

CHAPTER IV DESCRIPTION OF THE SAMPLE

One of the purposes of this study was to gain knowledge of single women who had moved from rental to ownership tenure. A demographic profile of these women that included descriptions of the type and characteristics of the housing they bought, the means by which they acquired it, and the changes made in their housing when they transition into ownership was constructed. This chapter includes a description of the sample in order to answer the following two research questions:

- 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?

The following chapter will discuss the results of analyses. Descriptive data was derived and data analyses were performed using SAS 6.10 version statistical package.

Sample Description

The sample consisted of 639 individuals who were respondents in the 1993 American Housing Survey National Core File. This sample was comprised of single women who were widowed, divorced, separated, or never married at the time of the survey and who owned their own homes. Additionally, the respondents in the sample had moved from rental to ownership tenure within 12 months of when the survey was conducted.

The total sample size ($N = 639$) represented 9% of all women homeowners ($N = 7,068$) and about 1.9% of all homeowners ($N = 33,421$) in the 1993 AHS. The sampling rate of the 1993 AHS was reported to be approximately 1 in 2,148 households (U.S. Bureau of the Census, 1995b). Relevant to this sampling rate, the sample for this study represented approximately 1.3 million single women homeowners throughout the United States.

General Demographic Characteristics of the Sample

Table 3 shows the results of the sample's demographic characteristics.

Geographic Location. The respondents in the sample ($N = 639$) represented all four Census regions of the country. The largest group (39.7%) resided in the South and the smallest group (13.5%) resided in the Northeast. The remaining two regions, the Midwest and West, each represented slightly less than one fourth of the sample at 22.7% and 24.1% respectively. Throughout all four regions, the sample resided primarily in metropolitan areas. Also, within each of the regions, more than three fourths of the sample resided in metropolitan areas.

Table 3.
Demographic Characteristics of the Sample

Characteristic	Result
<u>Geographic Location:</u>	
Northeast	86
-- Metropolitan	75(87.2%)
-- Non-metropolitan	11(12.8%)
Midwest:	145
-- Metropolitan	112(77.2%)
-- Non-metropolitan	33(22.8%)
South:	254
-- Metropolitan	194(76.4%)
-- Non-metropolitan	60(23.6%)
West:	154
-- Metropolitan	129(83.8%)
-- Non-metropolitan	25(16.2%)
<u>Age:</u>	
Median Age	44 Years
<u>Life-Cycle Stage:</u>	
No children in home <18 yrs	51.8%
Children at home 0 to 18 yrs	48.2%
<u>Marital status:</u>	
Widowed	24.9%
Divorced	40.1%
Separated	6.6%
Never married	28.5%
Mean Household Size	2.6
<u>Race:</u>	
White	511
Non-White:	128
-- Black	107
-- Asian	13
-- Native American	4
-- Other	4
Median Annual Income	\$25,000
Median Education Level	13.0 Years Completed

Age. The respondents in the sample ranged in age from 18 to 91 years of age. Of those in the total sample who reported their age (N = 496), the largest group of respondents (44.2%) were between 35 and 50 years of age. The next largest groups were those between the ages of 50 and 65 years of age (29.3%) and those who were over the age of 65 years (22.3%). The smallest group was that of women who were under the age of 35 years (4.2%). Consequently, the age distribution of the sample reflected a median age of 44 years, and a mean age of 47 years, with the sample almost evenly divided between those under 50 years of age (48.4%) and those who were 50 years of age and older (51.6%).

Life-Cycle Stage. Slightly more than one half of the respondents in the sample had no children in the home that were 18 or less years of age (51.8%). Of the 48.2% who had children in the home ages 18 years or less, 17.7% had at least one child under the age of 6 years. When considering the total sample, this meant that only 8.5% of the total sample had pre-school aged children in the home. The presence and ages of the respondent's children could also be an indication of the median age of the sample, 44 years, at which age few women still have pre-school aged children in the home.

Marital Status. The largest proportion, 40.1%, of the sample were divorced, and the smallest group, 6.6%, was comprised of those who were separated. The second largest group, women who were never married, comprised 28.5% of the sample, and 24.9% were widows. It is interesting to note that almost three fourths of the sample, 71.6%, had been previously married.

Household Size. The number of persons residing in the homes of the sample ranged from 1 to 14 persons. The median household size was comprised of 2 persons, and the average was 2.6 persons. The two largest groups were comprised of 1- and 2-person households, with 34.1% of the sample with 2 persons and 25.5% of the sample having only one person in the home. This indicated that over one half of the sample, 59.6%, had only 1 or 2 persons in the home. It is interesting, however, that the third largest group, comprising 22.6% of the sample, had four or more persons residing in the home. The smallest group, 17.7%, was that of 3-person households.

Race. As indicated in Table 3, the majority of the sample were White (79.9%). Of those in the sample that were non-White, 83.6% were Black, 10.2% were Asian, and 3.2% were Native American. The category of "Other" contained those respondents who did not meet the above racial classifications and those who were racially mixed. This group comprised another 3% of the non-White respondents in the sample.

Income. Annual household income was obtained on 632 respondents in the sample. Income amounts among the sample had a total range of \$128,000; with a median income of \$25,000 and a mean income of \$29,748. Of these 632 respondents, 36.9% reported having incomes under \$20,000; 31.2% had incomes between \$20,000 and \$34,999; 17.3% had incomes between \$35,000 and \$49,999; and 14.6% had incomes of \$50,000 or more.

Education. The levels of education completed was categorized into four groups: less than 12 years, 12 years, 1 to 3 years of college, and 4 or more years of college. The mean level of education completed was 13 years and the median was 12 years. Of the 639 respondents in the sample, the two largest groups were those who completed 12 years of school (34.7%) and those who completed 4 or more years of college (25.7%). Those who completed 1 to 3 years of college comprised 22.7% of the sample, and the smallest group (16.8%) completed less than 12 years of school. In summary, almost one half of the sample (48.4%) completed one or more years of college.

The Sample's Previous Housing Characteristics and Reasons for Moving and Choosing the Present Home and Neighborhood

Table 4 shows the results of the sample's previous housing characteristics and their reasons for moving and choosing their present homes and neighborhoods.

Type of Housing. A question in the AHS asked what type of housing in which respondents lived just before moving to their present home. This question provided three responses, which were house, apartment, and mobile home. The majority of respondents in the sample indicated that they lived in apartments prior to moving to their present home (60.6%, N = 639). Of the remaining respondents, 35.4% lived in houses and 4.1% lived in mobile homes.

Change in Housing Cost as Result of Move. Of those who reported their change in housing costs as a result of moving (N = 572), fewer than one half of the respondents increased their housing costs (44.6%). While it is expected that housing costs increase with the purchase of a home, 22.7% of the respondents indicated that their housing costs stayed the same, and 28.7% decreased their housing costs with the purchase and/or move to their present home.

Comparison of New Home to Previous Home. The AHS contains a question that allows the respondent to rate their present housing and neighborhood to those of their previous residence. A large majority of this study's sample indicated that their new residence was better than their previous residence (70.1%, N = 378). Less than one fourth (22.5%) said their housing was about the same as the previous, and only 7.4% felt their new residence was worse than the previous one.

Comparison of New Neighborhood to Previous One. Respondents' rating of their present neighborhood to the previous one showed similar patterns as the rating of their housing. However, a smaller proportion felt the neighborhood was better than the last one (49.3%, N = 377) and a larger proportion felt that it was just about the same (38.2%). Slightly more felt their neighborhood was worse than the previous neighborhood (9.3%), and 3.2% stayed in the same neighborhood.

Table 4.

Previous Housing and Neighborhood Characteristics and Reasons for Moving and Choosing the Present Home and Neighborhood

Characteristic	Result (%)
<u>Type of Previous Housing:</u> House Apartment Mobile Home	35.4 60.6 4.1
<u>Change in Housing Cost:</u> Increased Stayed the Same Decreased Don't Know/No Answer	44.6 22.7 28.7 4.0
<u>Comparison of New Home:</u> Better About the Same Worse	70.1 22.5 7.4
<u>Comparison of New Neighborhood:</u> Better About the Same Worse Stayed in Same Neighborhood	49.3 38.2 9.3 3.2
<u>Why Move From Previous Residence:</u> All Reasons Equal Housing Family/Personal Financial Other	4.3 50.3 28.8 8.2 8.4
<u>Why Move to Present Home:</u> All Reasons Equal Financial Physical Characteristics of Home Other	14.7 40.2 24.7 20.4
<u>Why Move to Present Neighborhood:</u> All Reasons Equal Personal Public Services Neighborhood Design The House w/in the Neighborhood Other	11.2 18.6 4.6 11.5 28.1 26.0

Primary Reason for Moving from Previous Residence. The respondents' reasons for moving were regrouped into 5 categories, which included all reasons equal, financial/employment, family/personal, housing, and other reasons. Half of the respondents indicated that they moved to their present home for "housing" reasons (50.3%, N = 368). This indicated that the respondents moved for such reasons as wanting a better quality home, to change tenure, lower housing costs, and other housing related reasons. The second most frequent group of reasons was that of family and personal reasons (28.8%). This indicated that this proportion of respondents moved for reasons of a change in marital status, needing a larger home, wanting to establish their own household, and other personal and family reasons. Only 8.2% of the sample moved for financial or employment reasons, which may have included a job transfer or easier commuting. Of the remainder of respondents who provided answers to this question, 4.3% indicated that all the reasons were equally important, and 8.4% moved for reasons other than those listed.

Primary Reason for Choosing Present Home. Similar to the question pertaining to the reasons for moving, reasons for respondents' choice of the present home was also regrouped into four categories: all reasons equal, financial, physical characteristics of the home, and other reasons. The largest proportion of respondents (40.2%, N = 368) chose their home for financial reasons. About one fourth of the respondents (24.7%) chose their home for reasons of its physical characteristics, which include the room/layout design, kitchen, size, and exterior appearance. Of the remaining reasons for choosing the present home, 14.7% of the respondents felt all reasons were equally important and 20.4% chose the home for reasons other than those listed.

Primary Reason for Choosing Present Neighborhood. Among the responses for the question pertaining to why a respondent chose a particular neighborhood, the AHS had a wider variety of choices. Therefore, these responses were regrouped into 6 categories, which included all reasons equal, personal, public services, design of the neighborhood, the house, and other reasons. It is interesting to note that the largest proportion of respondents (28.1%, N = 366) chose the neighborhood because of the particular housing unit to which they moved. An almost equally large number (26.0%) chose the neighborhood for reasons other than those listed.

Among the remaining reasons for selecting the neighborhood, 18.6% chose the neighborhood for personal reasons (e.g., convenient to job, convenient to leisure activities, and close to family and friends), 11.5% chose the neighborhood because of its design or appearance, and 11.2% felt all reasons were equally important. Only 4.6% chose the neighborhood for its public services such as good schools and public transportation.

Selected Housing Characteristics of the Sample

Table 5 shows the results of the sample's selected housing characteristics.

Table 5.
Selected Housing Characteristics of the Sample

Characteristic	Result (%)
<u>Structure Type:</u> Single-family Detached Single-family Attached Multi-family Attached Mobile Home	70.6 7.8 11.6 10.0
<u>Structure Size:</u> 0 to 1 Bedrooms 2 Bedrooms 3 Bedrooms 4+ Bedrooms	4.2 32.5 47.5 15.8
<u>Expenditure:</u> Housing Cost as % Income: -- Less than 29% -- 30 to 50% -- More than 50% Purchase Price: -- Less than \$30,000 -- \$30,000 to \$59,999 -- \$60,000 to \$89,000 -- \$90,000 or more Source of Down Payment: -- Sale of Property -- Savings or Cash -- Investment Sale -- Inheritance or Gift -- Other Source or Loan -- No Downpayment Source of Primary Mortgage: -- Bank -- Individual -- N/A Type of Mortgage Insurance: -- FHA -- VA -- FmHA -- Other/Private -- No Mortgage Insurance	64.8 24.2 11.1 33.5 33.3 15.7 17.5 16.2 58.5 1.1 4.9 11.8 7.2 86.9 12.8 0.3 16.2 2.4 1.3 45.9 34.2

(Table continued on next page)

Table 5 (Continued)

Characteristic	Result (%)
<u>Adequacy of Housing Quality:</u>	
Adequate	93.6
Moderately Inadequate	5.8
Severely Inadequate	0.6
<u>Neighborhood Adequacy:</u>	
Very Adequate	38.7
Adequate	44.3
Inadequate	17.0

Structure Type. Nearly three fourths of the sample lived in single-family detached homes (70.6%). This is in contrast to those living in other dwelling types such as single-family attached (7.8%), multi-family attached (11.6%), and mobile homes (10.0%).

Structure Size. The number of bedrooms in the housing unit was selected as the indicator of structure size for this particular study. The number of bedrooms is found to be a common criteria by which people evaluate what is the appropriate size of home needed for a family or household (Morris & Winter, 1996). For this particular sample, the number of bedrooms ranged from 0 to 7, with a mean of 2.8 bedrooms and a median number of 3 bedrooms (N = 639, SD = .9).

Expenditure. The purchase price of this sample's housing had a total range of \$349,878, with a mean price of \$61,000, and a median price of \$47,700 (N = 517, SD = \$57,967.68). Two thirds of the purchase prices were for under \$60,000 with 33.3% purchased for under \$30,000 and 33.7% purchased for a value between \$30,000 and \$60,000. Also, 15.7% of the sample had a purchase price that was between \$60,000 and \$90,000, with 17.4% paying over \$90,000 for their housing.

Two thirds of the sample (64.8%, N = 542) paid less than 30% of their income towards housing costs. This means that one third of the sample was cost burdened or paying 30% or more of their income for housing costs. Of those who were cost burdened, 24.2% had housing costs that were 30% to 50% of their income, and 11.1% were paying more than 50% of their income towards housing costs.

Of those respondents who gave information on the source of primary mortgage loans, the majority (86.9%, N = 297) obtained mortgage loans through banks or other mortgage finance institutions, and 12.8% obtained loans from individuals. About one fifth of the sample (19.9%,

N = 568) obtained government insured mortgages. Almost one half (45.9%) purchased private mortgage insurance and 34.2% were not required to carry mortgage insurance.

Adequacy of Housing Quality. A large majority of the sample resided in adequate quality housing (93.6%, N = 639). Only 5.8% of the sample had housing that was moderately inadequate and fewer than 1% (.6%) resided in housing that was considered to be severely inadequate.

Neighborhood Adequacy. The measure of neighborhood adequacy was derived from other measures in the AHS that indicated the presence of desirable features such as adequate schools and shopping facilities and a minimal presence of crime, heavy traffic, and noise. This measure was a three-point scale that ranged from inadequate to very adequate. More than one third of the sample indicated that the neighborhood was very adequate (38.7%, N = 106) and 44.3% indicated that their neighborhood was adequate. Only 17% of the sample resided in inadequate neighborhoods.

Comparison of the Sample to All Homeowners in the 1993 AHS

Comparisons of the study sample were made to the overall sample of all homeowners in the 1993 AHS. This was done as opposed to using Census of the Population data because a) statistical abstracts of the U. S. Census are available only on decennial years, and b) using the 1993 AHS offered the ability to compare similar data that is not available in the Census.

Demographic Characteristics. Table 6 depicts how demographic characteristics of the sample for this study compared to all homeowners in the 1993 AHS. According to these characteristics, the study sample was consistent with the larger sample of all homeowners in the 1993 AHS. Both sample groups had high proportions of Whites, more than three-quarters residing in metropolitan areas, more than a third residing in the South, and median levels of education above high school.

In spite of these similarities, the study sample had a higher proportion of non-White owners (20%) than did all homeowners in the 1993 AHS (10.4%). Additionally, the study sample had a slightly higher percentage (79.9%) residing in metropolitan areas than did all owners (77.6%). Furthermore, 39.7% of the study sample resided in the South, whereas 34.2% of all homeowners in the 1993 AHS lived in the South.

Differences between the sample groups are noted as a result of the study sample being younger than the overall group of homeowners in the 1993 AHS. The median age for the study sample was 44 years as compared to a median age of 51 years for all homeowners. A considerably larger percentage of the study sample (48.2%) had children at home who were under the age of 18 years, which was in contrast to 33.9% of all homeowners having children under 18 years of age in the home. The presence of children in the home is also reflected in the mean household size of the study sample (2.6) as compared to that of all homeowners (2.4). When not accounting for married couples, all homeowners in the 1993 AHS had a higher proportion of those who were widowed (41.4%) than did the study sample (24.9%). Subsequently, the study sample had larger

Table 6.

Demographic Characteristics of the Sample as Compared to All Homeowners in the 1993 AHS

Characteristic	Sample	1993 AHS[†]
Region:		
Northeast	13.5%	20.6%
Midwest	22.7%	25.9%
South	39.7%	34.2%
West	24.1%	19.3%
Settlement Type Area:		
Metropolitan	79.9%	77.6%
Non-metropolitan	21.1%	22.4%
Median Age	44	51
Life-Cycle Stage:		
No own children <18 yrs	51.8%	66.1%
With own children <18 yrs	48.2%	33.9%
Marital status:		
Married	N/A	65.5%
Widowed	24.9%	14.3% (41.4% [*])
Divorced	40.1%	10.8% (31.1% [*])
Separated	6.6%	2.2% (6.4% [*])
Never married	28.5%	7.2% (21.1% [*])
Mean Household Size	2.6	2.4
Race:		
White	80%	89.6%
Non-White	20%	10.4%
Median Annual Income	25,000	37,244 (25,724 ^{**})
Median Education Level	13.0	12.9

Notes: ^{*} These percentages indicate the proportion of unmarried marital status among all homeowners in the 1993 AHS when not accounting for households comprised of married couples.

^{**} This value is for all homeowners who moved within 12 months prior to the 1993 AHS and who did not own their previous residence.

[†] Source: U. S. Bureau of Census (1995b)

proportions representing those who were divorced, separated, and never-married than did all homeowners in the 1993 AHS.

Median income of the study sample was considerably lower than that of all homeowners in the 1993 AHS, \$25,000 and \$37,244 respectively. However, when the median income of the study sample was compared to that of all homeowners who moved within 12 months of the survey and did not own their previous residence, very little difference in median income was noted (see Table 6).

In summary, the study sample was younger, had more family households, earned lower income, and had a larger proportion living in the South and in metropolitan areas than did all homeowners in the 1993 AHS. The younger age of the study sample may reflect that the sample is not representative of those groups who have lower mobility rates, such as the elderly. The study sample may also reflect that single women enter into homeownership in larger proportions where the housing values are lower (e.g., the South) and where there is greater variety in the housing stock from which to choose (e.g., metropolitan areas).

Housing Characteristics. Table 7 shows how the housing characteristics of the sample for this study compared to that of all homeowners in the 1993 AHS. Similar to demographic characteristics, the study sample was consistent with the larger sample of all homeowners in the 1993 AHS. A large proportion of both sample groups owned single-family detached homes that had a median number of three bedrooms, were of adequate quality, and were located in neighborhoods with adequate facilities and other characteristics.

In spite of these similarities, the study sample owned a larger percentage of single- and multi-family attached homes (19.4%) than did all homeowners in the 1993 AHS (10.9%). A larger proportion of the study sample also owned mobile homes (10%) than did all homeowners (6.1%). The median purchase price of the study sample was considerably lower (\$47,700) than that of all homeowners who moved within 12 months of the AHS and did not own their previous residence (\$64,000). Reflecting a lower median purchase price, the study sample's median monthly housing cost was \$515 as compared to that of all homeowners who moved within 12 months of the survey and did not own their previous residence (\$537). Likewise, the median housing cost as a percentage of income was slightly lower for the study sample (25.5%) than for those owners who moved within 12 months of the survey and did not own their previous residence (28%).

The source of primary mortgage financing was similar for both the study sample and all homeowners in the 1993 AHS. A large majority of homeowners (86.9%) in both groups received financing for their primary mortgage from banks or similar financial institutions. A slightly larger portion of single women received financing from individuals (12.8%) than did all homeowners (12.4%).

Table 7

Housing Characteristics of the Sample as Compared to All Homeowners in the 1993 AHS

Characteristic	Sample	1993 AHS [†]
Structure type:		
Single-family, detached	70.6%	83.0%
Single-family, attached	7.8%	4.7%
Multi-family, attached	11.6%	6.2%
Mobile home	10.0%	6.1%
Median Purchase Price	47,700	45,295 (64,000 ^{*‡})
Housing Cost:		
Median Monthly Cost	515	511 (537 [*])
Median Cost as % Income	25.5	19 (28 [*])
Mortgage Financing:		
<u>Source of Downpayment:</u>		
Sale of Property	16.2%	13.1% ^{*‡}
Savings	58.5%	63.9% ^{*‡}
Investment Sale	1.1%	1.3% ^{*‡}
Inheritance/Gift	4.9%	4.4% ^{*‡}
Other	11.8%	9.1% ^{*‡}
No D/P Required	7.5%	8.3% ^{*‡}
<u>Source of Financing:</u>		
Bank	86.9%	86.9% ^{*‡}
Individual	12.8%	12.4% ^{*‡}
N/A	0.3%	0.7% ^{*‡}
<u>Mortgage Insurance:</u>		
FHA	16.2%	16.1% ^{*‡}
VA	2.4%	5.8% ^{*‡}
FmHA	1.3%	0.9% ^{*‡}
Private/Other	45.9%	52.5% ^{*‡}
No Mortgage Insurance	34.2%	24.7% ^{*‡}
Median No. Bedrooms	3	3
Mean Adequacy of Housing Quality	2.92	2.94 ^{*‡}
Mean Neighborhood Adequacy	2.21	2.22 ^{*‡}

Notes: * This value is for all homeowners who moved within 12 months prior to the 1993 AHS and who did not own their previous residence.

[†] Source: U. S. Bureau of Census (1995b) unless otherwise noted.

[‡] Source: U. S. Bureau of Census (1995a).

Where the two groups differ, however, in terms of mortgage financing are with the sources for downpayment money and primary mortgage insurance. A larger percentage of the study sample derived downpayment money from the sale of a previous property (16.2%) as compared to all homeowners (13.1%). Conversely, a smaller number of respondents in the study sample obtained downpayment money from their personal savings (58.5%) than did all homeowners (63.9%). The study sample also derived money for the downpayment from such sources as inheritance or gift money and other means (e.g., loans on other properties and the land on which the home is built) and did so to a more frequent degree than did all homeowners (see Table 7).

A smaller proportion of respondents in the study sample were not required to make a downpayment (7.5%) than were all homeowners (8.3%). This indicates that a higher proportion of all homeowners may have utilized financing instruments that did not require downpayments, such as federally insured mortgages (e.g., VA financing). This may also indicate that the single women in the study sample put more cash towards the purchase of their homes, or paid all cash, than did all homeowners. This is further evidenced in the proportion of those in the study sample who did not, or were not required to, purchase mortgage insurance (34.2%), which was almost 10% more than all homeowners (24.7%).

In summary, the housing of the study sample cost less and represented a larger proportion of attached housing than that of all homeowners in the 1993 AHS. Overall, the adequacy of the housing and neighborhoods in which the study samples' homes were located was equal to that of all homeowners. This may indicate that in order to afford the purchase of a home, single women are more likely to buy lower-cost attached housing that meets expectations for quality and neighborhood adequacy. Furthermore, there is evidence that low-downpayment financing instruments may be used to a lesser degree by single women than other homebuyers such as married couples or single men.

Discussion of Sample Description

The descriptive data provided a basic profile of the single women homeowners in the sample study. This profile included data on their demographic and housing characteristics. This profile also provided a description of factors associated with changes made in their housing when they transition from rental to ownership and the reasons for choosing their present homes and neighborhoods. The following is a discussion of these profiles and descriptions.

Demographic Characteristics

In general, the study sample was middle-aged, predominantly White, tended to have family households without young or preschool children, had been previously married, and earned moderate incomes. The largest proportion of the sample (39.7%) lived in the South. Throughout all regions, a majority resided in metropolitan areas (79.9%) as opposed to non-metropolitan areas

(20.1%). Additionally, the sample tended to be well educated with almost one half (48.4%) having completed one or more years of college.

Research indicates that homeownership rates vary across regions as a result of varying home prices, demographics, and housing types (Gyourko & Linneman, 1993; Hughes, 1991; Koebel & Zappatini, 1993). This study's finding that the largest group of single women homeowners resided in the South could be a function of lower home prices in this region even with respect to metropolitan areas. Burgess (1982) found that for single women living in the South, the probability that they would become homeowners increased by 11.3% as compared to single women residing in other regions of the country.

Although some research indicates that residing in central cities and metropolitan areas has a negative effect on single women's ownership rates (Burgess, 1982; Clark & Dieleman, 1996), this study's sample resided primarily in metropolitan areas. This result could be a reflection of the relationship between a local population's characteristics and choices among the housing stock (Myers & Doyle, 1990). Metropolitan areas tend to have a higher proportion of multi-family structures, which potentially are less costly than single-family detached housing units. Additionally, central cities and urbanized neighborhoods tend to have older, and in some cases less costly, housing units as compared to those built in newer suburban areas.

Very few of the sample, only 4.2%, were under 35 years of age. The descriptive findings of this study resemble results from other studies that found that the age of the household head strongly influences tenure in that homeownership rates increase as age increases (Clark & Dieleman, 1996). Research also indicates that over half of all heads of households become homeowners by their mid-thirties and this rate of increase continues until 50 years of age when it begins to level off (Clark & Dieleman, 1996; Hughes, 1996). Furthermore, Hughes (1996) found that since the early 1980s, ownership rates for household heads under 35 years of age have been decreasing and that the recent increase in homeownership rates is primarily due to a maturing population.

As previously discussed in the review of literature, the presence and age of children in the household has been shown to influence the transition from rental to ownership. The sample's low representation of single women under 35 years of age could be related to the few households represented in this study (8.5%) that had at least one preschool-aged child in the home. More than one half of the respondents (51.8%) had no children in the household under 18 years of age. Burgess (1982) found that women with preschool children were less likely to become homeowners than those with school-aged or older children. Additionally, when compared to all homeowners in the 1993 AHS, the result that 48.2% of the study sample had children in the home that were under 18 years of age could indicate that ownership provided these women and their families with

housing services such as larger units and better access to schools, shopping, recreational, and other facilities than if they remained in the rental sector of the housing market.

Almost three fourths of the sample (71.6%) had been previously married, with the largest group (40.1%) being divorced. Haurin and Kamara (1992) found that while income was about the same for divorced, widowed, and never-married women, the highest ownership rates were found among women who had previously been married (e.g., divorced and widowed). This result was attributed to these women's ownership while married. Another study (Munroe & Smith, 1989) found that early types of tenure status among men and women were strongly influenced by marital status and that the probability of women being homeowners was heavily influenced by their having been married.

Among many housing researchers, it is commonly accepted that homeownership rates increase as family size increases. The average household size of this sample, 2.6 persons per household, is the same as that for the national household size (U.S. Bureau of the Census, 1995c). Since a larger proportion of the sample had children present in the home as compared to all homeowners in the 1993 AHS, it is likely that the household size of the sample is attributed more to the presence of children rather than to other adults or unrelated individuals such as boarders and roommates in the home. Burgess (1982) found that household size increased the likelihood of ownership for both single women and men, and that this effect was stronger for women than for men. Furthermore, her results indicated that the presence of school-aged children in the home increased the likelihood of ownership by 17.3% among single women.

This study's finding that a majority of the sample resided in single-family detached homes could be a function of household size. Dieleman, et al. (1989) argued that household size along with income and characteristics of previous housing influence housing type choice among homeowners. Their study found that households of three or more persons who have lower incomes usually remain in the rental sector, but choose to rent larger single-family detached homes. Furthermore, households with children who moved from renting to owning were found to have incomes above \$20,000 per year and chose to own single-family detached homes (Dieleman, et al., 1989).

Although a large majority of the sample was White (80%), the proportion of non-White owners in this sample (20%) was almost twice that of non-White owners (10.4%) among all homeowners in the 1993 AHS. It was previously mentioned that among the non-White owners within the sample, over 80% were Black. Hughes (1996) found that between 1980 and 1995 homeownership rates for Black married couples showed considerable improvement. This trend shown by Hughes (1996) and the finding that being previously married has a positive effect on the likelihood of single women becoming or remaining homeowners (Haurin & Kamara, 1992;

Munroe & Smith, 1989), could partly explain the higher representation of non-White owners in the sample, especially since a large majority of the sample's non-White group were Black.

The sample had a median income of \$25,000 per year, which was essentially the same as that of all homeowners in the 1993 AHS that moved within 12 months of the survey and who did not own their previous residence. The study sample's income, however, was about 150% higher than that found by Lino's (1994) study of single women with families, which was found to be about \$17,000 per year.

The combination of income and education has been found to be increasingly important determinants of homeownership. As previously mentioned, almost one half of the study sample (48.4%) completed one or more years of college. In Lino's (1994) study, only 34.3% of single women with families completed one or more years of college. Additionally, only 16.8% of the study sample did not complete high school; whereas Lino (1994) found that 28.7% of single mothers did not complete high school. This comparison indicates that not only was the study sample found to have a higher income but also a higher level of education than most single women with families. Furthermore, this finding would support the argument that education and income are important determinants of homeownership, especially among single women.

Previous Housing Characteristics

Dieleman, et al. (1989) argue that previous housing characteristics influence the selection of housing among homeowners. The majority of respondents (60.6%) in the sample previously lived in apartments. This finding is not surprising, given that the majority of rental housing in this country is in the form of apartment units as opposed to single family detached homes. Cho, et al. (1990) also found that a majority of those who transition from rental to ownership previously lived in apartments. It is possible that apartment living is a choice of convenience and affordability for those who plan to eventually purchase a home.

Becoming a homeowner often involves taking on additional financial responsibility in terms of upkeep and maintenance as well as overall cost. It was not surprising that the largest proportion of respondents in the sample experienced an increase in their housing costs as a result of their move. A positive income change in the year preceding a move was found to increase the probability that a household would transition into ownership (Clark & Dieleman, 1996; Dieleman & Everaers, 1994). Furthermore, income stability was also found to be an important factor in the transition into ownership along with future income expectations (Dieleman & Everaers, 1994).

Research indicates that the transition from rental to ownership is related to increased housing quality and satisfaction (Morris & Winter, 1996). Therefore, it was not surprising to find that a majority of the respondents in the sample rated their new home to be better than the previous one. Given that a majority of the respondents moved from apartment units to single-family detached units, it is understandable that they would consider their present home to be better in

many respects. Ownership of a single-family detached home is the most common aspiration among most renter households (Morris & Winter, 1996; Varady & Lipman, 1994). The achievement of this aspiration would undoubtedly be reflected in new owners' "pride of ownership" and consideration that their own home is better than any previous one.

Similar to the rating of previous housing is that of the previous neighborhood. The results from this study, however, indicated that the positive rating of the neighborhood was not quite as strong as that of housing. Brower (1996) suggested that among the qualities that make a neighborhood good, or appealing, are those of "engagement" and "choicefulness." Engagement involves the way residents engage and avoid contact with each other, and choicefulness involves the extent to which individuals can choose where, how, and with whom they will live. The choice of a house may depend on considerations other than where it is located (e.g., price), and it is possible one buys a home more for its affordability than for its location. Developing emotional, personal, and social ties in a new neighborhood takes time and, thus, could influence how positively a person will rate their neighborhood, especially if it is not where they would prefer to live.

Reasons for Moving and Choosing the Present Home and Neighborhood

People move for many reasons, which can include those of financial, employment, personal interests, family, and housing. However, one half of the study sample moved for "housing" reasons, which could involve reasons of wanting a better quality home, to change tenure, and lower housing costs. Considering that the study sample previously rented, it is not surprising to note that within the grouping of housing reasons, changing tenure was the most frequently chosen response. Additionally, the sample's reasons for moving differed from another study that found single-parent households were twice as likely to move for family reasons than they were for housing reasons (Moore & Clark, 1990). Therefore, it seems that the aspiration to own was very high among this sample, that they did not differ from other population groups in their hopes of achieving ownership of their own home (Morris & Winter, 1996), and that their move was to fulfill this aspiration.

The largest proportion of respondents chose their home for financial reasons. Given the moderate income of the sample, it is likely that respondents bought their home because it met their established price criteria. Furthermore, while there are tax advantages to homeownership, research indicates that moderate income homebuyers rarely purchase a home for the tax and other financial advantages (Professional Builder's Consumer Survey, 1994). Therefore, it is possible that respondents choose the home because it was financially affordable for them.

Respondents' answers to the question concerning why they chose their present neighborhood were fairly evenly dispersed among the possible selections. Nevertheless, the response that was most frequently chosen was that of the housing unit within the neighborhood.

Research indicates that among most homebuyers, the neighborhood or location is first selected on the basis of the non-housing services provided (Morris & Winter, 1996), and then a housing unit is selected within the neighborhood (Brower, 1996; Gober, 1990; A Pro Builder Plus Exclusive, 1997). However, for this particular sample, the choice of the neighborhood may be secondary to the choice of the house. Also, because most respondents in this sample chose the home for financial reasons, as indicated above, it is possible that the neighborhood was chosen because it contained a home that met financial considerations, which was not one of the reasons listed among those for choosing the neighborhood.

Selected Housing Characteristics

Household size, life-cycle stage, and ages of children are found to be strongly associated to structure type as well as the number of bedrooms in the structure (Myers & Doyle, 1990; Rossi, 1955 & 1980). The majority of respondents in the sample purchased single-family detached homes and the median structure size was that of three bedrooms. However, nearly one-fifth of the sample's respondents owned attached forms of housing, which was a larger proportion than all homeowners in the 1993 AHS. Furthermore, the percentage of respondents in the sample who owned attached housing units was larger than that reported by Morris and Winter (1996) when they found that buyers of attached units comprised 13% of all homebuyers in 1992. This may indicate that among the sample, the desire to own may be more important than the structure type selected or that attached forms of housing meet the housing needs and preferences among single women homebuyers.

The finding that the sample's median purchase price was lower than that of all homeowners in the 1993 AHS who transitioned into ownership could have been a reflection of how households maximize their housing consumption within constraints of their financial resources (Clark & Dieleman, 1996; Morris & Winter, 1996). In spite of this finding, however, it was surprising to find that fewer respondents in the sample appeared to use financing instruments that required lower downpayments or the purchase of mortgage insurance. There are several possible explanations for this finding. Since a large majority of the women in the sample had been previously married, money obtained from divorce settlements or through the death of a spouse could have been used as purchase money (e.g., down or cash payment) when they bought their home. Another explanation relates to the lower purchase price as compared to all homeowners. If the respondents in the sample purchased lower cost housing, it is conceivable that they were able to pay 20% or more towards the downpayment, thereby not having to purchase mortgage insurance and keeping monthly payments to a minimum.

It may seem that an average purchase price of \$61,000 and median purchase price of \$47,700 seem very low. It should be noted how the AHS computes the purchase price of housing. The recorded purchase price in the AHS is the price paid for a house, condominium or

other attached unit, a lot, or a mobile home. If the price is for a lot, it does not include the cost of building a home or purchasing a mobile home to place on it. Additionally, if the cost is for a mobile home, it does not include the cost of the lot on which it is placed (Hadden & Leger, 1990). These criteria could easily cause the overall average and median purchase prices to be skewed towards a low value. Therefore, when using AHS home value data, it is instructive to compare median and mean housing costs among different groups in order to get a general picture of differences in home values.

Research generally indicates that about 15% of all homeowners are cost burdened (Birch, 1989). Therefore, it was surprising to find that about one third of the study sample paid 30% or more of their income for housing costs, especially given that this sample recently became owners and a majority of them received mortgages through banks. One explanation may be attributed to the costs that the AHS selects for inclusion in the total monthly housing costs. These costs include mortgage payments, insurance, property taxes, homeowners fees, utilities, fuel, trash collection, and routine maintenance for the home. While the amount of mortgage, property tax, and insurance payments may be less than 30% of a homeowner's income, additional costs such as those listed above could easily cause the total housing cost as a percentage of income to be much higher.

Previous findings indicate that when people transition from renting to owning, they improve their housing quality (Spain, 1990), that owners reside in better quality housing than do renters (Birch, 1989; Struyk, 1977), and that recent homebuyers most often reside in adequate quality housing (Morris & Winter, 1996). All of these observations were apparent in this sample. Given that this sample represented a group that recently purchased their home, it is understandable that a very large majority (93.6%) resided in housing of adequate quality.

The measure of neighborhood adequacy was less skewed toward "adequate" than was that of the adequacy of housing quality. Similar to the measure on why the neighborhood was chosen, this measure leaves much more open to interpretation even though a majority of respondents found their neighborhood to be adequate. Reasons accounting for this finding could be within how the measure itself was derived. Additionally, considering that a majority of the respondents were previously married, it is possible that they looked upon their new neighborhood as less desirable, and therefore less adequate, than the one lived in while they were married.

Chapter Summary

This chapter presented data in order to provide a profile of single women homeowners' demographic and housing characteristics. This chapter also presented information about the characteristics of their previous housing and reasons for choosing their present housing and neighborhoods. The discussion of these findings were to highlight results in relation to previous research and to provide a background for further discussion that follows presentation of the statistical analyses in the next chapter.

CHAPTER V

ANALYSES AND DISCUSSION

This chapter discusses the relationships between single women homeowners' demographic characteristics, their previous housing, reasons for moving and choosing their present homes, and their selected housing characteristics. The analyses presented in this chapter were done to answer the following research questions:

- 1) 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?
- 2) 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?
- 3) 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?
- 4) 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?

There were four null hypotheses formulated in accordance with the above research questions. The procedures used for testing and the results found for each null hypothesis are presented separately. Additionally, there is a discussion for the findings of the tests for each null hypothesis. Following the presentation and discussion of the null hypotheses, there is a discussion of the theoretical model relevant to the results.

Testing and Discussion of the Null Hypotheses

All appropriate tests for this sample were run using SAS Version 6.10 statistical package. The proposed theoretical model was tested using step-wise multiple regression and chi-square testing procedures. Phi-coefficients are widely used in the analysis of chi-square tests (Downie & Starry, 1977; Howell, 1992). Due to the relationship between chi-square and the phi-coefficient, for the chi-square groups where a significant relationship appears at $p \leq 0.05$, the phi-coefficient values will also be given.

Null Hypothesis H1

- 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.

Procedures for Testing H1

The procedures of step-wise multiple regression and chi-square were used to test the Null Hypothesis H1. Sixteen independent variables were included in the statistical model for analyzing their relationship to the dependent variables of structure size, purchase price, quality and neighborhood adequacy. The four variables of age, household size, education, and income were treated as continuous variables. Settlement type (e.g., 1 = metropolitan, 0 = non-metropolitan) and life-cycle stage (e.g., 1 = children in the home 18 years of age and younger, 0 = no children in the home under the age of 19 years) were coded as dummy variables for inclusion in regression analyses. Using these six independent variables, step-wise regression analyses were run separately on the dependent variables of structure size, purchase price, quality, and neighborhood adequacy. Step-wise regression procedures indicated a final model that included only those independent variables that met specific significance levels. All variables were dropped from the model that did not meet this criteria.

Chi-square tests were done to test the relationship between the remaining 10 independent variables and the dependent variables. The four dependent variables of purchase price, structure size, adequacy of quality, and neighborhood adequacy were categorized in order to conduct chi-square testing by the independent variables.

Results of Testing of H1

Step-Wise Regression Analyses. Step-wise regression analysis was used to test for the relationship between purchase price and the independent variables of settlement type area (Metro/non-Metro), annual income, education, life-cycle stage, household size, and age. Table 8 shows the final model of results of this analysis, which includes only those independent variables

that met the criteria of $p \leq 0.05$. Five of the six independent variables entered in this model were found to significantly affect purchase price ($N = 514$). Household size was the only variable that was not significant. The resulting model was found to account for 22.75% of the variance in purchase price.

Table 8

Summary of Step-Wise Regression Procedure for Purchase Price

Variable Name	<i>B</i>	<i>SE B</i>	<i>F</i>	<i>Prob > F</i>
(INTERCEPT)	-1397.82981783	16895.40651935	0.01	0.9341
Metro/non-Metro	22600.40376697	5789.81610567	15.24	0.0001
Income	0.82518615	0.11676055	49.95	0.0001
Education	3110.49034943	911.23528127	11.65	0.0007
Life-cycle Stage	-13114.06509092	4676.32002857	7.86	0.0052
Age	-348.28827157	157.61813116	4.88	0.0276

Note: $R^2 = 0.2275$ $F_{(5,508)} = 29.93$ Sig F = 0.0001.

As indicated in Table 9, the step-wise regression analysis that tested the relationship between structure size and the independent variables of settlement type, age, life-cycle stage, household size, income, and education found that only income and household size significantly affected structure size ($N = 632$). These two variables accounted for 20.67% of the variance in structure size but were significant at the $p \leq 0.05$ level.

Table 9

Summary of Step-Wise Regression Procedure for Structure Size (Number of Bedrooms)

Variable Name	<i>B</i>	<i>SE B</i>	<i>F</i>	<i>Prob > F</i>
(INTERCEPT)	2.03286418	0.07109785	817.53	0.0001
Income	0.00000673	0.00000153	19.36	0.0001
Household Size	0.21888251	0.01942711	126.94	0.0001

Note: $R^2 = 0.2067$ $F_{(2,629)} = 81.98$ Sig F = 0.0001.

The step-wise regression procedure that tested the relationship between housing quality and the independent variables of settlement type, age, life-cycle stage, household size, income, and education found that only income significantly affected housing quality (N = 632). However, as part of the model shown in Table 10, this variable accounted for .0195 of the total R-square. In spite of this result, for this particular sample and model, income is considered to have a significant effect, even though it accounted for a very small portion of the variance in housing quality.

Table 10

Summary of Step-Wise Regression Procedure for Housing Quality

Variable Name	B	SE B	F	Prob > F
(INTERCEPT)	2.87378127	0.03007568	9130.12	0.0001
Metro/non-Metro	0.04340835	0.02782546	2.43	0.1193
Income	0.00000176	0.00000053	11.14	0.0009
Household Size	-0.01156474	0.00659225	3.08	0.0799

Note: $R^2 = 0.0272$ $F_{(3,628)} = 5.86$ Sig F = 0.0006.

Step-wise regression analyses indicated that there was no significant relationship between neighborhood adequacy and the independent variables of settlement type, age, life-cycle stage, household size, income, and education.

Chi-Square Tests. Chi-square analyses were conducted to further test for the relationship between the remaining categorical independent variables and dependent variables of purchase price, structure size, housing quality, and neighborhood adequacy.

Table 11 shows the chi-square test of the demographic variables of *geographic region*, *marital status*, and *race* by purchase price. This test indicated that two chi-square groups, *geographic region* and *marital status* were significant at $p \leq 0.05$. In other words, there is an association between these two variables and that of *purchase price*. As indicated in Table 11, *race* was not found to have a significant association with *purchase price*.

Table 12 depicts the chi-square test of the demographic variables of *geographic region*, *marital status*, and *race* by *structure size*. This test indicated that two chi-square groups, *geographic region* and *race* were significant at $p \leq 0.05$. In other words, there was a significant association between these two variables and that of *structure size*.

Table 11

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Purchase Price

	Purchase Price of Current Home/Lot/Condo				
		< \$30K	\$30K - 59,999K	\$60K - \$89,999	\$90K+
	Total %	%	%	%	%
Geographic Region:					
Northeast	13.6	4.9	3.5	1.7	3.5
Midwest	23.9	8.2	10.0	4.1	1.7
South	37.1	13.4	13.6	5.4	4.7
West	25.3	<u>7.0</u>	<u>6.2</u>	<u>4.5</u>	<u>7.6</u>
		33.5	33.3	15.7	17.5
N = 514		$\chi^2 = 34.289$	df = 9	$p = 0.001^*$	$\phi = 0.250$
Marital Status:					
Widowed	22.4	12.1	6.0	1.6	2.7
Divorced	43.2	12.6	15.4	7.0	8.2
Separated	6.3	2.7	2.0	1.0	0.6
Never Married	28.1	<u>6.0</u>	<u>9.9</u>	<u>6.2</u>	<u>6.0</u>
		33.4	33.3	15.8	17.5
N = 514		$\chi^2 = 38.724$	df = 9	$p = 0.001^*$	$\phi = 0.274$
Race:					
White	81.4	26.3	26.9	12.4	15.8
Non-White	18.6	<u>7.2</u>	<u>6.4</u>	<u>3.3</u>	<u>1.7</u>
		33.5	33.3	15.7	17.5
N = 514		$\chi^2 = 5.699$	df = 3	$p = 0.127$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 12

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Structure Size

	Structure Size: Number of Bedrooms				
		1 Bedroom	2 Bedrooms	3 Bedrooms	4+ Bedrooms
	Total %	%	%	%	%
Geographic Region:					
Northeast	13.3	0.8	3.9	5.5	3.1
Midwest	22.6	1.1	7.7	10.9	2.9
South	39.9	1.1	11.8	21.8	5.2
West	24.2	<u>1.2</u>	<u>9.1</u>	<u>9.3</u>	<u>4.6</u>
		4.2	32.5	47.5	15.8
N = 638	$\chi^2 = 16.890$		df = 9	$p = 0.050^*$	$\phi = 0.163$
Marital Status:					
Widowed	24.9	1.2	8.1	10.9	4.7
Divorced	40.1	1.1	11.0	20.8	7.2
Separated	6.6	0.2	2.4	2.8	1.2
Never Married	28.4	<u>1.7</u>	<u>11.0</u>	<u>13.0</u>	<u>2.7</u>
		4.2	32.5	47.5	15.8
N = 638	$\chi^2 = 16.359$		df = 9	$p = 0.060$	
Race:					
White	80.1	3.0	28.4	37.6	11.1
Non-White	19.9	<u>1.2</u>	<u>4.1</u>	<u>9.9</u>	<u>4.7</u>
		4.2	32.5	47.5	15.8
N = 638	$\chi^2 = 14.836$		df = 3	$p = 0.002^*$	$\phi = 0.152$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 13 shows the chi-square test of the demographic variables of *geographic region*, *marital status*, and *race* by *housing quality*. This test indicated that only one of the chi-square groups, *race*, was significant at $p \leq 0.05$. In other words, there was a significant association between *race* and *housing quality*. As indicated in Table 13, neither *marital status* or *region* were found to have any significant associations with *housing quality*.

Table 13

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Housing Quality

	Total %	Overall Quality of Housing Unit		
		Severely Inadequate	Moderately Adequate	Adequate
	%	%	%	%
Geographic Region:				
Northeast	13.4	0.0	0.3	13.1
Midwest	22.7	0.2	1.1	21.4
South	39.7	0.3	3.6	35.8
West	24.2	<u>0.2</u>	<u>0.8</u>	<u>23.2</u>
		0.7	5.8	93.5
N = 639	$\chi^2 = 9.656$		df = 6	$p = 0.140$
Marital Status:				
Widowed	24.9	0.0	1.6	23.3
Divorced	40.1	0.5	1.6	38.0
Separated	6.6	0.0	0.3	6.3
Never Married	28.4	<u>0.2</u>	<u>2.3</u>	<u>25.9</u>
		0.7	5.8	93.5
N = 639	$\chi^2 = 6.269$		df = 6	$p = 0.394$
Race:				
White	80.0	0.5	3.3	76.2
Non-White	20.0	<u>0.1</u>	<u>2.5</u>	<u>17.4</u>
		0.6	5.8	93.6
N = 639	$\chi^2 = 13.313$		df = 2	$p = 0.001^*$ $\phi = 0.144$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Chi-square tests found that there were no significant associations at $p \leq 0.05$ between the demographic variables of *geographic region*, *marital status*, or *race* and the variable of *neighborhood adequacy*.

Chi-square groups were tested for associations between the variables of *purchase price*, *structure size*, *housing quality*, and *neighborhood adequacy* and the variables of a) *previous housing and neighborhood characteristics* and b) *reasons for moving and choosing the present home and neighborhood*. The results of these tests are shown in Table 14.

Table 14

Cross Tabulations of Chi-Square Results: Previous Housing and Neighborhood Characteristics by Purchase Price

		Purchase Price of Current Home/Lot/Condo				
		< \$30K	\$30K - 59,999K	\$60K - \$89,999	\$90K+	
		Total %	%	%	%	%
A) Characteristics of Previous Unit and Neighborhood						
Type of Previous Unit:						
House	34.0	12.7	8.3	6.6	6.4	
Apartment	62.1	18.3	16.8	13.3	13.7	
Mobile Home	3.9	<u>2.3</u>	<u>0.6</u>	<u>0.8</u>	<u>0.2</u>	
		33.3	25.7	20.7	20.3	
N = 518	$\chi^2 = 11.061$		df = 6	$p = 0.087$		
Change in Housing Cost as Result of Move:						
Increased	47.4	6.9	13.8	12.7	14.0	
Stayed the Same	22.5	8.3	4.5	5.3	4.4	
Decreased	26.5	15.9	4.9	2.9	2.8	
Don't Know	3.6	<u>1.7</u>	<u>1.3</u>	<u>0.4</u>	<u>0.2</u>	
		32.8	24.5	21.3	21.4	
N = 472	$\chi^2 = 83.549$		df = 9	$p = 0.001^*$	$\phi = 0.421$	
Comparison of New Home to Previous One:						
Better	71.4	13.4	17.8	20.1	20.1	
About the Same	21.3	4.8	7.6	5.4	3.5	
Worse	7.3	<u>2.9</u>	<u>1.9</u>	<u>0.9</u>	<u>1.6</u>	
		21.1	27.3	26.4	25.2	
N = 314	$\chi^2 = 11.174$		df = 6	$p = 0.083$		
Comparison of New Neighborhood to Previous One:						
Better	50.9	8.3	14.1	14.4	14.1	
About the Same	37.1	8.0	10.9	8.9	9.3	
Worse	8.9	4.2	2.2	1.9	0.6	
Stayed in Same Neighborhood	3.1	<u>0.6</u>	<u>0.3</u>	<u>1.3</u>	<u>0.9</u>	
		21.1	27.5	26.5	24.9	
N = 313	$\chi^2 = 17.090$		df = 9	$p = 0.047^*$	$\phi = 0.234$	

(Table continues on next page)

Table 14 (Continued)

		Purchase Price of Current Home/Lot/Condo				
		< \$30K	\$30K - 59,999K	\$60K - \$89,999	\$90K+	
		Total %	%	%	%	%
B) Reasons for Moving and Choosing Present Home and Neighborhood						
Primary Reason for Moving from Previous Residence:						
All Reasons Equal	4.4	0.9	1.3	0.9	1.3	
Financial	8.7	2.3	1.6	1.9	2.9	
Family/Personal	24.8	7.1	6.4	7.1	4.2	
Housing	54.1	8.7	14.5	15.1	15.8	
Other	8.0	<u>1.9</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>	
		20.9	27.0	26.6	25.5	
N = 311	$\chi^2 = 12.518$		df = 12	$p = 0.405$		
Main Reason for Choice of Present Home:						
All Reasons Equal	15.1	0.3	3.3	4.6	6.9	
Financial	41.4	11.2	14.4	10.2	5.6	
Design/Layout of Home	25.5	2.3	6.2	8.8	8.2	
Other	18.0	<u>6.9</u>	<u>3.6</u>	<u>2.6</u>	<u>4.9</u>	
		20.7	27.5	26.2	25.6	
N = 305	$\chi^2 = 49.034$		df = 9	$p = 0.001^*$	$\phi = 0.401$	
Main Reason for Choice of Neighborhood:						
All Reasons Equal	11.1	0.7	2.9	3.6	3.9	
Personal Interests	17.4	5.3	4.6	3.6	3.9	
Public Services	5.0	0.7	1.3	0.7	2.3	
Neighborhood Look/Design	11.8	1.0	2.6	3.9	4.3	
The Housing Unit	30.9	6.3	9.4	8.6	6.6	
Other	23.7	<u>7.6</u>	<u>6.9</u>	<u>5.3</u>	<u>3.9</u>	
		21.6	27.7	25.7	24.9	
N = 303	$\chi^2 = 25.408$		df = 15	$p = 0.045^*$	$\phi = 0.290$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 14 shows the results of the chi-square test for *previous housing and neighborhood characteristics* and *reasons for moving and choosing the present home and neighborhood* by *purchase price*. This test indicated that two of the chi-square groups, *change in housing cost as a result of the move* and *comparison of the new neighborhood to the previous one* had significant associations with *purchase price*.

Table 14 also shows the results of the chi-square tests for *reasons for moving and choosing the present home and neighborhood* by *purchase price*. Two chi-square groups were found to be significantly associated with *purchase price* at the $p \leq 0.05$ level, which were *reasons for choosing the present home* and *reasons for choosing the present neighborhood*.

Chi-square tests indicated that there were no significant associations between the variables of *previous housing and neighborhood characteristics*, *reasons for moving and choosing the present home and neighborhood*, and the variable of *structure size*.

Table 15 shows the results of the chi-square test for *previous housing and neighborhood characteristics* by *housing quality*. This test indicated that two of the chi-square groups, *change in housing cost as a result of the move* and *comparison of the new home to the previous one* had significant associations with *housing quality*. Chi-square tests found that there were no significant associations between the variables of *reasons for moving and choosing the present home and neighborhood* and the variable of *housing quality*.

Table 16 shows the results of the chi-square test for *previous housing and neighborhood characteristics* by *neighborhood adequacy*. This test indicated that only one of the chi-square groups, *type of previous housing* had a significant association with *neighborhood adequacy*.

Chi-square tests found that there were no significant associations at the $p \leq 0.05$ level between the variables of *reasons for moving and choosing the present home and neighborhood* by the variable of *neighborhood adequacy*.

Table 15

Cross Tabulations of Chi-Square Results: Previous Housing and Neighborhood Characteristics by Housing Quality

		Overall Quality of Housing Unit			
		Severely Inadequate	Moderately Adequate	Adequate	
Total %		%	%	%	
A) Characteristics of Previous Unit and Neighborhood					
Type of Previous Unit:					
House	35.3	0.0	2.9	32.4	
Apartment	60.5	0.6	2.5	57.4	
Mobile Home	4.1	<u>0.0</u>	<u>0.3</u>	<u>3.8</u>	
		0.6	5.7	93.6	
N = 639	$\chi^2 = 7.437$		df = 4	$p = 0.115$	
Change in Housing Cost as Result of Move:					
Increased	44.7	0.2	1.8	42.7	
Stayed the Same	22.8	0.2	1.6	21.0	
Decreased	28.6	0.3	1.6	26.7	
Don't Know	4.0	<u>0.0</u>	<u>0.9</u>	<u>3.1</u>	
		0.7	5.9	93.5	
N = 572	$\chi^2 = 13.869$		df = 6	$p = 0.031^*$	$\phi = 0.156$
Comparison of New Home to Previous One:					
Better	70.1	0.5	2.9	66.7	
About the Same	22.5	0.0	1.1	21.4	
Worse	7.3	<u>0.5</u>	<u>0.5</u>	<u>6.3</u>	
		1.0	4.5	94.4	
N = 378	$\chi^2 = 11.685$		df = 4	$p = 0.020^*$	$\phi = 0.176$
Comparison of New Neighborhood to Previous One:					
Better	49.3	0.5	1.9	46.9	
About the Same	38.1	0.5	1.8	35.8	
Worse	9.3	0.0	0.3	9.0	
Stayed in Same Neighborhood	3.2	<u>0.0</u>	<u>0.5</u>	<u>2.7</u>	
		1.0	4.5	94.4	
N = 377	$\chi^2 = 5.260$		df = 6	$p = 0.511$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 16

Cross Tabulations of Chi-Square Results: Previous Housing Characteristics by Neighborhood Adequacy

		Neighborhood Adequacy			
		Inadequate	Moderately Adequate	Adequate	
		1	2	3	
Total %		%	%	%	%
A) Characteristics of Previous Unit and Neighborhood					
Type of Previous Unit:					
House	40.6	12.3	13.2	15.1	
Apartment	56.6	4.7	29.2	22.6	
Mobile Home	2.8	<u>0.0</u>	<u>1.9</u>	<u>0.9</u>	
		17.0	44.3	38.6	
N = 106	$\chi^2 = 10.081$	df = 4	$p = 0.039^*$	$\phi = 0.308$	
Change in Housing Cost as Result of Move:					
Increased	31.6	3.2	16.8	11.6	
Stayed the Same	24.2	5.2	6.3	12.6	
Decreased	40.0	6.3	21.1	12.6	
Don't Know	4.2	<u>2.1</u>	<u>0.0</u>	<u>2.1</u>	
		16.8	44.2	38.9	
N = 95	$\chi^2 = 10.177$	df = 6	$p = 0.117$		
Comparison of New Home to Previous One:					
Better	59.65	10.53	26.32	22.81	
About the Same	22.81	3.51	7.02	12.28	
Worse	17.54	<u>5.26</u>	<u>8.77</u>	<u>3.51</u>	
		19.30	42.11	38.60	
N = 57	$\chi^2 = 3.003$	df = 4	$p = 0.557$		
Comparison of New Neighborhood to Previous One:					
Better	33.33	8.77	15.79	8.77	
About the Same	31.58	3.51	10.53	17.54	
Worse	28.07	5.26	10.53	12.28	
Stayed in Same Neighborhood	7.02	<u>1.75</u>	<u>5.26</u>	<u>0.00</u>	
		19.30	42.11	38.60	
N = 57	$\chi^2 = 6.480$	df = 6	$p = 0.372$		

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Discussion of Results of Tests of H1

The first null hypothesis that was tested stated that there was no relationship between the independent variables (e.g., demographic characteristics, previous housing and neighborhood characteristics, and reasons for moving and choosing the present home and neighborhood) and the dependent variables of purchase price, structure size, housing quality and neighborhood adequacy. Significance was tested at the level of $p \leq 0.05$. Using step-wise multiple regression and chi-square analysis techniques, significant relationships were found between the independent and dependent variables relevant to the first null hypothesis, and, therefore, the first null hypothesis was rejected. The following sections will separately discuss the dependent variables of purchase price, structure size, housing quality, and neighborhood adequacy and the independent variables that were found to be significantly related to each.

Purchase Price. Step-wise regression and chi-square testing techniques found that the demographic variables of geographic region, settlement type, age, life-cycle stage, marital status, income, and education were all significantly related to purchase price. Additionally, purchase price was also found to be significantly related to the change in housing cost as a result of moving, comparison of the new neighborhood to the previous one, and the reasons for choosing the present home and neighborhood.

The step-wise regression analysis indicated that settlement type (e.g., metropolitan or non-metropolitan), income, and education all had a positive effect on purchase price. Living in a metropolitan area had a positive effect on the purchase price of a home, indicating that, generally, home prices were higher in metropolitan areas than in non-metropolitan areas. The results also indicated that as level of education and income increased, the level of purchase price also increased.

The step-wise regression analysis found that life-cycle stage and age were found to have a negative effect on purchase price. Having children present in the home was found to have a negative effect on the purchase price of a home. In other words, home values tended to be lower for those households that had children in the home. With respect to age, the findings indicate that as age increased for this sample, purchase price decreased. These findings differ from results of other research that indicate as age and household size increases, housing consumption also increases; often reflecting this effect in higher housing costs and purchase prices (Clark & Dieleman, 1996; Henderson & Ioannides, 1983).

Chi-square tests found that geographical region and marital status were significantly related to purchase price. Lower purchase prices dominated in both the South and Midwest, with about three fourths of the respondents in these regions paying below \$60,000 for their housing. The West had the largest proportion of higher purchase prices, with 30% of the respondents from this region paying \$90,000 or more for their homes, and almost one half (48%) paying over \$60,000.

Although 25% of the respondents from the Northeast paid \$90,000 or more for their housing, 35% of the Northeast respondents indicated that their homes cost under \$30,000.

About three fourths of widowed and separated respondents paid less than \$60,000 for their homes; and about two thirds (64%) of divorced respondents paid \$60,000 or less. Never-married women, however, had the largest proportion (44%) of those who paid \$60,000 or more for their housing; with 22% of never-married women paying \$90,000 or more.

Chi-square tests found that purchase price was related to previous housing and neighborhood characteristics. Generally, as purchase price increased, the proportion of respondents that experienced increased housing costs also increased. Conversely, as purchase price decreased, the proportion of those who experienced lowered housing costs increased. Similar to that of changes in housing costs, the rating or comparison of the new neighborhood to the previous one was found to be significantly related to purchase price. That is, as purchase price increased, the proportion of respondents who rated their present neighborhood as better than the previous one also increased. Conversely, as purchase price decreased, the number of respondents who rated their present neighborhood as worse than the previous one increased.

Structure Size. Step-wise regression and chi-square testing techniques found that the demographic variables of household size and income were significantly related to structure size. In the regression analysis, both household size and income had a positive effect on structure size. That is, as income and household size increased the number of bedrooms in the home also increased. This finding is similar to a wide number of studies that also found that structure size is positively affected by household size and income.

Chi-square tests found that geographical region and race were significantly related to structure size. While 3-bedroom homes were the dominant structure size for all four regions, the Northeast had the largest proportion of homes (25%) that had 4 or more bedrooms. In the West, 42% of the homes had 2 or less bedrooms. Structure size was found to be smaller for Whites than for non-Whites. About three fourths of non-Whites resided in homes of 3 or more bedrooms, and about the same proportion of Whites resided in homes of 3 or fewer bedrooms. Non-Whites had the highest proportion (23% of non-Whites) living in homes with 4 or more bedrooms. This was in comparison to 14% of all Whites living in homes of 4 or more bedrooms.

Housing Quality. Step-wise regression analysis and chi-square tests found that the demographic variables of income and race were significantly related to housing quality. Additionally, housing quality was found to be related to the change in housing cost as a result of moving and comparison to the previous home.

Results from the regression analysis indicate that income is positively related to housing quality. That is, as income increases, housing quality improves. Chi-square tests found that there

was a significant relationship between race and housing quality. A greater proportion of all Whites were found to live in homes of higher quality than were non-Whites.

The results on the relationship between income, race, and housing quality are similar to a wide body of research, which found that as income increased, housing quality deficiencies decreased (Morris & Winter, 1996; Struyk, 1977). Additionally, while owners in general tend to live in homes of higher quality than do renters (Birch, 1989; Spain, 1990), non-White homeowners are found to reside in homes of lower quality than are Whites (Apgar, 1989; Shelton & Sillah, 1996).

Chi-square tests found that housing quality was related to the previous housing characteristics of change in housing cost as a result of moving and the comparison of the new home to the previous one. Generally, housing quality was higher for those who experienced an increased housing cost. Similarly, those who felt their new home was better than the previous one resided in higher quality homes.

Neighborhood Adequacy. Chi-square tests found that type of previous residence was related to neighborhood adequacy. This variable was the only one found to be significantly related to neighborhood adequacy. Generally, as shown in Table 16, those who previously lived in houses had a larger proportion (30%) who moved to neighborhoods that were considered to be inadequate than did those who previously lived in apartments (8%). Additionally, 91% of those who previously lived in apartments, moved to neighborhoods that were moderately adequate or better. This was in contrast to 70% of those who previously lived in houses and moved to neighborhoods that were moderately adequate or better.

Null Hypothesis H2

- 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.

Procedures for Testing H2

Chi-square statistical procedures were used to test the Null Hypothesis H2. Chi-square tests were done to test the relationship between 16 independent variables and the dependent variable of structure type. In order to conduct chi-square testing of age, household size, income, and education, these four continuous variables were categorized. The results of these chi-square tests are shown in Tables 17 and 18.

Results of Testing of H2

Table 17 shows the results of chi-square test of the demographic variables of *geographic region, settlement type, age, life-cycle stage, marital status, household size, race, income, and education by structure type*. The test indicated that seven chi-square groups; *geographic region, settlement type, life-cycle stage, marital status, household size, income, and education*; were significant at $p \leq 0.05$. In other words, there is an association between these seven variables and that of *structure type*.

Table 18 shows the results of chi-square tests of the previous housing characteristics of *previous housing type, change in cost as result of move, and reason for choosing present home by structure type*. Only these three chi-square groups were found to be significant.

Discussion of Results of H2

The second null hypothesis that was tested stated that there was no relationship between the independent variables (e.g., demographic characteristics, previous housing and neighborhood characteristics, and reasons for choosing the present home and neighborhood) and the dependent variable of structure type. Significance was tested at the level of $p \leq 0.05$. Using chi-square analysis techniques, significant relationships were found between the independent and dependent variables relevant to the second null hypothesis, and, therefore, this null hypothesis was rejected. The following paragraphs will separately discuss the independent variables that were found to be significantly related to structure type.

The demographic variable of *geographic region* was found to be significantly related to structure type. As shown in Table 17, about three fourths of the respondents from the Midwest and South were found to reside in single-family detached homes and about 11% from each of these regions were found to reside in mobile homes. While 72% of the respondents from the West were also found to reside in single-family detached homes, a higher proportion of them resided in single-family and multi-family attached homes. The Northeast had the smallest concentration of respondents residing in single-family detached homes (53%), and the largest proportion of residents from that region residing in attached forms of housing. This region also had the lowest overall number of respondents residing in mobile homes.

The above results may illustrate differences found in housing types throughout regions of the country and that these differences are influenced by regional population density and housing preferences. For example, mobile homes are more widely accepted and used as alternative forms of housing in some areas of the country, such as the South and Midwest. In the more densely populated areas of the Northeast, where housing prices are much higher and there is a large supply of attached housing, it would be expected to see a larger proportion of people living in attached forms of housing.

Table 17

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Structure Type

		SF-Detached	SF-Attached	MultiFam	Mobile Home
	Total %	%	%	%	%
Geographic Region:					
Northeast	13.5	7.2	2.7	2.8	0.8
Midwest	22.7	16.6	0.9	2.3	2.8
South	39.7	29.4	2.5	3.6	4.2
West	24.1	<u>17.4</u>	<u>1.7</u>	<u>2.8</u>	<u>2.2</u>
		70.6	7.8	11.5	10.0
	N = 639	$\chi^2 = 33.865$	df = 9	$p = 0.001^*$	$\phi = 0.230$
Settlement Type:					
Metropolitan	79.8	55.2	7.5	10.5	6.6
Non-Metropolitan	20.1	<u>15.3</u>	<u>0.3</u>	<u>1.1</u>	<u>3.4</u>
		70.5	7.8	11.6	10.0
	N = 639	$\chi^2 = 22.078$	df = 3	$p = 0.001^*$	$\phi = 0.186$
Age:					
Under 35	4.2	3.0	0.2	0.4	0.6
35 to 49	44.1	34.7	3.4	2.6	3.4
50 to 64	29.2	20.8	2.2	4.6	1.6
65+	22.3	<u>15.5</u>	<u>1.6</u>	<u>2.2</u>	<u>3.0</u>
		74.0	7.4	9.8	8.6
	N = 496	$\chi^2 = 15.708$	df = 9	$p = 0.073$	
Life-Cycle Stage:					
No Children <18 yrs.	51.8	32.7	5.2	8.9	5.0
Children <18 yrs. at Home	48.2	<u>37.9</u>	<u>2.6</u>	<u>2.7</u>	<u>5.0</u>
		70.6	7.8	11.6	10.0
	N = 639	$\chi^2 = 28.365$	df = 3	$p = 0.001^*$	$\phi = 0.211$

(Table continues on next page)

Table 17 (Continued)

		SF-Detached	SF-Attached	MultiFam	Mobile Home
	Total %	%	%	%	%
Marital Status:					
Widowed	24.9	18.6	1.3	1.9	3.1
Divorced	40.1	29.4	2.8	4.8	2.9
Separated	6.5	5.0	0.6	0.3	0.6
Never Married	28.4	<u>17.5</u>	<u>3.1</u>	<u>4.6</u>	<u>3.4</u>
		70.5	7.8	11.6	10.0
	N = 639	$\chi^2 = 17.430$	df = 9	$p = 0.042^*$	$\phi = 0.165$
Household Size:					
1 Person	25.5	14.2	2.4	6.4	2.5
2 Persons	34.1	24.4	2.9	3.1	3.7
3 Persons	17.7	12.7	1.9	1.2	1.9
4+ Persons	22.6	<u>19.2</u>	<u>0.6</u>	<u>0.9</u>	<u>1.9</u>
		70.5	7.8	11.6	10.0
	N = 639	$\chi^2 = 50.249$	df = 9	$p = 0.001^*$	$\phi = 0.280$
Race:					
White	79.9	55.7	6.1	9.7	8.4
Non-White	20.1	<u>14.9</u>	<u>1.7</u>	<u>1.9</u>	<u>1.6</u>
		70.6	7.8	11.6	10.0
	N = 639	$\chi^2 = 1.869$	df = 3	$p = 0.600$	
Annual Income:					
< \$20,000	36.9	23.2	1.8	4.6	7.3
\$20,000-\$34,999	31.2	24.1	1.9	3.6	1.6
\$35,000-\$49,999	17.3	12.2	2.8	1.6	0.7
\$50,000 +	14.5	<u>11.3</u>	<u>1.3</u>	<u>1.6</u>	<u>0.3</u>
		70.8	7.8	11.4	9.9
	N = 613	$\chi^2 = 52.884$	df = 9	$p = 0.001^*$	$\phi = 0.294$
Education Completed:					
Less than 12 Years	16.8	11.6	1.2	0.9	3.1
High School	34.7	25.8	2.0	2.5	4.4
1 to 3 Years College	22.7	15.8	1.6	3.6	1.7
4 + Years College	25.7	<u>17.4</u>	<u>3.0</u>	<u>4.5</u>	<u>0.8</u>
		70.6	7.8	11.5	10.0
	N = 639	$\chi^2 = 37.680$	df = 9	$p = 0.001^*$	$\phi = 0.243$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 18

Cross Tabulations of Chi-Square Results: Previous Housing Characteristics and Reasons for Choosing the Present Home by Structure Type

		SF-Detached	SF-Attached	MultiFam	Mobile Home
	Total %	%	%	%	%
Type of Previous Unit:					
House	35.4	28.2	1.9	1.5	3.8
Apartment	60.6	40.1	5.9	10.0	4.5
Mobile Home	4.0	<u>2.3</u>	<u>0.0</u>	<u>0.0</u>	<u>1.7</u>
		70.6	7.8	11.5	10.0
N = 639	$\chi^2 = 60.973$		df = 6	$p = 0.001^*$	$\phi = 0.309$
Change in Housing Cost as Result of Move:					
Increased	44.6	30.9	4.7	5.8	3.2
Stayed the Same	22.7	16.8	1.7	2.4	1.7
Decreased	28.7	20.1	1.1	2.9	4.6
Don't Know	4.0	<u>2.3</u>	<u>0.4</u>	<u>0.7</u>	<u>0.7</u>
		70.1	7.9	11.8	10.2
N = 572	$\chi^2 = 17.909$		df = 9	$p = 0.036^*$	$\phi = 0.177$
Main Reason for Choice of Present Home:					
All Reasons Equal	14.7	9.5	1.1	3.8	0.3
Financial	40.2	23.9	4.1	6.5	5.7
Design/Layout of Home	24.7	17.7	2.4	4.1	0.5
Other	20.4	<u>15.0</u>	<u>0.8</u>	<u>1.6</u>	<u>3.0</u>
		66.1	8.4	16.0	9.5
N = 368	$\chi^2 = 24.822$		df = 9	$p = 0.003^*$	$\phi = 0.260$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

The relationship found between settlement type and structure type was similar to that found for geographic region. Again, more respondents from metropolitan areas were found to be residing in attached forms of housing than those in non-metropolitan areas. Additionally, larger proportions of respondents from non-metropolitan areas resided in both single-family detached and mobile homes than those who lived in metropolitan areas.

Life-cycle stage was found to be related to structure-type in that those with children in the home lived predominantly in single-family detached homes. While the majority of respondents without children also lived in single-family detached homes, larger proportions of them lived in

attached housing (27%) as compared to those with children (11%). This finding is similar to the findings of Rossi (1955 & 1980) and Myers and Doyle (1990) that connects family life-cycle stages to the selection of housing structure type.

Differences in the selection of structure type were also found among respondents of varying marital status. Widows, along with those never married, were those who most resided in mobile homes, but 75% of widows resided in single-family detached homes. Only 61% of those never married lived in single-family detached homes. Additionally, 27% of this group lived in single- and multi-family attached housing, which was the largest proportion of any other marital status group to live in this form of housing. This finding could be interpreted as being related to the previous finding of life-cycle stage. Women who never married are least likely to have children in the home and also may be more likely to reside in metropolitan areas where there is a more abundant supply of attached housing. Furthermore, research has found that most older and retired persons live in single-family homes as do those with children at home (Clark & Dieleman, 1996; Morris & Winter, 1996; Sweet, 1990).

Considering the previous findings, the result that household size was also found to be related to structure type could be explained as a function of life-cycle stage and marital status. Those who have been previously married are more likely to have family members, such as children, in the home. As indicated in Table 17, larger households were found to live in single-family detached homes.

Generally, those with higher incomes were found to own single-family homes. As indicated in Table 17, almost one fourth of the respondents with incomes less than \$20,000 per year were found to own single-family homes. A possible explanation for this could be that this group is representative of widows who not only tend to have lower incomes but also are more likely to live in single-family detached homes.

Table 17 shows the chi-square group of *education by structure type*. This result indicated that those with less education (e.g., 12 years or less) tended to own either single-family detached or mobile homes. While about two thirds of those with 13 or more years of school owned single-family detached homes, higher proportions of them also owned attached forms of housing. The explanation for this could be that more highly educated people tend to live in metropolitan areas where there are better employment opportunities to meet their skills and, therefore, have greater access to attached housing.

Results of the chi-square test of *previous housing type by structure type* showed that a larger proportion (79%) of those who previously resided in single family homes remained in the same type of housing. This group also had the largest proportion who moved to mobile homes (24%). About two thirds of those who previously lived in apartments and more than one half of those who previously lived in mobile homes moved to single-family detached homes.

Additionally, as indicated in Table 18, those who previously lived in apartments comprised the largest number of all respondents who moved to attached forms of housing. The results also showed that those who previously lived in mobile homes moved either to single-family detached or mobile homes, with none of this group moving to attached forms of housing.

These results clearly indicate that type of previous residence is a factor in the move to or purchase of subsequent housing. Location of various forms of housing in terms of metropolitan and non-metropolitan areas could help explain these results. In other words, apartments are generally located in areas where there are other forms of attached housing, which would explain why former apartment dwellers would choose this type of housing for purchase, especially if they found this structure type to be acceptable for ownership. Likewise, mobile homes tend to be in less populated rural areas and where there is higher acceptance of this form of housing. Additionally, in many areas where mobile homes are located, there are few options for attached housing. Therefore, as an alternative to more expensive single-family detached housing, former mobile home residents would more likely find this structure type acceptable for purchase.

The chi-square group of *change in housing cost as result of move by structure type* clearly showed that those who moved to single-family detached and single- and multi-family attached housing were most likely to experience an increase in their housing cost. Conversely, those who moved to mobile homes comprised the largest group that experienced a decrease in housing costs.

Reasons for choosing the present home were found to be related to *structure type*. Across all structure types, respondents chose their homes primarily for financial reasons. Of those who choose their home because of its design and layout, 72% resided in single-family detached homes. An explanation for these results could be that the choice of structure type in the purchase of a home, especially for this group, is primarily a decision of choosing that which best fits financial circumstances. Of those who are financially able to be primarily concerned with a home's design, the single-family detached structure is the home of choice.

Null Hypothesis H3

- 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.

Procedures for Testing H3

Chi-square statistical procedures were used to test the Null Hypothesis H3. Chi-square tests were done to test the relationship between previous housing and neighborhood characteristics and reasons for choosing the present home and neighborhood. The results of these chi-square tests are shown in Tables 19, 20, and 21.

Results of Testing of H3

Table 19 shows the results of chi-square tests of *previous housing and neighborhood characteristics by main reason for moving from the previous residence*. This test indicated that two chi-square groups, *comparison of new home to previous one* and *comparison of new neighborhood to previous one* were significant. This result indicates that there is an association between these two variables and that of *reasons for moving from the previous residence*.

Table 20 shows the results of chi-square tests of *previous housing and neighborhood characteristics by main reason for choice of present home*. This test indicated that one chi-square group, *change in housing cost as result of move*, was significant at $p \leq 0.05$. In other words, there is an association between this variable and that of *reasons for choice of present home*.

Table 21 shows the results of chi-square tests of *previous housing and neighborhood characteristics by main reason for choice of present neighborhood*. This test indicated that two chi-square groups, *change in housing cost as a result of move* and *comparison of new neighborhood to previous one*, showed a significant association.

Discussion of Results of H3

The third null hypothesis that was tested stated that there was no relationship between *previous housing and neighborhood characteristics* and *reasons for moving and choosing the present home and neighborhood*. Significance was tested at $p \leq 0.05$. Using chi-square analysis techniques, significant relationships were found between chi-square groups relevant to the third null hypothesis. Therefore, the third null hypothesis was rejected. The following discussion highlights the variables of the chi-square groups that were found to be significantly related to each other.

As indicated in Table 19, of those who felt their housing was better than their previous residence, 40% moved for housing reasons, which was more than twice the number of those who moved for personal or family reasons and who felt their housing had improved (16.3%). Similar results were seen with the variable *comparison of new neighborhood to previous one*. Of those who moved for housing reasons, 26.7% felt their new neighborhood was better than the previous one and 18.8% felt it was about the same. Of those who moved for family and personal reasons, only 10.6% felt that the neighborhood was better and slightly more, 13.1%, felt it was about the same. An explanation for these results may be that decisions to move revolve primarily around housing and family or personal circumstances. But those who, in the case of this sample, bought primarily for housing reasons were more likely to have experienced an improvement in their housing and neighborhood conditions than were those who bought for family or personal reasons.

Table 19

Cross Tabulations of Chi-Square Results: Previous Housing and Neighborhood Characteristics by Main Reason for Moving From Previous Residence

	Total %	All Reasons		Family/		Other
		Equal	Financial	Personal	Housing	
	%	%	%	%	%	%
Type of Previous Housing Unit:						
House	34.4	0.8	1.9	12.2	16.0	3.5
Apartment	62.0	3.3	6.0	15.8	32.3	4.6
Mobile Home	3.6	<u>0.3</u>	<u>0.3</u>	<u>0.8</u>	<u>1.9</u>	<u>0.3</u>
		4.4	8.2	28.8	50.2	8.4
N = 368	$\chi^2 = 7.949$	df = 8	$p = 0.438$			
Change in Housing Cost as Result of Move:						
Increased	59.5	3.0	4.4	16.1	31.9	4.1
Stayed the Same	19.0	0.5	1.4	6.0	8.9	2.2
Decreased	19.6	0.8	2.2	6.3	8.2	2.2
Don't Know	1.9	<u>0.0</u>	<u>0.3</u>	<u>0.5</u>	<u>1.1</u>	<u>0.0</u>
		4.3	8.3	28.9	50.1	8.5
N = 367	$\chi^2 = 7.239$	df = 12	$p = 0.841$			
Comparison of New Home to Previous:						
Better	70.3	3.5	5.2	16.3	39.9	5.4
About the Same	22.1	0.5	1.6	10.0	7.3	2.7
Worse	7.5	<u>0.3</u>	<u>1.4</u>	<u>2.5</u>	<u>3.0</u>	<u>0.3</u>
		4.3	8.2	28.8	50.2	8.4
N = 368	$\chi^2 = 25.265$	df = 8	$p = 0.001^*$		$\phi = 0.262$	
Comparison of New Neighborhood to Previous One:						
Better	49.6	2.5	4.1	10.6	26.7	5.7
About the Same	37.5	1.5	2.7	13.1	18.8	1.4
Worse	9.6	0.3	1.4	4.4	3.3	0.2
Stayed in Same Neighborhood	3.3	<u>0.0</u>	<u>0.0</u>	<u>0.8</u>	<u>1.4</u>	<u>1.1</u>
		4.3	8.2	28.9	50.2	8.4
N = 367	$\chi^2 = 30.614$	df = 12	$p = 0.002^*$		$\phi = 0.289$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq 0.05$ level.

Table 20

Cross Tabulations of Chi-Square Results: Previous Housing and Neighborhood Characteristics by Main Reason for Choice of Present Home

	Total %	All Reasons		Design	
		Equal %	Financial %	of Home %	Other %
Type of Previous Housing Unit:					
House	34.2	4.6	12.5	8.4	8.7
Apartment	61.9	10.0	25.8	15.5	10.6
Mobile Home	3.8	<u>0.0</u>	<u>1.9</u>	<u>0.8</u>	<u>1.1</u>
		14.6	40.2	24.7	20.4
N = 368	$\chi^2 = 6.719$	df = 6		$p = 0.348$	
Change in Housing Cost as Result of Move:					
Increased	60.4	9.5	22.3	18.5	10.1
Stayed the Same	18.2	3.0	6.8	3.8	4.6
Decreased	19.3	2.2	10.1	1.6	5.4
Don't Know	1.9	<u>0.0</u>	<u>1.1</u>	<u>0.5</u>	<u>0.3</u>
		14.7	40.3	24.4	20.4
N = 367	$\chi^2 = 21.434$	df = 9		$p = 0.011^*$	$\phi = 0.242$
Comparison of New Home to Previous:					
Better	70.2	10.9	27.5	19.0	12.8
About the Same	22.6	2.9	9.2	4.6	5.9
Worse	7.0	<u>0.8</u>	<u>3.5</u>	<u>1.1</u>	<u>1.6</u>
		14.6	40.2	24.7	20.3
N = 368	$\chi^2 = 5.414$	df = 6		$p = 0.492$	
Comparison of New Neighborhood to Previous One:					
Better	49.3	7.4	21.0	12.5	8.4
About the Same	37.8	5.4	13.6	10.4	8.4
Worse	9.6	0.5	5.2	1.4	2.5
Stayed in Same Neighborhood	3.2	<u>1.1</u>	<u>0.5</u>	<u>0.5</u>	<u>1.1</u>
		14.4	40.3	24.8	20.4
N = 367	$\chi^2 = 14.001$	df = 9		$p = 0.122$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 21

Cross Tabulations of Chi-Square Results: Previous Housing and Neighborhood Characteristics by Main Reason for Choice of Neighborhood

		All Equal	Personal Interests	Public Services	N'hood Design	Housing Unit	Other
	Tot. %	%	%	%	%	%	%
Type of Previous Housing Unit:							
House	34.4	3.0	6.6	0.8	4.1	9.0	10.9
Apartment	61.6	8.2	10.4	3.5	6.8	18.0	14.7
Mobile Home	3.8	<u>0.0</u>	<u>1.6</u>	<u>0.3</u>	<u>0.5</u>	<u>1.1</u>	<u>0.3</u>
		11.2	18.6	4.6	11.4	28.1	25.9
N = 366	$\chi^2 = 14.451$	df = 10		$p = 0.153$			
Change in Housing Cost as Result of Move:							
Increased	58.7	6.5	10.4	3.8	7.1	17.5	13.4
Stayed the Same	19.1	2.2	4.4	0.5	3.5	4.4	4.1
Decreased	20.1	2.5	3.8	0.3	0.3	5.5	7.7
Don't Know		<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.6</u>	<u>0.8</u>	<u>0.6</u>
		11.2	18.6	4.6	11.5	28.2	25.8
N = 365	$\chi^2 = 25.655$	df = 15		$p = 0.042^*$	$\phi = 0.265$		
Comparison of New Home to Previous:							
Better	70.4	9.0	10.9	4.1	9.0	20.7	16.7
About the Same	22.7	2.2	6.6	0.3	1.9	4.9	6.8
Worse	6.8	<u>0.0</u>	<u>1.1</u>	<u>0.3</u>	<u>0.5</u>	<u>2.5</u>	<u>2.4</u>
		11.2	18.6	4.7	11.4	28.1	25.9
N = 366	$\chi^2 = 17.950$	df = 10		$p = 0.056$			
Comparison of New Neighborhood to Previous:							
Better	48.6	6.8	8.5	3.0	6.8	13.1	10.4
About the Same	38.4	4.1	8.2	1.4	3.3	10.7	10.7
Worse	9.7	0.0	1.4	0.3	0.3	3.6	4.1
Stayed in Same Neighborhood	3.3	<u>0.3</u>	<u>0.3</u>	<u>0.0</u>	<u>1.1</u>	<u>0.8</u>	<u>0.8</u>
		11.2	18.4	4.7	11.5	28.2	26.0
N = 365	$\chi^2 = 25.046$	df = 15		$p = 0.049^*$	$\phi = 0.262$		

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Changes in housing costs were found to be related to reasons for choosing the particular housing unit. As indicated in Table 20, the largest group of all respondents, 40.3%, chose their home for financial reasons. Of those who chose their home for financial reasons, more than one half experienced an increase in housing costs and more than one third lowered their costs. In contrast to this result was that of changes in housing costs for those who chose their home for its design or layout. While most of this group experienced an increase in housing costs, fewer than 10% of this group lowered their housing costs.

An explanation for differences found between groups who chose their home for financial and those who chose for design reasons may be in the differing financial situations of the two groups. For example, financial considerations in terms of affordability may be less important to those who primarily consider a home's design and, therefore, would less likely experience a decrease in housing costs. On the other hand, decreasing housing costs would definitely be a financial consideration in the choice of a home. Therefore, it is not surprising that of all the reasons for choosing a home, that of financial reasons would have the largest number of respondents who decreased their housing costs.

As indicated in Table 21, the choice of the neighborhood seems to be primarily related to the particular housing unit chosen. In other words, for the respondents in this group, neighborhood selection appears to be secondary to the selection of the home. For example, in the chi-square group *change in housing cost as result of move by reason for choice of neighborhood*, the largest proportion of all respondents chose the neighborhood because of the particular housing unit (28.1%), and over one half of this group experienced an increase in their housing costs. Likewise in the chi-square group *comparison of new neighborhood to previous one by reason for choice of neighborhood*, the largest proportion of those who felt the new neighborhood was better (13%) chose the neighborhood for the housing unit as compared to about half as many who chose the neighborhood for either reasons of personal interests or for its design.

Null Hypothesis H4

- 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.

Procedures for Testing H4

Chi-square statistical procedures were used to test the Null Hypothesis H4 and the relationship between 9 demographic variables and the variables relevant to *previous housing and neighborhood characteristics* and the *reasons for moving and choosing the present home and neighborhood*. The results of these chi-square tests are shown in Table 22 through Table 28.

Results of Testing of H4

Table 22 shows the results of chi-square tests of 9 demographic variables by *type of previous residence*. These tests indicate that the four demographic variables of *settlement type*, *life-cycle stage*, *marital status*, and *education* were significant at $p \leq 0.05$. The resulting p-values of the chi-square tests showed that a relationship existed between these four demographic variables and that of *type of previous residence*.

Table 23 shows the results of chi-square tests of the demographic variables and *change in housing cost as result of moving*. Eight of the demographic variables were significant at $p \leq 0.05$, indicating that there was a relationship between the variable of *change in housing cost as a result of moving* and the demographic variables of *settlement type*, *age*, *life-cycle stage*, *marital status*, *household size*, *race*, *income*, and *education*.

The results of the chi-square tests of the demographic variables by *comparison of new home to previous one* are shown in Table 24. Two chi-square groups, *marital status* and *income*, were significant at $p \leq 0.05$, indicating that there is a relationship between *comparison of new home to previous one* and the demographic variables of *marital status* and *income*.

Table 25 shows the results of the chi-square tests of the demographic variables by *comparison of new neighborhood to previous one*. Only one chi-square group, that with *marital status*, was significant at $p \leq 0.05$.

The results of the chi-square tests of demographic variables by *primary reason for moving from previous residence* are shown in Table 26. Only one chi-square group, that with *life-cycle stage*, was significant at $p \leq 0.05$.

Table 22

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Type of Previous Residence

		House	Apartment	Mobile Home	
	Total %	%	%	%	
Geographic Region:					
Northeast	13.5	4.1	9.4	0.0	
Midwest	22.7	6.9	14.4	1.4	
South	39.7	15.3	22.5	1.9	
West	24.1	<u>9.1</u>	<u>14.2</u>	<u>0.8</u>	
		35.4	60.5	4.1	
N = 639	$\chi^2 = 10.385$		df = 6	$p = 0.109$	
Settlement Type:					
Metropolitan	79.9	26.6	50.6	2.7	
Non-Metropolitan	20.1	<u>8.8</u>	<u>10.0</u>	<u>1.4</u>	
		35.4	60.6	4.1	
N = 639	$\chi^2 = 9.516$		df = 2	$p = 0.009^*$	$\phi = 0.122$
Age:					
Under 35	4.2	2.0	2.2	0.0	
35 to 49	44.1	16.9	25.2	2.0	
50 to 64	29.3	7.7	20.4	1.2	
65+	22.4	<u>9.9</u>	<u>11.9</u>	<u>0.6</u>	
		36.5	59.7	3.8	
N = 496	$\chi^2 = 12.070$		df = 6	$p = 0.060$	
Life-Cycle Stage:					
No Children <18 yrs.	51.9	15.7	34.3	1.9	
Children <18 yrs. at Home	48.2	<u>19.7</u>	<u>26.3</u>	<u>2.2</u>	
		35.4	60.6	4.1	
N = 639	$\chi^2 = 9.050$		df = 2	$p = 0.011^*$	$\phi = 0.119$
Marital Status:					
Widowed	24.9	11.0	12.5	1.4	
Divorced	40.1	12.8	25.7	1.6	
Separated	6.6	3.0	3.4	0.2	
Never Married	28.4	<u>8.6</u>	<u>18.9</u>	<u>0.9</u>	
		35.4	60.5	4.1	
N = 639	$\chi^2 = 13.056$		df = 6	$p = 0.042^*$	$\phi = 0.143$

(Table continues on next page)

Table 22 (Continued)

		House	Apartment	Mobile Home
	Total %	%	%	%
Household Size:				
1 Person	25.3	7.5	17.2	0.6
2 Persons	34.2	13.0	20.3	0.9
3 Persons	17.7	6.6	10.2	0.9
4+ Persons	22.8	<u>8.3</u>	<u>12.8</u>	<u>1.7</u>
		35.4	60.5	4.1
N = 639	$\chi^2 = 9.363$		df = 6	$p = 0.154$
Race:				
White	80.0	28.6	47.6	3.8
Non-White	20.0	<u>6.7</u>	<u>13.0</u>	<u>0.3</u>
		35.3	60.6	4.1
N = 639	$\chi^2 = 3.098$		df = 2	$p = 0.212$
Annual Income:				
< \$20,000	36.9	12.4	22.2	2.3
\$20,000-\$34,999	31.4	12.6	17.3	1.5
\$35,000-\$49,999	17.3	5.9	11.1	0.3
\$50,000 +	14.5	<u>4.4</u>	<u>10.1</u>	<u>0.0</u>
		35.3	60.7	4.1
N = 613	$\chi^2 = 11.997$		df = 6	$p = 0.062$
Education Completed:				
Less than 12 Years	16.9	7.7	8.1	1.1
12 Years	34.7	11.9	20.8	2.0
1 to 3 Years College	22.8	8.8	13.2	0.8
4 + Years College	25.7	<u>7.0</u>	<u>18.5</u>	<u>0.2</u>
		35.4	60.6	4.1
N = 639	$\chi^2 = 21.174$		df = 6	$p = 0.002^*$ $\phi = 0.182$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq .05$ level.

Table 23

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Change in Cost as Result of Moving

	Total %	Increased %	Stayed the Same %	Decreased %	Don't Know %		
Geographic Region:							
Northeast	13.2	4.5	3.8	4.6	0.3		
Midwest	24.0	12.8	3.9	6.6	0.7		
South	38.1	15.4	9.9	10.7	2.1		
West	24.7	<u>11.9</u>	<u>5.1</u>	<u>6.8</u>	<u>0.9</u>		
		44.6	22.7	28.7	4.0		
N = 572	$\chi^2 = 13.828$		df = 9		$p = 0.129$		
Settlement Type:							
Metropolitan	81.1	38.6	17.1	21.7	3.7		
Non-Metropolitan	18.8	<u>5.9</u>	<u>5.6</u>	<u>7.0</u>	<u>0.3</u>		
		44.5	22.7	28.7	4.0		
N = 572	$\chi^2 = 12.723$		df = 3		$p = 0.005^*$	$\phi = 0.149$	
Age:							
Under 35	4.3	2.1	1.1	0.9	0.2		
35 to 49	46.3	23.5	11.5	9.9	1.4		
50 to 64	29.3	9.4	6.5	12.0	1.4		
65+	20.1	<u>3.5</u>	<u>5.8</u>	<u>9.2</u>	<u>1.6</u>		
		38.5	24.9	32.0	4.6		
N = 434	$\chi^2 = 40.313$		df = 9		$p = 0.001^*$	$\phi = 0.305$	
Life-Cycle Stage:							
No Children <18 yrs.	50.5	26.4	11.3	11.2	1.6		
Children <18 yrs. at Home	49.4	<u>18.2</u>	<u>11.3</u>	<u>17.5</u>	<u>2.4</u>		
		44.6	22.7	28.7	4.0		
N = 572	$\chi^2 = 17.591$		df = 3		$p = 0.001^*$	$\phi = 0.175$	
Marital Status:							
Widowed	22.2	5.6	6.1	9.3	1.2		
Divorced	40.3	17.5	9.6	11.5	1.7		
Separated	7.0	2.4	1.6	2.8	0.2		
Never Married	30.5	<u>19.1</u>	<u>5.4</u>	<u>5.1</u>	<u>0.9</u>		
		44.6	22.7	28.7	4.0		
N = 572	$\chi^2 = 47.269$		df = 9		$p = 0.001^*$	$\phi = 0.287$	

(Table continues on next page)

Table 23 (Continued)

	Total %	Increased %	Stayed the Same %	Decr'sed %	Don't Know %	
Household Size:						
1 Person	23.1	14.5	4.4	3.7	0.5	
2 Persons	35.4	14.3	8.7	11.2	1.2	
3 Persons	18.5	8.7	4.2	4.9	0.7	
4+ Persons	22.9	<u>7.0</u>	<u>5.4</u>	<u>8.9</u>	<u>1.6</u>	
		44.5	22.7	28.7	4.0	
N = 572	$\chi^2 = 34.781$		df = 9	$p = 0.001^*$	$\phi = 0.247$	
Race:						
White	80.9	37.6	16.4	24.1	2.8	
Non-White	19.1	<u>7.0</u>	<u>6.3</u>	<u>4.6</u>	<u>1.2</u>	
		44.6	22.7	28.7	4.0	
N = 572	$\chi^2 = 11.184$		df = 3	$p = 0.011^*$	$\phi = 0.140$	
Annual Income:						
< \$20,000	35.4	12.6	8.0	12.4	2.4	
\$20,000-\$34,999	31.8	15.0	9.5	6.6	0.7	
\$35,000-\$49,999	18.2	10.9	1.8	5.1	0.4	
\$50,000 +	14.6	<u>6.0</u>	<u>3.8</u>	<u>4.4</u>	<u>0.4</u>	
		44.5	23.1	28.5	3.9	
N = 548	$\chi^2 = 33.755$		df = 9	$p = 0.001^*$	$\phi = 0.248$	
Education Completed:						
Less 12 Years	16.3	3.2	4.9	6.6	1.6	
12 Years	33.9	13.6	8.9	10.0	1.4	
1 to 3 Years College	24.0	11.4	4.5	7.3	0.8	
4 + Years College	25.7	<u>16.4</u>	<u>4.4</u>	<u>4.7</u>	<u>0.2</u>	
		44.6	22.7	28.6	4.0	
N = 572	$\chi^2 = 55.001$		df = 9	$p = 0.001^*$	$\phi = 0.310$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance level at $p \leq .05$.

Table 27 shows the results of the chi-square tests of the demographic variables by *main reason for choice of present home*. Only one chi-square group, that with *marital status*, was significant at $p \leq 0.05$, indicating that there was a relationship between this demographic variable and *main reason for choice of present home*.

The results of the chi-square tests of demographic variables by *main reason for choice of neighborhood* are shown in Table 28. These tests indicated that three of the chi-square groups, those with *life-cycle stage*, *household size*, and *education*, were significant at $p \leq 0.05$. Therefore, the results show that there was a relationship between *main reason for choice of neighborhood* and these three demographic variables.

Discussion of Results of H4

The fourth null hypothesis that was tested stated that there was no relationship between single women homeowners' demographic characteristics and a) the characteristics of their previous housing and neighborhoods and b) their reasons for moving and choosing their present homes and neighborhoods. Significance was tested at the level of $p \leq 0.05$. Using chi-square analysis procedures, significant relationships were found between single women homeowners' demographic characteristics and the characteristics of their previous homes and neighborhoods. Significant relationships were also found between their demographic characteristics and their reasons for moving and choosing their present homes and neighborhoods. Therefore, the fourth null hypothesis was rejected. The following discussion presents in more detail the significant results obtained from the chi-square tests of the fourth null hypothesis.

Type of Previous Residence. Table 22 shows the results of the chi-square tests of single women homeowners' demographic characteristics by *type of previous residence*, which was found to be significantly related to *settlement type*, *life-cycle stage*, *marital status*, and *education*. One half of all respondents who previously lived in apartments were in metropolitan areas. In contrast to this, the largest proportion of all respondents who previously lived in houses (43%) were in non-metropolitan areas. This result can be explained in terms of the differences found in the housing stock of differing types of settlement areas. Metropolitan areas have a much larger supply of apartments in the rental housing stock as compared to non-metropolitan areas. Therefore, it is likely that many of those in metropolitan areas who transition from renting to owning would live in apartments.

Table 24

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Comparison of New Home to Previous One

		Better	About the Same	Worse	
	Total %	%	%	%	
Geographic Region:					
Northeast	11.0	8.7	1.8	0.5	
Midwest	27.5	17.5	7.9	2.1	
South	37.8	26.7	8.2	2.9	
West	23.8	<u>17.2</u>	<u>4.5</u>	<u>2.1</u>	
		70.1	7.4	22.4	
N = 378	$\chi^2 = 4.912$	df = 6	$p = 0.555$		
Settlement Type:					
Metropolitan	80.7	57.9	17.5	5.3	
Non-Metropolitan	19.3	<u>12.2</u>	<u>5.0</u>	<u>2.1</u>	
		70.1	7.4	22.5	
N = 378	$\chi^2 = 2.694$	df = 2	$p = 0.260$		
Age:					
Under 35	5.1	3.5	1.6	0.0	
35 to 49	56.8	41.2	10.9	4.7	
50 to 64	25.9	16.1	8.2	1.6	
65+	12.1	<u>7.0</u>	<u>3.9</u>	<u>1.2</u>	
		67.8	7.4	24.7	
N = 255	$\chi^2 = 6.653$	df = 6	$p = 0.354$		
Life-Cycle Stage:					
No Children <18 yrs.	55.6	39.7	12.7	3.2	
Children <18 yrs. at Home	44.4	<u>30.4</u>	<u>9.8</u>	<u>4.2</u>	
		70.1	7.4	22.5	
N = 378	$\chi^2 = 1.975$	df = 2	$p = 0.372$		
Marital Status:					
Widowed	15.1	8.2	5.8	1.1	
Divorced	41.3	29.6	8.5	3.2	
Separated	6.6	4.2	1.3	1.1	
Never Married	37.0	<u>28.0</u>	<u>6.9</u>	<u>2.1</u>	
		70.0	7.5	22.5	
N = 378	$\chi^2 = 13.768$	df = 6	$p = 0.032^*$	$\phi = 0.191$	

(Table continues on next page)

Table 24 (Continued)

		Better	About the Same	Worse	
	Total %	%	%	%	
Household Size:					
1 Person	34.9	24.3	9.5	1.1	
2 Persons	31.5	22.5	6.1	2.9	
3 Persons	19.0	14.0	3.4	1.6	
4+ Persons	14.5	<u>9.3</u>	<u>3.4</u>	<u>1.8</u>	
		70.1	7.4	22.4	
N = 378	$\chi^2 = 9.162$		df = 6	$p = 0.165$	
Race:					
White	82.8	59.3	17.7	5.8	
Non-White	17.2	<u>10.8</u>	<u>4.8</u>	<u>1.6</u>	
		70.1	7.4	22.5	
N = 378	$\chi^2 = 1.851$		df = 2	$p = 0.396$	
Annual Income:					
< \$20,000	33.7	21.9	7.9	3.9	
\$20,000-\$34,999	36.8	25.6	9.6	1.6	
\$35,000-\$49,999	18.5	13.5	2.8	2.2	
\$50,000 +	11.0	<u>9.9</u>	<u>1.1</u>	<u>0.0</u>	
		70.9	7.7	21.4	
N = 364	$\chi^2 = 16.771$		df = 6	$p = 0.010^*$	$\phi = 0.215$
Education Completed:					
Less than 12 Years		6.1	3.7	1.3	
12 Years		23.5	6.6	2.9	
1 to 3 Years College		16.7	7.1	1.1	
4 + Years College		<u>23.8</u>	<u>5.0</u>	<u>2.1</u>	
		70.1	22.4	7.4	
N = 378	$\chi^2 = 11.319$		df = 6	$p = 0.079$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance level at $p \leq .05$.

Table 25

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Comparison of New Neighborhood to Previous One

	Total %	Better %	About the Same %	Worse %	Stayed in the Same Neighborhood %
Geographic Region:					
Northeast	11.2	7.2	3.5	0.5	0.0
Midwest	27.2	12.7	11.4	2.6	0.5
South	37.7	17.8	15.1	3.7	1.1
West	23.8	<u>11.6</u>	<u>8.2</u>	<u>2.4</u>	<u>1.6</u>
		49.3	9.2	38.2	3.2
N = 377	$\chi^2 = 9.957$		df = 9	$p = 0.354$	
Settlement Type:					
Metropolitan	80.7	39.5	30.5	8.0	2.7
Non-Metropolitan	19.3	<u>9.8</u>	<u>7.7</u>	<u>1.3</u>	<u>0.5</u>
		49.3	38.2	9.3	3.2
N = 377	$\chi^2 = 0.723$		df = 3	$p = 0.868$	
Age:					
Under 35	5.2	2.8	1.2	0.8	0.4
35 to 49	57.0	28.3	18.9	6.3	3.5
50 to 64	26.0	11.8	11.0	2.8	0.4
65+	11.8	<u>4.3</u>	<u>6.7</u>	<u>0.8</u>	<u>0.0</u>
		47.2	10.7	37.8	4.3
N = 254	$\chi^2 = 10.611$		df = 9	$p = 0.303$	
Life-Cycle Stage:					
No Children <18 yrs.	55.4	28.4	21.5	3.9	1.6
Children <18 yrs. at Home	44.5	<u>20.9</u>	<u>16.7</u>	<u>5.3</u>	<u>1.6</u>
		49.3	9.2	38.2	3.2
N = 377	$\chi^2 = 2.753$		df = 3	$p = 0.431$	
Marital Status:					
Widowed	14.9	6.1	6.9	1.6	0.3
Divorced	41.5	19.4	16.2	4.0	1.9
Separated	6.5	1.8	2.6	1.6	0.5
Never Married	37.1	<u>22.0</u>	<u>12.5</u>	<u>2.1</u>	<u>0.5</u>
		49.3	38.2	9.3	3.2
N = 377	$\chi^2 = 20.176$		df = 9	$p = 0.017^*$	$\phi = 0.231$

(Table continues on next page)

Table 25 (Continued)

	Total %	Better %	About the Same %	Worse %	Stayed in the Same Neighborhood %
Household Size:					
1 Person	34.7	15.1	15.7	2.6	1.3
2 Persons	31.5	17.5	10.3	3.2	0.5
3 Persons	19.2	10.1	6.9	1.9	0.3
4+ Persons	14.6	<u>6.6</u>	<u>5.3</u>	<u>1.6</u>	<u>1.1</u>
		49.3	9.3	38.2	3.2
N = 377		$\chi^2 = 10.064$	df = 9	$p = 0.345$	
Race:					
White	82.7	41.1	32.1	6.6	2.9
Non-White	17.3	<u>8.2</u>	<u>6.1</u>	<u>2.7</u>	<u>0.3</u>
		49.3	9.3	38.2	3.2
N = 377		$\chi^2 = 4.022$	df = 3	$p = 0.259$	
Annual Income:					
< \$20,000	34.0	15.2	13.5	5.0	0.3
\$20,000-\$34,999	36.6	17.6	15.7	1.9	1.4
\$35,000-\$49,999	18.4	9.9	5.8	1.6	1.1
\$50,000 +	11.0	<u>6.9</u>	<u>3.0</u>	<u>0.6</u>	<u>0.5</u>
		49.6	38.0	9.1	3.3
N = 363		$\chi^2 = 16.319$	df = 9	$p = 0.061$	
Education Completed:					
Less than 12 Years	10.8	4.5	4.2	1.6	0.5
12 years	33.1	16.7	12.2	3.7	0.5
1 to 3 Years College	24.9	12.2	9.8	2.1	0.8
4 + Years College	31.1	<u>15.9</u>	<u>12.0</u>	<u>1.9</u>	<u>1.3</u>
		49.3	38.2	9.3	3.1
N = 377		$\chi^2 = 5.727$	df = 9	$p = 0.767$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq 0.05$ level.

As shown in the chi-square group of *life-cycle stage* in Table 22, two thirds of those who had no children under 18 years of age previously lived in apartments. In contrast, a little over one half of those with school-aged children previously lived in apartments. Of those with school-aged children in the home, about 41% of them previously lived in houses. This finding is similar to that of Dieleman et al. (1989) in that renter households with children show a tendency to avoid moving into multifamily housing, choosing rather to rent single-family detached homes. Rossi (1955) also found that there was a connection between life-cycle stage and selection of housing structure type.

Marital status was also found to be significantly related to *type of previous residence*. Those who were divorced and never married were the two groups with the largest proportion of those who previously resided in apartments, about two thirds of respondents from each of these two groups. In contrast, about 44% of respondents who were either widowed or separated previously lived in houses, and about one half of respondents from each of these groups previously lived in apartments.

Those respondents who had completed 12 years of education comprised the largest groups (20.8%) of those who previously lived in apartments and those who previously lived in houses (11.9%). However, of those who had completed 4 or more years of college, 27% of them previously lived in houses and close to three fourths of this group (72%) previously lived in apartments. Those who completed 12 or fewer years of school accounted for the majority of those who previously lived in mobile homes.

Change in Cost as Result of Move. Table 23 shows the results of the chi-square tests of single women homeowners' demographic characteristics by *change in cost as a result of move*, which was found to be significantly related to *settlement type, age, life-cycle stage, marital status, household size, race, income, and education*.

About one third of respondents who lived in non-metropolitan areas experienced an increase in their housing costs (31%) as did those who reduced their costs (37%) as a result of their move. In contrast to this, of those who resided in metropolitan areas, close to one half (48%) increased their costs and about 27% decreased their costs as a result of their move. The different changes in housing costs between the two types of areas could be a reflection of differences in housing prices in metropolitan and non-metropolitan areas. The costs of ownership in metropolitan areas are likely to increase or be higher in metropolitan areas than non-metropolitan areas. Therefore, a larger proportion of those who transition into ownership in metropolitan areas would see an increase in their housing expenses than would those in non-metropolitan areas.

Table 26

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Primary Reason for Moving From Previous Residence

	All		Family/			
	Total %	Reasons Equal %	Financial %	Personal %	Housing %	Other %
Geographic Region:						
Northeast	11.4	0.3	1.1	3.8	5.7	0.5
Midwest	27.5	0.3	1.9	8.4	13.9	3.0
South	37.6	2.2	3.8	11.4	16.9	3.3
West	23.6	<u>1.6</u>	<u>1.4</u>	<u>5.2</u>	<u>13.8</u>	<u>1.6</u>
		4.4	8.2	28.8	50.3	8.4
N = 368	$\chi^2 = 12.191$		df = 12		$p = 0.430$	
Settlement Type:						
Metropolitan	81.1	3.3	6.3	23.4	42.1	6.0
Non-Metropolitan	19.0	<u>1.1</u>	<u>1.9</u>	<u>5.4</u>	<u>8.2</u>	<u>2.4</u>
		4.4	8.2	28.8	50.3	8.4
N = 368	$\chi^2 = 3.697$		df = 4		$p = 0.449$	
Age:						
Under 35	5.2	0.0	0.4	1.6	2.8	0.4
35 to 49	56.3	2.0	4.0	15.3	30.2	4.8
50 to 64	26.2	0.8	4.0	8.9	10.5	2.0
65+	12.0	<u>0.8</u>	<u>1.2</u>	<u>4.4</u>	<u>4.4</u>	<u>1.2</u>
		3.6	9.6	30.2	47.98	8.5
N = 248	$\chi^2 = 8.407$		df = 12		$p = 0.753$	
Life-Cycle Stage:						
No Children <18 yrs.	55.7	3.5	6.0	13.9	28.8	3.5
Children <18 yrs. at Home	44.3	<u>0.8</u>	<u>2.2</u>	<u>14.9</u>	<u>21.5</u>	<u>4.9</u>
		4.3	8.2	28.8	50.3	8.4
N = 368	$\chi^2 = 13.058$		df = 4		$p = 0.011^*$	$\phi = 0.188$
Marital Status:						
Widowed	14.6	0.5	1.6	6.5	4.4	1.6
Divorced	41.9	1.4	3.3	10.3	23.1	3.8
Separated	6.8	0.0	0.8	2.5	3.5	0.0
Never Married	36.6	<u>2.4</u>	<u>2.4</u>	<u>9.5</u>	<u>19.3</u>	<u>3.0</u>
		4.3	8.1	28.8	50.3	8.4
N = 368	$\chi^2 = 19.138$		df = 12		$p = 0.085$	

(Table continues on next page)

Table 26 (Continued)

	Total %	All Reasons		Family/		
		Equal %	Financial %	Personal %	Housing %	Other %
Household Size:						
1 Person	35.2	2.7	3.5	9.0	18.2	1.8
2 Persons	31.0	1.4	2.5	8.4	15.8	3.0
3 Persons	19.3	0.0	1.1	7.6	9.2	1.4
4+ Persons	14.5	<u>0.3</u>	<u>1.1</u>	<u>3.8</u>	<u>7.1</u>	<u>2.2</u>
		4.4	8.2	28.8	50.3	8.4
N = 368	$\chi^2 = 16.557$		df = 12		$p = 0.167$	
Race:						
White	83.1	3.8	6.2	23.1	43.2	6.8
Non-White	16.8	<u>0.5</u>	<u>1.9</u>	<u>5.7</u>	<u>7.1</u>	<u>1.6</u>
		4.3	8.1	28.8	50.3	8.4
N = 368	$\chi^2 = 2.951$		df = 4		$p = 0.566$	
Annual Income:						
< \$20,000	33.8	1.4	3.1	11.6	15.2	2.5
\$20,000-\$34,999	36.4	2.0	2.8	10.7	18.1	2.8
\$35,000-\$49,999	18.7	0.3	1.7	4.8	10.2	1.7
\$50,000 +	11.0	<u>0.5</u>	<u>0.6</u>	<u>2.0</u>	<u>6.8</u>	<u>1.1</u>
		4.2	8.2	29.1	50.3	8.1
N = 354	$\chi^2 = 7.593$		df = 12		$p = 0.816$	
Education Completed:						
Less than 12 Years	11.5	0.0	0.3	4.1	5.7	1.4
12 Years	32.3	1.1	2.2	9.2	16.3	3.5
1 to 3 Years College	24.7	1.1	3.3	6.5	11.1	2.7
4 + Years College	31.5	<u>2.2</u>	<u>2.4</u>	<u>9.0</u>	<u>17.1</u>	<u>0.8</u>
		4.4	8.2	28.8	50.2	8.4
N = 368	$\chi^2 = 17.343$		df = 12		$p = 0.137$	

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq 0.05$ level.

The chi-square group in Table 23 with *age by change in cost as result of move* shows that younger respondents (i.e., under 50 years of age) were more likely to increase their housing costs than were those who were older. One half of those under the age of 50 years, increased their housing costs, with only 21% of this group decreasing their costs. One third (32%) of those who were between the ages of 50 and 65 years increased and 41% decreased their costs as a result of moving. Of those who were 65 years of age or older, only 17% increased their housing costs, a little less than one third maintained the same costs (29%), and 46% decreased their cost by moving. The results of this chi-square test indicate that older, and possibly retired, respondents were in the process of “downsizing” their housing, while those who were younger were still in the process of moving up the housing ladder.

Over one half (52%) of those with no school-aged children in the home increased and only 21% of this group decreased their costs as a result of moving. This is in contrast to the slightly more than one third (37%) of those with school-aged children at home who increased and 35% who decreased their housing costs by the move. This result can be explained by the greater financial flexibility, and possibly age difference, of those who do not have younger children in the home and, as a result, are able to afford higher housing costs than those who do have school-aged children in the home. Another explanation can be that single women with children may delay the move from renting to owning until a time in their lives when they have greater time to devote to full-time and/or more demanding, and therefore higher paying, forms of employment.

Although divorced and never married women comprised the largest group of those who increased their housing costs, there were differences between these groups. About two thirds (62%) of those who never married increased and only 17% of this group decreased their costs as a result of moving. Of the divorced women, on the other hand, 43% increased their costs and 29% decreased their costs as a result of moving. Widowed women were most likely to lower and least likely to increase their costs by moving. The same result as that for widows was seen among those who were separated.

The explanations for the results seen in the chi-square group with *marital status* may have to do with the differing financial and social circumstances of each type of marital status. Women who have never been married are most likely to have the greatest financial ability and flexibility to improve and increase their housing costs, especially if they do not have children. Divorced women, once the adjustment is made to a changed marital status, may in time improve and stabilize their income to a point where they also can afford to increase their housing costs. Separated women, on the other hand, are still in a state of transition and may need to decrease their housing costs. Widows are most likely to be older (i.e., 65 years of age or older) and have low as well as fixed incomes, which would make them the group most in need of lowering their housing costs.

As indicated in Table 23, those of larger household sizes (i.e., 4 or more persons) were most likely to decrease their housing costs. One third of this group increased their costs and 39% decreased their costs by moving. This was in contrast to the two thirds of one-person households, 40% of two-person households, and 47% of three-person households who increased their costs by moving. Larger households are more expensive to support and it is likely that women with more children or family members in the home lowered their housing costs, even in the process of buying a home, to better support their families.

As shown in Table 23, Whites were more likely to increase their housing costs (46%) than were non-Whites (37%). However, non-Whites were less likely to decrease their housing costs, with only 24% of this group doing so. Also, a larger proportion of non-Whites, 33%, were found to have kept their housing costs the same as compared to Whites who did so (20%). The explanation for this result is probably due to the income differences found between Whites and non-Whites (Zhu & Shelton, 1996) and the relationship found between income and housing costs of non-White populations (Duca & Rosenthal, 1994).

The chi-square group of *income by change in cost as result of move*, as shown in Table 23, indicates that those of lower income (i.e., less than \$20,000 per year) are those most likely to decrease their costs by moving. Additionally, this same group comprised the second largest proportion of all respondents whose housing costs increased as a result of moving. Those respondents whose income was between \$35,000 and \$50,000 comprised the largest group of all respondents who increased their housing costs.

The results of those with incomes below \$20,000 per year may indicate that these respondents are representative of two groups. One group of those with lower incomes could be comprised of older respondents or those whose circumstances do not anticipate an income increase, leading to the need to lower housing costs. The other group could be those who are younger and in the process of improving their financial circumstances, and, therefore, can afford to increase their housing costs through the purchase of a home. Research indicates that those most likely to transition into ownership are those who recently experienced an increased or stabilized income, especially if they anticipate a future income increase (Dieleman & Everaers, 1994).

Education was found to be related to changes in housing costs in that those who completed 12 or fewer years of school comprised over one half of all respondents who decreased their housing costs. Those with one or more years of college comprised two thirds of those who increased their housing costs.

Comparison of New Home to Previous One. Table 24 shows the results of the chi-square tests of single women homeowners' demographic characteristics by *comparison of new home to previous one*, which was found to be significantly related to *marital status* and *income*.

Table 27

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Main Reason for Choice of Present Home

	Total %	All Reasons		Home's		
		Equal %	Financial %	Design %	Other %	
Geographic Region:						
Northeast	11.3	1.9	5.4	2.4	1.6	
Midwest	28.2	2.7	11.7	7.3	6.5	
South	36.4	6.0	14.1	7.9	8.4	
West	24.0	<u>4.1</u>	<u>9.0</u>	<u>7.1</u>	<u>3.8</u>	
		14.7	40.2	24.7	20.3	
N = 368	$\chi^2 = 7.465$		df = 9		$p = 0.589$	
Settlement Type:						
Metropolitan	81.0	12.8	32.3	21.2	14.7	
Non-Metropolitan	19.0	<u>1.9</u>	<u>7.9</u>	<u>3.5</u>	<u>5.7</u>	
		14.7	40.2	24.7	20.4	
N = 368	$\chi^2 = 6.568$		df = 3		$p = 0.087$	
Age:						
Under 35	4.8	0.0	2.4	1.2	1.2	
35 to 49	57.8	7.6	22.9	16.5	10.8	
50 to 64	26.0	4.0	10.0	5.6	6.4	
65+	11.2	<u>2.8</u>	<u>2.4</u>	<u>1.6</u>	<u>4.4</u>	
		14.4	37.7	24.9	22.8	
N = 249	$\chi^2 = 13.449$		df = 9		$p = 0.143$	
Life-Cycle Stage:						
No Children <18 yrs.	55.7	9.8	22.0	14.4	9.5	
Children <18 yrs. at Home	44.3	<u>4.9</u>	<u>18.2</u>	<u>10.3</u>	<u>10.9</u>	
		14.7	40.2	24.7	20.4	
N = 368	$\chi^2 = 5.407$		df = 3		$p = 0.144$	
Marital Status:						
Widowed	14.6	2.4	3.8	2.7	5.7	
Divorced	41.8	6.5	18.5	10.0	6.8	
Separated	6.3	0.0	3.3	1.4	1.6	
Never Married	37.2	<u>5.7</u>	<u>14.6</u>	<u>10.6</u>	<u>6.3</u>	
		14.6	40.2	24.7	20.4	
N = 368	$\chi^2 = 21.165$		df = 9		$p = 0.012^*$	$\phi = 0.240$

(Table continues on next page)

Table 27 (Continued)

	Total %	All Reasons		Home's	
		Equal %	Financial %	Design %	Other %
Household Size:					
1 Person	34.5	6.8	13.6	8.4	5.7
2 Persons	31.8	4.6	12.5	7.9	6.8
3 Persons	19.5	2.4	7.3	4.6	5.2
4+ Persons	14.1	<u>0.8</u>	<u>6.8</u>	<u>3.8</u>	<u>2.7</u>
		14.6	40.2	24.7	20.4
N = 368	$\chi^2 = 8.623$		df = 9		$p = 0.473$
Race:					
White	82.6	12.8	33.9	18.8	17.1
Non-White	17.4	<u>1.9</u>	<u>6.3</u>	<u>5.9</u>	<u>3.3</u>
		14.7	40.2	24.7	20.4
N = 368	$\chi^2 = 4.107$		df = 3		$p = 0.250$
Annual Income:					
< \$20,000	33.6	3.7	15.2	5.4	9.3
\$20,000-\$34,999	37.5	5.9	15.2	10.2	6.2
\$35,000-\$49,999	17.7	2.5	6.2	5.9	3.1
\$50,000 +	11.0	<u>2.5</u>	<u>4.0</u>	<u>2.8</u>	<u>1.7</u>
		14.6	40.6	24.3	20.3
N = 354	$\chi^2 = 15.345$		df = 9		$p = 0.082$
Education Completed:					
Less than 12 Years	10.8	1.6	4.3	2.2	2.7
12 Years	32.9	2.7	14.7	8.2	7.3
1 to 3 Years College	25.2	3.5	10.3	6.0	5.4
4 + Years College	31.0	<u>6.8</u>	<u>10.9</u>	<u>8.4</u>	<u>4.9</u>
		14.7	40.2	24.8	20.3
N = 368	$\chi^2 = 11.415$		df = 9		$p = 0.248$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance at $p \leq 0.05$ level.

Divorced and never married women comprised the largest group of those who felt their new homes were better than the previous ones. About three fourths of respondents from each of these groups rated their current home better than the previous one. Widows were less likely to rate their new home as better than the previous one, with only 54% of this group doing so. While two thirds of separated women rated their present home to be better, this group along with divorced women comprised over one half of the respondents who felt their new home was worse than the previous one.

Respondents of different incomes also rated their homes differently. Generally, those with higher incomes were more likely to rate their new home as better than the previous one. Although those with incomes below \$20,000 per year comprised 21.9% of those who rated their home as better, this group made up one half of those who rated their new home as worse than the previous one. None of those whose incomes were \$50,000 or more rated their new home to be worse than the previous one.

Comparison of New Neighborhood to Previous One. Table 25 shows the results of chi-square tests of single women homeowners' demographic characteristics by *comparison of new neighborhood to previous one*. Only one chi-square group, that with *marital status*, was significant. Generally, few of the respondents from any marital status group stayed in the neighborhood (less than 10%). Also, women who were never married were most likely to rate their new neighborhood as better than the previous one, comprising the largest group of all respondents to do so. The proportion of those never married to rate their neighborhood as worse or to stay in the same neighborhood was smaller than any other group. Although divorced women comprised the second largest group to rate their neighborhood as better, they, along with separated women, were two thirds of those who felt the neighborhood was worse than the previous one.

Main Reason for Moving From Previous Residence. The results of the chi-square tests of single women homeowners' demographic characteristics by *primary reason for moving from previous residence* are shown in Table 26. Only one chi-square group, that with *life-cycle stage*, was significant. Over one half (52%) of those with school-aged children in the home moved from the previous residence for family and/or personal reasons. Contrary to this, those without school-aged children at home were almost two thirds of the respondents that moved from the previous residence for housing reasons, and were 73% of those who moved for financial reasons. Although those with school-aged children at home were the majority of those who moved for family reasons, almost one half of this group (48%) moved for housing reasons.

Main Reason for Choice of Present Home. Table 27 shows the results of chi-square tests of single women homeowners' demographic characteristics by *main reason for choosing present home*. Only one chi-square group, that with *marital status*, was significant. Those women who were never married were the largest group of those who chose the home for its design features,

comprising 43% of all respondents who chose the home for this reason. Although those who were never married made up the largest group to select a home for its design, 40% of this group selected the home for financial reasons. Of those who selected the home for financial reasons, over one half of them were divorced and separated women. Widows were less likely to choose their homes for financial or design reasons, with the largest proportion of this group (40%) selecting their home for other reasons. An explanation for this result could be that widows chose their homes for personal or family reasons, which were not among the options in the survey for this question.

Main Reason for Choice of Present Neighborhood. There were three demographic variables that were significantly related to *main reason for choice of present neighborhood*. These were the groups with *life-cycle stage*, *household size*, and *education*. Table 28 shows the results of these chi-square tests.

The largest proportion of those respondents with school-aged children in the home (31%) chose the neighborhood for reasons other than personal interests, public services, neighborhood design, or the housing unit. Only one fourth of this group chose the neighborhood for the housing unit. Additionally, although a minority of respondents selected the neighborhood for its public services, over 80% of those who did so were women with school-aged children. Respondents with no school-aged children at home comprised two thirds of those who chose the neighborhood because of the housing unit and 70% of those who chose the neighborhood for its design.

Among those respondents who chose the neighborhood because of the housing unit, two thirds of this group were one- and two-person households. In spite of this, however, this reason was selected by 36% of those with four or more persons in the household, and was the reason most answered by these larger households.

Among those respondents who completed less than 12 years of school, the largest proportion of them (40%) selected the neighborhood for reasons other than personal interests, public services, neighborhood design, or the housing unit. One third of respondents who completed 12 years of school and one to three years of college chose the neighborhood because of the housing unit. Among those with four or more years of college, one third of them also chose the neighborhood because of the housing unit. However, smaller proportions of them chose the neighborhood because of other reasons. This group comprised the largest percentage of those who considered all reasons equally important (41%), chose the neighborhood because of its design (45%), or chose the neighborhood for its public services (41%).

Table 28

Cross Tabulations of Chi-Square Results: Demographic Characteristics by Main Reason for Choice of Neighborhood

	All Reasons Equal	Personal Interests	Public Services	N'hood Design	Housing Unit	Other	
Total %	%	%	%	%	%	%	
Geographic Region:							
Northeast	10.7	1.6	2.5	0.8	1.4	2.2	2.2
Midwest	27.8	2.7	4.9	1.1	3.0	9.0	7.1
South	37.2	4.4	7.6	2.2	4.4	7.4	11.2
West	24.3	<u>2.5</u>	<u>3.6</u>	<u>0.5</u>	<u>2.7</u>	<u>9.5</u>	<u>5.5</u>
		11.2	18.6	4.6	11.5	28.1	26.0
N = 366	$\chi^2 = 15.522$		df = 15		$p = 0.415$		
Settlement Type:							
Metropolitan	80.6	10.1	15.0	3.8	10.4	20.8	20.5
Non-Metropolitan	19.4	<u>1.1</u>	<u>3.5</u>	<u>0.8</u>	<u>1.1</u>	<u>7.4</u>	<u>5.5</u>
		11.2	18.5	4.6	11.5	28.2	26.0
N = 366	$\chi^2 = 8.320$		df = 5		$p = 0.139$		
Age:							
Under 35	4.8	0.8	0.4	0.0	0.0	2.0	1.6
35 to 49	56.2	5.3	9.8	3.3	8.5	16.3	13.0
50 to 64	26.7	3.2	7.3	1.2	0.8	6.9	7.3
65+	12.3	<u>2.1</u>	<u>3.3</u>	<u>0.0</u>	<u>0.8</u>	<u>1.6</u>	<u>4.5</u>
		11.4	20.8	4.5	10.1	26.8	26.4
N = 246	$\chi^2 = 21.069$		df = 15		$p = 0.135$		
Life-Cycle Stage:							
No Children <18 yrs.	55.1	6.6	10.9	0.8	7.9	16.9	12.0
Children <18 yrs. at Home	44.8	<u>4.6</u>	<u>7.7</u>	<u>3.8</u>	<u>3.6</u>	<u>11.2</u>	<u>13.9</u>
		11.2	18.6	4.6	11.5	28.1	25.9
N = 366	$\chi^2 = 17.567$		df = 5		$p = 0.004^*$		$\phi = 0.219$
Marital Status:							
Widowed	15.1	1.4	5.2	0.2	1.4	2.5	4.4
Divorced	40.9	5.2	7.6	2.5	4.1	11.7	9.8
Separated	6.8	0.5	0.6	0.5	1.1	1.6	2.5
Never Married	37.2	<u>4.1</u>	<u>5.2</u>	<u>1.4</u>	<u>4.9</u>	<u>12.3</u>	<u>9.3</u>
		11.2	18.6	4.6	11.5	28.1	26.0
N = 366	$\chi^2 = 20.646$		df = 15		$p = 0.149$		

(Table continues on next page)

Table 28 (Continued)

	All Reasons Equal	Personal Interests	Public Services	N'hood Design	Housing Unit	Other	
	Total %	%	%	%	%	%	%
Household Size:							
1 Person	34.7	4.9	7.4	0.3	4.1	10.4	7.6
2 Persons	31.7	2.5	5.5	1.6	3.8	9.8	8.5
3 Persons	19.3	2.7	3.5	2.5	1.6	2.7	6.3
4+ Persons	14.2	<u>1.1</u>	<u>2.2</u>	<u>0.3</u>	<u>1.9</u>	<u>5.2</u>	<u>3.5</u>
		11.2	18.6	4.7	11.4	28.1	25.9
N = 366	$\chi^2 = 28.540$		df = 15		$p = 0.018^*$		$\phi = 0.279$
Race:							
White	82.8	9.6	14.8	4.1	8.7	23.8	21.8
Non-White	17.0	<u>1.6</u>	<u>3.8</u>	<u>0.5</u>	<u>2.7</u>	<u>4.3</u>	<u>4.1</u>
		11.2	18.6	4.6	11.4	28.1	25.9
N = 366	$\chi^2 = 2.710$		df = 5		$p = 0.745$		
Annual Income:							
< \$20,000	34.0	2.8	7.7	1.4	2.3	9.6	10.2
\$20,000-\$34,999	37.1	4.5	7.4	2.0	4.8	9.6	8.8
\$35,000-\$49,999	18.3	2.0	2.6	0.8	1.7	7.8	3.4
\$50,000 +	10.5	<u>1.4</u>	<u>0.5</u>	<u>0.6</u>	<u>2.6</u>	<u>2.3</u>	<u>3.1</u>
		10.7	18.2	4.8	11.4	29.3	25.5
N = 352	$\chi^2 = 22.492$		df = 15		$p = 0.096$		
Education Completed:							
Less than 12 Years	11.5	0.6	2.2	0.6	1.9	1.6	4.6
12 Years	33.4	2.7	7.7	1.6	2.5	10.4	8.5
1 to 3 Years College	24.5	3.3	4.6	0.5	1.9	6.8	7.4
4 + Years College	30.6	<u>4.6</u>	<u>4.1</u>	<u>1.9</u>	<u>5.2</u>	<u>9.3</u>	<u>5.5</u>
		11.2	18.6	4.6	11.5	28.1	26.0
N = 366	$\chi^2 = 26.214$		df = 15		$p = 0.036^*$		$\phi = 0.268$

Note: Percentage totals may not equal 100% due to rounding of decimal places.

* Denotes significance level at $p \leq .05$.

Discussion of the Theoretical Model

The three main concepts of the original proposed theoretical model were the following: single women homeowners' individual demographic characteristics, the triggering events of their housing deficits and preferences, and their selected housing and neighborhood characteristics. The results of this study show that there are significant relationships between all of the constructs within the concepts of the proposed theoretical model. The following figures illustrate those relationships found to be significant. There will also be a short discussion of the final theoretical model.

The first relationship shown to be significant was between single women homeowners' demographic characteristics and their selected housing and neighborhood characteristics. Figure 4 illustrates the significant relationships that were found. Neighborhood adequacy was the only characteristic that did not have a significant association with any of the demographic characteristics. Therefore, neighborhood adequacy is not shown in this submodel.

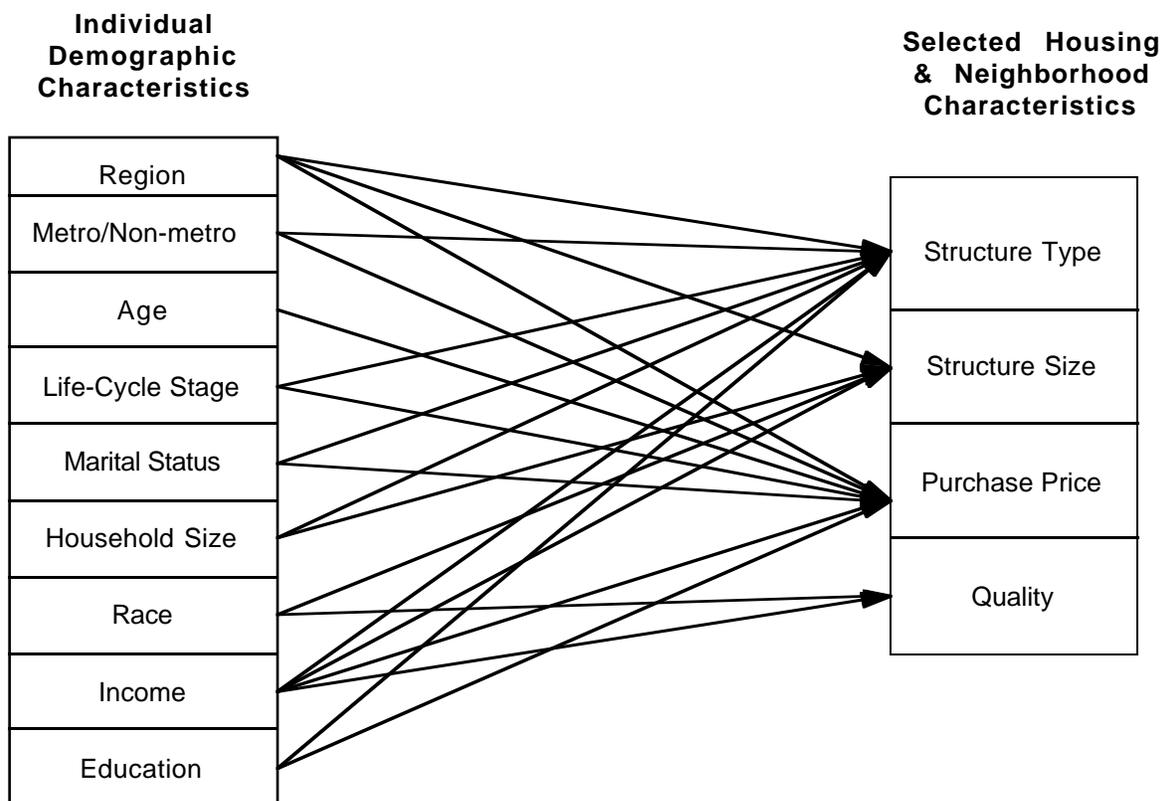


Figure 4.

Significant Relationships Between Single Women Homeowners' Demographic Characteristics and Their Selected Housing and Neighborhood Characteristics

Figure 5 illustrates the significant relationships found between the constructs of single women homeowners' triggering events of housing deficits and preferences and their selected housing and neighborhood characteristics. Structure size did not have a significant association with any of the variables within this submodel and, therefore, is not included. Likewise, the variable indicating reasons for moving from the previous residence did not have a significant association with any of the selected housing characteristics, and it also was removed from the submodel shown in Figure 5.

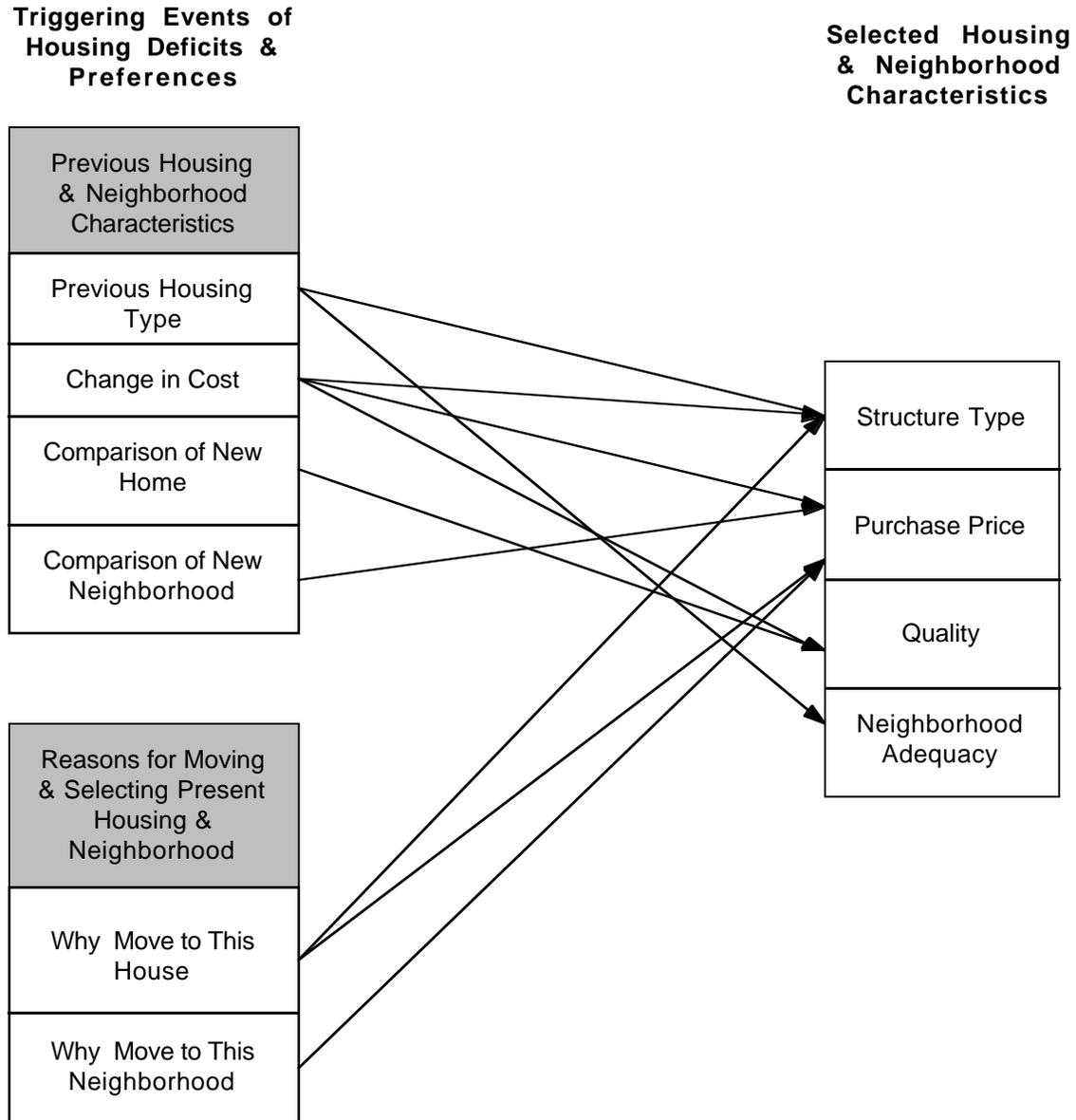


Figure 5. Significant Relationships Between Single Women Homeowners' Triggering Events of Housing Deficits and Preferences and Their Selected Housing Characteristics

The results also indicated that there were significant relationships between single women homeowners' demographic characteristics and the constructs within the concept of triggering events of their housing deficits and preferences. Geographic region had no significant associations with any of the variables and, therefore, was removed from this submodel. Figure 6 illustrates the significant associations.

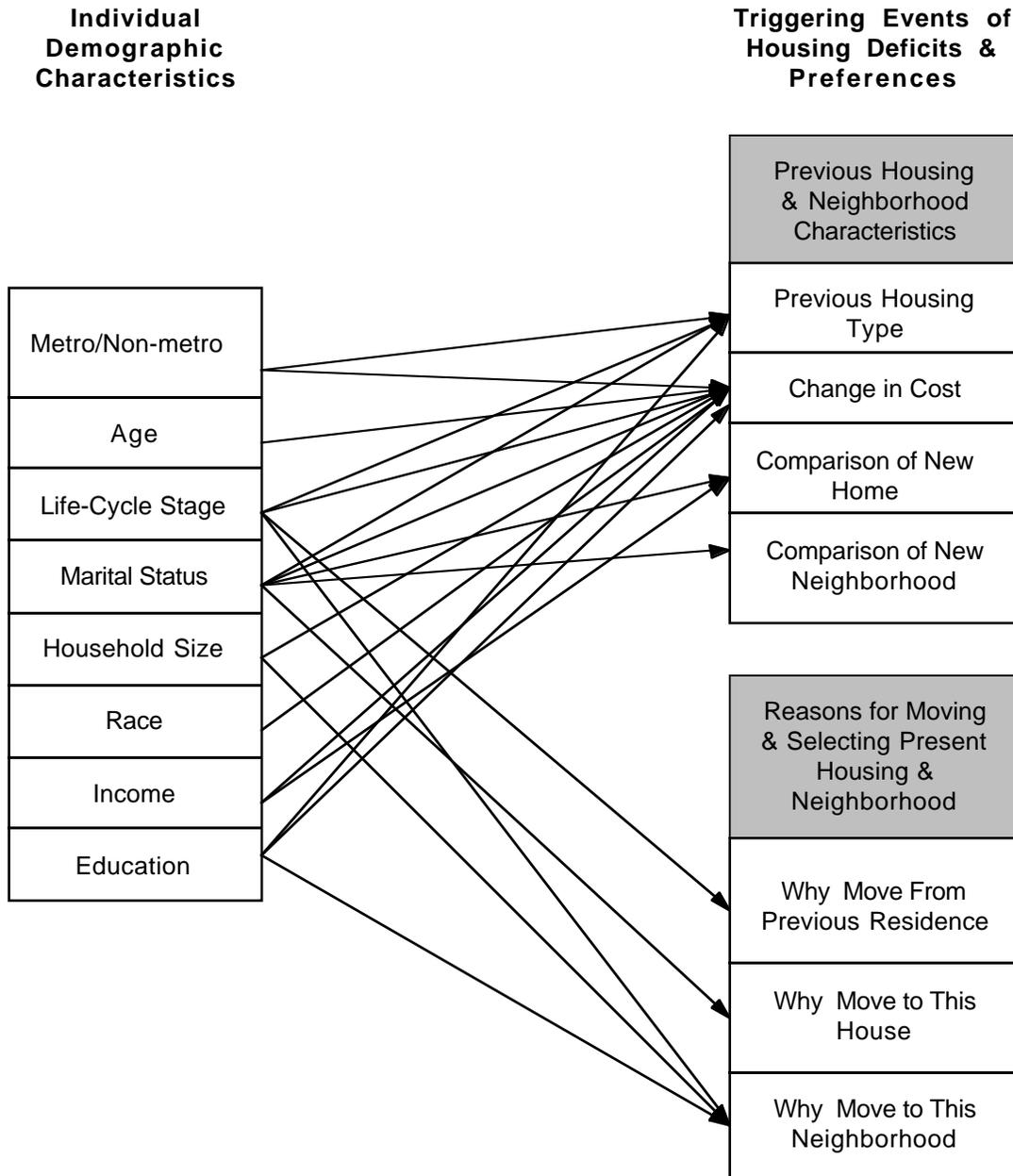


Figure 6. Significant Relationships Found Between Single Women Homeowners' Demographic Characteristics and Triggering Events of Housing Deficits and Preferences

The fourth relationship that results showed to be significant was the one between single women homeowners' previous housing and neighborhood characteristics and their reasons for moving and selecting their present homes and neighborhoods. Type of previous housing had no significant associations with any variables relevant to the reasons for moving and choosing the present home and neighborhood. Therefore, it was deleted from this submodel. Figure 7 illustrates the significant associations that were found.

**Triggering Events of Housing
Deficits & Preferences**

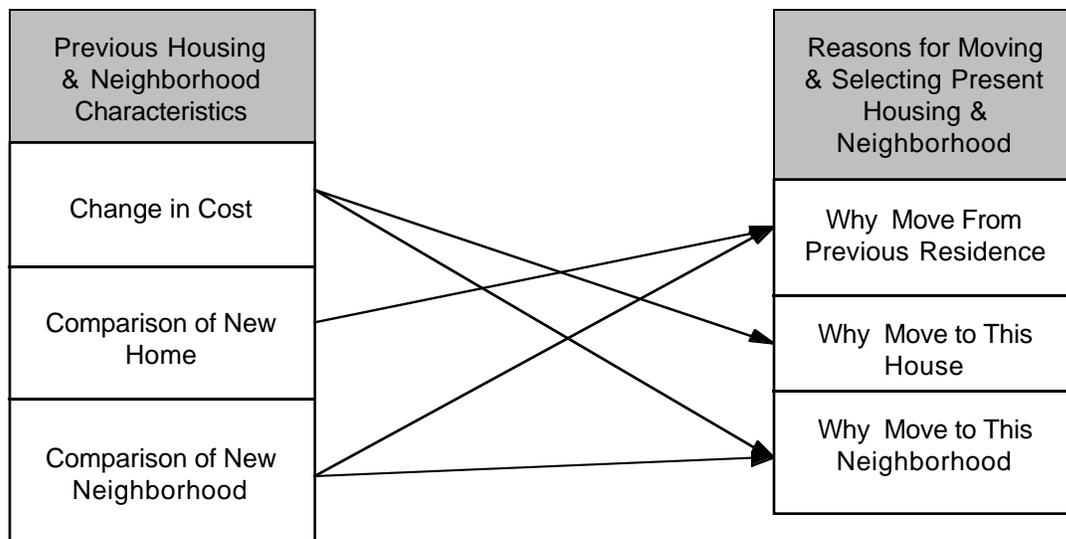


Figure 7.

Significant Relationships Found Between Single Women Homeowners' Previous Housing and Neighborhood Characteristics and Their Reasons for Moving and Choosing Their Present Homes and Neighborhoods.

Discussion of the Final Theoretical Model

As indicated by the four submodels, the results of this study support the concepts shown in the original proposed theoretical model. In summary, all the relationships depicted between constructs in the proposed theoretical model were shown to be significant. Figure 8 illustrates the final theoretical model that resulted from this study's findings. The thickness of the arrows indicate the amount of significant associations found between constructs. For example, the thicker the arrow, the more significant associations that were found and that, proportionately, more of the variables within a construct were found to be related to variables within other constructs. Additionally, the direction of the arrows do not indicate causality; only that a relationship exists between constructs of the model.

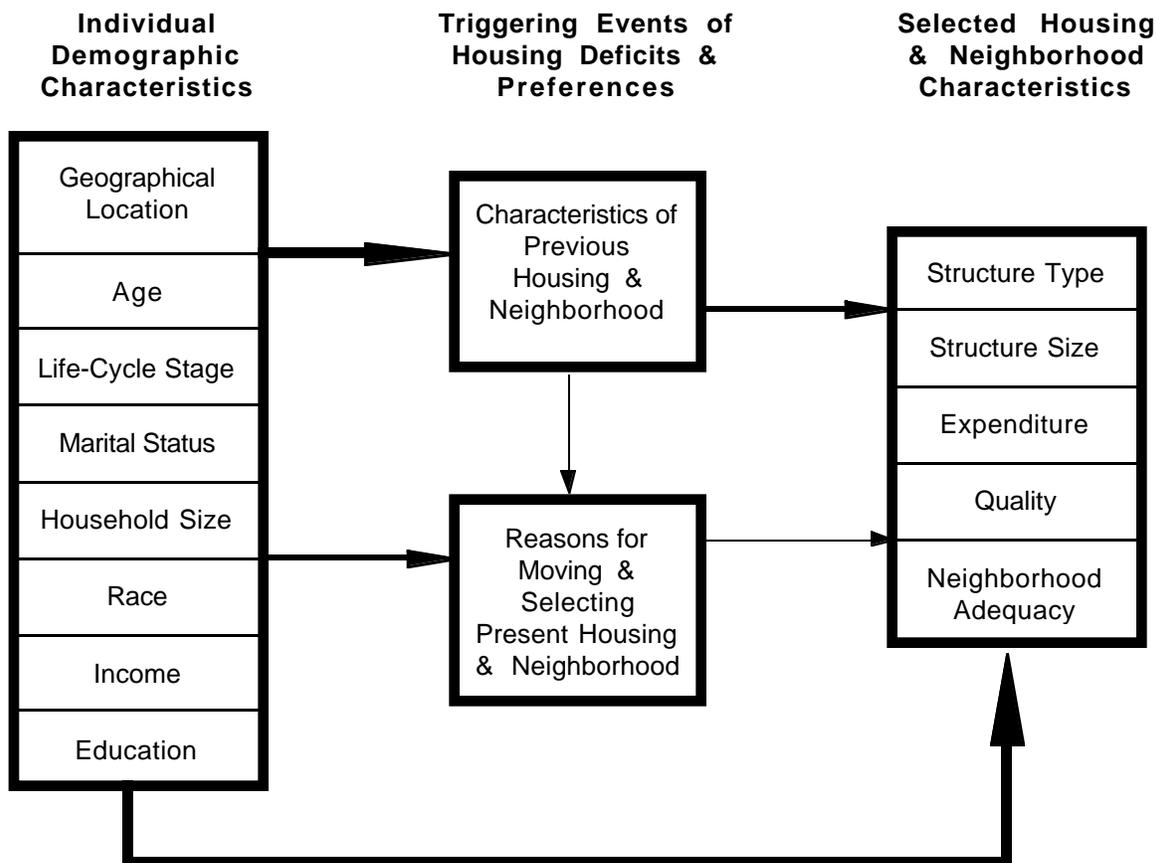


Figure 8.

Final Theoretical Model

The conceptual framework for this study was derived from Morris and Winter's (1996) model of residential mobility and Mulder's (1993) model of the context of housing and tenure choice. The abundance of associations that this study found between individual demographic characteristics and those of respondents' previous and current housing add further support to notions within Morris and Winter's (1996) theory of housing adjustment and adaptation that individual demographic characteristics influence levels of need and aspiration for certain housing characteristics. The results also support previous findings that household demographic traits and deficits in housing and neighborhood characteristics directly influence residential mobility (Morris & Winter, 1996; Rossi, 1955 & 1980), households' movements through the housing stock (Clark & Dieleman, 1996), and choice patterns within the housing market (Mulder, 1993).

The associations found between the constructs of previous housing and neighborhood characteristics, reasons for moving and selecting current homes and neighborhood, and the selected housing characteristics lend credence to the notion that individuals evaluate what is needed in a new dwelling within the context of the current home's deficiencies in size, type, cost, and location. Furthermore, the results support the argument that the routes households and individuals take through the housing stock are not isolated events but rather are influenced by life transitions and local housing markets (Clark & Dieleman, 1996; Mulder, 1993).

As indicated by the final theoretical model, resulting housing choice patterns are a function of individual demographic characteristics, household preferences and constraints, and housing stock availability. As suggested by others, such observed choice patterns are not independent of macrolevel constraints and opportunities (Clark & Dieleman, 1996; Mulder, 1993). Therefore, considering that housing decisions are made within the context of a dynamic economy and individual needs, housing market choice patterns are likely to differ not only for populations of varying demographic compositions but also across regions and local areas.

CHAPTER VI
SUMMARY, CONCLUSION, RECOMMENDATIONS FOR FURTHER RESEARCH,
AND IMPLICATIONS

This final chapter presents a summary, conclusion, implications, and recommendations for further research. The summary will present important elements from previous chapters. Following the summary, conclusions will highlight significant findings of the study. The final sections on recommendations and implications will discuss further interpretations of the findings.

Summary

This study examined the housing characteristics of single women homeowners who transitioned from renting into ownership. Using data from the 1993 American Housing Survey (AHS) National Core File, this specific population was investigated in order to construct a demographic profile of single women homeowners that included a description of the type of housing they bought, the means by which they acquired it, and the changes made in their housing when they became homeowners. Additionally, this study also examined which demographic and previous housing characteristics of this group were related to their selected housing characteristics.

The study sample consisted of 639 female respondents in the 1993 AHS that were either widowed, divorced, separated, or never married at the time of the survey. Additionally, the respondents were all homeowners who had transitioned from renting to owning sometime within the 12 months prior to being interviewed for the AHS. The respondents in the study sample represented all regions of the United States.

The importance of this study was in its focus on women homeowners rather than the determinants of ownership for this group. The homeownership rate among single women has always been lower than that of other population groups such as married couples and single men. While housing researchers are well aware of the lower homeownership rates and other housing problems of single women, there is very little research that focuses on single women as homeowners, factors associated with their decision to become owners, or the characteristics of the housing they buy. Therefore, due to the lack of research on single women homeowners, the literature reviewed in this study focused on factors contributing to lower homeownership rates among single women, demographic and housing characteristics of homeowners in general, and factors relevant to mobility and tenure choice.

A theoretical framework for this study was derived from two models: Morris and Winter's (1996) model of residential mobility and Mulder's (1993) model of the context of housing and tenure choice. There were three concepts within the theoretical model which were individual demographic characteristics, triggering events of housing deficits and preferences, and selected

housing characteristics. Constructs relevant to these concepts formed the framework for the model. Four null hypotheses were formulated from the constructs of the theoretical model.

The null hypotheses were tested using step-wise regression and chi-square statistical procedures. Since significant relationships were found between all the constructs of the model, all four null hypotheses were rejected. Specifically, results from the regression and chi-square analyses suggested that:

- a) there was a significant relationship between single women homeowners' demographic characteristics and their selected housing characteristics;
- b) there was a significant relationship between single women homeowners' demographic characteristics and the characteristics of their previous housing and neighborhoods;
- c) there was a significant relationship between single women homeowners' demographic characteristics and their reasons for moving and selecting their current homes and neighborhoods;
- d) there was a significant relationship between single women homeowners' previous housing and neighborhood characteristics and their reasons for moving and selecting their current homes and neighborhoods; and
- e) there was a significant relationship between single women homeowners' selected housing characteristics and the characteristics of their previous homes and neighborhoods as well as their reasons for moving and choosing their present homes and neighborhoods.

In addition to the regression and chi-square analyses, descriptive results from this study suggested that the study sample was younger, had more family households, earned less income, and had a larger proportion living in the South and metropolitan areas than did all homeowners in the 1993 AHS. Descriptive results also indicated that the housing of the study sample cost less and represented a higher proportion of attached and mobile home units than that of all homeowners in the 1993 AHS. Furthermore, the descriptive results suggested that single women homeowners use low-downpayment financing instruments to a lesser degree than do married couples or single men.

Results from this study supported findings of other research in that income, education, household size, life-cycle stage, age, race, and geographic region were all related to selected housing characteristics of the homeowners in the study sample. However, another key finding of this study was that not only were these demographic characteristics important to the housing characteristics of single women homeowners but also that respondents of varying marital status in the sample were found to differ in their present and previous housing characteristics and reasons for selecting their current home. This result supports suggestions made by other researchers that examining differences not only in gender but varying marital status will help to clarify and add to

the knowledge of housing and its relevance to populations of varying social composition (Birch, 1989; Burgess, 1985; Spain, 1990).

Conclusion

A number of conclusions emerged from the results of this study. First, the demographic characteristics of the sample differed adequately from that of all homeowners so that making broad generalizations of the characteristics of homeowners to this particular group (e.g., single women homeowners) should be precluded. Specifically, this study's results suggested that in comparison to homeowners in general, the sample represented single women who were more highly educated, had lower household income, owned a larger proportion of lower cost, attached, and mobile home units, and were more concentrated in the South and metropolitan areas. Additionally, there was a higher proportion of family households with school-aged children and non-White homeowners in the study sample as compared to homeowners in general.

Second, while several respondent demographics paralleled those of other homeowners, the respondent characteristic of marital status was found to be related to several variables within the study. Specifically, the varying types of marital status were found to be related to differences in respondents' selections of their home's structure type and purchase price. As a group, women who had been previously married (e.g., widowed, divorced, and separated) paid less for their housing than did those who had never been married. However, widows comprised the largest group of those residing in single-family detached homes, and those who never married were found to comprise the largest group of women residing in single- and multi-family attached housing.

Additionally, respondents of varying marital status differed in their type of previous residence, change in housing costs as a result of buying a home, rating of the new home and neighborhood, and reasons for selecting their current home. Women who were divorced and never-married had the largest proportion of those who previously resided in apartments while widows and separated women were most likely to have resided in houses. A majority of women who had never married increased their housing costs as a result of moving. This was in contrast to divorced, widowed, and separated women who were most likely to have decreased their housing costs. Divorced and never-married women were more likely to rate their new homes and neighborhoods as better than the previous ones than were widowed or separated women.

Third, the results of this study provide further evidence to the notion that housing characteristics selected by individuals are not simply a function of demographic characteristics nor are they isolated from previous housing events. Factors associated with the characteristics of previous housing and neighborhoods were shown to be related to both demographic and housing characteristics of single women homeowners. Additionally, the reasons for moving from previous homes and selecting current homes and neighborhoods were also found to be related to both demographic and housing characteristics of single women homeowners.

Finally, the results of this study provide further evidence that the process of housing selection is complex and dynamic, involving both macro- and microlevel socioeconomic elements. It is a process that varies across populations that differ in their social composition and is affected by temporal changes in individual demographic characteristics and conditions within local housing markets. Furthermore, understanding the processes involved in housing selection among homeowners can be clarified by examining specific subgroups within the broader general population in terms of their demographic and housing characteristics and the previous pathways they followed (e.g., housing types, tenure, cost, and location) to their present housing.

Implications

The overall purpose of this study was to examine single women who bought their home within 12 months of being interviewed for the 1993 AHS and who did not own their previous residence. Specifically, the study's purposes were to profile single women homeowners and their housing as well as examine the relationship between individual demographics, previous housing characteristics, and the characteristics of the housing purchased by the respondents. It was anticipated that the findings would strengthen the ongoing discussion concerning the relationship between demographics and housing, and provide housing researchers with additional contexts (e.g., the relationship to previous housing and reasons for housing choice) in which to examine the processes associated with choice within the housing market.

The research effort was successful in addressing the purpose of this study. Relationships were found between the respondents' demographic characteristics, triggering events of housing deficits and preferences, and their selected housing characteristics. Additionally, the results of this study add further evidence that the American Housing Survey provides a deep and rich source of information that can be used by housing researchers in their examination of issues relevant to populations and their housing.

The findings of this study provide implications for single women anticipating the purchase of a home. Although the homeownership rate of single women is improving, many rely on working two or more jobs to make the loan payments and keep up with maintenance (White, 1998). Educating single women on the choices within the housing market in terms of housing characteristics may help them make decisions that will save them time and money in both the short and long run. For example, many prefer the ownership of a single family detached home, but this type of housing requires more cost and effort in its maintenance, especially if it is an older structure. For this reason, an attached home may become more appealing to some single women homebuyers if they learned more about this type of housing such as what maintenance they would have to do, what is covered in homeowners' association fees, and how to review homeowners' association documents during the escrow process.

Results from this study could be beneficial to persons involved in the housing market (e.g., Realtors and builders), financial institutions, and public officials whose work involves housing. Based on this study's findings, those who work within the housing market could identify potential target markets for housing that fits the profile of the single women homeowners in this sample.

Similar to the findings of this study, builders who have researched the homebuying market for single person homebuyers have found that single women prefer homes that are moderately priced and sized, and that the neighborhood design provides a sense of security (Kalb, 1995; Lurz, 1997). Also, since results from this study showed that single women select single- and multi-family attached structures for ownership to a greater degree than do homebuyers in general, builders who plan to develop this type of housing could tailor their marketing strategies to single women.

Since the numbers of single women buying homes are likely to continue to increase, many real estate sales professionals are tapping into this growing market (Fullerton, 1996; Kalb, 1995). By understanding the needs, preferences, and life-styles of single women homebuyers, real estate professionals would be better able to market their services to this group and to aid them in the search within the housing market for a home that is easy to maintain but contains desired features and characteristics.

Additionally, real estate agents could become more familiar with types of financing instruments that facilitate the homebuying process for single women (White, 1998). By understanding the guidelines of some low-income or first-time homebuyer mortgage programs, real estate agents and sales professionals would be able to better serve single women who seek their services in the search for a home to buy. By becoming familiar with lending institutions that are more flexible or offer special programs that may appeal to single women, real estate agents could relieve much of the frustration encountered when a person must talk to several loan officers before they can find one that will give them a loan ("Crowning Achievement," 1997).

Financial institutions that provide home mortgages should examine their marketing strategies for financing instruments that require low-downpayments. Developing a wider market for low-downpayment mortgages could potentially expand the number of homeowners who are single women. Since the respondents in the study sample tended to be older, better educated, and have higher incomes than single women with families in general, it is possible that there is an untapped market among single women for various types of financing instruments. This would be true especially if it became widely known among this group that paying a full 20% downpayment may not be a necessity.

Public officials such as those who work in local planning departments could benefit from the results of this study by knowing how the characteristics of the local housing stock affect the composition of the resident population. For example, in areas where there is a tendency to approve

projects that feature primarily higher cost single family detached housing developments, those population groups who might benefit from the availability of lower and moderately priced single family detached or attached structures would become excluded from the ownership market. This effect is already widely apparent in many urban and suburban areas that feature primarily single-family detached structures and that have a low representation of single parent and retired households.

Groups who actively seek to increase homeownership rates among single women such as National Partners in Homeownership, Homeownership Opportunities for Women, and the McAuley Institute could also benefit from the results of this study. Such groups could incorporate into their strategies the knowledge that single women homeowners tend to use low-downpayment financing instruments to a lesser degree than other homeowners, select housing that differs in characteristics from those of other households, and that single women homeowners have higher income and more education than do female headed households in general. All of these factors could help such organizations in their efforts to educate single women about homeownership as well as work with finance agencies, local planners, and home builders in the development of projects that are targeted for low- and moderate-income single women.

As the results of this study indicate, understanding the complex relationships that exist between populations and their housing goes beyond simple demographics or dynamics of local housing markets. The process of providing housing for a varied population intricately involves the characteristics of the local housing stock, individual demographic characteristics, households' previous housing and tenure, and the conditions within the wider economy. None of these factors operate in isolation of each other.

In light of this, those who provide housing to the people of this country should take a closer look at how their efforts affect the housing choices of various groups within the population. Although it is understandable why home builders, public officials who approve home building projects, and those who provide the financing are concerned with successful development of a product that appeals to a specific targeted market and meets local community and economic development guidelines, focus should not be so narrow that others within local areas are excluded from homeownership opportunities.

Recommendations for Future Research

Results from this study suggest the possibility for researchers to explore other issues relevant to homeownership among single women. The following recommendations are suggested for future research in the field of housing and other relevant fields. These recommendations are made in considerations of the results, delimitations, and limitations of this study.

1. At the time the 1993 AHS was conducted, the country was still in an economic recession, and as a result, activity in the housing market was very low in many

parts of the country. Currently, homebuying activity is at an all time high, even for single women. As versions of the AHS become available for 1995 and 1997, single women homeowners' demographic and housing characteristics could be compared across varying years of the AHS in order to examine changes in their homebuying patterns as economic conditions improved.

2. Replicate the testing of this study's theoretical model for other population groups such as married couples and single men. Comparisons of the findings could then be made with those of this study.
3. Considering that single women homeowners appear to use low-downpayment financing instruments to a lesser degree than homeowners in general, future research could examine differences found between single women and other population groups in terms of financial portfolios; specifically, differences in the extent to which personal wealth is held in home equity versus other investments.
4. Relevant to the above recommendation, using longitudinal data such as the Panel Study of Income Dynamics (PSID), group comparisons could be made between the demographic and financial characteristics of single women, single men, and married couples when they first enter homeownership; specifically examining the differences in terms of age, life-cycle stage, and money saved to put towards downpayments.
5. Replicate the study that uses direct surveys rather than pre-existing data and includes a wider variety of factors such as attitudes, values, perceptions, and behaviors. By doing so, the researcher could add clarification to decisions made for home financing, housing preferences, reasons for moving, selections of certain housing characteristics, and other factors that influence choice within the housing market.
6. Future research could also explore the differences in which groups of varying social composition search for housing to buy. This type of study could examine and compare knowledge and familiarity with homebuying and financing processes, the sources that are used, from whom and what types of professional advice and information are gathered, and behaviors associated with the homebuying search.
7. Since there were few significant relationships found for the variable of neighborhood adequacy, it is recommended that more research be done to clarify the relationships between demographic, housing, and neighborhood characteristics. For example, future research could examine the role of neighborhood amenities, facilities, and design characteristics in the home buying decision among varying population groups.

8. Comparative analyses could be done that examine differences among varying population groups' preferences for housing types, amenities, design features, and neighborhood characteristics.
9. The number of households headed by single persons -- both men and women -- are projected to rise faster than any other demographic group over the next 15 years. The increase in loan approval rates for single women is so recent that there are no studies that examine this trend. Therefore, research could be done that examines the recent trends in growth of home mortgages held by single persons and predicts future growth of this loan market.
10. Related to the above recommendation, research of various mortgages held by single women homeowners could examine the effect of this growing market on individual lives, neighborhoods, and communities.
11. Since homeownership has been the cornerstone of federal housing and tax policy, more research is needed on the predicted effects of changing the tax structure within this country, especially if such a change eliminates the mortgage interest and property tax deductions. Additionally, research could examine the extent to which allowance for the mortgage interest and property tax deductions affect low- and moderate-income homebuyers' ability to qualify for a mortgage.
12. Research that considers the content of homebuyer education programs would help to improve the effectiveness of these programs. For example, groups who participated in homebuyer education programs could be evaluated on the extent to which they utilized information from the program in their search for a home, loan application procedures, and the buying process. By understanding more about the types of information and techniques for presentation that are most beneficial to potential homebuyers of varying social composition, these education programs could become more effective for certain demographic groups.
13. Since maintenance of the home appears to be a concern of single women homeowners (White, 1998), research could be done that examines women homeowners' attitudes and concerns about home maintenance, how a home maintenance education program could be tailored to women, the effect of maintenance costs and efforts on their housing satisfaction, and whether personal knowledge of home maintenance affects their housing satisfaction and intent to stay in their home.

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Education

Ph.D. in Housing, Virginia Polytechnic Institute and State University, Blacksburg., VA.
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M. S. in Housing, Environmental Analysis & Design, Purdue University, West Lafayette, Indiana.
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Thesis Title: Environmental control: Its role in alleviating the adverse effects of high density residential environments.

B. A., Family and Consumer Science, San Diego State University, San Diego, California.
Date Completed: December, 1975.

General Work Experience (1980 - Present)

Graduate Assistant (1995 - Present):

Virginia Tech - Department of Near Environments (Fall & Spring Semesters, 1995-Present):

Editorial Associate for the housing research journal, *Housing and Society*

- reviewed and critiqued manuscripts submitted for publication
- assisted with editing of manuscripts selected for publication

Researched technical literature to compile for use in course lectures and projects
Assisted with undergraduate housing and residential property management courses

Virginia Center for Housing Research (Spring, 1998):

Assisted in the market assessment for LIHTC rental housing in Waynesboro, VA:

- Collected and analyzed market area data
- Compiled special reports

Marketing Coordinator (May, 1997 - September, 1997):

Warm Hearth Village, Blacksburg, VA:

Coordinated marketing of independent-living homes in a senior living community
Developed and implemented a marketing plan for new construction phases
Scheduled appointments and met with prospective residents
Coordinated promotion and advertising of new and existing phases of homes
Made promotional presentations throughout the local area
Compiled and wrote monthly marketing reports

Personnel and Policy Assistant (May, 1996 - August, 1996)

Roanoke Redevelopment and Housing Authority, Roanoke, VA:

Assisted Personnel Administrator in development and modification of personnel policy
Evaluated current lease and housing management policy for recommended changes
Compiled and wrote special reports

Real Estate Sales and Marketing (1987 - 1995)

- New Home Sales** **Trimark Development (Weyerhaeuser)/The Mitchell Company - Oceanside, CA:**
 Performed all aspects of on-site marketing duties for a new home community
 Compiled market analysis reports of competition and tracked source of sales traffic
 Compiled records of tract/division sales for sales and marketing managers
- Other RE Sales** **Willis M. Allen Company - Rancho Santa Fe, CA:**
 Represented buyers and sellers in all aspects of real estate transactions
 Handled transactions on existing homes, vacant land, and income property
 Assisted with property management of homes and apartments

Interior Merchandising, Design, and College Instruction (1980 - 1988)

- Merchandising** **Motivational Systems, Inc./Interiors By Design - San Diego, California:**
 Interior Designer for companies specializing in marketing services for builders
 Defined design specification, construction plans, and color schemes for model homes
 and on-site sales offices; executed all phases of project administration
 Developed materials and cost estimates, proposals, and bid packages
 Directed and supervised design staff
 Won SAM and ELAN awards for model home and sales office designs
- College Instruction** **Palomar Community College/San Diego Design Institute - San Diego, California:**
 Interior Design instructor for a community college and private design school
 Instructed Business Practices, Textiles and Materials, and Space Planning

Honors

- Recipient:** 1996, 1997, & 1998 Savannah S. Day Scholarship Award for Outstanding Graduate Student in Housing.
- Phi Kappa Phi:** Interdisciplinary National Scholarship Honor Society
 - Initiated: 1997, Virginia Tech University
- Kappa Omicron Nu:** National Scholarship Honor Society for Consumer Sciences

Publications and Presentations

- Research Paper Presented:** Co-Author of *Assisted Living Spaces for the Elderly: Using research to plan interiors* (October, 1996), Annual Conference of American Association of Housing Educators; Kansas State University, Manhattan, Kansas.
- Book Review:** House as a mirror of self: exploring the deeper meaning of home, by Clare Cooper Marcus (1996). In *Housing and Society*, 23, 2, 111-112.
- Publication in Press:** Co-author with Rosemary C. Goss and Julia O. Beamish, *Chapter 2: Manufactured Housing Zoning and Regulation*, in *Manufactured Housing in Virginia*.

Memberships

- American Association of Housing Educators**
American Association of Family and Consumer Sciences

Service

Kappa Omicron Nu: National Scholarship Honor Society for Consumer Sciences

- President: 1996-1997, O Beta Zeta Chapter, Virginia Tech University

Graduate Advisory Committee, Virginia Tech: Graduate student representative on the GAC for the 1997-1998 academic year; participated in the development of a new graduate student policy and procedures handbook for the department of Near Environments.

The Junior League of San Diego: The JLSD is affiliated with the Association of Junior Leagues International, Inc., and is committed to promoting voluntarism, developing the potential of women, and improving quality of life for families and communities through the effective action of trained volunteers. The purpose of AJLI is strictly educational and charitable:

- Offices held 1980-1995: Administrative Vice-President, Director of Community Services, Director of Community Development Council, Headquarters Chair, Community Assistance Grants Chair, Nominating Committee Co-Chair, Teen Career Awareness Program Co-Chair, Paint-A-Thon San Diego Co-Chair, Chair of Volunteer Coordinating Committee for large fund-raiser that recruited the assistance of over 500 volunteers.
- Other Activities 1980-1995: Served on committees for Advisory Planning, Membership Training, and Project Development and Evaluation.

Miscellaneous Interests (Always): Horseback riding, tennis, hiking, gardening, travel, meeting people, and enjoying new adventures in life.