

Movers, Stayers, and Lifers: A Structural Equation Analysis of the Likelihood of Spending the Rest of Your Life in Your Current Home Community

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Abstract

Our model examines the effects of exogenous variables (has your current home community become better, stayed the same, or become worse as a place to live; quality of government services in your home community; quality of services and facilities located in your home community; feeling at home in your community; how long current housing will meet your needs; and socioeconomic status) on (attachment to community, and the likelihood that you will spend the rest of your life in your current home community). In a well-fitted model ($\chi^2=14.781$, $p=.097$, $R^2=.379$ and $.249$), more favorable perception of trends in the home community, greater satisfaction with local government services and local services and facilities, a stronger sense of feeling at home in the current community, and feeling current housing can meet needs longer are associated with stronger satisfaction with place; a stronger sense of satisfaction with place, feeling current housing can meet needs for a longer time, a stronger sense of feeling at home in the current community, and higher SES are associated with increased likelihood of spending the rest of one's life in the current home community. Implications are discussed.

Keywords: structural equations; housing; population; demographics; survey research; social policy

1. Background

This research examines the relationship between the likelihood that residents of rural counties will leave their current home community, and a set of demographic, attitudinal, and behavioral predictors of that decision. These results are based on the responses to a survey questionnaire by a random sample of residents of Iowa, which “stands in a class by itself as an agricultural state” (<http://www.infoplease.com/ipa/A0108213.html>). According to the 2000 national census, Iowa ranks 30th among the states in total population, and 61% of the state's population lived in urban areas. Furthermore, “since 1900, Iowa's rural population had declined continuously” (Morain, 1988). Rural America contains almost 25% of the nation's population, on a land base that occupies about 90% of the nation (Luoff & Swanson, 1990). With advanced telecommunications, mass-market retailers and global commodities creating a worldwide system of production and consumption (Tolbert, Irwin, &

Lyson, 2002), the rural and small-town U.S. seems to be changing rapidly beyond just farms and ranches (Browne, 2001). Some of these changes are viewed as desirable, and others as negative (Lasley, 2001). “Rural and small-town America is facing greater financial and other stresses than ever before” (Kerry & Edwards, 2004). National sample data have shown that approximately one-half (48%) of rural residents report complete satisfaction with their community (Campbell, 1981), but since the 1980s' farm crisis, opportunities for rural growth and development have declined steadily. Rural areas also have lost numerous manufacturing jobs to foreign competition (Miller, 2004). These and other negative factors can make rural/small town residents feel dissatisfied with the current situation, and dissatisfaction with their community then causes them to move to urban areas, which decreases the rural/small town population. Today, the declining number of farmers, transition from an agriculture-dependent economy, and lower satisfaction about rural communities necessitate a focus on improving the quality of rural and small-town life and increasing satisfaction with the rural community.

The well-being of rural or small-town people and places depends upon many things, including: the availability of economic growth level and good-paying job, access to critical services such as education and health care, strong communities, and a healthy natural environment (Economic Research Service, 2005). Stinner and Van Loon (1992) also found that the level of satisfaction with economic opportunity and public services are two of the variables that determine migration intention. In addition to ecological variables, strong evidence shows that community satisfaction also is influenced by a broad array of objective and subjectively perceived conditions (Browne, 2001).

A community's social infrastructure—local social institutions, human resources, and quality of social networks—shapes the capacity of a rural community to address its economic and social problems (Flora, 2003). Variables found to be related to community satisfaction include age (Filkins, Allen, & Cordes, 2000), income and occupational status (Bradburn, 1969), gender (Filkins et al., 2000), education (Filkins et al., 2000), family size (Miller & Crader, 1979), migration attitudes (Schulze et al., 1963), migrant status (Stinner & Toney, 1980), social participation, residential mobility, and residential

satisfaction (Jesser, 1967), proportion of your friends living in the community, proportion of adults you know in the community, and organizational membership (Goudy, 1977), satisfaction with employment and duration of residence (Brown, 1993), stronger community attachment (Theodori, 2001), and home ownership, attendance at religious services, and social support (Theodori, 2001).

The combined effects of economic downsizing in agriculture have had a lasting impact on many rural communities (Miller, 2004). Rural and non-metropolitan populations have “lower average incomes, lower levels of health insurance, less preventive health care and poor health status” (McLaughlin & Stokes, 2001). Tolbert, Irwin, and Lyson (2002) noted, “In rural or small-town America, a community’s social and economic institutional matrix not only fosters a sense of public integration and cohesion but also enhances development of public goods and civic welfare”. Lack of job opportunities and lower income are the major reasons for population loss in rural and small-town Iowa. Improving the economic level of agriculture, with job opportunities and higher average incomes, is prescribed to improve rural and small town residents’ satisfaction with their current community and thereby stop rural population loss (Lasley, 2001).

Socioeconomic status (SES) strongly affects community satisfaction. Family SES, and particularly children’s economic well-being, is depressed in rural areas (Roscigno & Crowley, 2001). Socioeconomic progress is difficult in U.S. rural areas, which have disproportionately higher proportions of individuals and families living in poverty (Brown & Deavers, 1987), the highest rates of high school dropouts, and the smallest proportion of college-trained population (Israel & Beauliea, 1990). Hopes of a better future rest with the younger and better-educated residents of rural localities, but they tend to leave in search of better opportunities for their family (Israel & Beauliea, 1990). At the same time, their departure accentuates rural communities’ human resource shortages and reduces the economic position of those left behind. Economic structures have strong consequences for SES, family structure, and school resources (Roscigno & Crowley, 2001), and thus are related to community satisfaction.

Dependency is associated with the ability of rural towns or nearby areas to provide services to satisfy the needs of the local population or of the agricultural economy. Satisfaction is tied to local institutions such as the grocery store; hospital; store for feed, seed, and fertilizer; service shop; or credit organization (Luoff & Swanson, 1990). Increases in rural nonfarm populations may be explained partly by increased availability to farmers of scientific and technological innovations and education, to improve rural socioeconomic levels.

Housing is a basic need. Minimum standards for adequate and appropriate housing include being affordable, safe, of sufficient size, and sanitary. However, some households fall short of standard necessities, particularly in rural areas and among low-income families (James, 2000). Increasing housing prices make it more difficult to find acceptable and affordable housing, especially for low-income households (James, 2000).

2. Sample

The survey was administered to a random sample of Iowa rural and small town residents. A total of 1,231 survey responses were useable; 98.3% of the respondents were White/Caucasian; 42% were 55 years of age or older; 60% were male; 32% had associate degrees or higher, and 7.4% had not received a high school diploma; 77.2% were married; 63% were employed or self-employed in a fulltime or parttime job; and 82% were satisfied or very satisfied with their own health situation.

The survey contained 50 questions, divided into 4 sections: life in Iowa and in your current community (10 items); your current residence (20 items); future plans (4 items); and personal information (16 items). Specific questions measured residents’ perceptions about their current community (ranging from very dissatisfied to very satisfied), the economic level of their home community, the overall quality of services and facilities, and whether they feel at home in their communities.

3. Data Analysis and Methods

Statistical analyses were conducted using SAS (Statistical Analysis System) 8.0 and AMOS 5.0 (Analysis of MOment Structures) statistical software. AMOS provides easily-used drawing tools to specify, build, and view the model quickly, and applies powerful multivariate data analysis methods to build a structural equation model (SEM) that can provide insight into the causal nature and the estimated strength of direct and indirect relationships among exogenous (independent) and endogenous (dependent) variables. Prior to SEM estimation in AMOS, Pearson product-moment correlations and principal component factor analysis with varimax rotation were used in SAS to reduce the large number of items to a few latent factors comprising multiple items sharing covariance with each factor. The validity of these derived latent factors was established through confirmatory factor analysis conducted with AMOS.

4. The Estimated Model

The final SEM, following preliminary model development, included 6 exogenous variables: rating of

economic level of current home community (Q3); rating of quality of service and facilities in home community (Q8); feeling “at home” in home community (Q30); how long you feel your current house can meet your needs (Q17); proportion of close personal adult friends who live in current home community (Q29); and socioeconomic status, a latent variable created and validated by factor analysis, based on education level, employment status, and household income level (Q38Q46Q50). A latent variable, based on respondents’ feelings about living in Iowa, their home community, and their current residence (Q1Q2Q11) is an intervening endogenous variable. The likelihood of spending the rest of your life in the current home community (Q34A) is the ultimate dependent (endogenous) variable.

The χ^2 goodness-of-fit test ($p = 0.104$) supports the null hypothesis that the model fits the data. Other evidence that the model yields a good fit is provided by the Bentler-Bonett normed fit index (NFI) = 0.99, Bollen’s relative fit index (RFI) = 0.972, Bollen’s incremental fit index (IFI) = 0.996, Tucker-Lewis coefficient (TLI) = 0.989, and comparative fit index (CFI) = 0.996. The sample covariance matrix is not significantly different from the covariance matrix reproduced by the model, which thus provides a good approximation of how the variables are related to each other. The resulting values for RMSEA (root mean squared error of approximation) and AIC (the Akaike Information Criterion) are small, again showing that the model provides a close fit to the data. The squared multiple correlations are 0.327 for sense of satisfaction with living place and 0.231 for likelihood of wanting to spend the rest of life in the current home community; about 33% and 23%, respectively, of the variance in the two endogenous variables is explained by the model.

4.1 Direct and Indirect Effects

Significant correlations among the exogenous variable include rating of economic level of current home community (Q3) with rating of quality of service and facilities in home community (Q8), feeling “at home” in home community (Q30), and proportion of close personal adult friends who live in current home community (Q29); rating of quality of service and facilities in home community (Q8) with rating of economic level of current home community (Q3), feeling “at home” in home community (Q30), how long you feel your current house can meet your needs (Q17), and proportion of close personal adult friends who live in current home community (Q29); feeling “at home” in home community (Q30) with rating of economic level of current home community (Q3), rating of quality of service and facilities in home community (Q8), how long you feel your current house can meet your needs (Q17), and proportion of close

personal adult friends who live in current home community (Q29); how long you feel your current house can meet your needs (Q17) with rating of quality of service and facilities in home community (Q8), feeling “at home” in home community (Q30), and proportion of close personal adult friends who live in current home community (Q29); and proportion of close personal adult friends who live in current home community (Q29) with rating of economic level of current home community (Q3), rating of quality of service and facilities in home community (Q8), feeling “at home” in home community (Q30), and how long you feel your current house can meet your needs (Q17).

Table 1 summarizes the decomposition of the total effect of each predictor variable on each dependent variable, with the standard error for each direct effect, the critical ratio for each direct effect (measured as the ratio of the parameter estimate divided by the standard error), and the percentage of the total effect that is accounted for by the direct effect.

5. Results

Using the statistically significant ($p < .05$) estimates of standardized regression weights in the model, visualized in Figure 1 and summarized numerically in Table 1, we find the following relationships.

- a stronger feeling that the economic level is more prosperous in the home community is associated with a strong sense of satisfaction with place ($\beta = .29$)
- greater satisfaction with local services and facilities is associated with a stronger sense of satisfaction with place ($\beta = .24$)
- a stronger sense of feeling at home in the current community is associated with a stronger sense of satisfaction with place ($\beta = -.23$)
- feeling current housing can meet needs for a longer time is associated with a stronger sense of satisfaction with place ($\beta = .12$)
- a stronger sense of satisfaction with place is associated with increased likelihood of wanting to spend the rest of one’s life in the current home community ($\beta = .15$)
- a stronger sense of feeling at home in the current community is associated with increased likelihood of wanting to spend the rest of one’s life in the current home community ($\beta = -.25$)
- feeling current housing can meet needs for a longer time is associated with increased likelihood of wanting to spend the rest of one’s life in the current home community ($\beta = .22$)
- a higher proportion of close personal adult friends living in the current community is associated with increased likelihood of wanting to spend the rest of one’s life in the current home community ($\beta = .09$), and

- lower self-reported SES, measured by a lower level of education, currently being unemployed, and lower household income, is associated with increased likelihood of wanting to spend the rest of one's life in the current home community ($\beta = -.13$).

From the statistically significant ($p < .05$) estimated correlations in the model, we conclude that:

- a stronger feeling that the economic level is more prosperous in the home community is associated with a stronger sense of feeling at home in the current community
- a stronger feeling that the economic level is more prosperous in the home community is associated with a higher level of satisfaction with local services and facilities
- a stronger feeling that the economic level is more prosperous in the home community is associated with a higher proportion of close personal adult friends living in the current community
- a higher rate of satisfaction with local services and facilities is associated with a stronger sense of feeling at home in the current community
- feeling current housing can meet needs for a longer time is associated with a higher rate of satisfaction with local services and facilities
- a higher rate of satisfaction with local services and facilities is associated with a higher proportion of close personal adult friends living in the current community
- feeling current housing can meet needs for a longer time is associated with a stronger sense of feeling at home in the current community
- a higher proportion of close personal adult friends living in the current community is associated with a stronger sense of feeling at home in the current community, and
- a higher proportion of close personal adult friends living in the current community is associated with a stronger feeling that current housing can meet needs for a longer time.

6. Discussion

The results of the survey data analyses in this research show the influences on the sense of satisfaction with place and the likelihood of wanting to stay in one's current community: high economic level, many job opportunities, and a high quantity of services and facilities, such as good public schools, good health care, and access to good services. Of course, if you have a lot of friends who live nearby, your current house is very comfortable, and you feel at home in your current community, you should feel higher satisfaction with your community than if these situations were reversed. If you have high satisfaction with services, lots of your friends live within a short distance, you like your house very much, and you like your community very much and feel about it as home,

then you should want to stay in the community for a long time, possibly the rest of your life.

From these research results, we find that higher self-reported SES is associated with decreased likelihood of wanting to spend the rest of one's life in the current community. This finding suggests that the current economic level in the community in rural and small town Iowa generally may not provide adequate job opportunities, especially high-salary career positions for highly-educated residents.

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Table 1: Decomposition of Total Effect for the Structural Equation Model

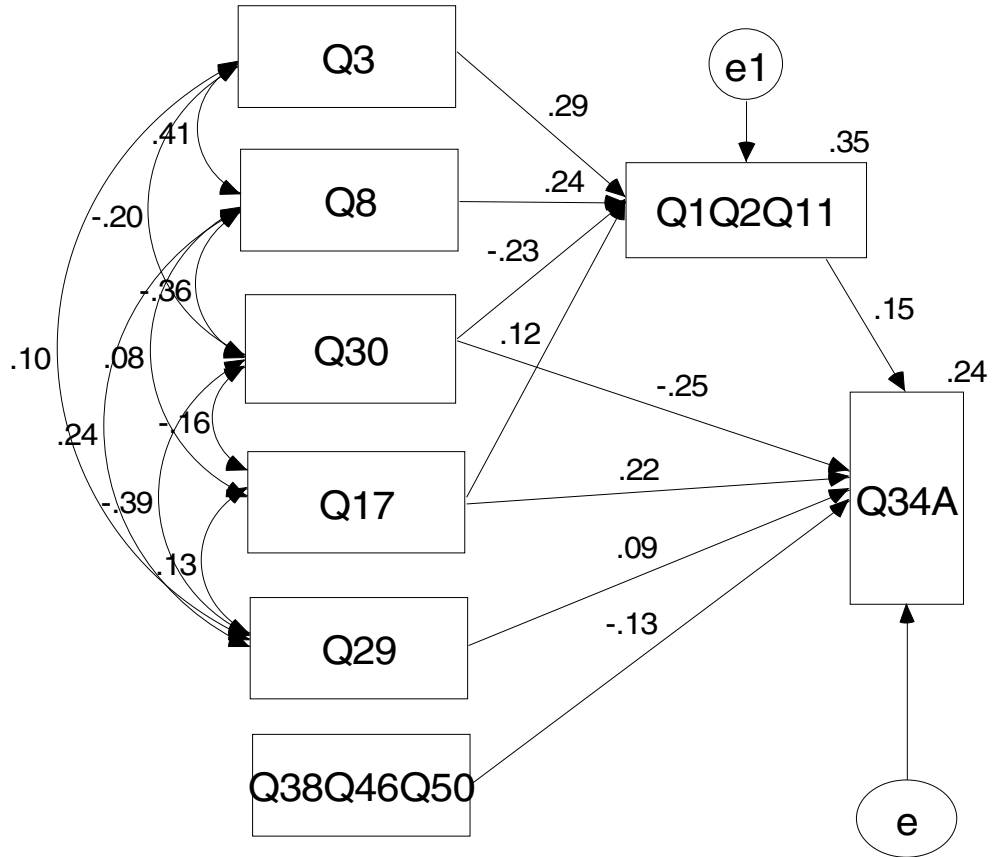
Regression Weight (Path)	Total Effect	Direct Effect	Indirect Effect	Direct Effect Standard Error	Direct Effect Critical Ratio	Direct Effect as % of Total Effect
economic level---->sense satisfaction	0.286	0.286	0.000	0.024	11.292***	1.000
satisfy level for services and facilities---->sense satisfaction	0.242	0.242	0.000	0.026	9.099***	1.000
home feeling in community---->sense satisfaction	-0.234	-0.234	0.000	0.070	-9.359***	1.000
time for house can meet needs---->sense satisfaction	0.116	0.116	0.000	0.036	4.943***	1.000
home feeling in community---->likelihood of want to stay for future	-0.286	-0.251	-0.034	0.132	-8.670***	0.878
time for house can meet needs---->likelihood of want to stay for future	0.234	0.217	0.017	0.064	8.563***	0.927
proportion of close friend living close---->likelihood of want to stay for future	0.087	0.087	0.000	0.066	3.204*	1.000
self-reported socioeconomic status---->likelihood of want to stay for future	-0.134	-0.134	0.000	0.053	-5.413***	1.000
sense satisfaction---->likelihood of want to stay for future	0.147	0.147	0.000	0.044	5.413***	1.000

Note:

Total Effect = Direct Effect + Indirect Effect

*** $p < 0.001$; * $p < 0.05$

Figure 1



Note:

- Q3: rating of economic level of current home community
- Q8: rating of quality of service and facilities in home community
- Q30: feeling “at home” in home community
- Q17: how long you feel your current house can meet your needs
- Q29: proportion of close personal adult friends who live in current home community
- Q38Q46Q50: socioeconomic status, a new variable created by factor analysis, based on education level, employment status, and household income level
- Q1Q2Q11: a new variable created by factor analysis, based on feeling about living in Iowa, home community, and current residence
- Q34A: likelihood of spending the rest of your life in the current home community.