

is a significant and important factor in residential mobility. Morris and Winter (1996) maintain that the propensity to move is associated with reductions in housing and neighborhood satisfaction, and is directly influenced by household demographic traits and deficits in housing and neighborhood characteristics.

A dynamic application of this model was made in a study of renter households' transition into ownership (Cho, et al., 1990). The study's sample consisted of married-couple households who began their marriage as renters. The study collected data on the household's residential history from the time the couples were married to time of the interview, recording changes in income, household composition, and tenure. Cho, et al. (1990) found that most first-time home purchases were that of a single-family dwelling and that most couples removed space and dwelling-type deficits in the move to ownership. These results also indicate that the theory of housing adjustment is viable in the dynamic analysis of tenure transition.

Mulder's (1993) model (see Figure 2) of the context of housing and tenure choice assumes that housing market choices are set within the context of a dynamic economy, and vary across regions. Clark and Dieleman (1996) noted that the courses households take through the housing

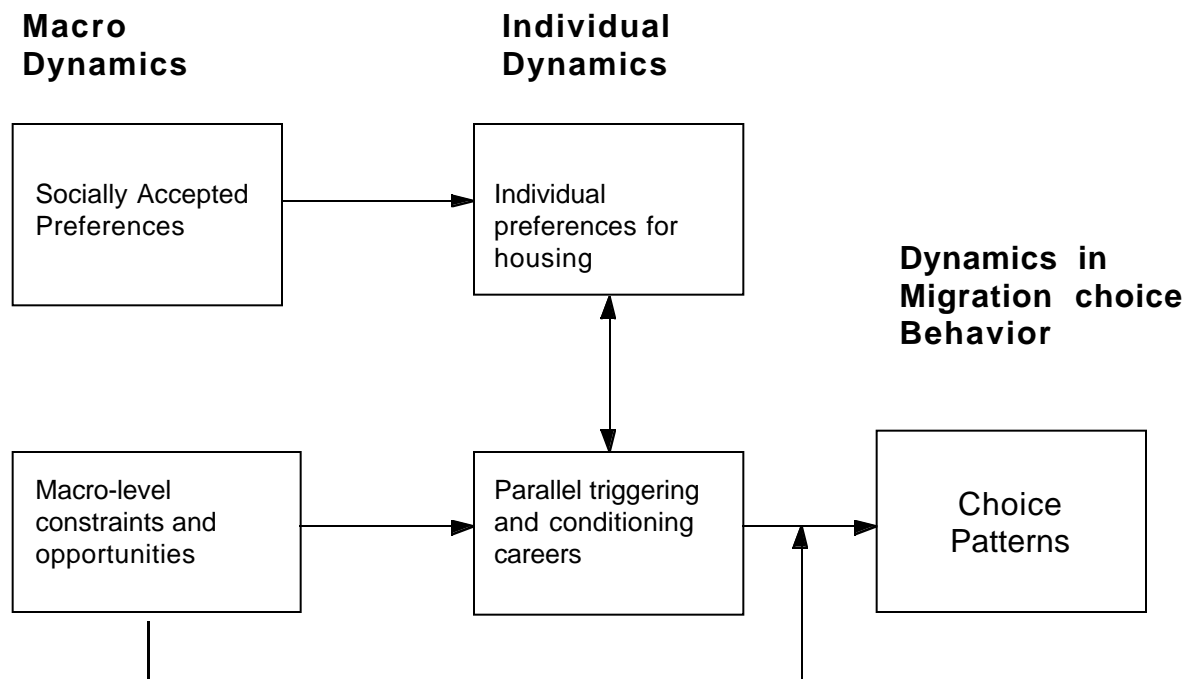


Figure 2.

Mulder's Model of the Context of Housing and Tenure Choice

stock are influenced by life transitions and local housing markets. The parallel circumstances of family formation and income changes, referred to as parallel triggering and conditioning careers in Mulder's (1993) model, influence as well as constrain preferences for housing and tenure. The resulting housing choice patterns are a function of housing stock availability and individual household preferences and constraints:

Therefore, conditions at the macrolevel also influence the outcomes of the movements of households through the housing stock. This complex process in which general goals, household and individual preferences, and macrolevel constraints and opportunities interact leads to a set of observed choice patterns....The observed choice patterns of mobility and housing and tenure choice are usually referred to as 'revealed' choice behavior (Clark & Dieleman, 1996, p. 35).

Thus, the changes experienced by an individual or household over a lifetime generate disequilibrium between the household and their dwelling, eventually resulting in a move. This leads households to engage in a constant coordinating process in which they organize and synchronize their housing to meet life-cycle stage needs (Clark & Dieleman, 1996).

#### Proposed Theoretical Model

This study's proposed theoretical model combined attributes from Morris and Winter's (1996) model of residential mobility and Mulder's (1993) model of the context of housing and tenure choice (Figure 3). Using the basic framework of a microlevel model from Morris and Winter, the theoretical model had three main concepts: individual demographic characteristics, triggering events of housing deficits and preferences, and selected housing and neighborhood characteristics.

The concept of individual demographic characteristics was adapted from Morris and Winter's (1996) concept of constraint indicators, which is a microlevel (e.g., household) reflection of the macrolevel constraints and opportunities as seen in Mulder's (1993) model. This concept was operationalized in the proposed theoretical model by single women homeowners' characteristics of geographical location, age, life-cycle stage, marital status, household size, income, and education. These factors have all been widely accepted to influence households' selection and characteristics of their dwelling units.

The concept of triggering events and housing deficits and preferences was created from both Morris and Winter's (1996) concept of housing deficits and Mulder's (1993) concept of parallel triggering and conditioning careers. The concepts of both Mulder's and Morris and Winter's models were adapted to the proposed theoretical model because they both imply the process by which housing decisions and choices are made. The concept of triggering events of housing deficits and preferences was operationalized by previous housing and neighborhood

characteristics and reasons for moving and choosing the present housing and neighborhood. The constructs of this concept (e.g., previous housing and neighborhood characteristics and reasons for moving and choosing present housing and neighborhood) were hypothesized to be effected by single women homeowners' demographic characteristics.

The concept of selected housing and neighborhood characteristics was adapted from the construct of choice patterns in Mulder's (1993) model. The proposed theoretical model's constructs of the housing and neighborhood characteristics (e.g., structure type, structure size, expenditure, quality, and neighborhood adequacy) can be thought of as a microlevel reflection of choice within a given housing market. These microlevel choices are affected by households' demographic characteristics, previous housing characteristics, and reasons for making a dwelling change. The concept of selected housing and neighborhood characteristics in the proposed theoretical model was operationalized by structure type, structure size, expenditure, quality, and neighborhood adequacy.

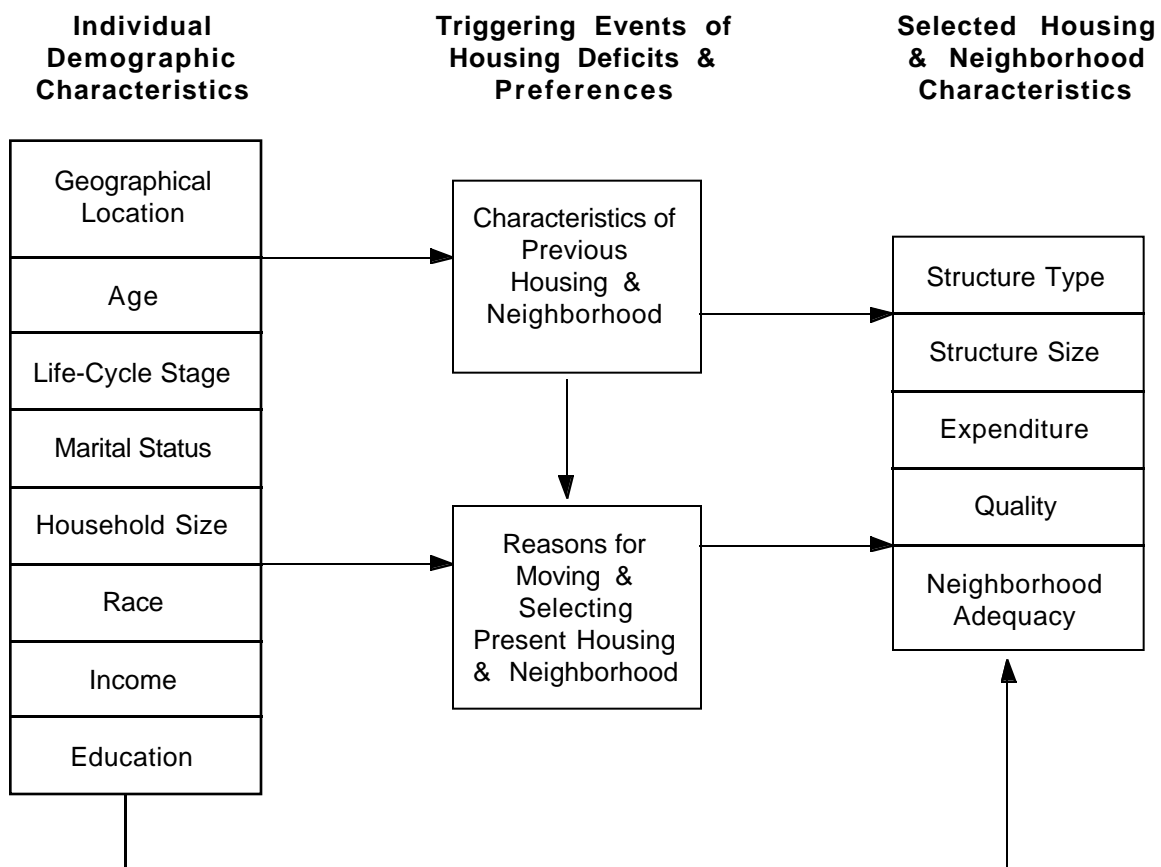


Figure 3.

Proposed Theoretical Model: Selected Housing Characteristics of Single Women Homeowners

### Summary of Review of Literature

This chapter reviewed the factors that influence homeownership rates among single women, giving a background discussion of demographic changes in America, recent tenure trends among women, and the characteristics of women's employment, education, and income. Also presented in the background discussion was a review of research pertaining to the benefits of homeownership.

Following the background discussion, research literature was presented that illustrated the demographic and housing characteristics of homeowners. The review of literature covering demographic and housing characteristics of homeowners was given as a discussion of homeowners in general due to the fact that research on women homeowners is lacking.

Through this review of literature, the need for additional empirical testing of relationships between demographic variables and housing characteristics among women homeowners is evidenced by:

1. Continued use of demographic variables by researchers to classify and describe household choices within the housing market;
2. The application of demographic variables in analyzing homeownership trends among single-person headed households, when controlling for income, has had mixed and inconclusive results; and
3. Few studies focus on women as homeowners and the demographic variables, other than income, that are related to their choice of housing.

### CHAPTER III METHODOLOGY

The purpose of this study was to examine information on single women who moved from rental to ownership tenure. A demographic profile was constructed of single women homeowners that included the housing characteristics chosen when they buy a home. Additionally, this study attempted to determine which demographic and previous housing characteristics of single women homeowners were related to the housing characteristics of their present homes.

The objectives of this chapter were to describe the design and methodology of this study. Specific objectives were to:

- a) describe the survey instrument;
- b) discuss the sampling of the AHS;
- c) list the variables and their operational definitions;
- d) provide appropriate research hypotheses in null form; and
- e) describe the method of data analysis.

#### Survey Instrument

The 1993 American Housing Survey (AHS) was the data source for this study. The 1993 edition of the AHS was used because the 1995 edition of the AHS National Core File was not yet available at the time this study began. The AHS has been conducted by the U.S. Census Bureau for the U. S. Department of Housing and Urban Development (HUD) since 1973. The original purpose of the survey was to assist in administering housing programs effectively by evaluating possible new programs and by monitoring, and possibly evaluating, the availability of adequate housing at affordable prices. First known as the Annual Housing Survey, the survey was done every year until 1981. Since that time, the survey has been called the American Housing Survey and data are collected every other year (Hadden & Leger, 1990).

The data for the AHS are collected by interviewers who use three separate forms to gather information: 1) a control card for each home that lists household members and stays in use as long as the listed household remains in the home; 2) a questionnaire for occupied homes that consists of core questions asked of all households, a similar questionnaire asked of households who usually reside elsewhere (these units are considered “unoccupied” as the AHS considers or counts only those who reside at their primary residence), and supplemental questions asked in occasional surveys; and 3) a questionnaire for vacant units that have been torn down or converted to other non-residential uses (Hadden & Leger, 1990). The survey is administered by personal interview and while most interviews are conducted face to face, some surveys are taken over the

phone when the interviewer is unable to meet the respondent at home. If the unit is vacant, information is obtained from informed persons such as landlords, rental agents, or neighbors (U.S. Bureau of Census, 1995b).

The survey is designed to provide a wide array of information about housing including the size and composition of the housing inventory, size and type of housing units, characteristics of the occupants, indicators of housing and neighborhood quality and satisfaction, changes in inventory as a result of new construction, and characteristics of recent movers (Dieleman et al., 1989; Martinson, 1993; U.S. Census Bureau, 1991). Other data provided by the AHS is a mobility measure that provides information on recent moves (within the last 12 months of the survey) and future planned moves (Gilderbloom & Mullins, 1995; Hadden & Leger, 1990). The mobility measures of the AHS provide a rich context in which to evaluate households' changes in tenure, housing type and size, housing value, housing costs, and neighborhood location such as metropolitan or suburb (Dieleman et al., 1989).

In order to have a longitudinal effect of recording housing and household changes over a long period of time, the survey is taken at the same housing units each year of the survey and is updated by a sample of addresses from building permits to include new construction and conversions (Bureau of the Census, 1995; Hadden & Leger, 1990). Gilderbloom and Mullins (1995) contend that one of the most important features of the AHS is that the same units are used in each survey year and this longitudinal character allows researchers to follow housing trends over time, thus providing a potent source for data analysis.

Gilderbloom and Mullins (1995) argue that the data in the AHS has strong reliability and validity because each time the survey is conducted a) the interviewers return to the same units and b) surveys are done with the same methods and instrument from year to year. Furthermore, they maintain, "We would expect to collect the same data in repeated applications of the questionnaire. The data are valid because surveys accurately measure the cost and quality of housing as operationalized in the concept of the questionnaire (Gilderbloom & Mullins, 1995; p. 62)."

The American Housing Survey is capable of assisting researchers to inquire about a broad range of housing issues. Although the AHS may be limited in providing specific information about housing needs, aspirations, and attitudes of specific groups such as the elderly (Gilderbloom & Mullins, 1995) or single women, it is a source of information on housing that cannot be found in any other national survey. The foregoing characteristics of the AHS and the rich diversity of its housing data makes this instrument a valuable research tool that may be underused by housing researchers.

### Sample

The universe of the 1993 American Housing Survey consists of a basic sample of approximately 55,000 housing units selected from the 1980 Census of Population and Housing Records (U. S. Bureau of the Census, 1995a). For sampling purposes in the AHS, the United States is divided into 394 areas consisting of cities and counties, which are referred to as primary sampling units (PSUs). The overall sampling rate used in the 1993 AHS to select the sample of housing units from the 1980 Census of Population was about 1 in 2,148. The within-PSU sampling rate was determined so that the overall probability of selection for each sample housing unit was the same (U.S. Bureau of the Census, 1995b).

Reflecting the growth of the housing inventory, the American Housing Survey continually adds new housing units to the sample. Selection of new construction housing units is derived primarily from building permits issued for units that were completed after April 1, 1980. Within each PSU, permits are selected so that clusters of four housing units are created. Then housing units in these clusters are subsampled at a rate of 1 out of 4.

Housing units that have been added to the inventory since 1980 are represented by using two methods: one method identifies within-structure additions and the other identifies whole-structure additions. All within-structure additions in 1-to-15-unit buildings containing at least one sample unit are interviewed for the AHS. If the building contains more than 15 units, only those within-structure additions are selected for interview that fall within AHS sampling lines. Area sampling methods are used for identifying whole-structure additions and differ on the basis of whether or not new construction is monitored by building permits. Both methods, however, compare addresses with the 1980 Census registers, eliminating any units that match. Clusters ranging from 4 to 8 are then selected for sampling (U.S. Bureau of the Census, 1995b).

The AHS differentiates households according to their location in four U.S. Census-defined regions: Northeast, West, South, and Midwest. The survey also classifies several settlement types that integrate the two most frequently identified U.S. Census settlement measures of Metropolitan Statistical Area (MSA) or Urbanized Area and Non-urbanized or Rural Areas (Golant & La Greca, 1994). The survey also consists of two separate samples. One sample is taken nationally every other year that covers all four national regions. Data from this sample are identified as a National Core File. The other is a series of samples of 44 metropolitan areas (MSAs) that survey units different than the national sample and are collected on a rotational basis so that about 15 to 20 cities are sampled each year of a 3 to 4 year cycle (Crispell, 1989). Data from these samples are referred to as Supplement Files.

This study used data from the 1993 National Core File. Only those respondents from whom the interviewer was able to obtain usable information on gender, age, marital status, tenure, income, race, education, mobility, and housing characteristics were included in this study.

The selection of the sample for this study was limited to single women homeowners who moved from the tenure of rental to that of ownership within the last 12 months of when the 1993 AHS survey was taken. These delimitations resulted in a useable sample of approximately 639 respondents (see Table 1 for a breakdown of sample selection).

Table 1  
Breakdown of Sample Selection

Total number of single women homeowners in 1993 AHS sample	7,068
Number of single women homeowners who moved within 12 months of the AHS survey and did not own their previous home	639

### Variable Selection and Data Coding

#### Dependent Variables

The dependent variables in this study were the selected housing characteristics of single women homeowners. These dependent variables were operationalized by the characteristics of structure type, structure size, expenditure, quality, and neighborhood adequacy.

#### Structure Type

Structure type, a categorical variable, is classified in the AHS as one unit detached or attached, 2 or more units attached, one unit mobile home, or a mobile home with two or more units. For example, a one-unit structure home (otherwise known as single-family house) is considered “detached” if it is not adjoining another housing structure on any of its four sides. A housing unit is considered to be one-unit attached if any one side extending from ground to roof adjoins another unit (e.g., townhouses and row houses). If two or more living units share a common roof, attic space, or foundation, in addition to having any one side of the unit attached to another unit, then the structure type is classified as having two or more units in the building (e.g., multifamily unit).

A mobile home is a housing unit that is constructed on a chassis, includes single- and double-wides, and may or may not be permanently affixed to a foundation. Beginning in 1984, the AHS classified mobile homes as having one or more permanent rooms. If any of these permanent

rooms have been added to serve as a separate living quarter attached to the mobile home, then the mobile home unit is classified as having 2 or more units.

This study used the 5 classifications of units in a structure to determine structure type as found in the AHS (see Table 2). However, the category for mobile homes with more than one unit was dropped because there was no representation within the sample.

### Structure Size

The number of bedrooms is the number of rooms used primarily for sleeping. This variable was used as an ordinal variable and provided an actual count of bedrooms.

### Expenditure

Purchase Price of House and Lot/Condo Unit. The purchase price of the home, a continuous variable, is the price paid at the time of purchase and is not the estimated value of the home at the time of the interview. This variable was used according to the AHS calculations of purchase price.

Housing Costs as Percent of Income. Up until 1984, the AHS provided a calculated monthly housing cost as percent of income. The 1993 AHS only provided a composite variable for total monthly housing cost. For this study, a variable for housing cost as a percent of income was calculated using the following specifications: monthly housing costs multiplied by 12 by 100 then divided by annual income.

Major Source of Down Payment for Purchase or Construction of Property. The source of down payment money was a categorical variable. The same possible responses as found in the AHS were used for this study (see Table 2).

Source of Primary Mortgage. The source of primary mortgage money was a categorical variable. The same possible 2 responses as found in the AHS were used (see Table 2), which indicated the use of mortgage money in the purchase of the home. If no mortgage was used (e.g., an all cash purchase) then this variable was coded as “not applicable” or “not answered” in which case was treated as a missing variable.

Primary Mortgage Insurance. Type of primary mortgage insurance was a categorical variable. The same responses as found in the AHS were used (see Table 2), which indicated the various types of mortgage insurance as well as mortgage insurance not being required.

### Housing Quality

Beginning in 1984, a recoded or summary measure of housing quality was provided in the AHS data files. Various housing quality criteria are used to create a three-point scale of housing quality adequacy. For this study, the coding of housing adequacy as it was found in the AHS (see Table 2) was reversed to reflect: 1 = severely inadequate, 2 = moderately inadequate, and 3 = adequate so that it could be analyzed as an interval scale in which a higher score indicated a higher degree of quality.

### Neighborhood Adequacy

The presence of desirable neighborhood characteristics can influence a household's decision to reside in a particular location. Variables were selected from the 1993 AHS that indicated the presence of desired amenities (e.g. schools and shopping facilities) and potentially bothersome characteristics (e.g., crime, noise, and traffic). Five variables of neighborhood characteristics were used from the AHS (see Table 2). At first, these five variables were recoded to form a 5-point composite variable of neighborhood adequacy, ranging from 1 to 5, in which a higher score indicated a higher degree of neighborhood adequacy. However, when chi-square tests were run with this variable, there were a high number of empty cells in the 1 to 3 range. This variable was then recoded into a 3-point composite scale, where the first three points on the scale were combined into one point and the remaining two points stayed the same.

### Independent Variables

The following describes the reasoning for selecting the independent variables that were included in the empirical model and how they were coded for analysis.

### Geographical Location

Geographical/Census region and central city/suburban status, both categorical variables, had the same coding as what appeared in the AHS (see Table 2). Geographical location was included as an independent variable because it has been found to be an important factor in homeownership in that ownership rates vary among national regions and settlement type areas (Chung, Magrabi, & Wysocki, 1989; Koebel & Zappatini, 1993) as well as between urban and non-urban areas (Clark & Dieleman, 1996; Gober, 1990).

Region. Geographic or Census region consisted of four categories: Northeast, Midwest, South, and West.

Central City/Suburban Status. The settlement type area originally consisted of seven areas: central city of SMSA, urbanized suburb, other urban suburb, rural suburb, non-metro urban area, other non-metro urban area, and rural non-metro area. However, frequency distributions indicated that the sample was dispersed primarily between metropolitan and non-metropolitan areas. Therefore, this variable was recoded into two categories wherein the four metropolitan settlement type areas were combined into one category, and the non-metropolitan settlement type areas were combined into a second category.

### Age

Age, a continuous variable, was used according to internal calculations processed by the AHS. Age was selected as an independent variable because of the wide acceptance among housing researchers that age is positively related to homeownership: as one's age increases, their propensity to become a homeowner also increases. Additionally, as age increases, mobility, or making housing changes, decreases (Rossi, 1980).

### Life-cycle Stage

Life-cycle stages are most directly related to needs and preferences as well as the monetary means to attain housing (Kendig, 1990). Generally, as people progress through life, their financial and family circumstances change as they age; these changes are then reflected in housing choices. Although consideration of life-cycle stages in housing analyses has the limitation of a static rather than dynamic description of people's life changes (Clark & Dieleman, 1996; Kendig, 1990), it is, nevertheless, widely used to explain housing demand.

The presence of school-aged children in the household has been shown to have a significant effect on the likelihood of single-person households attaining homeownership (Burgess, 1982). For the purposes of this study, a variable for the life-cycle stage was created from data that indicated the presence of school-age children in the household. From relevant data, three variables were created that indicated age of children in the household. The first variable was for households that had at least one child 6 years of age or younger. The second included households that had at least one child aged 7 to 18 years of age; and the third variable included households that had at least one child 19 years of age or older. From these three variables, two dichotomous variables were created for chi-square and multiple regression analyses. The first and second groups were combined into one group that only included households with children 18 years of age or younger in the home. The second group included households that had no children 18 years of age or younger.

### Marital Status

Studies that examined homeownership among female-headed households suggested that further defining the "unmarried state" of single women can help to better understand trends of homeownership for this group (Burgess, 1982; Haurin & Kamara, 1992). Although all respondents selected for this study were single women, their marital status was categorized as divorced, separated, never-married, and widowed, which is consistent with the U.S. Census unmarried classifications.

The AHS classifies unmarried heads of households as widowed, divorced, separated and never-married. The selection and coding of these categories of marital status were used in this study as they were found in the AHS (see Table 2).

### Household Size

This study used household size, an ordinal variable, as calculated within the AHS. This variable was selected because it was a widely used measure in studies that link housing and population (Myers & Doyle, 1990). Not only is the number of persons per household related to structure type and size but also the age of occupants has been found to be an important factor. Additionally, household size has been found to indicate broad demographic changes, reflecting national and local trends.

Race

Race was included as an independent variable because the ethnic and racial composition of America's population has been found to affect homeownership rates. Generally, homeownership rates are lower for non-Whites than for Whites and minority gains in homeownership during times of economic recovery are slower for non-Whites (Hughes, 1996). Race, a nominal independent variable, was recoded into two categories, White and non-White (see Table 2).

Income

Income was included as an independent variable because of its wide acceptance as a determinant of homeownership. For the purposes of this study, income was used as a continuous variable. Data for this variable was based on the recoded variable for income as found in the AHS. The recoded income variable was the summed amount reported for wage and salary income, net self-employment income, Social Security or railroad retirement income, public assistance or welfare payments, and all other money income. The figures represent gross annual income.

Education

In the AHS, the interviewers recorded the highest grade or year of school completed by the reference person. This study used the same coding as the AHS from 1 to 12 that indicated the number of years in primary/secondary education. The remaining responses, 21 to 26, were recoded to 13 through 18 to indicate years of college completed (see Table 2). Education was selected as an independent variable because recent demographic trends indicate the rising importance of educational attainment in determining household tenure status (Gyourko & Linneman, 1996; Gyourko & Linneman, 1997).

Triggering Events of Housing Deficits and Preferences

"Triggering events", as mentioned in Mulder's model of residential mobility and observed choice patterns (1993), are variables that influence the decision to move. A counterpart to these triggering events is the concept of housing and neighborhood deficits as mentioned in Morris and Winter's (1996) model of residential mobility. In either context, factors such as households' previous housing and neighborhood characteristics and the reasons why they choose their present homes and neighborhoods may be factors associated with the decision to move and influence selected housing characteristics. The AHS provides data on previous housing and neighborhood characteristics of those households who moved within the last 12 months of the survey.

Characteristics of Previous Housing and Neighborhood. Data within the AHS on previous housing and neighborhood characteristics allows for comparisons to be made between previous and the current housing and neighborhood in terms of structure type, cost, condition (e.g., better or worse), tenure, and neighborhood quality (e.g., better or worse) (see Table 2).

Reasons for Moving and Selecting Current Home and Neighborhood. Possible responses to reasons for moving from previous residence cover personal, housing, and financial

considerations. Three variables were selected that measured reasons for moving and selecting the current home and neighborhood. These were: 1) the primary reason for moving, 2) the main reason for choosing the neighborhood, and 3) the main reason for choosing the home. Reasons for selecting the current housing and neighborhood include similar reasons as well as features associated with the two settings.

Initially, the coding for these variables was the same as found in the AHS. However, after running frequency distributions, the three variables were recoded as a result of low counts and to reduce the number of responses. The 18 responses for the primary reason for moving were recoded into 4 responses, which were 1= financial, 2 = family/personal, 3 = housing, and 4 = other. The responses for “displacement” and “all reasons being equal” each had very low counts, less than 1% and less than 3% respectively, so they were eliminated. The 12 responses for the main reason for choosing the neighborhood were recoded into 6 responses, which were 1 = all reasons equal, 2 = personal interests, 3 = public amenities, 4 = neighborhood design, 5 = the house itself, and 6 = other. The 12 responses for the main reason for choosing the home were recoded into 4 responses, which were 1 = all reasons equal, 2 = financial, 3 = physical characteristics of the home, and 4 = other.

Table 2.

Variables Included in the Model

<b>Construct</b>	<b>Variables</b>	<b>Ref. # &amp; Name</b>	<b>Responses</b>	<b>Variable Type</b>
Geographical Location	Census Region	0001 REGION	1 Northeast 2 Midwest 3 South 4 West	Categorical
	Central City/ Suburban Status	0002 METRO	1 Central City of SMSA 2 Urbanized Suburb 3 Oth. Urb. Suburb 4 Rural Suburb 5 Urban, non- metro 6 Other Urban, Non-Metro 7 Rural, Non- Metro	Categorical

(Table continues on next page)

Table 2 (Continued)

Construct	Variables	Ref. # & Name	Responses	Variable Type
Age	Age of Respondent	0490 AGE	10-90 91      10-90 yrs 91+ yrs	Continuous
Life Cycle Stage	Children in Household 6 Yrs. of age or younger	(Recode)	1 Yes 0 No	Dichotomous
	Children in Household age 7 to 18 Years	(Recode)	1 Yes 0 No	Dichotomous
	Children older than 18 Yrs.	(Recode)	1 Yes 0 No	Dichotomous
Marital Status	Marital Status	0506 MAR	2 Widowed 3 Divorced 4 Separated 5 Never Married	Categorical
Household Size	No. of Persons in Household	0588 PER	1-98 No. Occup.	Ordinal
Race and Ethnicity	Race	0521 RACE	1 White 2 Black 3 Amer. Native 4 Asian 5 Other	Nominal
Income	Recoded Income of Ref. Person and Hhold members	0621 ZINC	0 None 1-999996 \$ amt -100000 Loss	Continuous

(Table continues on next page)

Table 2 (Continued)

Construct	Variables	Ref. # & Name	Responses	Variable Type
Education	Education	(Recode)	0 Never Attended 1 Grade 1 2 Grade 2 3 Grade 3 4 Grade 4 5 Grade 5 6 Grade 6 7 Grade 7 8 Grade 8 9 Grade 9 10 Grade 10 11 Grade 11 12 Grade 12 13 1 Yr of College 14 2 Yr of College 15 3 Yr of College 16 4 Yr of College 17 1 Yr Grad Sch 18 2+Yr Grad Sch	Continuous
Characteristics of Previous Residence & Neighborhood	Previous Tenure	1291 XATEN	1 Owned 2 Cash Rent 3 No Cash Rent	Categorical
	Previous Type of Residence	1301 XAUNIT	1 House 2 Apartment 3 Mobile Home 4 Other Type	Categorical
	Change in Housing Costs by Move From Previous Residence	1316 XACOST	1 Increased 2 Stayed the Same 3 Decreased 4 Don't Know	Categorical
	Comparison of New to Old Dwelling	1442 XHRATE	1 Better 2 Worse 3 About the Same	Categorical
	Comparison of New to Old Neighborhood	1430 XNRATE	1 Better 2 About the Same 3 Worse 4 Stayed in Same Neighborhood	Categorical

(Table continues on next page)

Table 2 (Continued)

Construct	Variables	Ref. # & Name	Responses	Variable Type
Reasons for Moving and Choosing Present Housing and Neighborhood	Primary Reason for Moving	1352 WHYMOVE	00 All Reasons Equal 01 Displaced by Private Action 02 Displaced by Government 03 Disaster Loss 04 New Job/Transfer 05 Commuting 06 Other finan/emply 07 Establish Own Household 08 Needed Larger Unit 09 Change in Marital Status 10 Other Fam/Pers Reasons 11 Wanted Better Quality Unit 12 Change Tenure 13 Wanted to Lower Housing Costs 14 Other Housing Related Reasons 15 Other Reasons	Categorical
	Main Reason for Choosing This Neighborhood	1429 WHYTON	0 All Reasons Equal 1 Convenient to Job 2 Close to Friends and Relatives 3 Convenient to Leisure Activities 4 Convenient to Public Transp. 5 Good Schools 6 Other Public Services 7 Look/Design of Neighborhood 8 House Was Most Important	Categorical

(Table continues on next page)

Table 2 (Continued)

Construct	Variables	Ref. # & Name	Responses	Variable Type
(Reasons for Moving and Choosing Present Housing and Neighborhood)	Main Reason for Choosing This Particular Unit	1441 WHYTOH	0 All Reasons Equal 1 Financial Reasons 2 Room/Layout Design 3 Kitchen 4 Size 5 Ext. Appearance 6 Yard/Trees/View 7 Quality 8 Only one available 9 Other Reasons	Categorical
Structure Type	Classification of Structure Type	0046 NUNIT2	1 1 Unit - detached 2 1 Unit- attached 3 2+ Unit Bldg. 4 Mobile Home (1) 5 MH 2+ Units	Categorical
Structure Size	Number of Bed-Rooms Used	0075 BEDRMS	0 None 1-9 1 to 9 Bdrooms 10 10+ Bdrooms	Ordinal
Expenditures	Recoded Housing Cost as % Income	(Recode)	0 0/Not Computed 01-96 1% to 96% 97 97%+	Continuous
	Purchase Price of House/Condo/Lot	1074 LPRICE	1-250000 \$Amt 250001 \$250K+	Continuous
	Source of Down Payment	1075 DWNPAY	1 Sale of Property 2 Savings or Cash 3 Investment Sale 4 Loan on Other Property 5 Inheritance/Gift 6 Land on which structure built used to finance 7 Other 8 No Downpayment Required	Categorical

(Table continues on next page)

Table 2 (Continued)

<b>Construct</b>	<b>Variables</b>	<b>Ref. # &amp; Name</b>	<b>Responses</b>	<b>Variable Type</b>
(Expenditures)	Who Provided Primary Mortgage	1114 BANK	1 Bank or Other Organization 2 Individual 8 Not Answered 9 Not Applicable	Categorical
	Primary Mortgage Insurance	1112 MORTINS	1 FHA 2 VA 3 FMHA 4 Other 5 Don't Know 8 Not Answered 9 Not Applicable	Categorical
Housing Quality	Recoded Adequacy of Housing Quality	0224 ZADEQ	1 Adequate 2 Mod. Inadequate 3 Severely Inadequate	Ordinal
Neighborhood Adequacy	Recoded composite score using the following:			Ordinal
	Adequacy of Shopping Facilities	0357 SHP	1 Adequate 2 Inadequate 3 Don't Know	
	Adequacy of Schools	0365 SCH	1 Adequate 2 Inadequate 3 Don't Know	
	Crime is bothersome in this neighborhood	0312 NUCRIM	0 No, not a bother 1 Yes, is a bother	
	Noise is neighborhood is a bother	0313 NOISE	0 No, not a bother 1 Yes, is a bother	
Heavy traffic in neighborhood is a bother	0314 TRAF	0 No, not a bother 1 Yes, is a bother		

## Research Questions and Null Hypotheses

Research Questions

As stated previously, the following research questions were used to direct this study:

- 1) What is the demographic profile of single-women homeowners in terms of geographic location, age, household size, family life-cycle stage, education, income, and race?
- 2) What is the profile of housing characteristics of single women homeowners in terms of structure type, structure size, expenditures, quality, and neighborhood adequacy?
- 3) What is the relationship between the independent variables (e.g., geographic location, age, household size, family life-cycle stage, marital status, race, income, education, previous housing and neighborhood characteristics, and reasons for moving and choosing the present housing and neighborhood) and the dependent variables of structure size, purchase price, quality, and neighborhood adequacy?
- 4) What is the relationship between the dependent variable structure type and:
  - a) single women homeowners' demographic characteristics (e.g., geographic location, age, household size, family life-cycle stage, marital status, race, income, and education);
  - b) single women homeowners' previous housing and neighborhood characteristics; and
  - c) single women homeowners' reasons for moving and choosing their present housing and neighborhoods?
- 5) What is the relationship between single women homeowners' previous housing and neighborhood characteristics and their reasons for moving and choosing their present homes and neighborhoods?
- 6) What is the relationship between single women homeowners' demographic characteristics (e.g., geographic location, age, household size, family life-cycle stage, marital status, race, income, and education) and:
  - a) their previous housing and neighborhood characteristics, and
  - b) their reasons for moving and choosing their present housing and neighborhood?

### Null Hypotheses

The following null hypotheses were tested to answer the research questions:

- H1 There is no relationship between the independent variables (e.g., geographic location, age, household size, family life-cycle stage, marital status, race, income, education, previous housing and neighborhood characteristics, and reasons for moving and choosing the present housing and neighborhood) and the dependent variables structure size, purchase price, quality, and neighborhood adequacy.
- H2 There is no relationship between the housing characteristic of structure type and:
- a) single women homeowners' demographic characteristics;
  - b) single women homeowners' previous housing and neighborhood characteristics; and
  - c) single women homeowners' reasons for moving and choosing their present housing and neighborhoods.
- H3 There is no relationship between the single women homeowners' previous housing and neighborhood characteristics and their reasons for moving and choosing their present housing and neighborhood.
- H4 There is no relationship between single women homeowners' demographic characteristics (e.g., geographic location, age, household size, family life-cycle stage, marital status, race, income, and education) and:
- a) the characteristics of their previous housing and neighborhoods, and
  - b) their reasons for moving and choosing their present housing and neighborhoods.

### Data Analysis

The descriptive statistics of frequency distributions, percentages, and means were used to profile the demographic characteristics of single women homeowners and to profile their selected housing and neighborhood characteristics.

The procedure of step-wise multiple regression analysis was used to test the relationship between the independent variables and the dependent variables of structure size, purchase price, quality, and neighborhood adequacy. This study attempted to ascertain the relationship between the independent variables and dependent variables represented by the regression equation:

$$Y'_{1..4} = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_6X_6$$

in which the dependent variables were:

$Y'_1$  = Structure Size

$Y'_2$  = Purchase Price

$Y'_3$  = Quality

$Y'_4$  = Neighborhood Adequacy

and the independent variables were:

$X_1$  = Geographical Location (metropolitan or non-metropolitan area)

$X_2$  = Age

$X_3$  = Life-Cycle Stage

$X_4$  = Household Size

$X_5$  = Income

$X_6$  = Education

Because structure type was a categorical dependent variable, it was analyzed separately using the statistical test of chi-square analysis to examine the relationship between structure type and:

- a) single women homeowners' demographic characteristics of region, marital status, and race;
- b) single women homeowners' previous housing and neighborhood characteristics; and
- c). single women homeowners' reasons for moving and choosing their present housing and neighborhoods.

Chi-square analysis was used also to examine the relationship between:

- a. single women homeowners' previous housing and neighborhood characteristics and their reasons for moving and selecting their current homes and neighborhoods;
- b) single women homeowners' demographic characteristics and the characteristics of their previous housing and neighborhoods;
- c) single women homeowners' demographic characteristics and their reasons for moving and choosing their present housing and neighborhoods.