, rate their health lower, and are living in households with two or more persons, regardless of marital status. On the other hand, respondents married and presumably living with their spouse are more likely than all other groups to report a deficit in current control.

The estimated coefficients between future control deficit and the independent variables are somewhat different than those noted between the independent variables and the amount of control and present control deficit. Health rating and income are positively correlated with future control deficit while the age of the respondent is negatively correlated with that variable. In other words, the respondents who rate their health higher, have a higher income, and are younger anticipate more control in the future than they have now than do those who rate their health lower, have a lower income, and are older.

Logistic Analyses

The second step of the analysis is to regress the presence of plans on all the variables of each of the three models, that is, with current
control over life, present control deficit, future control deficit (Table 2). Logistic regression was used since the dependent variable is a dichotomy, the presence or absence of plans.

**Current control over life**

The model that includes current control over life as one of its independent variables has a chi-square of 40.03, $P = .0000$. In this model the variables that are significantly related to the presence of plans are the age of the respondent, $P = .02$; income $P = .07$; life satisfaction, $P = .04$. Age of the respondent and income have a positive relationship with the presence of plans while life satisfaction has a negative one. These results imply that older individuals, those who have higher incomes, and those who feel dissatisfied with their lives are the ones who are apt to have plans. Being married and living in either a two-person or a three-or-more-person household is significantly different from the omitted category, the ones who are not married and live alone.

**Present control deficit**

The model that has present control deficit as one of its independent variables has a chi-square of 39.83, $P = .0000$. In this model, as in the one above, the significant variables are the age of the respondent, $P = .02$; income, $P = .08$; and life satisfaction, $P = .04$. The relationship is positive between age of the respondent and income and the presence of plans as in the the previous model. There are significant differences between those who are married and live in either
a two-person or a three-or-more-person household and those who are not married and live alone. As in the previous model, the absence of plans is associated with those individuals who are married, regardless of household size.

**TABLE 2. Logistic regression of presence of plans on the independent variables**

<table>
<thead>
<tr>
<th>Model</th>
<th>Current control over life</th>
<th>Present control over life deficit</th>
<th>Future control over life deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>P</td>
<td>b</td>
</tr>
<tr>
<td>Age of the respondent</td>
<td>.8830</td>
<td>.02</td>
<td>.8705</td>
</tr>
<tr>
<td>Health rating</td>
<td>-.2363</td>
<td>.39</td>
<td>-.2400</td>
</tr>
<tr>
<td>Income</td>
<td>.0000+</td>
<td>.07</td>
<td>.0000+</td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td>.2424</td>
<td>.56</td>
<td>.2561</td>
</tr>
<tr>
<td>Physical assistance needed</td>
<td>-.1325</td>
<td>.12</td>
<td>-.1353</td>
</tr>
<tr>
<td>Not married-2 person</td>
<td>-8.2705</td>
<td>.71</td>
<td>-8.2726</td>
</tr>
<tr>
<td>Not married-3 person</td>
<td>-.9034</td>
<td>.44</td>
<td>-.8905</td>
</tr>
<tr>
<td>Married-2 person</td>
<td>-1.4017</td>
<td>.00</td>
<td>-1.4157</td>
</tr>
<tr>
<td>Married-3 person</td>
<td>-2.0566</td>
<td>.02</td>
<td>-2.0839</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>-.1186</td>
<td>.04</td>
<td>-.1175</td>
</tr>
<tr>
<td>Current control over life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present control over life deficit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future control over life deficit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model chi-square | 40.03 | 39.83 | 42.02 |
P | .0000 | .0000 | .0000 |
df | 11 | 11 | 11 |
**Future control deficit**

The third model has future control deficit as one of its independent variables. Its chi-square is 42.02, $P=.0000$. This model basically follows the same trend as the two described above. The age of the respondent, $P=.03$; income, $P=.07$; and life satisfaction, $P=.05$, are significantly related to the presence of plans. These three relationships are consistent with the ones already described, as well as the significant difference between individuals who are married, regardless of household size, and those who are not married living alone. The third model is the only one in which the level of physical assistance needed is significantly related to the presence of plans, $P=.10$. It is a negative relationship, thus indicating that those who need less physical assistance are the ones who have plans. It might be, as Heyman and Jeffers (1965) suggest, those who need physical assistance find the reality of needing to make plans too uncomfortable to be faced.

Overall, health rating, sex of the respondent and the control-over-life variables are not found to be related to the presence of plans. The trend among the household size-marital status groups is the same as in the previous models.

These results indicate that these three models are fairly similar. Their chi-square values are fairly close together and the significant variables related to the presence of plans are basically the same in the three models. Nevertheless, they are not identical. In the third model, future control deficit acts as a suppressor variable. When it is controlled, the relationship between level of physical assistance needed
and the presence of plans becomes significant at the P=.10.

To investigate if any of the household size-marital status dummy variables are significantly different from each other, a set of four regression analyses were performed each having a different dummy variable as the omitted category. The only significant differences are between those who are not married and live in one-person households and the ones who are married and live in either a two-person or a three-or-more-person household. When the omitted category was the group of respondents who are not married and live in one-person households, the other two groups have a negative coefficient, thus indicating that the absence of plans is associated with being married, regardless of household size.

Typology

The analysis was carried one step further because there is no research with control-over-life deficit variables. A typology of the respondents was developed based on the three control-over-life variables (Table 3). The typology represents, essentially, interaction among current level of control, present deficit, and future deficit.

Included in the first four types are the respondents who report a feeling of complete control over their lives right now. Type 1 are the individuals who do not have a present nor anticipate a future deficit in control over their lives, by far the largest category with 55.3 percent of the respondents in this category. In other words, the respondents report that they have complete control, want complete control and expect
to maintain complete control. Type 2 are those who have more control than they want but do not anticipate losing control in two years. Type 3 consists of those who also have more control than they want currently and anticipate losing some control in the future. Very few people are in either of these two categories, as only three respondents have a positive present control deficit. Type 4 are those who have the amount of control they want currently but are anticipating losing control in two years. This category is the third largest group in the typology with 8.8 percent of the respondents.

Types 5 through 13 contain those who report less than complete control over their lives right now. The ones who have the amount of control they want and anticipate the same amount of control in two years

Table 3. Typology of respondents based on their control-over-life variables frequency distribution

<table>
<thead>
<tr>
<th>Type</th>
<th>Current control over life</th>
<th>Present control deficit</th>
<th>Future control deficit</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>151</td>
<td>55.3</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>+</td>
<td>0</td>
<td>2</td>
<td>.7</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>+</td>
<td>-</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>0</td>
<td>-</td>
<td>24</td>
<td>8.8</td>
</tr>
<tr>
<td>5</td>
<td>&lt;7</td>
<td>0</td>
<td>-</td>
<td>22</td>
<td>8.1</td>
</tr>
<tr>
<td>6</td>
<td>&lt;7</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>7</td>
<td>&lt;7</td>
<td>+</td>
<td>-</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>8</td>
<td>&lt;7</td>
<td>0</td>
<td>-</td>
<td>6</td>
<td>2.2</td>
</tr>
<tr>
<td>9</td>
<td>&lt;7</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>10</td>
<td>&lt;7</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>5.1</td>
</tr>
<tr>
<td>11</td>
<td>&lt;7</td>
<td>-</td>
<td>+</td>
<td>30</td>
<td>11.0</td>
</tr>
<tr>
<td>12</td>
<td>&lt;7</td>
<td>-</td>
<td>0</td>
<td>20</td>
<td>7.3</td>
</tr>
<tr>
<td>13</td>
<td>&lt;7</td>
<td>0</td>
<td>+</td>
<td>3</td>
<td>1.1</td>
</tr>
</tbody>
</table>
are classified in type 5. This category represents the fourth largest category with 8.1 percent of the respondents. Types 6 and 7 are categories representing respondents with less than complete control but more control than they currently want; none of the respondents fell in either category. Type 8 are the people who currently enjoy the amount of control desired but anticipate losing control in the future. A very small percentage (2.2) of the respondents are in this category.

The respondents whose present and future control deficits are positive are in type 9, a third empty category in the typology, while in type 10 are the respondents whose present and future control deficits are negative, indicating less control than they would like now and an anticipation of a further decline in control (5.1%). Classified as type 11 are the individuals whose present control deficit is negative and their future control deficit is positive, an indication that they foresee an improvement in the situation. This category (11%) is the second largest group in the typology. In type 12 are the ones who have less control than they would like and who anticipate no change in the future, 7.3 percent of the respondents. Type 13 includes the small group of respondents (1.1%) who have a 0 in their present control deficit but anticipate more control in two years.

The categories in this typology were grouped somewhat and a cross-classification table between the typology and the presence or absence of plans was developed (Table 4). The respondents who report a feeling of complete control now and whose present control deficit is either 0 or positive and their future control deficit is 0 are group A (types 1 and
2). In group B are those who report a feeling of complete control now and whose present control deficit is either 0 or positive and their future control deficit is negative (types 3 and 4). Type 5 is group C, type 10 is group D, type 11 is group E, and type 12 is group F. In group G are the respondents who belong to both types 8 and 13, that is, those who have less than complete control now and whose present control deficit is 0 and their future control deficit is either positive or negative.

Table 4. Cross-classification of presence of absence of plans by type

<table>
<thead>
<tr>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
<td>N</td>
</tr>
<tr>
<td>No plans</td>
<td>129</td>
<td>(84.3)</td>
<td>16</td>
<td>(64.0)</td>
<td>20</td>
<td>(90.9)</td>
<td>13</td>
</tr>
<tr>
<td>Plans</td>
<td>24</td>
<td>(15.7)</td>
<td>9</td>
<td>(36.0)</td>
<td>2</td>
<td>(9.1)</td>
<td>1</td>
</tr>
</tbody>
</table>

The largest percentage of planners (36.0%) occurs among respondents who currently enjoy the amount of control they would like but who anticipate losing some control in two years (group B). The next largest percentage of planners (23.3%) is found among those who currently do not have the amount of control they would like and anticipate more control in two years (group E). Next (22.2%) are those who anticipate either
more or less control in the future than they currently enjoy (group G). Twenty percent of those who currently have less control than they want and who anticipate the same amount of control in two years are planners (group F). With 18 percent of the entire sample classified as planners, these four groups (B, E, F, and G) have a higher percentage classified as planners than could be expected by comparing to the overall sample. It is important that those who now have complete control, have the amount of control they want now, and who anticipate the same amount of control in two years (group A) are less likely to plan than the four other groups and than the sample taken as a whole. Those who have less than complete control now and that situation is acceptable with no change anticipated (group C) or who anticipated a future deficit (group D) have the lowest proportion of planners in the sample.

The most interesting finding in the typology is the difference between group A and group B, two groups essentially the same in current control, in present deficit but different in future control deficit. Those who have complete control, and who have no current deficit but who anticipate losing some life control are twice as likely to plan than those who do not anticipate having less than complete control.

A logistic regression was performed using these groups instead of the control-over-life variables (Table 5). The omitted group is group A. As expected, in addition to the variables already noted as significant predictors of plans (age, income, life satisfaction, and being married living in either a two-person or three-or-more-person household), membership in group B is also a significant predictor of the
Table 5. Logistic regression of the presence of plans on the independent variables and the typology

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the respondent</td>
<td>.9804</td>
<td>.01</td>
</tr>
<tr>
<td>Health rating</td>
<td>-.2222</td>
<td>.43</td>
</tr>
<tr>
<td>Income</td>
<td>.0000+</td>
<td>.10</td>
</tr>
<tr>
<td>Sex of the respondent</td>
<td>.1862</td>
<td>.66</td>
</tr>
<tr>
<td>Physical assistance needed</td>
<td>-.1235</td>
<td>.17</td>
</tr>
<tr>
<td>Not married-2 person</td>
<td>-8.4641</td>
<td>.69</td>
</tr>
<tr>
<td>Not married-3 person</td>
<td>-.6399</td>
<td>.59</td>
</tr>
<tr>
<td>Married-2 person</td>
<td>-1.4789</td>
<td>.00</td>
</tr>
<tr>
<td>Married-3 person</td>
<td>-2.1967</td>
<td>.02</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>-.1145</td>
<td>.06</td>
</tr>
<tr>
<td>Group B</td>
<td>1.2760</td>
<td>.02</td>
</tr>
<tr>
<td>Group C</td>
<td>-.5192</td>
<td>.53</td>
</tr>
<tr>
<td>Group D</td>
<td>-1.3153</td>
<td>.24</td>
</tr>
<tr>
<td>Group E</td>
<td>.6149</td>
<td>.29</td>
</tr>
<tr>
<td>Group F</td>
<td>.7414</td>
<td>.27</td>
</tr>
<tr>
<td>Group G</td>
<td>.5152</td>
<td>.53</td>
</tr>
</tbody>
</table>

Model chi-square 50.24 P .0000 df 16

To further investigate if these groups are significantly different from each other, a set of six regression analyses were performed. Each analysis had a different group as the omitted category. The results indicate that some of these seven groups are significantly different from each other (Table 6).

The respondents in group A, when this was the omitted group, are significantly different from the ones in group B. The coefficient has a positive sign, thus indicating that the presence of plans is associated with individuals who currently feel they have complete control over
their lives, who feel that they have the amount of control they want but who anticipate losing some control over their lives in two years.

Group B individuals, when this group was the omitted category in the regression, are also significantly different from those respondents in groups C and D. The coefficients have a negative sign, thus it is not merely a future deficit that matters but that the individuals must feel complete control now, not simply anticipate the loss of control.

Table 6. Significant differences on the presence of plans by typology groups

<table>
<thead>
<tr>
<th>Omitted group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>*(+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>*(+)</td>
<td></td>
<td>*(+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td>*(+)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*(+)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*(+)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*( )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significantly different at p < .10
( ) sign of the coefficient

The other significant differences are found when group D was the omitted category. In this case, the differences are between those in groups E and F. The coefficients are positive, thus indicating that the presence of plans is also associated with those respondents who do not report a current feeling of complete control over their lives, who feel that they presently have less control over their lives than what they
would like to have but who anticipate that in two years they will have the same or more control over their lives.

The groups that are significantly different from the others are the ones in which individuals feel that they have complete control over their lives right now and anticipate losing control in two years and those who feel they do not have complete control over their lives right now but who do not anticipate a change in two years or even expect an improvement in their feeling of control over their lives.

The most significant finding in this analysis is the emergence of differences among the groups once the typology is introduced in the regression in replacement of the control-over-life variables. When individuals are classified based on the three control-over-life variables a whole new group emerges as potential nonplanners, the ones who are married.
CHAPTER IV. SUMMARY AND CONCLUSIONS

The purpose of this study was to examine the relationship between self-assessment of control over life and planning activity among a random sample of individuals aged 60 and over in the state of Iowa. The general hypothesis tested was that when socioeconomic and demographic variables are controlled, those who report high levels of control over their lives are more apt to have plans for the future. Alternate hypotheses were also tested with present and future life control deficits.

The data for this research came from the study done by Iowa State University on the Housing Needs and Preferences of Elderly Iowans under a grant from the Iowa Department of Elder Affairs. The sample only had individuals aged 60 and over and it was stratified by age and by place of residence.

The main analyses consisted of a series of logistic regression to test for the relationship between control-over-life variables, life satisfaction, and the presence or absence of plans. First, the regressions had each of the control-over-life variables as one of the independent variables. These were followed by a regression that omitted the control-over-life variables and instead had a typology of the respondents based on the three control variables.

The specific hypothesis of this study stated that having plans for health problems is positively related to current control over life, age, level of physical assistance needed, household income, related to being
a male, being not married and negatively related to a deficit, either present or future, of control over life, household size, health rating, and life satisfaction.

The findings are that the variables that are significant predictors of the presence of plans are life satisfaction, age of the respondent, and having a higher income. These results are consistent with what was hypothesized.

In the model that has future control deficit as one of its independent variables, the level of physical assistance needed is a significant predictor of the presence of plans. The relationship is in the opposite direction to that which was hypothesized. Those individuals who need less physical assistance to perform selected daily life activities are the ones who have plans.

Conclusions

The main conclusion that can be drawn from this research is that the individuals in the sample do not have any plans for health problems. Fewer than one-fifth have any plans for a time when they would have to move from their present dwelling and/or for a time when they would not be able to care for themselves for a long period of time.

In part, this finding can be explained because the questions requested "definite plans." Kulys and Tobin (1980) found that the percentage of elderly individuals who had thought about what they would do if faced with a serious problem was considerably higher than those who had any preparations. Another explanation might be that the cohorts
in this sample belong to a group who did not anticipate living to be too old and thus do not have any plans. It remains to be seen if successive cohorts, more conscious of a longer life expectancy and who might have gone through the experience of parents and/or in-laws living into very old age, become planners for that age.

Alternative explanations may be that the event is uncertain and the one suggested by Heyman and Jeffers (1965) that the possibility is too uncomfortable to be faced. Therefore, no plans are made.

Those who do have plans for a time when they can no longer take care of themselves or have to move from their current dwelling are the ones who are less satisfied with their lives, are older, have higher incomes, and need less physical assistance. In other words, the planners are the ones who report lower levels of life satisfaction, can afford the expense of a change in living arrangements and whose level of physical activity is higher so that they can anticipate living longer and at the same time their future looks brighter. Those who need more help performing selected daily activities might have chosen to deal with this reality by not preparing for it.

An analysis of the set of household size-marital status dummy variables does indicate that there are some differences among the groups. The ones who are not married and live alone are significantly different from the ones who are married, regardless of household size but not from those who are not married and live in a household with 2 or more individuals. Those who are not married are more apt to be planners than the ones who are married.
Even though none of the control-over-life variables has a significant relationship with the presence of plans, when they are substituted for a typology of the respondents, based on the three control-over-life variables, some interesting findings emerge. Those individuals who feel that they have complete control over their lives now, that it is the amount of control desired now, and who do not anticipate a loss in the future are significantly different from the ones who feel they have complete control over their lives now, that it is the amount of control desired now, but who anticipate less control over their lives in two years. Those who anticipate a loss in the amount of control over their lives in the future are more apt to be planners than the ones who expect to have complete control over their lives in two years.

Finally, it can be concluded that most of the standard sociodemographic characteristics of the population are not good predictors for distinguishing those who have plans from those who do not have plans. It is necessary to find those characteristics which would help differentiate between these two groups. Those professionals who deal with the elderly might be interested in being able to concentrate their efforts on either one of these two groups.

Implications

The results of this study suggest that it is not sufficient to study individuals' feelings about current control over their lives. It is the interaction between current control over life, a current deficit
in life control, and anticipated control in the future that seems to emerge as an indicator that differentiates between planners and nonplanners.

The results of this study suggest the following implications for future research. A different operationalization for the presence of plans is needed, especially in terms of long-term care in case of a long illness or alternate living arrangements, if needed.

Introducing the typology based on the three control-over-life variables indicated some interesting patterns, so, further research with this interaction, that is current control over life and present and future control deficit, is recommended.

There has not been very much research examining life satisfaction as an independent variable to predict the propensity to act among elderly individuals. The results of this study indicate that more research on these variables should be undertaken.

The health-related questions used in the present study are not significant preductors of the presence of plans. So, further research with other types of health related questions is suggested.
REFERENCES


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My deepest and most sincere gratitude is expressed to my children, Rodrigo, Maria de Lourdes, Fernando, and Carlos Antonio for all their help, support, and affection received while I attended graduate school.
## APPENDIX

### Table A-1. Reliability assessment of the life satisfaction scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with level of physical activity</td>
<td>5.4505</td>
<td>1.3953</td>
<td>.5546</td>
</tr>
<tr>
<td>Satisfaction with number of people see/talk to</td>
<td>5.9927</td>
<td>.8224</td>
<td>.7279</td>
</tr>
<tr>
<td>Satisfaction with physical health</td>
<td>5.3846</td>
<td>1.4356</td>
<td>.5532</td>
</tr>
<tr>
<td>Satisfaction with psychological health</td>
<td>5.9048</td>
<td>.8901</td>
<td>.6561</td>
</tr>
<tr>
<td>Scale</td>
<td>22.7326</td>
<td>3.4049</td>
<td></td>
</tr>
<tr>
<td>Cronbach's alpha</td>
<td></td>
<td></td>
<td>.7035</td>
</tr>
</tbody>
</table>

### Table A-2. Reliability assessment of the level of physical assistance needed scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistance to prepare meals</td>
<td>.0403</td>
<td>.3125</td>
<td>.8012</td>
</tr>
<tr>
<td>Assistance with using the toilet</td>
<td>.0147</td>
<td>.1709</td>
<td>.8129</td>
</tr>
<tr>
<td>Assistance with bathing</td>
<td>.0733</td>
<td>.3954</td>
<td>.8008</td>
</tr>
<tr>
<td>Assistance to get out of chair</td>
<td>.0330</td>
<td>.2478</td>
<td>.8129</td>
</tr>
<tr>
<td>Assistance to walk up-down stairs</td>
<td>.1575</td>
<td>.6593</td>
<td>.7772</td>
</tr>
<tr>
<td>Assistance to do housework</td>
<td>.1209</td>
<td>.5656</td>
<td>.7542</td>
</tr>
<tr>
<td>Assistance to do shopping</td>
<td>.1575</td>
<td>.6480</td>
<td>.7360</td>
</tr>
<tr>
<td>Scale</td>
<td>.5971</td>
<td>2.2424</td>
<td></td>
</tr>
<tr>
<td>Cronbach's alpha</td>
<td></td>
<td></td>
<td>.8142</td>
</tr>
</tbody>
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