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Publisher: Routledge

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Journal of Housing For the Elderly

Publication details, including instructions for authors and subscription information:

http://www.tandfonline.com/loi/wjhe20

Aging in Place or Relocation? Plans of Community-Dwelling Older Adults

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Published online: 04 Sep 2014.

To cite this article: Heidi H. Ewen, Sarah J. Hahn, Mary Ann Erickson & John A. Krout (2014) Aging in Place or Relocation? Plans of Community-Dwelling Older Adults, Journal of Housing For the Elderly, 28:3, 288-309, DOI: 10.1080/02763893.2014.930366

To link to this article: http://dx.doi.org/10.1080/02763893.2014.930366

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Journal of Housing for the Elderly, 28:288–309, 2014 Copyright © Taylor & Francis Group, LLC

ISSN: 0276-3893 print / 1540-353X online DOI: 10.1080/02763893.2014.930366



Aging in Place or Relocation? Plans of Community-Dwelling Older Adults

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This study examines the anticipated housing options of 416 community-dwelling older adults from a semi-rural upstate New York county using data from the first two data collections of the Pathways to Life Quality Study. Aging in place, either with or without home modifications to meet special needs as they arise, is seen as the most likely anticipated housing, followed by moving to a retirement community and living with others. Measures of psychosocial well-being, variables assessing resident satisfaction with current homes, health status, and moving intentions were entered into structural equation models in an effort to predict perceived likelihood of living in select housing arrangements. Our findings indicate that those who were considering a move were more likely to consider retirement communities rather than moving closer to relatives. Home satisfaction measures were related to the anticipation of remaining in one's home with modifications. Factors that can be predictive of ability to successfully age in place, such as better health and social support networks, were not significant. Additional research on moving intentions in conjunction with housing options is needed. Although many new types of senior housing have emerged in recent years, marketing and educational materials may not be reaching the older adult populations.

KEYWORDS older adults, housing, residential transitions

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INTRODUCTION

The decision to relocate, particularly for older adults, can be difficult but can be mitigated by a variety of factors, such as finances, health, and functional ability. Hobbs and Damon (1996) noted the increasing size of the oldest old population, and their health situation suggests that long-term care in conjunction with housing will be forthcoming. By the year 2050, approximately 86.7 million Americans will be older than age 65 years and 20.9 million will be aged 85 years and older (He, Sengupta, Velkoff, & DeBarros, 2005). The "graying of America" raises several issues, including what type of future housing options the burgeoning number of older adults will use.

As older adults proceed through the life course, priorities shift and new challenges require them to periodically reassess the appropriateness of their housing (Lawton, 1986). On retirement, some people chose to relocate to the sunbelt states, retirement communities, or homes that require less maintenance (Bradley & Longino, 2009; Longino, 1990). However, most older adults do not move, and if they do, it is generally over a short distance (Calvo, Haverstick, & Zhivan, 2009). However, many older adults must assess the appropriateness of their housing in the face of losses that can accompany old age, such as declining health, widowhood, or financial hardship (Pynoos & Golant, 1996; Venti & Wise, 2004; Walters, 2002).

Although the growing need for housing alternatives is apparent, relatively little research has been conducted on the residence patterns and preferences of older adults (Pynoos, Cicero, & Nishita, 2010; Pynoos & Liebig, 1995). Previous research has shown that measures of expectations are useful in estimating future behavior (Juster, 1997; Sergeant, Ekerdt, & Chapin, 2010). This study examines the future anticipated housing of 416 older adults living in central New York. The findings will enable researchers, housing professionals, and policy makers to refine predictions of housing and plan more effectively for the future housing needs of older adults.

REVIEW OF LITERATURE

Aging in Place

Aging in place is by far the preferred long-term housing arrangement among older adults. In a 1990 national survey by the AARP (1993), 85% of respondents aged 55 years and older said they never wanted to move, whereas approximately 70% of a 2000-person national sample of older adults surveyed in 2000 indicated that they never plan to move (Harper & Bayer, 2000). Of the 30% who did anticipate moving, only 25% had a plan for their future housing options (Harper & Bayer, 2000). Aging in place may be a conscious choice or it may simply be a default living arrangement that results from a

lack of planning (Barrett, 2003; Dobkin, 1992). Older adults are attached to their homes, often living in them for 30 years or more (Hobbs & Damon, 1996), and homeowners are less likely to move than renters (Longino, Jackson, Zimmerman, & Bradsher, 1991; Miller, Longino, Anderson, James, & Worley, 1999).

Older adults who want to remain in their homes despite physical and cognitive limitations may use compensatory measures, such as home modifications and supplemental care. Harper and Bayer (2000) found, of those who were permitted to adapt their environment, 70% had made one or more major home modification. Approximately 9.5 million Americans aged 50 years and older receive supplemental care from family, friends, and/or home health care (Kassner & Bectel, 1998) which, along with the home modifications, postpones or eliminates future moves (Harper & Bayer, 2000; Miller et al., 1999). Those who use home health care most are the oldest old, are women, have more disabilities, have been hospitalized, have few children, and are unmarried (Hanley & Wiener, 1991; Jones, Harris-Kojetin, & Valverde, 2012; Kassner & Bectel, 1998). Home health care is used most by those who receive subsidized health care (who are impoverished) and are wealthy but less by those who have moderate incomes (Choi, 1996; Hanley & Wiener, 1991; Jones, Harris-Kojetin, & Valverde, 2012).

For older adults who need a low cost alternative to supplemental care or simply want increased social interaction within the home, match-up home sharing or shared living are viable housing alternatives. Each of these innovative programs pairs two or more unrelated adults in a symbiotic relationship that enables the older adult(s) to remain in the community longer than they would if living independently (Pollack, 1987). However, few older adults utilize these housing alternatives (Varady, 1988), and they may only be a temporary solution, as evidenced by subsequent moves (Colsher & Wallace, 1990).

Residential Relocation

Despite the prevailing desire to age in place, older adults have become increasingly mobile (Blake & Simic, 2005; Clark & Davies, 1990; Oswald & Rowles, 2006). Relocation among older adults is typically described by Lee's (1966) push/pull model. People move in response to push factors, such as declining health and financial hardship, and pull factors, such as a desire for increased socialization and amenities. Weeks, Keefe, and Macdonald (2012) found that gender, age, income, and housing fit predicted relocation among older adults in Canada. Choi (1996) found clear patterns for intrastate and interstate movers that are consistent with, and expand on, Lee's (1966) model. Of those who moved to another state, being close to family or friends and amenities were the primary reasons for moving (pull factors). Participants

who cited financial hardship (a push factor) as the primary reason for moving generally stayed within their home state. The few who did move out of state appear to be wealthier and influenced largely by a desire for kinship.

Stoller and Longino (2001) found that marital status, financial adequacy, and good health did not predict relocation among older adults who had previously made an amenity move to the sunbelt states. However, when accounting for other influencing factors, such as frequency of return visits to family and levels of dissatisfaction with the current home, older adults were likely to consider a return move. Furthermore, those who had adequate financial resources were less likely to consider moving than those who did not.

Moves to Supportive or Congregate Housing

Moving in with family members is sometimes an intermediary step between independent living and congregate housing. Approximately 12.8% (3.9 million) of those aged 65 years and older in the United States lived with relatives other than a spouse in 1993 (Hobbs & Damon, 1996). By 2011, 55.1% of older adults lived with a spouse, 30% (11.3 million) lived alone, 4% lived in institutional settings, and the remainder (approximately 11%) lived with other family (Administration on Aging, 2011). However, most older adults do not want to live in a family member's home (Harper & Bayer, 2000). A 1990 survey from the AARP (1993) found that only 17% of older respondents indicated they would consider moving in with a family member. In addition to seniors' desire to maintain independence, the changing family structure (fewer marriages, divorce, having children later in life, having fewer or no children, and women having careers) can diminish the support older adults receive from family and has dramatic implications for housing (Hobbs & Damon, 1996). A study of 8,313 Australian women who were childless found they were 40% to 43% more likely to live alone and 66% more likely to live in an institution than women with children (Rowland, 1998). Thus, it is possible that older adults will be increasingly likely to move to congregate or supportive housing alternatives because they are unable to rely on their children for care.

Older adults who decide the customary choices of aging in place or living with family members are not viable options may turn to assisted living, which provides a combination of housing, health care, and social services. The private and public sectors have looked to this option as a means to both reduce the need for nursing home beds and improve the independence and quality of life of older persons. A broad category, it includes residential care facilities, personal care homes, catered living facilities, retirement homes, homes for adults, community residences, residential care in continuing care

retirement communities, parts of independent-living arrangements, and special residential sections of nursing homes (He et al., 2005; Schwarz & Brent, 1999). It is estimated that approximately 1 million older adults currently live in a variety of housing products referred to generally as assisted living, but increasing numbers of older adults are expected to move to such supportive living environments in the future (Administration on Aging, 2011; Schwarz & Brent, 1999; Speare, Avery, & Lawton, 1991). This is due not only to people living longer with chronic illnesses, but also to the development of more alternatives to traditional senior housing. However, existing research suggests that many older people are unaware and uninformed about these housing options. A study published in 1996 found that 60% of respondents aged 70 years and older had never heard of continuing care retirement communities, approximately half had never heard of assisted living or congregate housing and less than one quarter had visited such facilities (Harvard School of Public Health & Louis Harris & Associates, 1996).

As the growing number of older adults proceeds through their life course, they periodically need to assess the appropriateness of their housing. Older adults prefer to remain in their homes for as long as possible. To age in place despite limitations, many older adults modify their environment, use supplemental care, or both. Those who find that aging in place is not appropriate may move in with family, choose assisted living, or move to a continuing care retirement community. Consumers have a growing menu of housing alternatives to choose from, but which do they view as most appropriate?

CONCEPTUAL FRAMEWORK

A literature review did not identify any frameworks that had been specifically developed to examine anticipated future housing of older adults. However, several approaches used to study migration and housing provided useful insights. Studies of residential relocation among older persons have found that quality of life issues, amenities such as weather and recreation, and economic issues such as cost of living and taxes are often identified as reasons for moving (Longino, 1990; Serow, 1987). Lee's (1966) pushpull model directs our attention to factors in the current living situation, as well as anticipated characteristics of alternative housing options. Dissatisfaction with or inappropriateness of housing quality or features can lead an older individual to relocate, either voluntarily or involuntarily, and would likely be related to the degree to which he or she would anticipate moving.

Lawton and Nahemow (1973) and Lawton (1986) looked at the relationship between a person's competencies (health, sensorimotor functioning, cognitive skills, ego strength) and the demands placed on them by the

housing environment. These "demand characteristics" place varying levels of "environmental press" on older individuals. A person's comfort with or ability to function in an environment varies based on combinations of individual competence and environmental press (Lawton, 1986). A person's functional abilities should be considered in relation to the environment in which he or she lives when gauging the likelihood that housing changes (including modification or relocation) would occur. Although we do not have direct measures of environmental press, our study includes measures of individual abilities, housing quality, and satisfaction with housing and community.

Litwak and Longino's (1987) stage theory of migration also suggests variables that may influence anticipated changes in housing. These researchers describe three types of moves in later life, which do not necessarily occur sequentially or apply to all older adults. These include the following: moves by young, healthy retirees to areas with amenities and friendship networks; moves in response to increasing frailty, often to be more proximate to informal helping; and moves into long-term care institutions brought on by increasing and chronic disability. The second two moves appear to be predicated on increasing health and social service needs. Several researchers have reported findings that generally support this approach (Longino, 1990; Longino et al., 1991; Longino & Serow, 1992; Longino & Smith, 1991; Reshovsky & Newman, 1990; Speare, Avery, & Lawton, 1991).

Research suggests that housing options that accommodate changes in needs, such as assisted living, would be more likely to be identified as alternatives to existing arrangements as a person experiences or anticipates functional declines (Day, Carreon, & Stump, 2000; Oswald & Rowles, 2006). Factors such as income, health, age, housing satisfaction, and the availability of helping networks might be predictive of who among older adults are more or less likely to consider alternatives to aging in place. One of the choices that could be seen as the "default" option is to simply age in place without any changes to the home environment. Indeed, it seems reasonable to look at housing options as a continuum that ranges from the aging in place choice, with no home modifications, to relocation to some kind of congregate facility. Each choice makes different psychological, social, and financial demands on the individual.

A study of older adults' moving plans draws on the frameworks cited above and proposes residential satisfaction as another important component of older adults' mobility (Erickson, Krout, Ewen, & Robison, 2006). This longitudinal study of older adults found that poor housing fit and lower residential satisfaction increased the likelihood of consideration of a move. Comprehensive concepts that emphasize meaningful (e.g., belonging) and functional aspects (e.g., agency) of person-environment exchange are worth consideration in investigating relocation decision making (Wahl, Iwarsson, & Oswald, 2012; Wahl & Oswald, 2010).

This article applies insights from the push-pull (Lee, 1966), Lawton and Nahemow (1973), and Litwak and Longino (1987) models to examine the likelihood that older adults see themselves living in various arrangements in the future. These researchers direct us to consider individual characteristics, functional status and resources, social support, housing quality, housing and neighborhood satisfaction, and significant life events. We include identification with current home and a measure of moving intent. Our analysis seeks to answer the following questions:

- How likely are community-dwelling elders to anticipate moving to various housing options?
- Who is more or less likely to anticipate moving to these arrangements?
- What is the relative importance of various independent variables in predicting the housing options identified by older adults?

HYPOTHESES

To examine these questions, we use a model with explanatory variables that the literature suggests are associated with residential relocation and thus would likely also be associated with anticipated moves. These variables reflect characteristics of individuals and their housing, as well as satisfaction with existing housing and social/neighborhood relationships that would likely influence a desire or ability to relocate and not age in place. The first category is that of factors that could be seen as likely to create differences in how older adults consider their future housing options: gender, age, education, and marital status. We do not include race or ethnicity because the data for this study were collected from a sample with little racial or ethnic variation. We hypothesize that older individuals will be less likely to indicate utilizing housing options other than aging in place because they have likely lived in their current housing longer and have greater attachment to it and because they may not see themselves living long enough to justify a major change of residence. We anticipate that women would be more inclined to indicate a likelihood of options other than aging in place because they may see themselves living longer. Women and unmarried individuals would be more likely to note other options because of the need for assistance in caring for a home.

The second category includes factors that are indicative of an individual's ability to remain independent and respond to environmental demands (e.g., self-rated health, indices of ADL/IADL capabilities, and social engagement). Those in better health would see themselves as better able to take advantage of options. On the other hand, health could also be seen as an indicator of need. Therefore, those in poorer health might recognize that they might have to make home modifications or move in with others. The third category

includes measures of psychosocial well-being and social contacts, both with family members and with friends or neighbors. A psychosocial measure of social relationships (integration) was included in the analyses. Presumably, those with closer social neighborhood ties would be more likely to indicate aging in place options and those with closer family ties would indicate a greater likelihood of using options that involve relatives. The fourth category is satisfaction, including housing and privacy. We argue that satisfaction with existing housing is positively associated with the likelihood of selecting aging in place options.

We hypothesized the following:

- Older individuals with adequate financial resources and higher levels of education would be more likely to indicate plans to age in place.
- Unmarried individuals and women would be more likely to consider moving near family.
- Older individuals who were in poorer health would be more likely to indicate moving closer to relatives or retirement housing as options.
- Those with greater ties to home and who had greater social ties would be more likely to indicate aging in place options and those with fewer social ties would be more likely to consider moving closer to family or relocating to a retirement community.
- Those who were satisfied with existing housing options would be more likely to select aging in place options.

SAMPLE

This article analyzes data collected as part of the Pathways to Life Quality Study, a longitudinal study that compared older adults living in a variety of residential settings. The Pathways to Life Quality Study followed individuals for 6 years and investigated the relationships among changes in well-being and anticipated housing options. The current article focuses on only one wave of the data because we wanted to understand the ways in which older adults think about their future housing accommodations and investigate the factors influencing the planning for those housing arrangements in the context of factors known to be associated with success in aging in place or after relocation. The sample for this analysis consists of community-dwelling adults 60 years and older who were not living in any type of congregate facility at the time of the survey. It is a random community sample (n = 416) recruited through mailings and follow-up telephone calls to residents aged 60 years and older from an upstate New York county. The names of eligible participants were obtained through age-targeted lists from Survey Sampling, Inc., and county voter registration records. The demographic characteristics of the sample closely match those of the county. A variety of senior housing

TABLE 1 Demographics of Random Community Sample versus Census Data^a

| | Random Community | | 1990 County | |
|-----------------------------|------------------|------------|-------------|------------|
| Demographic | No. | Proportion | No. | Proportion |
| Gender (ages 60+ y) | | | | |
| Male | 146 | .399 | 4598 | .407 |
| Female | 220 | .601 | 6713 | .593 |
| Age (60+), y | | | | |
| 60–64 | 72 | .199 | 2846 | .251 |
| 65–69 | 94 | .260 | 2607 | .230 |
| 70–74 | 85 | .235 | 2077 | .184 |
| 75–79 | 57 | .158 | 1666 | .147 |
| 80–84 | 31 | .086 | 1130 | .100 |
| 85 and above | 22 | .061 | 985 | .087 |
| Marital status (ages 65+ y) | | | | |
| Married | 207 | .639 | 4369 | .516 |
| Widowed | 84 | .259 | 3040 | .359 |
| Divorced/separated | 26 | .070 | 548 | .065 |
| Never married | 8 | .025 | 508 | .060 |
| Race (ages 60+ y) | | | | |
| Caucasian | 357 | .978 | 10911 | .965 |
| African American | 5 | .014 | 255 | .022 |
| American Indian | 1 | .003 | 13 | .001 |
| Asian | 1 | .003 | 129 | .011 |
| Other | 1 | .003 | 3 | .000 |
| Income (ages 65+ y) | | | | |
| <\$15,000 | 31 | .106 | 2086 | .383 |
| \$15,000-29,999 | 86 | .295 | 1570 | .288 |
| \$30,000-49,999 | 77 | .264 | 954 | .175 |
| \$50,000-74,999 | 52 | .178 | 392 | .072 |
| \$75,000–99,999 | 22 | .075 | 229 | .042 |
| >\$100,000 | 24 | .074 | 218 | .040 |

 $^{^{}a}$ The census data had information for only seniors aged 65 years and older on income and marital status. For appropriate comparisons, we used only data for respondents aged 65 years and older (n = 325) on these two categories. Thirty-three of the random community respondents refused to answer the income question.

options were also prominent within this small rural county. Senior housing available included a continuing care retirement communities, an independent/assisted living facility with ties to a local college, government subsidized public housing, and several low-middle income senior apartments. All of these options were considered when developing the questions for the interview.

The average age of the sample was 71 years, 60% were women, and approximately 60% were married. Almost all were Caucasian and close to one-third reported incomes of \$50,000 or greater. Table 1 summarizes the demographic characteristics of the random community sample and the entire 60 years and older population from the county from which the sample was drawn. The study sample is similar to the county in gender and race, but the sample was more likely to be married and report higher incomes. It also shows a greater proportion of people in the 65–69 and 70–74 years

age groups. Compared to older people in the United States in general, our sample includes fewer non-whites and reports higher income and marriage levels (see Table 1).

MEASUREMENT VARIABLES

Independent variables consist of items assessing several demographic areas, including income, health, marital status, spouses' health, and level of education. Cases missing substantial data were filtered out prior to analysis, yielding the final sample of 416 participants. Missing data on any of the measurement variables was handled using a pairwise deletion of cases in the regressions and structural equation models. In addition, a psychosocial scale was embedded in the interview. Items measuring the ways in which the present home reflected their personal identity were summed into a score. The following items were used to measure home identity and each was rated on a 4-point Likert scale: "My home appearance reflects my personal identity," "If left home, my memories go with it," "It would take longer to put roots down," and "My home appears lived in." This scale was included as a measure of current home satisfaction that is noted as "Home Identity." Prior research has indicated that residential satisfaction is an important facet of meaning, attachment, and identity (Oswald & Kaspar, 2012; Oswald et al., 2006). The scale had a Chronbach's alpha reliability rating of 0.74 within our data. Confirmatory factor analyses were run on the scale items on home identity and indicated the scale items were satisfactory ($X^2 = 27.99$, df = 14, p > .01; Comparative Fit Index (CFI) = 0.97).

Two other satisfaction scales were also included. These include (1) a ten-point rating scale on life satisfaction, with "0" representing worst and "10" representing best; and (2) a continuum scale for rating satisfaction in getting what is paid for at the residence, where "100" indicates complete satisfaction and "0" indicates complete dissatisfaction. These scales, indicative of home and general life satisfaction, were included in the analyses as predictors of moving plans. Satisfaction with housing cost was used as a mediator in structural equation models. Finally, respondents were asked about the frequency of contact with friends and family members. Responses were coded into the number of contacts per week. The number of years in residence was included in regression analyses.

A dichotomous item asked whether they were currently considering moving. If the respondent answered no, then he or she was asked whether there were any circumstances that would lead them to consider moving. If the answer was yes, then the two items were collapsed in a 3-level categorical variable: yes, considering moving; might consider moving; and not considering moving. This variable was used as a predictor for future housing plans in regression analysis and as a mediator in structural equation models.

Dependent Variables

Respondents were asked to rate the likelihood that they would live in various housing options in the foreseeable future, on a scale of zero (absolutely no chance) to 100 (certain they will). Ratings of these options were not percentages of individuals who agree, but rather the relative likelihood that they would choose to live in each arrangement. The options were not mutually exclusive and the score indicates a preference for each option. For example, the first two options both involve remaining at home, but the second indicates having instrumental assistance. The housing options included (1) remain here without any changes; (2) remain here with assistance; (3) move to a retirement community that provides meals, housekeeping transportation, and social activities; and (4) move closer to family. These options do not include having a family member move in with them. We are unable to determine whether respondents were considering other aging-in-place home options (such as caregivers coming into provide care), although it is likely to be seen as similar to moving in with a family member.

ANALYSES

Correlations among factors of interest were computed and are presented in Table 2. A series of standard multiple regression analyses were run on four potential housing options: age in place, age in place with assistance, relocate to a retirement community, and relocate nearer family. Predictors of housing fit (e.g., health status, activity limitations), mobility (e.g., financial adequacy), housing satisfaction (e.g., home identity), support (e.g., contact with family and friends), years in residence, and moving plans were entered into hierarchical regression models. Structural equation models (SEM) designed and efficacious for determining pathways of influence for direct (e.g., regression) and indirect relationships (e.g., path analysis). The advantage of SEM over path analysis is the ability to estimate effects with both measured and latent variables (i.e., constructed scale scores) (Nachtigall, Kroehne, Funke, & Steyer, 2003). Structural equation models were used to refine the results of the regression analysis and to explore the role of mediators, such as moving plans, in predicting anticipated future housing options.

RESULTS

In the sample as a whole, aging in place (in either the home as it is or with major modifications) appears to be the highest rated future housing option, with mean scores of 71 and 61, respectively. The remaining options were given lower likelihood ratings, with retirement community having the

TABLE 2 Relationships among Demographic, Health, and Psychosocial Measures

| | 1 | 2 | 3 | 4 | 5 | 9 | 7 | 8 | 6 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|-------------|------|------------|------------|-----|-------------|------------|------------|-------------------|-----|------------------|------------|------------|-----------|--------------------|
| 1. Education 2. Marital status | I | .10* | 09* 24* | 16* 21* | | .02 .09* | 06 14* | 24* .05 | 03 .39* | 80 | 09* 12* | .03 70. | .02 | .09* | .17* |
| o. Gender 4. Financial adequacy | | | | | .01 | .05 | .03 .03 | .03 | 038 029 | *60 | .21* | 16* | 0/ 18* | .08 02 | .07 |
| 5. Age 6. Identity 7. Contact with | | | | | | 12* | 90. 0. | .10* | 12* .034 01 | 16* | .19* 05 07 | 07 .13* | 03 .12* | .31* | -12* -09* 05 |
| friends 8. Contact with | | | | | | | | <u> </u> | 15. | 14* | *80 | 04 | .02 | 16* | 20 |
| children 9. Number of roles | s F | | | | | | | | | .02 | 14* | .12* | .18* | 10* | 09 |
| 10. Fersonal mastery 11. Number of ADLS 12. Health | y x | | | | | | | | | | 14. | | 20* 30* | 03 07 | |
| 13. Rating of life14. Privacy scale15. Moving plans | | | | | | | | | | | | | I | 80. | 16 05 |
| * $p \le .05$. ADLs = activities of daily living. | laily livir | ıg. | | | | | | | | | | | | | |

next highest rating (32) and moving closer to relatives the lowest (14). Each of these options was a dependent variable in both multiple regression and structural equation models. The options were not mutually exclusive and were expected to be highly correlated. As such, the dependencies between the options were accounted for in the structural equation models.

Aging in Place

Multiple regression results on general aging in place intentions in which groups of variables were entered hierarchically into the model showed that significant predictors changed with the inclusion of subsequent blocks of predictors. Education was significant until the addition of a three-level variable assessing moving plans (yes, maybe, no). Education was negatively related to the outcomes, indicating that higher levels of education were associated with a lower likelihood of aging in place. However, once moving plans were included, this predictor was no longer significant. Similarly, age and higher levels of life satisfaction were predictive of aging in place until the inclusion of moving plans. Identity reflected in the current home predicted aging in place and remained in the final model with moving plans. Financial adequacy, not significant in early models, became significant with the addition of moving plans. Thus, aging in place was best predicted by age, current moving plans, home identity, and financial adequacy. These results partially support our hypothesis that older individuals with adequate financial resources would plan to age in place. However, education was not significant in the final model. Home identity and satisfaction were found to be influential in aging in place, providing support for our hypothesis that those who were satisfied with existing housing options would be more likely to select aging in place options.

SEM Analysis of Aging in Place

Basic descriptive statistics and correlations were run on all endogenous, exogenous, and latent variables. Two structural equation models were performed: one path model was designated for the aging-in-place options (Figure 1) and the second was for the moving options (Figure 2). Because the outcome variables were not mutually exclusive, the errors associated with each option were correlated (aging in place, r = 0.46; relocation, r = 0.32).

Model 1 originally contained demographic information on marital status, age, and income; scale scores for satisfaction with housing and housing costs; contact with others; health variables of the number of ADL limitations and self-rated health; and financial adequacy. Marital status and income, although

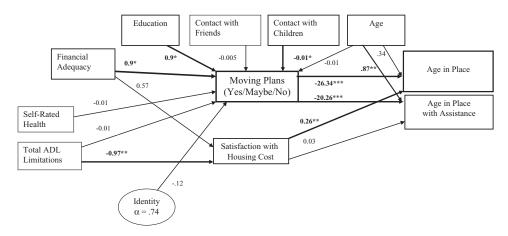


FIGURE 1 Likelihood of aging in place. ADL = activity of daily living.

tied to relocation in the literature, were not effective in predicting aging-inplace options in either the regression or the structural equation model and significantly altered the SEM model fit indices. The model was run without these two measures and the final model is presented in Figure 1 ($X^2 = 304.25$, df = 126, p \leq .001; CFI = 0.82; Root Mean Square Error of Approximation (RMSEA) = 0.059). The endogenous variables assessing health status were not effective in predicting either option.

Remain with Assistance

Not surprisingly, the second option of aging in place with assistance yielded similar results as the general aging in place option in hierarchical regression analysis. Age, education, home identity, life satisfaction, and moving

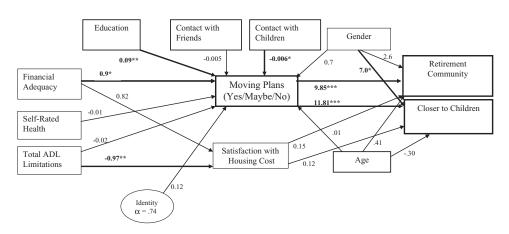


FIGURE 2 Anticipated likelihood of relocation. ADL = activity of daily living. *significant at .05; **significant at .01.

plans were significant predictors. Low levels of education and high scores on home identity and satisfaction predicted aging in place with assistance. Once entered into the model, contact with friends and children emerged as significant predictors, specifically less contact with friends and more frequent contact with children. These findings support our hypotheses. Once moving plans were added, only contact with friends remained a significant predictor. Some of these factors might simply push people to make a plan. For example, older age means that one sees more friends move or pass away, which may lead people to consider moving, although it might not push them to a particular decision (Table 3).

A structural equation model was used to investigate the impact of moving plans as a mediator of the predictors of interest. It was additionally hypothesized that moving intention and satisfaction with housing cost would serve as mediators among the demographic, health, social contact, and financial factors and the dependent variables on aging in place. Because the dependent variables were not mutually exclusive options, they were correlated in the model (r = 0.46). The overall model demonstrated acceptable indices of fit $(X^2 = 505.0, df = 176; CFI = 0.80; RMSEA = 0.060)$. Moving plans and satisfaction with housing costs were mediators in the aging-inplace models. The community-dwelling older adults in this sample who were planning to age in place were more highly educated, more financially secure, and had less contact with children. Age was not mediated by moving plans, yet it had a direct predictive effect on aging-in-place with assistance. Although the health variables were not effective in the multiple regression analyses, ADL limitations predicted aging in place indirectly through satisfaction with housing cost. Those with more limitations were less satisfied with housing costs but intended to age in place. This does not support our second hypothesis that poorer health would be related to relocation options. Home identity was not mediated by moving plans for either option, despite its significance as a direct predictor in the regression model. This means that home identity is related to aging in place but not moving plans per se and supports our hypotheses.

Relocation Options

The second model tested relocation options of moving to a retirement community and moving closer to relatives. Model 2 contained demographic information on marital status, age, and income; scale scores for satisfaction with housing and housing costs; contact with others; health variables of number of ADL limitations and self-rated health; and financial adequacy (Figure 3). The model had adequate indices of fit ($X^2 = 331.5$, df = 139; CFI = 0.81; RMSEA = 0.060).

 $\textbf{TABLE 3} \ \ \text{Nested Multiple Regression Analyses for Anticipated Likelihoods of Aging in Place and Relocation Options}$

| and Relocation Option | 115 | | | |
|-----------------------|--------------|------------------------------------|---------------------------------------|---------------------|
| Covariates | Age in Place | Age in Place with Assistance | Retirement Community | Closer to Relatives |
| | | | · · · · · · · · · · · · · · · · · · · | |
| Mean rating 1-100 | (71) | (61) | (32) | (14) |
| Model 1 | R2 = .04 | R2 = .07 | R2 = .03 | R2 = .01 |
| Education | 15** | 07 | .14** | .09 |
| Marital status | .12* | .19** | .02 | 03 |
| Gender | 06 | .07 | .06 | .09 |
| Financial adequacy | .04 | .04 | 08 | .03 |
| Age | .15** | .27** | 10 | 08 |
| Model 2 | $R^2 = .07$ | $R^2 = .11$ | $R^2 = .03$ | $R^2 = .02$ |
| Education | 12* | 04 | .12* | .06 |
| Marital status | .09 | .11 | .04 | .01 |
| Gender | 05 | .04 | .07 | .11* |
| Financial adequacy | .03 | .05 | 09 | .03 |
| Age | .17** | .27** | 09 | 07 |
| Home identity | .20*** | .16*** | 06 | 03 |
| Friend contact | 04 | 12** | .01 | .05 |
| Child contact | .03 | .11* | 10 | 13** |
| No. social roles | .04 | .10 | 01 | 05 |
| Model 3 | $R^2 = .08$ | $R^2 = .11$ | $R^2 = .04$ | $R^2 = .03$ |
| Education | 13* | 04 | .12* | .06 |
| Marital status | .10 | .10 | .02 | .01 |
| Gender | 04 | .04 | .07 | .11 |
| Financial adequacy | .04 | .04 | 10 | .05 |
| Age | .19** | .26*** | 11 | 07 |
| Home identity | .19** | .17** | 05 | 03 |
| Friend contact | 05 | 10* | .01 | .05 |
| Child contact | .04 | .10* | 10 | 14** |
| No. social roles | .03 | .11 | 01 | 06 |
| Personal mastery | .07 | .03 | 03 | 04 |
| Health rating | 07 | 07 | .01 | .08 |
| ADL limitations | 08 | 08 | 01 | 06 |
| Model 4 | $R^2 = .26$ | $R^2 = .19$ | $R^2 = .05$ | $R^2 = .07$ |
| Education | 07 | .01 | .13* | .07 |
| Marital status | .09 | .07 | .09 | 02 |
| Gender | 02 | .05 | .06 | .09 |
| Financial adequacy | .01 | .07 | 11* | 03 |
| Age | .14** | .22** | 10 | 07 |
| Home identity | .15** | .15** | 05 | 02 |
| Friend contact | 07 | 13* | .01 | .07 |
| Child contact | 02 | .06 | 09 | 11* |
| No. social roles | 01 | .08 | .00 | 04 |
| Personal mastery | 03 | 06 | 03 | 03 |
| Life satisfaction | .06 | .09 | 01 | .06 |
| health rating | 06 | 02 | .01 | .09 |
| ADL limitations | 09 | 08 | 01 | 06 |
| Privacy | 01 | 03 | 01 | .01 |
| Moving plans | 46*** | 28** | .15** | .21** |

 $\label{eq:add_equal} ADL = activity \ of \ daily \ living.$

 $p \le .05. p \le .01. p \le .001.$

Results from the multiple regression analysis on relocating to a retirement community did not support our hypotheses, which stated poorer health and fewer social contacts would be related. Education, entered in the first model, remained a significant predictor throughout the various additions of covariates. The final model included education, financial adequacy, and moving plans (Figure 2). The second relocation option was moving closer to relatives, and we hypothesized that health and demographic factors (gender, marital status) and social contacts would be related to this option. Specifically, unmarried women in poorer health and less contact would rate this option more highly. The results partially support this hypothesis that those with fewer social ties would be more likely to consider moving. Gender was a significant predictor, along with less contact with children, until the inclusion of moving plans. The final model consisted only of contact with children and moving plans, controlling for the influence of marital status, age, housing satisfaction, finances, and health.

With relocation options as dependent variables, a second structural equation model was used to test the hypotheses that moving intention and satisfaction with housing cost would serve as mediators among the demographic, health, satisfaction, social contact, and financial factors. Gender was not mediated by moving plans and remained a direct predictor of moving closer to children. Higher levels of education, greater financial adequacy, and less contact with children predicted moving plans, which, in turn, predicted the relocation options. Health, home identity, home cost satisfaction, and social connections (with friends) were not related to either option or to moving plans. This finding does not support our hypothesis that poorer health, financial adequacy, and social ties would predict relocation.

DISCUSSION

The data show that aging in place, either with or without major home modifications, is seen as the most likely future housing arrangement of community-dwelling older persons in this study. Increased housing tenure may influence the thought that they may not live long enough to justify a major change of residence. The next most likely is a retirement community (about a 3 in 10 chance), whereas options such as moving closer to family are given lower likelihood ratings. Although the retirement community option is not rated high, it portends a potentially significant market for senior housing. These findings are not surprising given that previous research has shown the strong preference among older adults for independence in housing options, a desire to not be a burden, and a preference for "intimacy at a distance" with family members. It is difficult to determine whether the relative strength of the retirement community option would be found in communities without the visible presence of such choices in the area where this study was

undertaken. We do not have baseline data to judge the likelihood for anticipating whether the retirement community option has changed or reflects nationwide preferences.

We found that few of the hypothesized relationships were supported. Thus, variables suggested by extant theories do not emerge as significant. For example, health status was seen by Litwak and Longino (1987) as an important factor in relocation of older adults, but it was not related to the relative likelihood of a respondent indicating any of the living situation options identified in this study. Measures of health were related to satisfaction with housing costs and indirectly related to aging in place, not relocation as we had hypothesized. Subjective ratings of housing, which presumably would act as push factor in Lee's (1966) schema or as a measure of environmental demand for Lawton and Nahemow (1973), also do not emerge as significant.

SUMMARY AND CONCLUSIONS

This study has examined the future housing options selected by a random sample of 416 community-dwelling older residents of an upstate New York county. Clearly, respondents see aging is place as the most likely future living situation. Options such as sharing housing with relatives are given a very low likelihood, whereas moving to a retirement community that provides services is seen as more likely than these other options. Structural equation analyses reveal significant correlates of housing options for all four options, with those indicating a greater likelihood of aging in place having greater financial adequacy and a sense that their homes reflect their identities. Recent research by Golant (2011) also found support on housing that provides emotion-based relevance as comfort zones, particularly when they feel competent and in control of their environments. Women are more likely to consider moving closer to relatives, whereas marital status was noninfluential.

Our hypotheses are not supported and the variables taken from the conceptual frameworks used to frame this research do not provide much insight into the factors related to the future housing options older adults are more or less likely to choose. For example, the data indicate that the likelihood of anticipated aging in place is not related to factors that can be predictive of an ability to do so successfully (e.g., better health or social integration). This suggests that researchers need to consider other conceptual approaches to gain a greater understanding of who among older adults is more or less likely to consider and ultimately select different housing options and why. Walters (2002) supported this finding by elucidating the persistent problems within the migration and relocation literature through focus on common, rather than unique, variables that include significant individual variability in responses and impact.

The data indicate that the older adults in this study who are considering a change in residence are more likely to consider retirement communities. Clearly, more research on this topic would contribute to our understanding of migration among older adults and be useful to policy makers, planners, and retirement housing developers. We also see the need for more research on the specific wants and needs of those considering such a move. What kinds of services and amenities do older adults expect when they move and what are they willing to pay for them?

The degree to which new housing alternatives may influence established moving patterns is unclear, and more information is needed if individuals, families, the government, and the private sector are to plan effectively. The findings may also indicate the need for more information and education on housing options for older adults. One possible factor contributing to the popularity of aging in place and the low expectation for some other options is the strong psychological attachment and sense of familiarity that develops after years of living in a particular setting (as supported by these findings), regardless of how appropriate or comfortable it is. Without a greater understanding of what is available, older adults may not want to seriously consider other options. Service and government agencies, religious and volunteer organizations, public service announcements, and family members are just some of the sources that could provide information on housing options to older adults.

It is important to note that the analysis reported here does have limitations. The sample, although random, is from one county in one state and may not be representative of older adults living in other areas. In particular, our sample has little diversity, is well educated and wealthy, and the community is relatively service rich and has a wide range of housing options that may not be found in other largely rural areas. This may have increased the ratings of several anticipated housing options, such as moving to a retirement community and remaining at home with modifications. However, the study's advantage is its longitudinal design, which allows us to investigate the relationships between the expected likelihood of moving to various housing alternatives and subsequent relocation behavior, as well as relationships among variables associated with moving. Hopefully, other researchers will also consider the issues raised in this article by including questions on moving intentions in their studies.

FUNDING

This research was conducted as part of the Pathways to Life Quality Study and supported by a grant from the Atlantic Philanthropies (USA) Inc. to the Ithaca College Gerontology Institute and the Cornell University Bronfenbrenner Life Course Center.

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