

A COMPARATIVE ANALYSIS OF MOVERS AND NON-MOVERS
TO A RETIREMENT COMMUNITY

by

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(ABSTRACT)

The purpose of this study was to determine whether significant differences exist between movers and non-movers to a retirement community in the areas of demographic characteristics, residential characteristics of the most recent age-integrated community dwelling, and residential satisfaction. A personal interview schedule was developed and administered to a random sample of 32 elderly (age 62+) residents of the Montgomery County/City of Radford, Virginia community-at-large (non-movers) and 32 residents of a Montgomery County, Virginia retirement community (movers). T-test and chi square analyses were used to examine the data.

The findings revealed significant differences ($P < .05$) between the two groups in marital status, income, residential characteristics of the most recent age-integrated community dwelling including tenure, dwelling type, dwelling age, number of rooms, length of residence,

presence of major structural problems, neighborhood, and overall satisfaction levels. Non-movers were more likely to be married homeowners who were more satisfied with their present housing and neighborhoods than movers were with their previous housing. Non-movers' dwellings were more likely to be single-family detached, older, and larger, and contained fewer structural problems than the previous dwellings of movers.

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DEDICATION

This thesis is dedicated to my loving father, Mr. Thomas M. Woebke, who died in 1985 before its completion.

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CHAPTER I

INTRODUCTION

Since the 1930s, the "elderly" has been a term used to describe the collective group of individuals over age 65. However, when applied, this term accurately defines only a person's age group. Like any other age group, the elderly consists of individuals from all geographic areas, professions, and personalities. There is no typical "elderly" person because this group is heterogeneous in many facets other than in age.

Just as there is no typical elderly person, there is no typical housing arrangement which meets the needs of all elderly individuals. While only five percent of the elderly are institutionalized (living in nursing homes, hospitals and prisons) (Lawton, 1979; Fowles, 1985), and another five percent live in planned housing environments for the elderly, the vast majority (90%) live within communities-at-large (Lawton, 1979). The types of dwelling units occupied by this 90 percent include single-family detached and attached units, mobile homes, Granny flats (ECHO housing), multi-family housing, group homes, accessory apartments, subsidized, and public housing (AIA, 1985). Of all the elderly, 75 percent are homeowners (Fowles, 1985). They

occupy over nine million homes, one-fifth of all owner-occupied homes in the U.S. (Rabushka & Jacobs, 1980).

The composition of elderly households is also varied. According to 1984 data compiled by the American Association of Retired Persons (AARP) and the Administration on Aging, 67 percent of those over age 65 live in family situations [with spouse, child(ren), or sibling], 30 percent live alone, and two percent live with other unrelated persons (Fowles, 1985).

Since the turn of the century, the elderly population in the U.S. has increased seven-fold (Rabushka & Jacobs, 1980; Fowles, 1985). In 1900, persons over 65 comprised only 4.1 percent of the total population. By 1984, the elderly represented 11.9 percent of the population (28.0 million), slightly less than one in every eight Americans (Fowles, 1985). It is projected that by the year 2000 the elderly will represent 13 percent of the U.S. population and by 2030 this percentage may climb to more than 20 percent (Rabushka & Jacobs, 1980; Fowles, 1985).

There are numerous factors that affect an elderly person's housing needs. One of the factors which may act as a constraint on an aged person's choice of residence is the amount of income received. Many retired individuals receive only small pensions or Social

Security payments. Consequently, they are often restricted by income as to the type of dwelling they can afford. McAuley & Nutty (1982) found that housing costs were one of the most important factors affecting the residential choice of the elderly.

Within the past few decades, the income constraint has been lessened for some by the availability of public housing and Section 8 housing for those with low incomes. These federally subsidized housing programs provide low-income elderly households with an available alternative to their present living arrangements. U.S. Census Data (1983) showed 23 percent of elderly renters to be living in publicly owned or subsidized housing (Fowles, 1985).

Many elderly households encounter a positive housing deficit in that they have a housing surplus (Morris & Winter, 1978). When household size declines due to children leaving, separation or death of a household member, the size of the home is often more than is needed by the remaining member(s). As these members become older, they are often less able to maintain large homes. Housework, yardwork, and household repairs may become more difficult and bothersome for elderly persons. Thus, some elderly close off parts of their houses or move to smaller dwellings.

The level of independence is also a constraining factor when a

person can no longer provide total care for oneself. While some elderly individuals need total care requiring institutionalization, many others are partially disabled and can still live independently in their own homes. Partially disabled persons may suffer from arthritis, loss of eyesight or hearing, or other disabilities which may hinder their capacity to maintain a home. Although those with disabilities represent only one segment of the elderly population, these disabilities must be considered when an elderly individual chooses a housing arrangement.

Whether elderly persons are constrained by income and loss of independence or are financially stable and physically independent, they make different choices regarding their living environments. Two of these choices are 1) to continue living in a housing environment in an age-integrated community-at-large, and 2) to move into a retirement community.

A retirement community is an age-segregated community for individuals over a certain age, such as 55 or 60 years. Some retirement communities provide few services to residents while others provide many services such as resident cafeterias, recreational activities, and emergency intercom systems. Retirement communities differ from nursing homes in that total health and daily care are not provided for

residents. Except for extremely unusual cases, at least one person in the elderly household must be able to live independently or semi-independently in both the age-integrated community-at-large and retirement communities.

The concept of retirement communities became known after World War II when builders began to construct communities designed specifically for older people. These communities were set up mainly in popular retirement locales such as Florida, Arizona, and California (Hubbard, 1984). By the 1960s, Rossmoor had expanded these communities to various cities across the U.S. calling them "Leisure World". As people became more familiar with the idea, new types of retirement communities which attracted a greater variety of elderly clientele were developed. By 1975, approximately 5.64 percent of the elderly in the U.S. were residing in retirement communities (Marans, 1982).

By the mid 1980s, retirement communities across the nation were quite varied in composition. The larger communities such as the Leisure Worlds often resembled new towns or subdivisions consisting of 1000 or more single family houses, townhouses, and duplexes and perhaps a multi-level apartment building. Some offered a variety of recreational services such as golf, craft workshops, and musical programs.

Although the subdivision type community is probably better known, the majority of retirement communities consist of one or more apartment buildings (Baldwin, 1984). The mobile home retirement community is another type of arrangement which accounts for approximately 15 percent of all retirement communities (Baldwin, 1984).

One retirement community concept which has become more prevalent in recent years is the continuing care retirement center (CCRC). The CCRC includes single family houses or apartments and a nursing home. The addition of the nursing home provides residents with nursing and daily care if needed, thus lending itself to life-long residency. Generally, residents who select CCRCs are attracted to the security of lifetime care (Baldwin, 1984; Hartwigsen, 1985).

While some elderly persons prefer living in age-segregated communities, others do not and would not consider retirement community living because it is, in fact, age-segregated. There has been much debate as to which way of life is more beneficial to the elderly resident. Again, since the elderly are such a diverse group of people, neither type of housing is necessarily more beneficial. Depending on their needs and desires, age-segregated housing may be more beneficial for some, age-integrated may be more beneficial to others.

As specific characteristics of movers and non-movers to retirement communities are identified, housing and gerontological agencies as well as builders and developers will be able to service the needs of this group more effectively. The purpose of this study was to focus on the characteristics of elderly who chose to reside in retirement communities and how they differed from those who chose to remain in the age-integrated community-at-large.

Elderly consumers are defined in this study as persons age 62 or over. Age 62 was chosen as the minimum age for two reasons. First, it is the age at which persons become eligible for partial Social Security retirement benefits. Second, 62 is the minimum age for the largest section of the retirement community (Warm Hearth Retirement Village) which was used in this study.

Conceptual Framework

The decision making process is a complex process in which many factors are considered. The decision making process used when choosing a place to live is not unlike the process used when choosing a consumer product. In fact, housing choices can be considered residential products. Assael (1981) created a model of complex decision making in regard to the purchase of consumer products (see Figure 1),

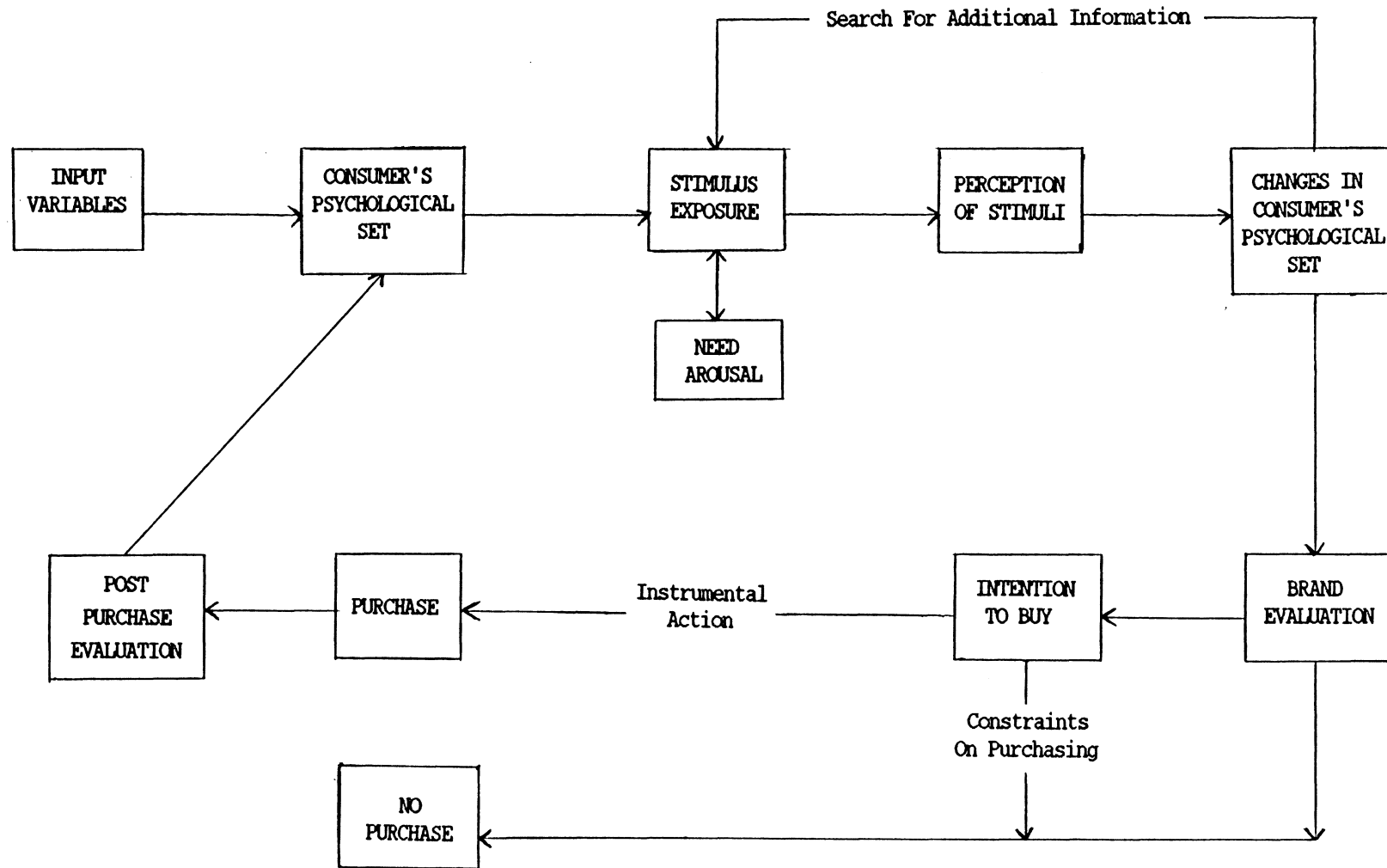


Figure 1. Model of Complex Decision Making (Assael, 1981)

which can easily be adapted for specific use in the process of selecting residential products (see Figure 2).

According to Assael's model, a complex decision is influenced first by a person's psychological set. This set consists of attitudes, demographic characteristics, past experiences, environmental influences, and other factors which one brings into a decision-making situation. Secondly, the consumer becomes aware of a product or idea through stimulus exposure such as seeing an advertisement or hearing of it from a friend.

In this study, for example, the consumers were individuals over age 62 and the product was the retirement community. The consumer's demographic/housing characteristics and residential satisfaction levels ("pushes" toward mobility or non-mobility), were influential factors in the psychological set. Availability of the retirement community was the stimulus to which consumers were exposed. As the consumer gains more information about the product, the psychological set changes again to accommodate new or reinforced perceptions (Assael, 1981).

Through the process of evaluation, the consumer decides whether or not to purchase the product or, in this case, to move to a retirement community. A decision to purchase (move) does not necessarily

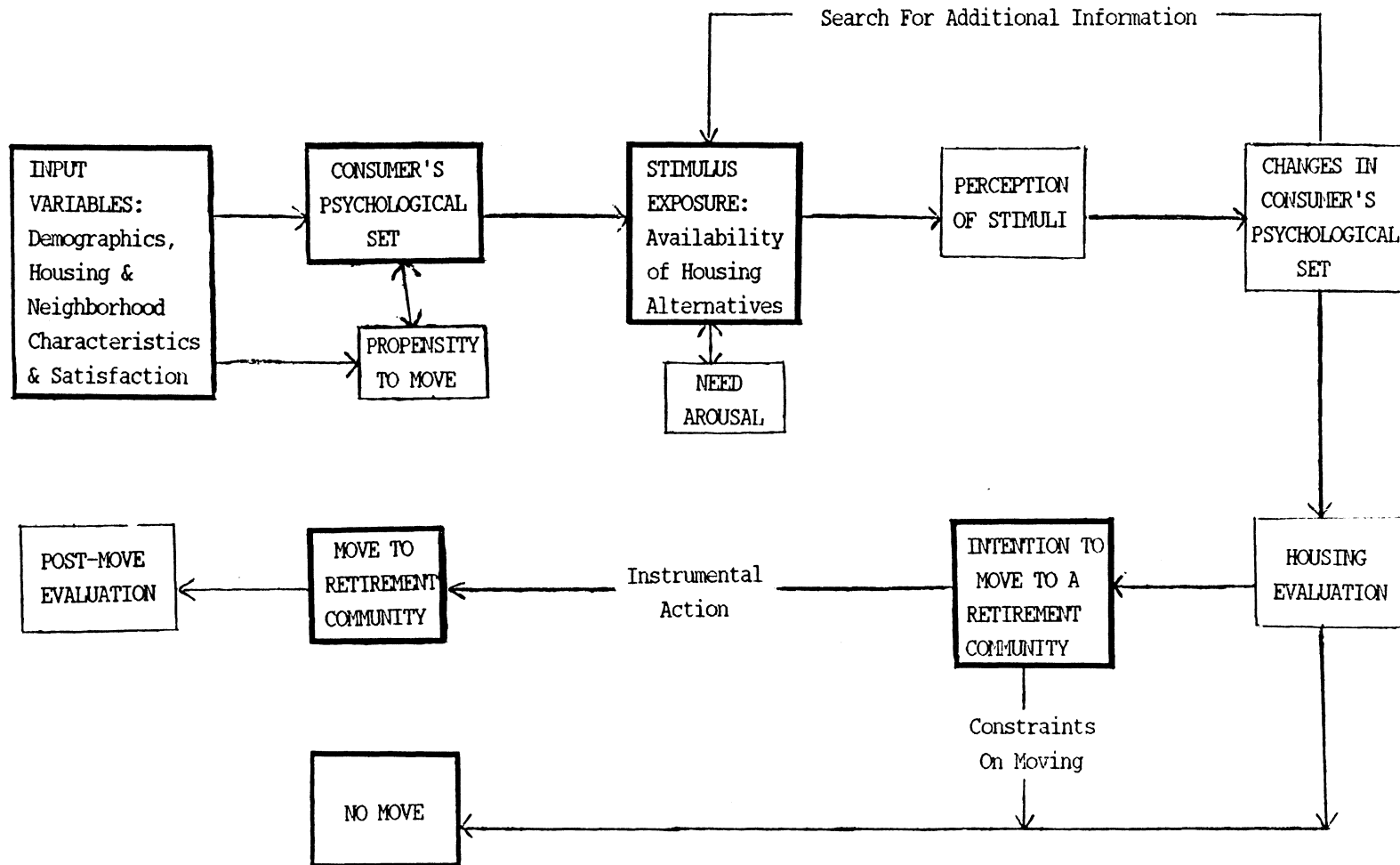


Figure 2. Model of Decision to Move to a Retirement Community
(Adapted from Assael, 1981)

mean the purchase (move) is made, however. Constraining factors may restrict the consumer from buying the product or making the move. If the purchase (move) is made, the consumer will then evaluate the product for satisfaction. This evaluation may take place during and/or after consumption. Once again, these evaluations will influence the psychological set.

This study focused on factors initially incorporated into the psychological set including demographics, housing characteristics, and residential satisfactions. These types of input factors which accompany the consumer when entering the decision making process may be correlated with the ultimate decision leading to instrumental action. The parts of the model which were examined in this study are highlighted in Figure 2.

Statement of the Problem

As more people approach age 60 or over, there will be a greater demand for alternative types of living arrangements. The retirement community is one viable alternative to remaining in the community-at-large which will potentially increase in supply in the near future.

Since there will be a possible increase in demand for retirement community environments, policymakers, housing planners, and developers

will benefit from knowledge about the potential market for this type of environment. The problem is that there is a lack of current research about the factors which are influential in the decision to move or not to move to a retirement community.

Objectives

The objectives of this study were to determine whether differences exist between retirement community residents and residents of the age-integrated community-at-large in the following areas:

A. Demographic characteristics

1. Age of elderly person
2. Marital status
3. Educational level attained
4. Health status
5. Average yearly income
6. Employment status (i.e. retired, employed)

B. Length of residence in most recent age-integrated community

dwelling of both retirement community residents and residents of the community-at-large.

C. Characteristics of most recent age-integrated community dwelling

1. Type of dwelling

2. Age of dwelling
 3. Tenure (i.e. owned, rented)
 4. Number of rooms in dwelling
 5. Number of bedrooms in dwelling
 6. Presence of major structural problems
- D. Satisfaction with housing and neighborhood characteristics

The Setting

In this study, the community-at-large was the population of elderly living in independent housing units in Montgomery County and the City of Radford, Virginia, a predominantly rural area southwest of Roanoke, Virginia. Warm Hearth Retirement Village was the retirement community used for comparison with the age-integrated community-at-large. Located just outside the town of Blacksburg in Montgomery County, Virginia, Warm Hearth was opened for occupancy in December 1982. By 1984 it had 130 residents in the two sections which make up the independent living areas of the village. One of these sections consists of three low rise, subsidized, apartment buildings - - Trollinger North, Trollinger South, and New River House - - which are available to persons age 62 and over and those who are handicapped. The majority of the residents in these buildings receive Section 8

housing subsidies. The second section, Founder's Forest, is a section of townhouses which are bought under a life lease by persons over age 55. This section is not subsidized. The Warm Hearth Retirement Village was the first retirement community in southwest Virginia to provide retirement community living for different socioeconomic levels.

At the time of this study, each of the apartment buildings and Phase 1 of Founders Forest were open for occupancy. Additional sections, including a health care facility, were in the planning and construction stages of development. Thus, Warm Hearth will eventually become a continuing care retirement center providing lifetime care to elderly of all socioeconomic levels in the New River Valley area of southwest Virginia.

Delimitations

The boundaries of this study included only those persons who were at least 62 years of age and who lived in Montgomery County and the City of Radford, Virginia. These persons resided either in the age-integrated community-at-large or in the independent housing units of the Warm Hearth Retirement Village, Blacksburg, Virginia.

Definitions

Elderly - persons age 62 or older.

Retirement community - a housing community developed solely for older adults.

Age-integrated community-at-large - community housing which is not planned specifically for one age group.

Age-segregated housing - housing planned for and restricted to people in one particular age group such as the elderly. A retirement community is one example of age-segregated housing.

Independent housing - housing for persons who are able to maintain their own home and daily care without the assistance of non-household members.

Movers - those who have voluntarily moved from the age-integrated community-at-large to a retirement community.

Non-movers - those elderly who have made a conscious decision to remain living in the age-integrated community-at-large.

CHAPTER II

LITERATURE REVIEW

A brief overview of residential mobility followed by more detailed analysis of the relationships between mobility and individual demographic and housing characteristics are discussed in this chapter. Residential satisfaction levels and their relationship to mobility are also reviewed. Finally, a model of mobility and its relationship to the decision making model is presented.

Residential Mobility

There are many factors associated with mobility of households from one residence to another. In his classic study titled Why Families Move, Rossi (1955) identified family life-cycle events, family composition, housing complaints such as costs and space needs, neighborhood, and location satisfaction as major factors in residential mobility decision-making. Members of the elderly stage of the life-cycle can be affected by each of these factors. For example, when the composition of the family changes (due to death or mobility of family members), space needs change as well. The home may now have so much unutilized space that it is impractical and/or undesirable to maintain it. Likewise, decreased income levels may make it difficult

to maintain a larger home.

Morris & Winter (1978) developed a theory of housing adjustment and adaptation which encompassed many of the types of factors found in Rossi's study. These researchers described the difference between an actual housing condition and a desired or normative housing condition as a housing deficit. When a perceived deficit exists, the satisfaction level associated with it is low, and constraints are not too great, the household turns to other housing options: mobility, residential alteration, or adaptation of the deficit condition. Although residential mobility has been found to occur when constraints are not a problem, McAuley & Nutty (1982) found that older people are less likely than any other age group to move when dwellings with the desired residential characteristics become available.

Demographic and Socioeconomic Characteristics

While more attention has been given to elderly in the community-at-large, there have been several studies conducted which touch upon the demographic and socioeconomic characteristics of the elderly in retirement communities. The characteristics discussed in this section are age, marital status, income, educational level attained, health, and employment status.

With regard to age, Shanas (1969) noted that retirement communities were more likely to attract the younger segment of the elderly population. Sherman (1971) confirmed this finding. Comparing retirement communities to other living arrangements specifically for the elderly, she found the average age of residents in retirement communities to be 67.8, more than six years younger than the average age of those living in retirement hotels, rental apartments for the elderly, and life care facilities. In a study of two New Jersey retirement communities Bonwit (1977) found the majority of respondents (55 percent) to be between the ages of 65 and 74.

While elderly in retirement communities appear to be younger than those in other types of housing for the aged, elderly living in the community-at-large also appear to be younger than those in hotels, life care facilities, and rental apartments for the elderly. In a review of 1980 census data, Fowles (1985) found that 59.6 percent of the elderly as a whole were also in the 65-74 age group, 30.7 percent were in the 75-84 age group and 9.6 percent were over 85.

Marital status has not been shown to be a significant factor related to mobility to retirement communities. In general, however, half of the women over 65 are widows (50 percent in 1984) while most older men live with their spouses (78 percent in 1984) (Fowles, 1985).

Although marital status has not been shown to be a significant factor in mobility to retirement communities, it has been suggested that death of a spouse is a major factor influencing mobility of the elderly (Newman, 1976; Morris & Winter, 1978). In a national survey of low-income elderly, Ferraro (1981) found that elderly who were unmarried were more likely to experience mobility (but not necessarily mobility to a retirement community).

Incomes of older persons, on the average, tend to be smaller than incomes of younger persons. The national mean income of persons over 65 in 1984 was \$10,450 for males and \$6,020 for females. Families headed by persons 65+ averaged \$18,215 with 19 percent receiving less than \$10,000 annually and 34 percent receiving more than \$25,000 annually (United States Department of Commerce, 1984). Gottschalk (1972) found that the incomes of retirement community dwellers in a Florida retirement community specifically for members of the Loyal Order of Moose were above the average income of elderly in general.

In their review of the literature regarding the relationship between income and mobility, Morris & Winter (1978) found mixed results. Two reports concluded that those with lower incomes tended to be more mobile while another researcher showed that no difference existed. Roistacher (1974) concluded that changes in income rather

than the income level itself were more likely to be associated with higher mobility.

Bultena & Wood (1969) found the educational level of persons in retirement communities was higher than that in the community-at-large. Bonwit (1977) found educational levels of residents of two New Jersey retirement communities to be above the national average. A majority (85 percent) of respondents in her study had received high school diplomas and 24 percent had graduated from college.

Between 1970 and 1984, the median level of education of the elderly population increased from 8.7 years to 11.4 years. Nationally, by 1984, 48 percent of persons age 65+ were high school graduates and nine percent had received four or more years of college education (Fowles, 1985).

In a national study of population projections, Brotman (1977) noted that 81 percent of persons over 65 experience some form of chronic illness. Census data in 1982 showed that 35 percent of the elderly assessed their health as fair or poor (Fowles, 1985). However, the health status of retirement community residents appeared to be good, better in many cases than the health status of elderly in general (Bultena & Wood, 1969; Sherman et. al., 1968; Gottschalk, 1972). Seventy-one percent of Bonwit's respondents claimed to have

either good or excellent health. It must be noted that many retirement communities offer housing to elderly as young as age 55. Thus the health status of these residents may be better than the health status of residents in retirement communities with an older age minimum.

Housing Characteristics

One of the major concerns of housing researchers in the U.S. is housing quality. Over the years, housing quality has been measured in several ways: in terms of space (number of rooms or bedrooms per person), age of dwelling, presence or absence of certain features such as plumbing, and structural flaws. Varied findings have been reported, depending on the criteria used to measure the quality of housing.

The findings with regard to the quality of the elderly's housing are also varied. Atchley & Miller (1979) reported that at least 24 percent of the elderly occupied inadequate housing due to the presence of five or more defects identified as being "particularly intolerable" to the average household. These defects include lack of central heat and a lack of plumbing facilities. Annual Housing Survey data have been used to establish the quality of the elderly's housing. When

reviewing these data, Struyk (1977) found that elderly headed households were "moderately less well housed" than the population in general. His research was based on a measure of structural defects as the indicator of housing quality. Concerned over these findings, the Department of Housing and Urban Development (1979) requested that a report be prepared based on the 1976 Annual Housing Survey. The results showed that the elderly were housed "no differently" from other Americans. In a review of 1984 Census data, Fowles (1985) reported eight percent of elderly homeowners lived in inadequate housing as compared to six percent of younger homeowners.

According to the HUD (1979) report, the difference between the elderly and the population in general is in the proportion of income they spend on housing. As of 1976, approximately 40 percent of the elderly needed to spend more than 25 percent of their incomes to live in unflawed, uncrowded housing compared with only 20 percent of the general population. McAuley & Nutty (1982) found that one of the most important variables affecting residential preference of the elderly was housing costs.

The quality of the elderly's housing is sometimes thought to be poor because of its age (Shanas, 1969). Approximately one half of the elderly live in dwellings that were built before World War II

(O'Bryant, 1983; Lawton, 1979). Montgomery, Stubbs, and Day (1980) also found that the houses of the rural elderly were old and had been occupied by residents for a relatively large number of years. However, there is no basis to generalize that because dwellings are older they are of poor quality. Although many older houses occupied by the elderly are in disrepair, there are also many older dwellings which are in good condition.

Another indicator of the suitability of housing is whether or not the dwelling contains enough space to accommodate the members of the household. Elderly households usually do not suffer from a lack of space. In fact, the space available in homes owned by the elderly frequently exceeds the space needed (Baer, 1980; Morris & Winter, 1978). According to the 1970 Census of Housing, the average number of rooms in an elderly owned house was 5.2 (Soldo, 1978). Considering that most elderly households consist of only one to two members, it is probably more accurate to say that many elderly households suffer from underutilization of housing space (Baer, 1980; Morris & Winter, 1978). While many elderly households needed the extra space in the earlier stages of the life cycle, once the children have moved, the older members alone become responsible for all the interior and exterior maintenance.

The amount of space in the homes of elderly renters is significantly less than in owner-occupied homes. The 1970 Census of Housing showed that the average number of rooms in rental units for the elderly was 3.6 (Soldo, 1978). For the one to two person household, this amount of space is considered adequate.

Other housing characteristics examined in the research include tenure and housing type. Of the 17.9 million households headed by persons over age 65 in 1984, 75 percent were homeowners and 25 percent were renters (Fowles, 1985). Of those elderly living alone, 1970 Census data showed the percentage of renters (53 percent) to be greater than the percentage of owners (47 percent) (Soldo, 1978). In a national study of 3,402 low income elderly, Ferraro (1981) discovered that those who owned their dwellings were less likely to want to move than those who rented.

The elderly choose many different types of living arrangements. Lawton (1978) reported that 67 percent live in single family detached dwellings, seven percent in units with four or more floors, five percent in apartments with 50 or more units, and only a fraction in hotels and rooming houses. In addition, five percent live in mobile homes (Haley, 1986; Lawton, 1978) and five percent are institutionalized (Fowles, 1985; Lawton, 1979). The remaining 11 percent

occupy townhomes, group homes, accessory apartments, and Granny flats (AIA, 1985).

Residential Satisfaction

There has been considerable interest by researchers in housing satisfaction and its effect on mobility. Gerontological research has shown consistently that overall housing satisfaction is at least moderately related to more generalized life satisfaction (Lawton, 1980). Therefore, housing and neighborhood satisfaction have recently been given more attention by researchers in the area of residential mobility.

Dwelling Satisfaction

Both Morris & Winter (1978) and Ferraro (1981) identified housing and neighborhood satisfaction as a major factor influencing the propensity to move. Speare, Goldstein, and Frey (1974) discussed the migration decision in terms of satisfaction with the physical and social environment of a given household.

When perceived normative housing deficits have not been eliminated by residential alteration or adaptation, residential dissatisfaction may increase. Dissatisfaction is produced by the perception, not just the existence of deficits (Morris & Winter, 1978). Dwelling

dissatisfaction may be caused by a variety of factors: lack of space, too much space, increased amount of maintenance, structural flaws, unattractive appearance, too costly, or undesirable dwelling design (e.g. too many stairs).

Renters have been found to be consistently more dissatisfied with their dwellings than homeowners. This dissatisfaction is due mainly to lack of ownership rather than to specific differences in the dwellings themselves (Morris & Winter, 1978). Homeowners, especially elderly homeowners, are less likely to convey dissatisfaction with their houses since their housing is considered a result of their own choice and accomplishments. Homeowners are more likely to become dissatisfied with their neighborhoods than with their dwellings.

Neighborhood Satisfaction

Varady (1980) found that neighborhood safety and neighborhood deterioration were important sources of dissatisfaction among the elderly. The results of his study showed that dissatisfaction with the environment was more likely to be expressed by older elderly, renters, and those in poor health. In a 1979 comparison of the elderly with other age groups in a study of 900 Oklahoma residents in the community-at-large, Bohland & Davis (1979) found that the physical condition of the neighborhood was an important factor in housing

satisfaction especially in the old, old (85+). Contrary to the findings of Varady, however, these researchers found only a minor association between neighborhood safety and satisfaction. A larger association was found between the presence of children in a neighborhood and decreased satisfaction.

Overall Residential Satisfaction

Although many elderly express some dissatisfaction with their neighborhood environments, the majority of elderly in the community-at-large express a high degree of satisfaction with their housing situations. O'Bryant (1983) found that the elderly more than any other age group perceive their housing to be satisfactory. The 1974 Annual Housing Survey revealed that 83 percent of elderly household heads considered their homes either excellent or good places to live (Lawton, 1978). In a study of rural elderly, Montgomery, Stubbs, and Day (1980) found that 95 percent of couples and 98 percent of women living alone felt their housing "fully met" their housing needs.

When considering the higher rates of structural defects reported in the elderly's housing, it seems rather paradoxical that the elderly are more satisfied with their housing than are other age groups. Butler & Lewis (1977) found that although 75 percent of the elderly reported some undesirable characteristics in their housing, more than

95 percent did not wish to move.

Mobility Model

During the 1970s, Morris & Winter (1978) developed a causal model of mobility incorporating many of the factors identified in Rossi's findings. This model consists of three dimensions: 1) demographic and socioeconomic determinants, 2) normative influences (normative housing deficits), and 3) housing and neighborhood satisfaction influences. Each of these dimensions can be subdivided into specific characteristics such as stage in family life cycle, and income (see Figure 3). The various components of this model are hypothesized as being causal influences on the propensity to move.

While Morris and Winter's model shows whether or not there is a propensity to move, Assael's complex decision making model (see Figures 1 and 2) delves more specifically into what residential choices will be made. The components of Morris and Winter's model can be incorporated into Assael's model as variables of the psychological set (see Figure 4). Once the decision to move has been made, Assael's model can be adapted to deal with the next decision, whether or not to move to a retirement community. When combined, these two models follow the resident from the variables which affect the propensity to

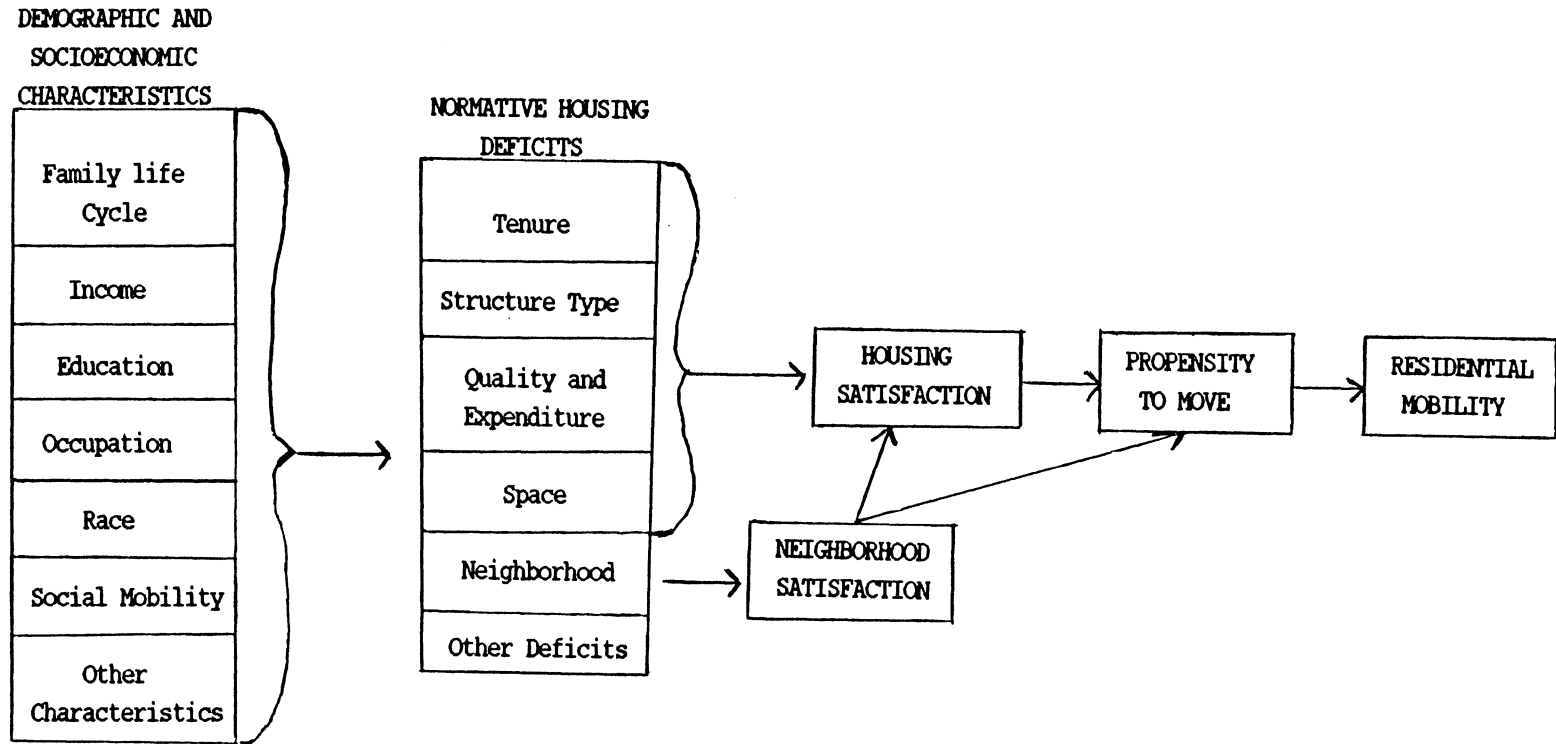


Figure 3. Causal Model of Hypothesized Influences on Residential Mobility (Morris & Winter, 1978)

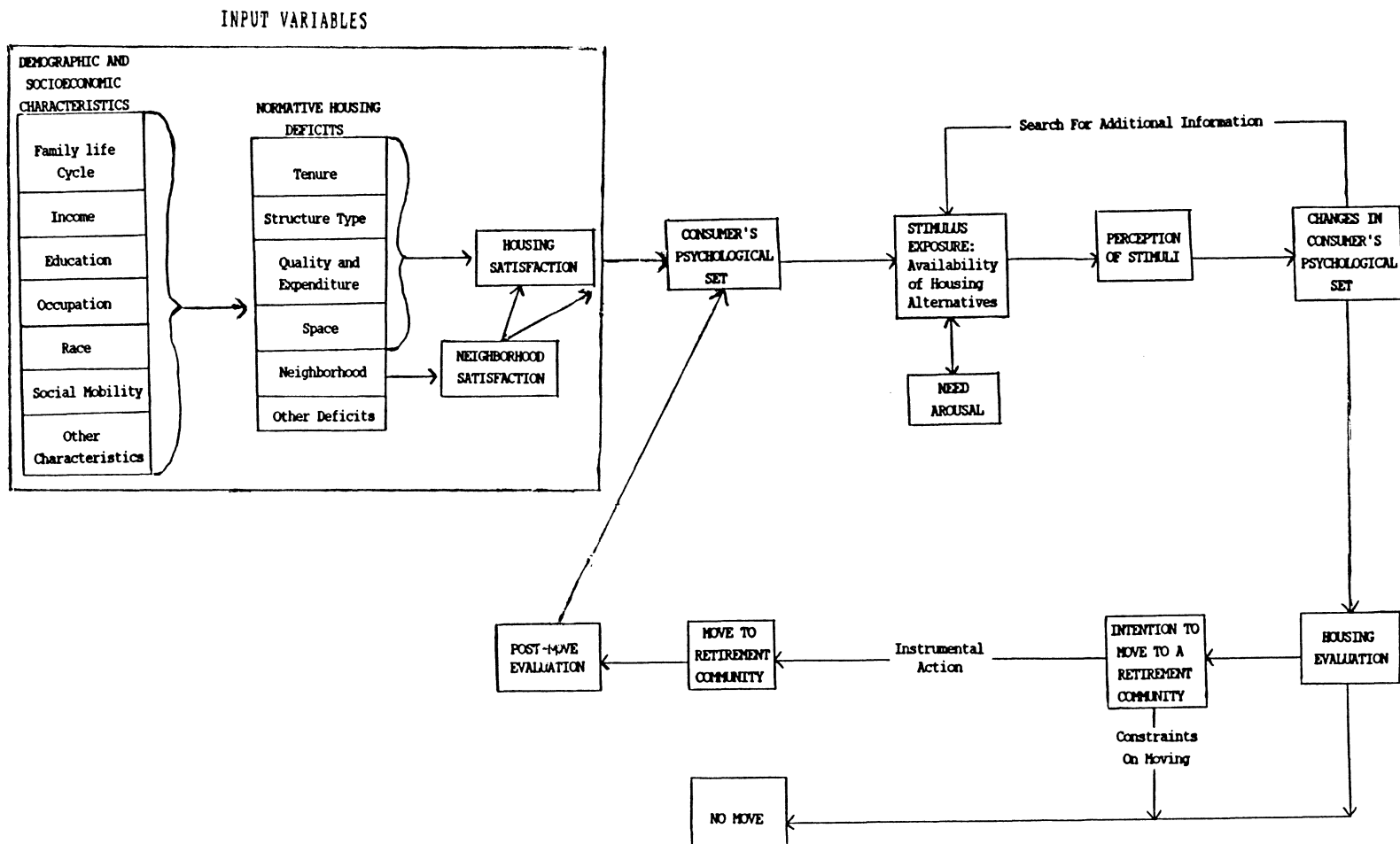


Figure 4. Combined Model of Influence on Residential Mobility and Complex Decision Making With Regard to the Move to a Retirement Community (Morris & Winter, 1978; Assael, 1981)

move, through the choice of living arrangement, to the actual move itself.

With the ever-increasing interest of researchers in the area of gerontology, more research has been directed specifically toward factors which are influential in the mobility decision making process of the elderly and to which type of housing arrangement they will select. As seen in the combined model (Figure 4), many of the factors listed in Morris and Winter's causal model of mobility can be applied to the elderly stage of the life-cycle and the decision making process regarding the potential move to a retirement community.

Summary

The research has shown some variations between the elderly in retirement communities and those in the community-at-large. Retirement community residents tend to be younger, more educated, and in better health than other elderly. In addition, one researcher found that retirement community residents have above average incomes.

While few comparisons have been made between retirement community residents and community-at-large residents in the area of housing characteristics (of the most recent age-integrated community-at-large dwellings), there have been assessments of housing characteristics of

the elderly population in general. The elderly tend to live in older dwellings, many of which contain structural flaws. Most elderly (75 percent) own their homes although a large percentage (40 percent) have been found to pay more than 25 percent of their incomes on their housing. The average number of rooms in both renter- and owner-occupied homes is more than adequate for one or two person households. In many cases, the housing of the elderly is considered underutilized.

Although many elderly live in housing which contains structural defects, this age group is found to be more highly satisfied with its housing than any other age group. The elderly tend to express more dissatisfaction with neighborhood characteristics such as neighborhood deterioration than with dwelling characteristics.

While there has been a significant amount of research on characteristics of the elderly in general, recent research on characteristics of elderly living in retirement communities is limited. That some differences between the two groups have been found indicates that through further research a more detailed understanding of these groups can be achieved.

CHAPTER III

METHODOLOGY

The five sections of this chapter explain the procedures used in this study. Sample selection, development of the instrument, and data collection are examined followed by the hypotheses of this study and the methods of data analysis used.

Selection of the Sample

The sample used in this study consisted of 64 respondents, slightly less than one percent (.925%) of the elderly population living in Montgomery County and the city of Radford, Virginia (United States Department of Commerce, 1983). Thirty-two of the respondents were elderly persons living in the community-at-large and 32 were elderly persons from Warm Hearth Retirement Village, the only retirement community in Montgomery County or the city of Radford. According to the 1980 Census of Population, Montgomery County and the City of Radford had 6,925 persons age 62 or over. This age group comprised nine percent of the total population there. One hundred thirty residents or 1.9 percent of the elderly population lived in Warm Hearth Retirement Village.

The retirement community residents used in this study were 32 of

the 35 Warm Hearth residents who were over 62 and who had participated in Phase One of a longitudinal study conducted by the Departments of Housing, Interior Design, and Resource Management (HIDM) and Family and Child Development (FCD) at Virginia Polytechnic Institute & State University (VPI&SU). The researchers in these departments sent letters to each resident of Warm Hearth requesting his or her participation in the study. Several days after the letters were sent, an interviewer telephoned each resident. If the resident agreed to participate in the study at the time of the telephone call, an interview time was scheduled. If a resident refused to participate, the name was removed from the list of potential respondents.

Thirty-seven Warm Hearth residents participated in Phase One of the study. Thirty-eight other residents had been contacted, but refused to be interviewed. The two most common reasons for refusing the interview were illness, either their own or their spouse's (18), and busy/not interested (10). Nine additional units had no telephone and the residents did not respond to the letters sent to them by the investigators.

Thirty-five of the 37 participants in the HIDM-FCD study were over age 62. One of these respondents was not a resident of an independent living unit but resided in Showalter Center (which

provides limited health services), so was not included in this study. Another two were excluded because their spouses had already been interviewed. Therefore, the total number of respondents from Warm Hearth was 32.

The 32 households from the age-integrated community-at-large were chosen from the Chesapeake and Potomac December 1983 telephone directory for Montgomery County and the city of Radford (Blacksburg, Christiansburg, Radford, and Shawsville). Those residents who were listed in the directory, but who did not live in either Montgomery County or the city of Radford (e.g. those who lived at Claytor Lake and Pulaski County) were excluded from the sample.

To obtain a sample from the telephone directory, the investigator randomly selected 32 of the 256 pages of residential listings by putting the page numbers into a box and selecting the page numbers one at a time, recording the number and replacing it into the box. From these pages, one name was chosen randomly from the non-commercial, non-college dormitory listings on each page. This was done by selecting in a likewise manner a number between one and 173 (there were up to 173 entries per page) and counting down the page to the corresponding name. If the corresponding name was a commercial or dormitory listing, another number was chosen. The investigator telephoned the

selected numbers to ask if the household contained a person aged 62 or older (see Appendix A). If the household included an elderly person, he or she was asked to participate in the study. If the person refused, or if the household did not contain an elderly person, another name was selected randomly from another randomly selected page. This process of selection was continued until 32 residents aged 62 or older were contacted who were willing to participate in the study.

The investigator called 246 residences including 52 which had an elderly member and 128 which had no elderly members. No answer was received at 66 of the households after calling each three times at different hours of the day. Of the residences which did contain an elderly person, 32 agreed to be interviewed and 20 declined. Several reasons were given for the refusals: elderly person was ill, going out of town, too busy, and not interested. One man claimed the University was too nosey about other people's affairs and thus refused. With a few exceptions, however, those contacted were very pleasant and most of those who refused expressed regret at not being able to be interviewed.

Development of the Instrument

The instrument, a personal interview schedule, consisted of four sections: 1) housing characteristics, 2) housing and neighborhood satisfaction, 3) mobility intentions, and 4) demographic characteristics (see Appendix C).

Each of the questions in the interview schedule was a forced choice question. Sections one, two, and four were developed by faculty members in the Departments of HIDM and FCD at VPI&SU as a part of a longitudinal study on housing and friendship formation funded through a supplemental grant by the Virginia Tech Educational Foundation.

Section one, housing characteristics, contained nine questions regarding the physical characteristics of the most recent dwelling in an age-integrated community. For example, how old is (was) your home? Do (did) you have running water in the kitchen? Section one also asked if the home is (was) owned, rented, received for services, or some other form of tenure.

Section two, housing and neighborhood satisfaction, contained 18 housing and neighborhood characteristics and required the respondent to choose one of the following satisfaction levels for each: very dissatisfied, dissatisfied, somewhat dissatisfied, somewhat satisfied,

satisfied, very satisfied. These responses were written on a card so that the respondent could look at the choices while being questioned.

This section also asked the respondent to rate the housing and neighborhood characteristics as to the degree of importance placed on each. Again, the responses were provided on a card: very unimportant, unimportant, somewhat unimportant, somewhat important, important, very important.

Section four, demographic characteristics, contained nine questions about the respondents themselves. (e.g. What is your current marital status?)

Section three, mobility intentions, was developed by the investigator of this study and was used only with the 32 respondents from the community-at-large. This section was designed to determine whether the respondents had made a conscious decision to move to a retirement community or to remain in the community-at-large.

The interview schedule administered to the residents of the community-at-large contained all four sections of questions and was written in present tense since it pertained to participants' present dwellings. The interview schedule used with the residents of the retirement community contained questions concerning participants' previous dwellings; that is the dwellings in which they lived just

prior to moving to the retirement community.

The retirement community schedule contained only sections one, two, and four (housing characteristics, housing and neighborhood satisfaction, and demographic characteristics). The third section, mobility intentions, pertained to participants' intentions toward mobility to a retirement community and was not asked of the Warm Hearth residents since they had already acted on their intentions by moving to the retirement community.

Collection of the Data

The instrument was pretested by trained interviewers from the Department of Family and Child Development at VPI&SU in 1983 before it was administered to the residents of the retirement community. The interviewers each asked an elderly person whom they knew to participate in the interview. Approximately 10 persons were used in the pretest. As a result, a few minor rewording changes were made on the interview schedule.

The interviewers for both the retirement community residents and the community-at-large residents were trained in a two-hour training session by one of the principal interviewers from the Department of Family and Child Development. The session covered methods of

approaching residents, probing for answers, and recording the data.

Data were collected from the retirement community residents between May 1983 and April 1984 by investigators from the Department of Family and Child Development. The investigators interviewed some of the participants in their homes at Warm Hearth and some on the Virginia Tech campus.

The 32 community-at-large residents were interviewed by the investigator of this study during May, June, and July of 1984. Appointment times were scheduled by the investigator at the time of the telephone sample selection. When an elderly person agreed to participate in the study, the investigator visited the resident in his home for the interview. The interviews each took approximately 45 minutes.

One slight adjustment in data collection was made for three of the community-at-large residents. One of these residents could not read and two did not have reading glasses. Therefore, the investigator repeated the written responses in section two of the questionnaire to these residents.

Hypotheses

The null hypotheses of this study were as follows:

Ho1: There is no significant relationship between the decision to move to a retirement community and the following demographic characteristics of movers and non-movers to a retirement community:

- a. age of elderly person
- b. marital status
- c. educational level attained
- d. health status
- e. average annual income
- f. employment status

Ho2: There is no significant relationship between the two groups with respect to their decision to move to a retirement community and the length of residence in the most recent dwelling in an age-integrated community.

Ho3: There is no significant relationship between the decision to move to a retirement community and the following housing characteristics of the most recent age-integrated community dwelling:

- a. type of dwelling
- b. age of dwelling
- c. tenure type

- d. number of rooms in dwelling
- e. number of bedrooms in dwelling
- f. presence of major and minor structural problems

Ho4: There is no significant relationship between the decision to move to a retirement community and dwelling satisfaction.

Ho5: There is no significant relationship between the decision to move to a retirement community and neighborhood satisfaction.

Analysis of the Data

Inferential statistics were used for hypothesis testing. The "Student's t-distribution" (t-test) was used for interval and ratio data (linear responses) such as age, educational level attained, income, age of dwelling, number of rooms, number of bedrooms, and length of residency. The t-test was considered an accurate type of statistical hypothesis testing for the above mentioned data. Use of a small sample ($N < 120$) such as the sample used in this study made the normal distribution curve inappropriate (Hinkle, Wiersma, & Jurs, 1979).

Since the hypotheses being tested involved two samples, the null hypothesis for the two independent sample situation formula, $H_0: u_1 = u_2$,

was used where μ_1 and μ_2 are the population means. Using the data collected in this study, the two assumptions associated with the two sample hypothesis case were met. First, the two samples were randomly selected. Secondly, homogeneity of variance was considered and the appropriate formula was applied. Because the t-test is a parametric test, it can only be applied to interval and ratio data.

For categorical data (nominal and ordinal) such as marital status, health, employment status, type of dwelling, and tenure, the chi square test of independence for the two sample case was used. This non-parametric test of significance compares the observed frequencies of occurrence with the expected (theoretical) frequencies associated with them. The chi square two sample case is analogous to the t-test, but may be used with nominal and ordinal data. The alpha level of 0.05 was used for retention and/or rejection of the null hypotheses in both t-test and chi square analyses.

Descriptive statistics as well as inferential statistics were used to analyze the data in this study. The arithmetic average (mean) was used to describe interval and ratio data found in Chapter 4, Description of Movers and Non-Movers.

CHAPTER IV

DESCRIPTION OF MOVERS AND NON-MOVERS

Examination of the data revealed several differences as well as similarities between the movers (retirement community) and non-movers (community-at-large) samples. In this chapter the two samples are described in terms of demographic characteristics, housing characteristics, and satisfaction levels.

Demographics

Demographically, the two samples were similar in age, self-rated health, and employment status. Differences could be seen in education, income, and marital status (see Table 1).

With respect to age, both groups averaged in the low 70s which is considered young elderly (ages 65-74; Fowles, 1985). The average age for non-movers was slightly younger at 70.0 years. The oldest participant in this group was 91 and the youngest was 62. The retirement community group averaged 71.64 years with ages ranging from 62 to 84.

Respondents rated their own health compared to others their own age as either excellent, good, fair, or poor. In both groups, the most common response was "good" (37.5 percent, community-at-large;

Table 1

Demographic Characteristics of Movers and Non-Movers

| Characteristics | Movers | | Non-Movers | |
|-----------------------------------|-----------|-------------|------------|-------------|
| | N | Adj.% | N | Adj.% |
| Age | | | | |
| 62-69 | 11 | 44.0 | 21 | 65.6 |
| 70-79 | 9 | 36.0 | 6 | 18.8 |
| 80+ | <u>5</u> | <u>20.0</u> | <u>5</u> | <u>15.6</u> |
| | 25 | 100.0 | 32 | 100.0 |
| Marital Status | | | | |
| Single (never married) | 1 | 3.2 | 0 | 0.0 |
| Married | 3 | 9.7 | 18 | 56.3 |
| Widowed, Divorced, Separated | <u>27</u> | <u>87.1</u> | <u>14</u> | <u>43.7</u> |
| | 31 | 100.0 | 32 | 100.0 |
| Educational Level Attained | | | | |
| Elementary | 7 | 22.6 | 8 | 25.8 |
| Some High School | 5 | 16.1 | 2 | 6.4 |
| High School Graduate | 10 | 32.3 | 6 | 19.4 |
| Attended College | 4 | 12.9 | 4 | 12.9 |
| College Graduate | <u>5</u> | <u>16.1</u> | <u>11</u> | <u>35.5</u> |
| | 31 | 100.0 | 31 | 100.0 |
| Self Rated Health | | | | |
| Excellent | 6 | 20.0 | 8 | 25.0 |
| Good | 11 | 36.6 | 12 | 37.5 |
| Fair | 5 | 16.7 | 7 | 21.9 |
| Poor | <u>8</u> | <u>26.7</u> | <u>5</u> | <u>15.6</u> |
| | 30 | 100.0 | 32 | 100.0 |
| Yearly Income | | | | |
| less than \$10,000 | 21 | 80.8 | 14 | 45.2 |
| \$10,000 - \$20,000 | 3 | 11.5 | 7 | 22.6 |
| over \$20,000 | <u>2</u> | <u>7.7</u> | <u>10</u> | <u>32.2</u> |
| | 26 | 100.0 | 31 | 100.0 |
| Employment Status | | | | |
| Employed (Full or Part Time) | 4 | 12.9 | 4 | 12.5 |
| Not Employed | <u>27</u> | <u>87.1</u> | <u>28</u> | <u>87.5</u> |
| | 31 | 100.0 | 32 | 100.0 |

36.7 percent, retirement community). Nearly a quarter of the respondents in each group rated themselves as having excellent health while 15.6 percent of the community-at-large group and 26.7 percent of the retirement community group gave themselves a poor rating. The average health rating in both groups was between fair and good.

The third demographic similarity between the two groups was in employment status. In each group, 87 percent of the respondents were retired. Most of the remaining 13 percent were working part time.

A slight difference between the two samples was in the level of education attained. Although the average number of years of schooling was nearly the same in each group (11.83 years, retirement community; 12.29 years, community-at-large), more than twice as many community-at-large participants were college graduates. The extremes in each group ranged from some primary education (first grade, community-at-large; sixth grade, retirement community) to post graduate degrees.

A more notable difference between the two groups was in their level of income. The majority of movers (80.8 percent) earned less than \$10,000 annually while less than half (45.2 percent) of the non-movers received earnings in that range. Consequently, many of the movers received Section 8 housing subsidies which enabled them to live in the retirement community. Although weighted toward the lower end

of the scale, incomes were more evenly distributed in the community-at-large group which averaged in the \$10,000 to \$15,000 range. In the retirement community group only 7.7 percent earned more than \$20,000 per year as compared to 32.3 percent of the community-at-large participants.

Another notable difference between the two groups was in marital status. While 56.3 percent of the non-movers were married, 90.3 percent of the movers lived in single-person households. Of these 90.3 percent, 64.5 percent were widowed, the remainder were divorced or never married.

Demographic Summary

The average mover to a retirement community was 71.64 years old, not married, and in fair to good health. He/she had completed 11.83 years of schooling, was retired, and received an annual income between \$5,000 and \$10,000. In contrast, the average non-mover in this study was 70 years old, married, and in fair to good health. He/she had completed 12.29 years of schooling, was retired, and received \$10,000 to \$15,000 in annual income.

Housing Characteristics

While a demographic overview showed some similarities between the

two samples, a housing overview showed differences in each category studied (see Table 2).

Of the community-at-large residents interviewed, 87.5 percent, 12.5 percent more than the national average, lived in a home which they owned either outright or with a mortgage. Of those who had moved to the retirement community, only 28.1 percent had been homeowners. The majority (59.4 percent) had rented their dwellings while 12.5 percent received their living arrangements for some form of service or had lived under another type of arrangement.

The most common type of dwelling occupied by the non-movers was the single family detached house (96.9 percent). The previous dwellings of movers were split between single family units (43.8 percent) and apartment units (43.8 percent). The remaining 12.5 percent had occupied mobile homes.

The dwellings occupied by non-movers were older on the average (39.3 years) than the previous dwellings of the movers (26.2 years). In addition, non-movers had resided in these dwellings for a longer period of time. This group averaged 25.5 years of residence in their current dwellings while retirement community residents averaged only 11.45 years in their most recent age-integrated community-at-large residence.

Table 2

Housing and Residency Characteristics of Movers and Non-Movers

| Characteristics | Movers | | Non-Movers | |
|----------------------------|-----------|-------------|------------|-------------|
| | N | Adj. % | N | Adj. % |
| Type of Dwelling | | | | |
| Mobile Home | 4 | 12.5 | 0 | 0.0 |
| Single Family Detached | 14 | 43.8 | 31 | 96.9 |
| Apartment | <u>14</u> | <u>43.8</u> | <u>1</u> | <u>3.1</u> |
| | 32 | 100.0 | 32 | 100.0 |
| Age of Dwelling | | | | |
| 0-19 years | 13 | 48.1 | 8 | 25.8 |
| 20-39 years | 7 | 25.9 | 9 | 29.0 |
| 40-59 years | 6 | 22.2 | 9 | 29.0 |
| 60+ years | <u>1</u> | <u>3.7</u> | <u>5</u> | <u>16.1</u> |
| | 27 | 100.0 | 31 | 100.0 |
| Tenure | | | | |
| Own | 9 | 28.1 | 28 | 87.5 |
| Rent | 19 | 59.4 | 4 | 12.5 |
| Other | <u>4</u> | <u>12.5</u> | <u>0</u> | <u>0.0</u> |
| | 32 | 100.0 | 32 | 100.0 |
| Number of Rooms | | | | |
| 1-3 | 10 | 31.2 | 2 | 6.2 |
| 4-6 | 17 | 53.2 | 14 | 43.8 |
| 7-10 | <u>5</u> | <u>15.6</u> | <u>16</u> | <u>50.0</u> |
| | 32 | 100.0 | 32 | 100.0 |
| Number of Bedrooms | | | | |
| 1-2 | 23 | 71.9 | 8 | 25.0 |
| 3-4 | 8 | 25.0 | 23 | 71.9 |
| 5+ | <u>1</u> | <u>3.1</u> | <u>1</u> | <u>3.1</u> |
| | 32 | 100.0 | 32 | 100.0 |
| Length of Residency | | | | |
| 0-9 | 20 | 64.5 | 7 | 21.9 |
| 10-19 | 5 | 16.1 | 6 | 18.7 |
| 20-29 | 1 | 3.2 | 7 | 21.9 |
| 30-39 | 4 | 12.9 | 7 | 21.9 |
| 40+ | <u>1</u> | <u>3.2</u> | <u>5</u> | <u>15.6</u> |
| | 31 | 100.0 | 32 | 100.0 |

The sizes of the dwellings also varied between the two groups. Non-movers lived in larger houses with an average of 6.66 rooms including 2.97 bedrooms. Movers had lived in dwellings with 4.47 rooms including 2.03 bedrooms.

The respondents each identified major or minor problems with their dwellings (see Table 3). While each group identified 40 minor problems, the movers identified more than seven times as many major problems with their previous dwellings as the non-movers identified with their present dwellings. The movers listed 32 major problems in contrast to four listed by the non-movers.

Although the movers, as a group, identified a seemingly large number of major housing problems, these same problems were listed by just 18.7 percent of the group. In fact, two of the movers each identified 11 major problems. In contrast, 50 percent of retirement community residents claimed to have had no problems while 18.7 percent claimed to have had only one to three minor problems. In the community-at-large, four residents each identified one major problem while 40.6 percent registered no problems and 43.7 percent only one to three problems. None of the major housing problems were identified by homeowners in the retirement community group while three of the four major problems identified by the community-at-large group were named

Table 3

Perceived Number of Major and Minor Problems in the Most Recent Age-Integrated Community Dwelling

| Problem | Movers | | Non-Movers | |
|---|----------|----------|------------|----------|
| | Major | Minor | Major | Minor |
| Condition of plumbing | 3 | 6 | 2 | 5 |
| Cracks in walls or ceiling | 3 | 2 | 1 | 6 |
| Condition of heating system | 5 | 4 | 0 | 0 |
| Leaks in the roof | 1 | 4 | 0 | 6 |
| Decay of porch or outside steps | 3 | 2 | 1 | 2 |
| Peeling paint on outside walls | 1 | 3 | 0 | 5 |
| Missing or torn screens | 3 | 0 | 0 | 3 |
| Holes or badly worn places in floor | 2 | 2 | 0 | 2 |
| Peeling paint on inside walls | 1 | 2 | 0 | 3 |
| Broken or missing window panes | 2 | 2 | 0 | 1 |
| Quality of the water | 1 | 4 | 0 | 1 |
| Decay of door or window frames | 1 | 2 | 0 | 2 |
| Uneven floors | 2 | 0 | 0 | 2 |
| Broken or missing materials on outside wall or foundation | 1 | 2 | 0 | 2 |
| Condition of electrical system | 1 | 2 | 0 | 0 |
| Condition of cooling system | <u>1</u> | <u>1</u> | <u>0</u> | <u>0</u> |
| | 31 | 38 | 4 | 40 |

by homeowners.

The most frequent complaints of the retirement community group concerning their previous residences were the quality of heating (five major/four minor), and the quality of plumbing (three major/six minor) followed by decay of porch or steps, cracks in walls or ceiling, leaks in roof, and quality of water. The complaints of non-movers were most prevalent in the categories of plumbing quality (two major/five minor), cracks in walls or ceiling (one major/six minor), and leaks in roof (six minor).

The presence of plumbing in each residence was also noted. All of the previous dwellings of the movers had hot and cold running water in the kitchens and bathrooms. In contrast, 100 percent of the non-movers had hot and cold running water in their kitchens, but only 97 percent had the same in their bathrooms. One respondent (three percent), an 80 year old single renter, did not have an indoor bathroom. She used an outhouse approximately 45 feet from the house. Even so, this respondent expressed no dissatisfaction with her dwelling.

Housing Summary

On the average, movers to the retirement community had rented their most recent community-at-large dwelling which was either a

single family detached house or apartment unit. The average dwelling age was 26.2 years and these residents had resided there an average of 11.45 years. Each dwelling consisted of 4.47 rooms including 2.03 bedrooms. While a small number of residents (18.7%) complained of many problems with the condition of their former dwellings, the majority had either no problems or one to three minor problems.

The average community-at-large resident owned a single family detached house which was 39.3 years old, and contained 6.66 rooms including 2.97 bedrooms. The resident had lived in this house for an average of 25.47 years and indicated either no problems or one to three minor problems with the condition of the house.

Housing and Neighborhood Satisfaction

Each of the participants was asked to rate his/her most recent age-integrated residence in terms of 18 dwelling and neighborhood related items (see Tables 4, 5, 6, and 7). A six-point satisfaction scale was used which ranged from very satisfied to very dissatisfied (see Appendix C). Nine of the items were neighborhood related and nine items were related to the individuals' dwellings or former dwellings. Participants were then asked to give these dwellings an overall rating based on the six-point scale.

Table 4

Neighborhood Satisfaction Responses of the Most Recent Age-Integrated
Community Residence of the Sample of Movers

| Characteristic | N | Percent of Respondents at Each Satisfaction Level | | | | | |
|---|----|--|---|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Safety of surrounding area | 32 | 9 | 9 | 9 | 3 | 28 | 41 |
| Privacy | 32 | 3 | 3 | 3 | 6 | 19 | 66 |
| Quality of police protection | 32 | 6 | 6 | 3 | 16 | 41 | 28 |
| Quality of fire protection | 30 | 17 | 7 | 0 | 7 | 17 | 53 |
| Water supply | 31 | 7 | 0 | 10 | 3 | 19 | 61 |
| Sewage disposal | 30 | 3 | 7 | 0 | 0 | 20 | 70 |
| Quality of health and medical services in the area | 31 | 10 | 0 | 6 | 10 | 22 | 52 |
| Distance from shopping and other services | 31 | 16 | 3 | 3 | 3 | 26 | 48 |
| Neighbors and neighborhood | 31 | 6 | 6 | 0 | 13 | 16 | 58 |

Satisfaction Level

1 = very dissatisfied

4 = somewhat satisfied

2 = dissatisfied

5 = satisfied

3 = somewhat dissatisfied

6 = very satisfied

Note: Percentages may not equal 100 because of rounding.

Table 5

Dwelling Satisfaction Responses of the Most Recent Age-Integrated
Community Residence of the Sample of Movers

| Characteristic | N | Percent of Respondents at Each Satisfaction Level | | | | | |
|--|----|--|----|----|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Size of your home | 32 | 0 | 0 | 13 | 6 | 28 | 53 |
| Design of your home | 32 | 9 | 0 | 0 | 6 | 28 | 56 |
| Amount of maintenance required | 31 | 10 | 3 | 3 | 6 | 29 | 48 |
| Amount of inside storage space | 32 | 6 | 3 | 13 | 9 | 22 | 47 |
| The way the inside of the home looks | 32 | 0 | 6 | 6 | 3 | 28 | 56 |
| The way the outside of the home looks | 31 | 13 | 3 | 3 | 0 | 29 | 52 |
| Size of outdoor living space | 31 | 3 | 3 | 16 | 6 | 16 | 55 |
| Heating system | 32 | 3 | 6 | 3 | 9 | 25 | 53 |
| Total monthly housing costs including utilities | 31 | 3 | 10 | 13 | 10 | 19 | 45 |

Satisfaction Level

1 = very dissatisfied

4 = somewhat satisfied

2 = dissatisfied

5 = satisfied

3 = somewhat dissatisfied

6 = very satisfied

Note: Percentages may not equal 100 because of rounding.

Table 6

Neighborhood Satisfaction Responses of the Sample of Non-Movers

| Characteristic | N | Percent of Respondents at Each Satisfaction Level | | | | | |
|--|----|---|---|----|---|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Safety of surrounding area | 31 | 0 | 3 | 10 | 6 | 39 | 42 |
| Privacy | 31 | 0 | 0 | 0 | 3 | 48 | 48 |
| Quality of police protection | 31 | 0 | 0 | 0 | 0 | 90 | 10 |
| Quality of fire protection | 31 | 0 | 3 | 0 | 3 | 71 | 23 |
| Water supply | 31 | 0 | 0 | 3 | 6 | 71 | 19 |
| Sewage disposal | 31 | 3 | 3 | 3 | 3 | 68 | 19 |
| Quality of health and medical services in the area | 30 | 0 | 0 | 0 | 0 | 83 | 17 |
| Distance from shopping and other services | 31 | 0 | 3 | 3 | 0 | 74 | 19 |
| Neighbors and neighborhood | 31 | 0 | 0 | 0 | 6 | 55 | 39 |

Satisfaction Level

1 = very dissatisfied

4 = somewhat satisfied

2 = dissatisfied

5 = satisfied

3 = somewhat dissatisfied

6 = very satisfied

Note: Percentages may not equal 100 because of rounding.

Table 7

Dwelling Satisfaction Responses of the Sample of Non-Movers

| Characteristic | N | Percent of Respondents at Each Satisfaction Level | | | | | |
|---|----|---|----|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Size of your home | 31 | 0 | 3 | 0 | 10 | 68 | 19 |
| Design of your home | 31 | 0 | 0 | 6 | 6 | 65 | 23 |
| Amount of maintenance required | 31 | 0 | 3 | 6 | 6 | 77 | 6 |
| Amount of inside storage space | 31 | 0 | 10 | 3 | 6 | 68 | 10 |
| The way the inside of the home looks | 31 | 0 | 3 | 6 | 6 | 71 | 6 |
| The way the outside of the home looks | 31 | 0 | 3 | 0 | 6 | 81 | 10 |
| Size of outdoor living space | 31 | 0 | 0 | 3 | 3 | 77 | 16 |
| Heating system | 31 | 0 | 0 | 6 | 0 | 68 | 26 |
| Total monthly housing costs including utilities | 31 | 0 | 10 | 0 | 13 | 74 | 3 |

Satisfaction Level

1 = very dissatisfied

2 = dissatisfied

3 = somewhat dissatisfied

4 = somewhat satisfied

5 = satisfied

6 = very satisfied

Note: Percentages may not equal 100 because of rounding.

Eighty-four percent of the movers expressed some form of dissatisfaction (very dissatisfied, dissatisfied, or somewhat dissatisfied) with at least one of the 18 items listed (see Tables 4, 5, and 8). Twenty-five percent expressed dissatisfaction in only one category while 21.9 percent expressed major dissatisfaction (very dissatisfied) in three or more categories.

In contrast, 48.4 percent of the non-movers expressed some form of dissatisfaction in at least one category (see Tables 6, 7, and 8). Nineteen percent expressed dissatisfaction in only one category. Only one respondent registered major dissatisfaction and did so in only one category.

Neighborhood Satisfaction

Of the retirement community participants, 59.4 percent expressed some form of dissatisfaction with at least one characteristic of their former neighborhoods as compared with 29 percent of the community-at-large participants. Although many participants in both samples expressed some form of dissatisfaction with a dwelling characteristic as well, 21.9 percent of the movers and 12.9 percent of the non-movers expressed dissatisfaction only in the neighborhood categories.

The neighborhood related items fell into two categories, location and quality of local services. Four items related to the location and

Table 8

Dissatisfaction of Movers and Non-Movers With Regard to Their
Most Recent Age-Integrated Community Dwellings and Neighborhoods

| Level of Dissatisfaction | Movers | | Non-Movers | |
|---|--------|--------|------------|--------|
| | N | Adj. % | N | Adj. % |
| Overall | | | | |
| Dissatisfaction in only 1 category | 8 | 25 | 6 | 19 |
| Dissatisfaction in 1+ categories | 27 | 84 | 15 | 48 |
| Major dissatisfaction in 3+ categories | 7 | 22 | 0 | 0 |
| No dissatisfaction | 5 | 16 | 16 | 52 |
| Neighborhood | | | | |
| Dissatisfaction in 1+ categories | 19 | 59 | 9 | 29 |
| Dissatisfaction in a location category | 14 | 44 | 6 | 19 |
| Dissatisfaction in a service category | 15 | 47 | 5 | 16 |
| No dissatisfaction | 13 | 41 | 22 | 71 |
| Dwelling | | | | |
| Dissatisfaction in 1+ categories | 20 | 62 | 11 | 35 |
| No dissatisfaction | 12 | 38 | 20 | 65 |

five items related to the quality of local services. Forty-four to 47 percent of the movers showed dissatisfaction in each of these two categories respectively while only 19 and 16 percent of the non-movers showed the same. The one neighborhood item which elicited the most dissatisfaction for both groups was "safety of the surrounding area" (28 percent, retirement community; 13 percent, community-at-large).

Dwelling Satisfaction

In the nine dwelling related categories, some form of dissatisfaction with the most recent age-integrated residence was expressed by 62.5 percent of the movers and 35.5 percent of the non-movers. The two items in this section which received the greatest number of dissatisfied responses for both groups were "amount of inside storage space" and "the total monthly housing costs, including utilities."

Overall Housing Satisfaction

Although the majority of the movers and over a third of the non-movers expressed dissatisfaction in a dwelling related category, the majority of both groups gave their housing an overall rating of satisfactory or very satisfactory (see Table 9). In fact, no respondent of the community-at-large group gave an overall rating in the dissatisfied range as compared to 21.8 percent of the retirement community

Table 9

Overall Dwelling Satisfaction Ratings of the Most Recent Age-Integrated Residence

| Satisfaction Level | Movers | | Non-Movers | |
|-----------------------|----------|------------|------------|------------|
| | N | Adj.% | N | Adj.% |
| Very Satisfied | 14 | 43.8 | 15 | 48.4 |
| Satisfied | 7 | 21.9 | 15 | 48.4 |
| Somewhat Satisfied | 4 | 12.5 | 1 | 3.2 |
| Somewhat Dissatisfied | 3 | 9.4 | 0 | 0.0 |
| Dissatisfied | 2 | 6.2 | 0 | 0.0 |
| Very Dissatisfied | <u>2</u> | <u>6.2</u> | <u>0</u> | <u>0.0</u> |
| | 32 | 100.0 | 31 | 100.0 |

group.

Satisfaction Summary

The majority of movers expressed some form of dissatisfaction in two or more dwelling and/or neighborhood related categories. Overall, however, movers gave their previous housing satisfactory ratings. The majority of non-movers expressed satisfaction with their neighborhood and dwellings. Overall, 97 percent of these respondents were satisfied or very satisfied with their housing.

Mobility Intentions

Residents of the community-at-large were asked if they would like to move from their present housing (see Appendix C). Eighty-two percent responded that they would not like to move and 14 percent replied that they would like to move. Four percent were unsure. Of those who desired to move, only one was planning to move and none were planning to move to a retirement community.

The community-at-large residents who desired to move stated four reasons for wanting to do so. They were: dwelling the wrong size, rising burden of home maintenance, change in family situation, and present housing costs too high.

The community-at-large respondents who did not desire to move

cited several reasons for wanting to remain in their present residences (see Table 10). The reasons most often cited were: respondent likes the location, convenience, sentimental reasons, and the house meets the needs of the family.

The majority of reasons cited for not desiring to move were in some way related to the respondents' satisfaction with either housing or neighborhood characteristics. In view of the literature on mobility and satisfaction, it is not surprising that most of these respondents did not desire to move.

Table 10

Reasons Cited by Non-Movers for Desiring to Remain in Their
Present Dwellings

| Reason | Number of Responses |
|-------------------------------------|---------------------|
| Like location | 12 |
| Convenience/ "Hate to move" | 12 |
| Sentimental reasons/ "It's home" | 9 |
| House meets the needs of the family | 8 |
| Want to remain close to relatives | 5 |
| Very satisfied with dwelling | 4 |
| Economic reasons | 4 |
| Dwelling is comfortable | 2 |
| Dwelling feels secure | 1 |
| Dwelling is owned without debt | 1 |

Note: Many respondents gave two or more reasons for not desiring to move.

CHAPTER V

STATISTICAL ANALYSIS AND DISCUSSION

When 32 movers and 32 non-movers to a retirement community were interviewed, significant differences between the two samples were found in two of the six demographic characteristics and in each of the seven housing and residency characteristics examined. Thus, nine of the 13 parts of the first three hypotheses were rejected. Three satisfaction levels were tested, neighborhood satisfaction, dwelling satisfaction, and overall housing satisfaction. Relationships were shown to exist between two of these satisfaction levels and the decision to move to a retirement community.

Examination of each hypothesis, as outlined in Chapter III Methodology, including the statistical analysis is reported in this chapter. A discussion of the findings follows each statistical analysis.

Demographic Characteristics

Hypothesis 1

The relationships between each of six demographic characteristics and the decision to move to a retirement community were examined. Two of these characteristics, marital status (1b) and income (1e), were

shown to be significantly related to the decision to move to a retirement community.

Marital status was examined using a chi square (X^2) distribution (see Table 11). The four responses in the distribution were married, widowed, divorced, and single (never married). The probability was less than .001 that the observed sample variance could be due to sampling fluctuation ($X^2 = 16.3$; d.f.=2; $P < .001$). In addition, the Phi measure of association was moderately high at the 0.50 level. It was concluded, therefore, that the decision to move to a retirement community is associated with one's marital status. Those who were single (divorced, widowed, or never married) were more likely to move to the retirement community while those who were married were more likely to remain in the community-at-large.

The finding regarding marital status has not been shown elsewhere in the literature on retirement community dwellers. In fact, Bonwit (1977) found that the majority (82 percent) of retirement community dwellers in her two samples were married. In terms of mobility in general, one national study of low-income elderly found that the unmarried were more likely to experience mobility (but not necessarily to a retirement community) (Ferraro, 1981). The findings of this study were supported by Ferraro since the sample of movers tended to be both

Table 11

Chi Square Frequencies of Marital Status of the Movers and Non-Movers

| Marital Status | Movers | | Non-Movers | | Total | |
|------------------------|--------|------|------------|------|-------|-------|
| | N | % | N | % | N | % |
| Married | 3 | 4.8 | 18 | 28.5 | 21 | 33.3 |
| Widowed | 20 | 31.7 | 12 | 19.1 | 32 | 50.8 |
| Divorced/Separated | 7 | 11.1 | 2 | 3.2 | 9 | 14.3 |
| Single (never married) | 1 | 1.6 | 0 | 0.0 | 1 | 1.6 |
| Total | 31 | 49.2 | 32 | 50.8 | 63 | 100.0 |

$\chi^2 = 16.3$; d.f.=2; $P = .001$; $\phi = .511$

unmarried and lower income elderly. One factor which often precipitates mobility is a change in family composition. Had many of the sample of movers recently lost a spouse or other companion, their ensuing mobility would not be surprising.

The t-distribution was used to examine annual income (see Table 12). Mean annual income of movers was extrapolated to be \$5,400 while the mean income of non-movers was extrapolated to be \$12,600. The computed test statistic exceeded the critical value for the non-directional alternative at the .01 level of significance ($t=2.797$; $df=53$; $P<0.01$). Therefore, the null hypothesis was rejected. One's annual income can be associated with the decision to move to a retirement community since annual income levels of movers were significantly lower than those of the non-movers.

Apparently, a greater number of lower income elderly moved to the retirement community due to the availability of housing subsidies for the majority of the units there. McAuley and Nutty (1982) found that one of the most often cited variables affecting residential preference of the elderly was housing costs. If the cost of living in the retirement community including monthly maintenance and/or activity fees is higher than the average cost of maintaining a community-at-large residence, then moving to the retirement community is only

Table 12

Means, Mean Differences, and Calculated Levels of Probability of
Demographic Characteristics Tested By T-Test Analysis

| Characteristic | Mean | | Difference Between the Means | Calculated Level of Probability |
|-------------------------------|---------|------------|------------------------------------|---------------------------------------|
| | Movers | Non-Movers | | |
| Age | 71.6 | 70.0 | 1.6 | .377 |
| Educational Level Attained | 11.8 | 12.3 | 0.5 | .672 |
| Income | \$5,400 | \$12,600 | \$7,200 | .007* |

* $P < .05$

viable for those with above average incomes or assets. One previous study found income of movers to retirement communities to be higher than that of non-movers (Gottschalk, 1972).

In this study, however, the majority of movers received Section 8 housing assistance which was available in the larger of the community's two sections. Retirement community living was, therefore, available to those with lower than average incomes as well as to those with above average incomes. It can be concluded then that those with lower incomes are inclined to move to a retirement community if and when it becomes a viable alternative for them.

The other four demographic characteristics, age of respondent (1a), educational level attained (1c), health status (1d), and employment status (1g), were shown not to be significantly related to the decision to move to a retirement community at the .05 level of significance. For age (1a) and educational level attained (1c), t-test analysis was used. In these cases, the observed difference in sample means was not sufficient to warrant rejection of the null hypothesis.

Chi square analysis was used to examine health status (1d) and employment status (1e). In these cases, the probability was greater than 0.05 that the observed sample variance would have occurred by

chance if the null hypotheses were true (Health status $\chi^2=1.29$; $df=3$; $P=.731$; $\phi=.144$; Employment status $\chi^2=.002$; $df=1$; $P=.962$; $Q=.006$).

Previous studies have shown that retirement community dwellers had attained higher levels of education than elderly in general (Bonwit, 1977; Bultena & Wood, 1969). This finding was unsupported by this study.

Another discrepancy can be seen between the literature and the findings of this study with regard to health status. Several studies on retirement community dwellers in the larger, subdivision type of retirement communities have found these elderly to be in good health, and, in many cases, in better health than the elderly in general (Bultena & Wood, 1969; Sherman, et.al, 1968; Gottschalk, 1972). Although the elderly in this retirement community reported an average health status of between fair and good, their health was no better than that of community-at-large residents.

The findings on employment status were comparable to 1984 Census data regarding the elderly population in general. Both movers and non-movers in this study reported 13 percent in the labor force which is slightly higher than the national percentage of 11 percent (Fowles, 1985).

Housing and Residency Characteristics

Hypothesis 2

The relationship between the decision to move to a retirement community and the length of residence in the most recent age-integrated community dwelling was examined using t-test analysis (see Table 13). Mean length of residence of non-movers in their present homes was 25.5 years while mean length of residence of movers in their previous homes was 11.4 years ($t=3.79$; $d.f.=54$; $P<.001$). Therefore, the null hypothesis was rejected. It was concluded that length of residence in most recent age-integrated community dwelling is related to the decision to move to a retirement community. Those who had lived longer in their most recent community-at-large dwellings were less likely to move to the retirement community.

This finding coincided with mobility research in which it has been found that mobility, in general, is less likely to occur in households which had remained in the same dwelling for a long period of time. As discussed in an earlier section of this study (mobility intentions), many of the community-at-large residents cited sentimental reasons for not desiring to move. The longer they had resided in the dwelling, the more inclined they were to stay.

Table 13

Means, Mean Differences, and Calculated Levels of Probability of
Housing and Residency Characteristics

| Characteristic of Most Recent Com- munity-at-Large Dwelling | Mean | | Difference Between the Means | Calculated Level of Probability |
|--|--------|------------|------------------------------------|---------------------------------------|
| | Movers | Non-Movers | | |
| Length of Residence | 11.4 | 25.5 | 14.1 | .0004* |
| Dwelling Age | 26.2 | 39.3 | 13.1 | .021* |
| Number of Rooms | 4.5 | 6.7 | 2.2 | .0001* |
| Number of Bedrooms | 2.0 | 3.0 | 1.0 | .0005* |
| Weighted Number of Problems | 3.3 | 1.6 | 1.7 | .01* |

* $P < .05$

Hypothesis 3

Both chi square and t-test distributions were used to examine the relationships between the decision to move to a retirement community and seven housing characteristics of the respondents' most recent age-integrated community dwellings. In each of the seven cases, a significant difference was shown and the null hypothesis was rejected.

The type of dwelling (3a) was examined using chi square analysis (see Table 14). The three responses given by respondents were single family detached houses, apartment units, and mobile homes. The movers were less likely than non-movers to have lived in single family detached dwellings ($X^2=21.7$; d.f.=2; $P<.001$). The phi level of association was high at 0.582.

Chi square analysis was also used to examine tenure (3c) (see Table 15). Of the three types of tenure mentioned by respondents (own, rent, and receive for services), movers were significantly less likely than non-movers to have owned their most recent community-at-large residence ($X^2=23.5$; d.f.=2; $P<.001$). Again, the phi level of association was high at 0.606.

The t-distribution was used to test dwelling age (3b), number of rooms (3d), number of bedrooms (3e), and perceived number of problems in the home (3g) (see Table 13). The difference in dwelling age

Table 14

Chi Square Frequencies and Percentages of The Most Recent Age-Integrated Community-at-Large Dwelling Types

| Dwelling Type | Movers | | Non-Movers | | Total | |
|------------------------|--------|------|------------|------|-------|-------|
| | N | % | N | % | N | % |
| Mobile Home | 4 | 6.2 | 0 | 0.0 | 4 | 6.2 |
| Single Family Detached | 14 | 21.9 | 31 | 48.4 | 45 | 70.3 |
| Apartment | 14 | 21.9 | 1 | 1.6 | 15 | 23.5 |
| Total | 32 | 50.0 | 32 | 50.0 | 64 | 100.0 |

$\chi^2 = 21.7$; d.f.=2; $P = .001$; $\phi = .582$

Table 15

Chi Square Frequencies of the Form of Tenure of the Most Recent
Age-Integrated Community-at-Large Residence

| Form of Tenure | Movers | | Non-Movers | | Total | |
|----------------|--------|------|------------|------|-------|-------|
| | N | % | N | % | N | % |
| Own | 9 | 14.1 | 28 | 43.8 | 37 | 57.8 |
| Rent | 19 | 29.7 | 4 | 6.2 | 23 | 35.9 |
| Other | 4 | 6.2 | 0 | 0.0 | 4 | 6.2 |
| Total | 32 | 50.0 | 32 | 50.0 | 64 | 100.0 |

$\chi^2 = 23.5$; d.f.=2; $P = .001$; $\phi = .606$

between the two groups was significant at the .02 level ($t=2.38$; $d.f.=54$). Non-movers were more likely than the movers to have lived in older dwellings. The older age of the non-movers' dwellings was not unexpected in view of the finding that the community-at-large sample had occupied their homes for longer periods of time (see Hypothesis 2).

The differences between the two samples in both the number of rooms and number of bedrooms were significant at the .001 level. The previous dwellings of movers had an average of 4.5 rooms and 2.0 bedrooms while the dwellings of non-movers had an average of 6.7 rooms and 3.0 bedrooms. Thus, the retirement community sample was more likely to have lived in homes with fewer rooms and fewer bedrooms.

The shorter length of residency of the sample of movers in their most recent age-integrated community dwellings suggests that many in this sample had moved at least once since they became "empty nesters". Goodman (1974) concluded that households often move in response to a family life cycle change and/or a change in household size. Thus, the retirement community sample may have adjusted their previous housing size downward to fit a change in family composition or life cycle stage.

The number of perceived problems in the most recent age-

integrated community dwelling (3f) was examined using a weighted scale and t-distribution analysis. Those characteristics which respondents considered to be major problems were assigned a value of two. Those which respondents considered to be minor problems were given a value of one. The weighted number of problems listed by respondents in each sample were then applied to the t-distribution formula.

The results were significant at the .01 level and, therefore, the null hypothesis was rejected. Using the weighted scale, movers averaged 3.3 housing problems and the non-movers averaged 1.6 housing problems ($t=3.38$; $d.f.=38$). It was concluded that those who had moved to the retirement community had experienced more problems with their previous dwellings than those who remained living in the community-at-large. The fact that those who had moved to a retirement community expressed a greater number of problems, specifically a greater number of major problems, was not surprising in view of literature in the fields of housing, mobility, and marketing research.

Shanas (1969) found that the elderly generally had dwellings in poorer condition than other age groups in the community-at-large. In subsequent studies, mobility has been linked with the condition of the dwelling (Morris & Winter, 1978). One conclusion indicated that the rate of mobility was higher for households living in dwellings in a

poorer state of repair. Thus, those living in dwellings with more problems would be more inclined to move.

It is possible that the group of movers perceived a greater number of problems in their previous homes than actually existed. Conversely, homeowners may not have perceived problems where, by normative standards, problems actually existed. For example, one participant in the community-at-large sample acknowledged only one problem (a minor problem), although the investigator observed several of the problems listed in the questionnaire. Likewise, the movers may have exaggerated the number and magnitude of problems as a way of justifying the move. In a study of mobility factors, McHugh (1985) attributed negative attitudes of previous dwellings in part to post facto rationalization. Assael (1981) also described consumer justification as a component of consumer decision making and evaluation behavior.

Finally, the literature has shown that renters are more inclined to openly acknowledge negative aspects of their housing than homeowners (Morris & Winter, 1978). Since there were a greater number of renters among the group who moved to the retirement community, identification of a greater number and magnitude of problems could be expected.

Satisfaction

Specific satisfaction responses were divided into three groups, neighborhood satisfaction, dwelling satisfaction, and overall satisfaction. Significant differences were found between the two groups in the neighborhood and overall satisfaction categories, but not in the dwelling satisfaction category (see Table 16).

The respondents first ranked each of the 18 characteristics (nine dwelling and nine neighborhood) for satisfaction. Then each characteristic was rated according to the amount of importance placed upon it by the respondent (see Appendix C). These responses were applied to a housing satisfaction index (Goss, 1982, adapted from Morris, 1976) (see Appendix D). This index accounted for the level of importance placed on each characteristic as well as the level of satisfaction.

The matrix scores ranged from zero to 17. If a respondent rated a characteristic as very important yet very dissatisfactory, the assigned matrix score was zero. At the other end of the matrix, if a respondent rated a characteristic as very important and very satisfactory, the assigned score was 17.

Using the satisfaction/importance matrix, the possible range of scores for the nine dwelling and nine neighborhood characteristics was

Table 16

Weighted Means, Mean Differences, and Calculated Levels of
Probability of Dwelling, Neighborhood, and Overall Satisfaction
Levels

| Characteristic | Weighted Mean | | Difference Between the Means | Calculated Level of Probability |
|---------------------------|------------------|------------|------------------------------------|---------------------------------------|
| | Movers | Non-Movers | | |
| Dwelling Satisfaction | 122 | 126 | 4 | .489 |
| Neighborhood Satisfaction | 120 | 135 | 15 | .008* |
| Overall Satisfaction | 4.69 | 5.45 | .76 | .046* |

* $P < .05$

zero to 153 each. The overall satisfaction ratings were used without the index because it was assumed that one's overall housing situation is important to everyone. Therefore, the possible range of satisfaction scores for the overall housing satisfaction category was one to six (very unsatisfactory to very satisfactory).

Hypothesis 4

At the 0.05 level, no significant difference was found between the two groups in satisfaction of their most recent age-integrated community dwelling ($t=0.70$; $d.f.=50$; $P=0.49$). Therefore, the null hypothesis was retained.

Each of the nine dwelling related characteristics was tested individually for differences between the responses of the two samples. None were found to show a significant difference at the 0.05 level. These findings were unexpected after considering the difference found in the number of problems recorded by the two groups. Since the movers listed a greater number of problems, one might expect these residents to have been more dissatisfied with their previous dwellings.

Hypothesis 5

A significant difference was seen between the two groups in neighborhood satisfaction at the 0.01 level ($t=2.75$; $d.f.=37$). In this case the null hypothesis was rejected. Those who had moved to

the retirement community were less satisfied with their previous community-at-large neighborhoods.

Of the nine individual neighborhood characteristics examined, four differences between the two samples were found at the 0.05 level. They were: (c) quality of police protection, (d) quality of fire protection, (g) quality of health and medical services in the area, and (i) neighbors and neighborhood. In each case, movers were less satisfied with these characteristics of their previous neighborhoods.

Each respondent gave his/her most recent age-integrated community residence an overall satisfaction rating. A significant difference was found between these ratings at the 0.05 level ($t = 2.92$; d.f.=40). Again, the movers expressed a higher level of dissatisfaction with their previous residences.

Mobility literature supports these findings. Those persons who are more dissatisfied with their residences tend to move in an effort to find a more satisfactory place to live. The literature has shown also that elderly homeowners more than any other group are satisfied with their residences. In this study, the sample of non-movers contained a significantly greater percentage of homeowners than the sample of movers.

Summary

Significant differences were shown to exist between the two groups (movers and non-movers to a retirement community) in the following categories:

Demographic - marital status, income.

Housing and residency - length of residence in most recent age-integrated community-at-large residence, dwelling type, dwelling age, tenure, number of rooms, number of bedrooms, and perceived number of problems of respondents' most recent age-integrated community residences.

Satisfaction - neighborhood and overall residency satisfaction.

CHAPTER VI

SUMMARY, CONCLUSIONS, IMPLICATIONS

AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

Older, mainly retired individuals, often referred to as the elderly, are a growing yet diverse group of people with varied housing needs and desires. Retirement communities are one alternative to remaining in the community-at-large in which many elderly have chosen to establish residency.

The major objectives of this study were to determine whether or not significant differences existed between elderly residents of the community-at-large (non-movers) and elderly who had moved to a retirement community (movers) in the areas of demographic characteristics, housing/residential characteristics, and satisfaction levels of the most recent age-integrated community-at-large residence.

The sample used for this study consisted of 32 elderly residents of the community-at-large (Montgomery County and the City of Radford, Virginia) and 32 residents of a retirement community. Community-at-large respondents were selected using a random drawing of residents from the telephone directory. The retirement community respondents

were residents of the Warm Hearth Retirement Village (Blacksburg, VA).

The test instrument used was an interview schedule consisting of four sections: housing and neighborhood characteristics, residential satisfaction, mobility intentions, and demographic characteristics of the respondent.

The interview was administered by the investigator to the community-at-large residents and by investigators in the Department of Family/Child Development at Virginia Tech to the retirement community respondents either in their homes or on the Virginia Tech campus. Data from the retirement community group were collected from May 1983 to April 1984. Data from the community-at-large group were collected from May to July 1984.

Upon examination of the data using t-test and chi square analyses, several significant differences were found to exist between the two groups. Demographically, the two samples differed in marital status and income. With regard to the most recent age-integrated community dwelling, the two groups differed significantly in terms of length of residence, dwelling age, dwelling type, tenure, number of rooms and bedrooms in dwelling, and prevalence of major and minor structural problems. Finally, significant differences were found in the areas of neighborhood and overall housing satisfaction.

Conclusions

Based on this study, the following conclusions about movers and non-movers to a retirement community seem justified:

1. Movers to the retirement community where housing subsidies are available are more likely than non-movers to be single (widowed, divorced or never married) and to have lower incomes.
2. The length of residence in the most recent age-integrated community-at-large residence is more likely to be shorter for movers to the retirement community than for non-movers.
3. Movers to the retirement community are more likely than non-movers to have lived most previously in rented apartment units or mobile homes, whereas non-movers are more likely to own and live in a single family detached dwelling.
4. The dwelling of the most recent community-at-large residence of movers to the retirement community is more likely to have fewer rooms and bedrooms than the dwellings of non-movers.
5. A greater number of perceived problems are more likely to exist in the most recent age-integrated community dwellings of movers.
6. Movers to the retirement community are more likely than non-

movers to have been dissatisfied with their most recent age-integrated community-at-large neighborhoods as well as with their overall housing situation.

Limitations

Since this study was limited to a sample which included only residents of Montgomery County and the City of Radford, Virginia, who had telephones and who were over age 62, the conclusions drawn from these findings cannot necessarily be generalized to apply to 1) movers and non-movers to types of retirement communities which differ from the one used in this study (i.e. retirement communities which do not provide some subsidized housing); 2) movers and non-movers in other geographic locations (i.e. other regions of the U.S., foreign countries); 3) movers and non-movers to retirement communities in areas of greater or lesser population (i.e. metropolitan areas); 4) movers and non-movers who are younger than age 62.

Implications

It was noted that the group of people referred to as elderly are not a homogeneous group. Individuals in the elderly age group have varied needs and desires in terms of housing. While some prefer age-integrated communities, others choose age-segregated

communities such as the retirement community.

This study found that the sample of movers to the retirement community were significantly different from those who remained in the community-at-large in several aspects of housing, demographic and satisfaction characteristics. Thus, planners and developers who are planning a retirement community which is of the same nature as the Warm Hearth Retirement Village (WHRV) can expect to target elderly in these categories: single, lower income, renters, those living in smaller units and apartments as well as single family detached units, those living in housing with a greater number of problems, and those who have been more recently transient.

When the demographic findings of this study were compared to the findings of other studies on the composition of retirement communities, variations were observed in several categories (age, marital status, income, education, health). Thus, one can also conclude that neither do all movers to retirement communities constitute a homogeneous group. WHRV offered subsidized housing units (garden apartments) as well as unsubsidized single-family attached units (townhouse/villas). While some recreational facilities were offered, the more active (and expensive) sports such as golfing and swimming were not offered. The composition of movers to retirement communities

with characteristics similar to those at WHRV would probably differ from the target group of other types of retirement communities.

Therefore, policies and planning involving the movers to retirement communities cannot necessarily be applied to all retirement communities.

Finally, the findings in this study related to satisfaction and mobility are important factors to consider when searching for solutions to problems in the field of housing for the elderly. Elderly in the community-at-large were more likely to be homeowners who are satisfied with their homes. The literature supports the association between elderly, home ownership, satisfaction, and a reluctance to move. Indeed, the majority of community-at-large respondents in this study were satisfied homeowners who did not desire to move due to their satisfaction with and attachments to their homes.

These findings would have been beneficial to the developers of the recently proposed housing incentive subsidy for the elderly which appeared in The Public Interest (Welfeld, 1985). This program seeks to provide more housing for younger families by moving the elderly out of community-at-large residences and into age-segregated condominium developments. The assumptions were made that elderly homeowners would be better off moving to smaller units with less maintenance and that

with an economic incentive (a housing subsidy) elderly homeowners will voluntarily sell their homes to younger families and move to these condominiums. The findings of this study indicate that elderly homeowners may not be willing to move (voluntarily) even with the subsidy incentive.

Recommendations for Further Research

The following research on movers and non-movers to retirement communities is recommended:

1. Research in other regions of the U.S. using samples from several types of retirement communities.
2. Research in more populated areas such as Boston, Los Angeles, Washington, D.C., using samples from several types of retirement communities.
3. Research on movers and non-movers to retirement communities including also those in the 55-62 age range.
4. Comparative research of movers and non-movers to two or more different types of retirement communities.
5. Comparative research of movers and non-movers to retirement communities in both urban and rural areas.

Studies such as these would be beneficial to planners who are interested in a nationwide overview of movers and non-movers to retirement communities. In addition, findings from these studies would help developers determine which types of retirement communities would be most beneficial in different areas of the country. The more effectively potential movers to retirement communities can be targeted, the more effective retirement community housing programs will become.

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Appendix A

Sample Selection: Community-at-Large Residents

Sample Selection: Community-at-Large Residents

[Telephone] Hello, my name is Mary Jane Barrow. I'm a graduate student in the Department of Housing at Virginia Tech. We are conducting a housing survey of Virginia residents age 62 and over. Is a member of your household age 62 or over?

[If no] Thank you for your time; I will need to call another number.

[If yes] May I please speak with him or her?

[If no] When would be a good time to call back?

[If yes] (Hello, my name is Mary Jane Barrow. I'm a graduate student in the Department of Housing at Virginia Tech.)

We're conducting a study of housing characteristics and attitudes of Virginia residents over age 62. Your name has been randomly selected from the C&P Telephone Directory. This study is being done so that we may learn more about people's attitudes toward their housing. We will use the results of this study to help others with their housing.

In order to complete this study, I need to interview a large sample of residents. The interview will take approximately 1/2 hour of your time and I will come to your home so that you will not be inconvenienced. All of your responses will be completely confidential. We would greatly appreciate if you would help us with our study.

When would be a convenient time for us to have the interview?

Appendix B

Introduction to Interview: Retirement Community Residents

Introduction to Interview: Warm Hearth Residents

My name is _____, and I am a graduate student (faculty member) in the Department of (Housing or Family/Child Development) at Virginia Tech. The Center for Gerontology there is sponsoring a study of people who have moved to this community. We are interested in finding out what you think about your housing, and we also want to learn more about how you feel about the people who are important to you. We would like to ask you questions about where you lived before, how satisfied you are with your current residence, and what you think about your life and the people in your community.

The interview will be strictly confidential. The answers you provide will be pooled with many others. Your name will never be connected with the information you provide. Feel free to answer each question as honestly as you can, because the people you tell me about will never know what you said. You don't have to answer any question if you do not wish to do so. You may ask me questions along the way if there is something you don't understand.

Do you have any questions right now?

I would like to ask you if you understand the purpose of this study, if you are participating willingly, and if we have permission to use the confidential information you provide for research purposes. Do we have your permission?

_____ Yes

_____ ? (IF RESPONDENT HAS ANY OTHER QUESTIONS OR ANY HESITATION, ANSWER HIM/HER, ASK FOR PERMISSION AGAIN, CHECK APPROPRIATE SPACE, AND CONTINUE ACCORDINGLY.)

_____ No (TERMINATE INTERVIEW)

I have explained the study to the respondent, answered any questions that s/he had, and checked the proper space above.

Respondent Code _____ Interviewer signature _____

Appendix C
Interview Schedule

INTERVIEW SCHEDULE

HOUSING CHARACTERISTICS

Do you live in a single family home or a building with more than one family in it? _____

1. single family unit
2. multi-family unit

What type of housing is it? Was it a(n) _____

1. mobile home
2. pre-fab or other manufactured housing
3. regular, conventional house
4. apartment
5. other (RECORD _____)
9. don't know

How old is your house (apartment, etc.)?
(ENTER 2 DIGITS FOR YEARS; 99=DON'T KNOW) _____

Do you

1. own it -- it is paid for (CODE 10 "888"; GO TO Q 12)
2. own it -- you are paying on the mortgage _____
3. rent or lease it
4. receive it in exchange for your services
5. other (RECORD _____)

How many rooms are in your dwelling -- not counting bathrooms and closets? (ENTER 2 DIGITS) _____

How many bedrooms are in your dwelling? _____
(ENTER 1 DIGIT)

Do you have running water in the kitchen? Is it just cold or both hot and cold? _____

Do you have running water in the bathroom? Is it just cold or both hot and cold? _____

- 0. none
- 1. cold only
- 2. hot and cold

Now I will ask you about problems you may have in your home. If you have any of these problems, tell me if it is a minor or a major problem. Do you have problems with

- a. leaks in the roof? _____
- b. cracks in the walls or ceilings? _____
- c. sags or buldges in the walls or ceilings? _____
- d. peeling paint on inside walls? _____
- e. peeling paint on outside walls? _____
- f. decay of the porch or outside steps? _____
- g. decay of any door or window frames? _____
- h. uneven floors? _____
- i. holes or badly worn place in the floor? _____
- j. broken or missing window panes? _____
- k. broken or missing materials on the outside walls or foundation? _____
- l. missing or torn screens? _____
- m. the quality of the water? _____
- n. the condition of the heating system? _____
- o. the condition of the cooling system? _____
- p. the condition of the plumbing system? _____
- q. the condition of the electrical system? _____

- 0. no problem
- 1. minor problem
- 2. major problem
- 8. not applicable

HOUSING AND NEIGHBORHOOD SATISFACTION

(Card 2)

People have different opinions about what they like and dislike about where they live. It would be helpful to know what you think about where you live. Look at Card 11 and tell me how satisfied you are with each item I mention. How satisfied are you with

- a. the safety of the surrounding area _____
- b. the privacy _____
- c. quality of the police protection _____
- d. quality of the fire protection _____
- e. the water supply _____
- f. the sewage disposal _____
- g. quality of the health and medical services in the area _____
- h. the distance you are from shopping and other services _____
- i. your neighbors and neighborhood _____
- j. the size of your home _____
- k. the design of your home -- the layout of the rooms and location of bedrooms and bathrooms _____
- l. the amount of maintenance required _____
- m. the amount of inside storage space you have _____
- n. the way the inside of the home looks _____
- o. the way the outside of the home looks _____
- p. the size of your outdoor living space _____
- q. the heating system _____
- r. the total monthly housing costs, including utilities _____

- | | |
|--------------------------|-----------------------|
| 1. very dissatisfied | 4. somewhat satisfied |
| 2. dissatisfied | 5. satisfied |
| 3. somewhat dissatisfied | 6. very satisfied |

Overall, how satisfied are you with your dwelling? Tell me the number from Card 11. _____

Now look at Card 2 and tell me how important each aspect of your dwelling is to you. How important is

- a. the safety of the surrounding area _____
- b. the privacy _____
- c. quality of the police protection _____
- d. quality of the fire protection _____
- e. the water supply _____
- f. the sewage disposal _____
- g. quality of the health services _____
- h. the distance you are from shopping and other services _____
- i. your neighbors and neighborhood _____
- j. the size of your home _____
- k. the design of your home -- the layout of the rooms, the location of bedrooms and bathrooms _____
- l. the amount of maintenance required _____
- m. the amount of inside storage space you have _____
- n. the way the inside of the home looks _____
- o. the way the outside of the home looks _____
- p. the size of your outdoor living space _____
- q. the heating system _____
- r. the total monthly housing costs, including utilities _____

- | | |
|-------------------------|-----------------------|
| 1. very unimportant | 4. somewhat important |
| 2. unimportant | 5. important |
| 3. somewhat unimportant | 6. very important |

Look at Card 3, and tell me the thing you liked best about the place where you live _____

- 1. neighborhood and neighbors
- 2. location
- 3. privacy
- 4. housing design: size, plan and layout
- 5. amount of maintenance and convenience
- 6. yard or outdoor space

Again, from Card 3, tell me the thing you like least about the place where you live.

MOBILITY INTENTIONS

Would you like to move from your present housing?

- 0. No
- 1. Yes

If yes, why? Do you want to move because

- a. your dwelling is the wrong size
 - b. you dislike the location
 - c. your dwelling needs major repairs
 - d. you want better security
 - e. of a rising burden of home maintenance
 - f. of a change in your family situation, such as health problems, loss of your spouse or another loved one
- _____
- _____
- _____
- _____
- _____
- _____

If no, why? Do you want to remain because

- a. your house meets the needs of the family
 - b. of economic reasons
 - c. you want to remain close to relatives
 - d. you like the location
 - e. of convenience
 - f. other (RECORD _____)
- _____
- _____
- _____
- _____
- _____
- _____

Do you plan to move from your present dwelling in the near future?

- 0. no
- 1. yes

If yes, into what kind of community do you plan to move?

- 1. Retirement community
 - 2. Age-integrated community
- _____

DEMOGRAPHIC CHARACTERISTICS

Sex (observe) 1. Male
 2. Female

How many years of schooling did you have all together?
 (ENTER 2 DIGITS)

What is your current marital status? Are you

1. married
2. widowed
3. divorced
4. single - never married

Compared to other people your age, is your health

1. poor
2. fair
3. good
4. excellent

I'd like to ask everyone about certain disabilities that may affect how easy it is to get around. These may or may not apply to you -- just tell me whether or not it is a problem for you. Do you have

- a. severe loss of sight
- b. complete loss of sight
- c. severe loss of hearing
- d. poor balance
- e. incoordination (clumsiness)
- f. do you tire easily
- g. do you have difficulty reaching with your arms
- h. inability to use your arms
- i. difficulty bending or kneeling
- j. do you rely on walking aids (braces, cane, crutches)
- k. are you able to use your legs
- l. do you have difficulty understanding directions or instructions
- m. OBSERVE AND RATE: extremes of size and weight

0. Yes 1. No

Are you employed or retired or a homemaker or what?

(DO NOT READ RESPONSE CHOICES, PROBE FOR ACCURACY)

HOMEMAKER

1. No paid employment
2. Retired from paid employment

RETIRED

3. Not employed
4. Employed part-time
5. Employed full-time

EMPLOYED

6. Part-time
7. Full-time

UNEMPLOYED

8. Seeking work

What is (was) your chief occupation?

(PROBE FOR ACCURACY; RECORD BELOW AND REFER TO OCCUPATION CODE SHEET FOR NUMERICAL CODE)

What is (was) your husband's (wife's) chief occupation?

(PROBE, RECORD, CODE AS BEFORE)

Birthdate: Month, Day, Year (2 DIGITS EACH)

Annual Income, total all sources

- | | |
|----------------------|----------------------|
| 1. Less than \$1000 | 5. \$16,000 - 20,999 |
| 2. \$1,000 - 5,999 | 6. \$21,000 - 25,999 |
| 3. \$6,000 - 10,999 | 7. \$26,000 - 30,999 |
| 4. \$11,000 - 15,999 | 8. \$31,000 or more |

How long have you lived at this address? (ENTER 2 DIGITS)

APPENDIX D

Weightings of Scores for the Satisfaction-Importance Scale

Table 17

Weightings of Scores for the Satisfaction-Importance Scale
(from Goss, 1982, as adapted from Morris, 1976)

| | Very Unimportant | Unimpor- tant | Somewhat Unimportant | Somewhat Important | Impor- tant | Very Important |
|--------------------------|---------------------|------------------|-------------------------|-----------------------|----------------|-------------------|
| Very Satisfied | 11 | 12 | 13 | 15 | 16 | 17 |
| Satisfied | 10 | 11 | 12 | 14 | 15 | 16 |
| Somewhat Satisfied | 9 | 10 | 11 | 13 | 14 | 15 |
| Somewhat Dissatisfied | 8 | 7 | 6 | 4 | 3 | 2 |
| Dissatisfied | 7 | 6 | 5 | 3 | 2 | 1 |
| Very Dissatisfied | 6 | 5 | 4 | 2 | 1 | 0 |

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