

Leaving the Good Life: Predicting Migration Intentions of Rural Nebraskans

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ABSTRACT This paper examines the migration intentions of nonmetropolitan Nebraskans. Data from the 1998 Nebraska Rural Poll were analyzed at two levels. First, demographic comparisons were made between those who were considering a move from their community and those not planning to move. Second, a multivariate model was developed to examine the independent effects of several different constructs on the decision to stay or leave. These constructs include a set of variables designed to measure community satisfaction, residential preference status, and the individual characteristics of the respondents. It was found that residential preference status, community social attributes, evaluations of K - 12 education, satisfaction with employment and environmental factors, and residential tenure all had statistically significant effects on migration intentions.

Presented at the 1998 Midwest Association for Public Opinion Research Annual Conference in Chicago, IL on November 20-21.

Introduction

Much has been written about the population turnaround in the nonmetropolitan United States in the 1990's. While only 45% of the nonmetropolitan counties experienced population growth during the 1980's, it was estimated that nearly 74% of these counties grew between 1990 and 1994 (Johnson, 1996). However, over one-half of Nebraska's nonmetropolitan counties have continued to experience population declines between 1990 and 1997 (Population Estimates Program, Population Division, U.S. Bureau of the Census, Washington, DC). The question then remains, "Why are people moving from nonmetropolitan counties in Nebraska?" This paper attempts to answer that question by analyzing the migration intentions of nonmetropolitan Nebraskans.

Literature Review

Prior research on migration intentions has included such variables as community satisfaction and residential preference status (current community size vs. preferred size). Community satisfaction has been argued to be particularly relevant in shaping mobility intentions (Speare, 1974; Bach and Smith, 1977; Landale and Guest, 1985). When various dimensions of community satisfaction are explored further, certain dimensions have had more influence on migration intentions than others. Stinner and Van Loon (1992) found perceptions of local economic opportunity and the quality of the public service infrastructure to be statistically significant in predicting migration intentions. Sofranko and Fliegel (1984) found respondents' assessments of school quality and the friendliness of neighbors made significant contributions to the explained variance of likelihood of moving. Using a multidimensional view of community satisfaction, one can determine if certain community attributes vary in their influence on migration

decision making (Stinner et. al, 1992).

Residential preferences have also been shown to have an important influence on migration decision-making. Heaton et. al (1979) found that “people who prefer to live in a community having different size or location characteristics than their present residence are five times more likely to intend to move than those who have attained their preferred type of residence.” (p. 571) They also found that residential preference status had a somewhat larger effect on mobility intentions than did community satisfaction.

Certain structural variables have also been shown to influence migration intentions. Such structural variables as age, income, duration of residence and education have been shown to be significant predictors of migration intentions (Landale and Guest, 1985; Speare et. al, 1982; Bach and Smith, 1977; Sofranko and Fliegel, 1984).

This paper will analyze the migration intentions of nonmetropolitan Nebraskans at two levels. First, demographic and other comparisons are made between those who are planning to stay in their communities and those who are considering a move. Second, a multivariate model is developed to examine the independent effects of several different constructs on the decision to stay or leave. These different constructs include a set of variables designed to measure community satisfaction, residential preference status, and individual characteristics of the respondents.

Data

The data used for this analysis are from the 1998 Nebraska Rural Poll. A self-administered questionnaire was mailed to approximately 7,000 randomly selected households living in the 87 nonmetropolitan counties in the state. This report is based on 4,196 completed questionnaires

received out of approximately 6,500 deliverable surveys (response rate = 65%). The total design method was used in developing and administering the survey (Dillman, 1978).

Community Satisfaction Variables

The eleven variables used to measure community satisfaction consisted of respondents' evaluations of general community attributes. Factor analysis, i.e., principal factor extraction with varimax rotation, was used to generate 10 of these variables.

The first variable includes three social attributes of the community, as assessed by the respondents. Specifically, respondents were asked if they would describe their communities as friendly or unfriendly, trusting or distrusting, and supportive or hostile. For each of these three dimensions, respondents were asked to "rate" the community using a seven-point scale between each pair of contrasting views. Each scale was coded so that 7 indicated friendly, trusting and supportive. The Cronbach alpha value for this variable was 0.91.

The next seven variables were derived from a question in which the respondents indicated how satisfied they were with different community services and amenities (taking into consideration availability, cost and quality). A five-point scale was used by the respondents to rate the services and amenities, with 1 being very dissatisfied and 5 being very satisfied. The first of these variables includes evaluations of three environmental services: sewage disposal, water disposal and solid waste disposal. The second variable consists of evaluations of three consumer services: retail shopping, restaurants and entertainment. Evaluations of two levels of local government, i.e., county and city/village government make up the third variable. The fourth variable is composed of evaluations of three health services: nursing home care, basic medical care services, and mental health services. The fifth variable consists of evaluations of three human

services: head start programs, day care services, and senior centers. The sixth variable includes evaluations of four transportation services: air service, bus service, rail service, and taxi service. The final community services variable includes the evaluations of K - 12 education. This variable did not load on any of the above factors, but was included in the analysis based on previous findings of its influence on community satisfaction (Campbell et. al, 1976; Sofranko and Fliegel, 1984).

The final three variables used to measure community satisfaction include evaluations of economic and environmental aspects. These three variables were derived from a question in which the respondents were asked how satisfied they were with various items that can influence their well-being. The respondents rated their level of satisfaction using a five-point scale, with 1 being very dissatisfied and 5 being very satisfied.¹ The first variable consists of evaluations of two different aspects of their income: their current income level and their future financial security (during retirement). The second variable includes evaluations of three employment factors: their job satisfaction, their job security and their job opportunities. The final variable consists of two evaluations of environmental factors: clean air and water as well as greenery and open space. Cronbach's alpha values range from 0.67 to 0.91 for the set of items included in each of these variables.²

¹ Respondents were given the option of selecting a box denoting "does not apply" for these satisfaction questions. The respondents checking these boxes were excluded from this analysis.

² Social attributes: number of items, 3; alpha, 0.91; mean score, 15.13; standard deviation, 3.93. Environmental services: number of items, 3; alpha, 0.85; mean score, 11.05; standard deviation, 2.57. Consumer services: number of items, 3; alpha, 0.77; mean score, 9.11; standard deviation, 3.09. Local government services: number of items, 2; alpha, 0.77; mean score, 6.43; standard deviation, 1.95. Health services: number of items, 3; alpha, 0.69; mean score, 10.74; standard deviation, 2.36. Human services: number of items, 3; alpha, 0.67; mean score, 10.71; standard deviation, 2.14. Transportation services: number of items, 4; alpha, 0.81; mean score,

(continued...)

Residential Preference Status Variable

To determine respondents' preferred community size, they were asked the following question, "In terms of size, if you could live in any size community you wanted, which one of these would you like best?" The answer categories included: a large metropolitan city over 500,000 in population; a medium-sized city 50,000 to 500,000 in population; a smaller city 10,000 to 49,999 in population; a town or village 5,000 to 9,999 in population; a town or village 1,000 to 4,999 in population; a town or village less than 1,000 in population; or in the country outside of any city or village.

This question was compared to a combination of two other questions asking about the respondent's current residence. First, respondents were asked the size of their current community. Six answer categories were given: less than 100; 100 to 499; 500 to 999; 1,000 to 4,999; 5,000 to 10,000; and over 10,000. Respondents were also asked if they lived within or outside the city limits. These two questions were combined to create one variable denoting current residence, ranging from living in the country to living in a community with a population greater than 10,000.

The respondents' current and preferred community size were then compared to create a residential preference status variable. This dichotomous variable is coded 0 if the respondent does not currently live in their preferred community size and 1 if they do live in their preferred community size.

²(...continued)

10.96; standard deviation, 2.89. Income factors: number of items, 2; alpha, 0.76; mean score, 5.97; standard deviation, 2.35. Employment factors: number of items: 3; alpha, 0.78; mean score, 10.19; standard deviation, 2.98. Environmental factors: number of items: 2; alpha, 0.76; mean score, 8.39; standard deviation, 1.78.

Individual Characteristics Variables

The final category of variables included in this analysis are the personal characteristics of the respondents. Age and number of years lived in the community are both metric variables. Education and household income were ordinal variables coded so that higher numbers represent higher levels on these variables. The final variable, representing family life cycle stage, is a dichotomous variable where 1 indicates there are children in the home.

Migration Intentions Variable

The dependent variable in this analysis is the migration intentions of the respondents. Respondents were asked whether or not they planned to move from their community in the next year. Three answer categories were used: yes, no and uncertain. A dichotomous variable was created where either yes or uncertain was coded 1 as a potential mover.

Model

The first stage of this analysis will consist of demographic comparisons between those considering a move from their community and those with no plans to move. The second stage will consist of a multivariate logistic regression analysis that will include the three different constructs discussed above, i.e., community satisfaction, residential preference status and individual characteristics.

Results

First, chi-square analyses were used to make demographic comparisons between those contemplating a move from their community in the next year and those who had no plans to move (see Table 1). There were statistically significant differences between these two groups in three areas: age, number of years lived in their community and whether or not they currently live

Table 1. Demographic Comparisons By Migration Intentions

	<i>Not Considering a Move</i>	<i>Considering a Move</i>	<i>Significance</i>
<i>Age:</i>			
19 to 39 years	24%*	31%	$\chi^2 = 14.0$ (.001)
40 to 64 years	56%	53%	
65 years and over	21%	16%	
<i>Education:</i>			
High school or less	39%	34%	$\chi^2 = 5.0$ (.080)
Some college	37%	40%	
College degree	24%	27%	
<i>Household income:</i>			
Under \$10,000	3%	4%	$\chi^2 = 3.8$ (.279)
\$10,000 - \$39,999	47%	51%	
\$40,000 - \$74,999	41%	38%	
\$75,000 and over	10%	8%	
<i>Years lived in community:</i>			
0 to 10 years	20%	41%	$\chi^2 = 110.3$ (.000)
11 to 30 years	37%	34%	
31 to 50 years	28%	18%	
51 years and over	16%	7%	
<i>Family life cycle status:</i>			
No children in home	39%	36%	$\chi^2 = 1.4$ (.127)
Children in the home	61%	64%	
<i>Residential preference status:</i>			
Do not live in preferred community size	46%	68%	$\chi^2 = 73.4$ (.000)
Live in preferred community size	54%	32%	

* Column percentages sum to 100%.

in their preferred community size. Respondents considering a move from their community were, on average, younger than those not considering a move. Thirty-one percent of those considering a move were between the ages of 19 and 39; compared to only twenty-four percent of those not

considering a move who fell into this same age category.

Those considering a move were also more likely to have lived in their community for shorter periods of time, compared to those not considering a move. Forty-one percent of those considering a move had lived in their community for 10 or fewer years, while only twenty percent of those not considering a move had lived in their community for this shorter time frame.

The final difference occurred in residential preference status. Just over two-thirds of those considering a move (68%) did not live in their preferred community size. Only forty-six percent of the respondents not considering a move were not currently living in their preferred community size. There were no statistically significant differences between these two groups in household income, education and family life cycle status.

Next, a multivariate logistic regression analysis was performed that included the three constructs described earlier to gain a more precise view of the unique contribution and importance of each of the independent variables in helping to explain the variation in migration intentions (Table 2). Social attributes of the community did influence migration intentions. The higher the respondent rated their community in terms of its friendliness, trusting nature and supportiveness, the less likely they were to be considering a move from that community.

Only one of the community service variables was statistically significant in the model, education (K - 12). Higher satisfaction levels with education led to a reduced likelihood of moving considerations.

Satisfaction with employment and environmental factors were also statistically significant. The more satisfied respondents were with these factors, the less likely they were to be considering a move from their community.

Table 2. Prediction of Migration Intentions by Community Satisfaction, Residential Preference Status and Individual Characteristics

	B	(S.E.)
<i>Community Satisfaction Variables:</i>		
Social attributes	-.083***	(.02)
Environmental services	.000	(.03)
Consumer services	-.002	(.03)
Local government services	.013	(.05)
Health services	-.024	(.04)
Human services	-.021	(.044)
Education (K - 12)	-.167*	(.07)
Transportation services	-.028	(.03)
Income factors	-.058	(.04)
Employment factors	-.064*	(.03)
Environmental factors	-.099*	(.04)
<i>Residential Preference:</i>		
Residential preference status	-.785***	(.17)
<i>Individual Characteristics:</i>		
Age	.003	(.01)
Years lived in community	-.036***	(.01)
Household income	-.085	(.05)
Education	.115	(.06)
Family life cycle status	-.190	(.22)
<i>Model chi-square</i>	161.84***	
<i>d.f.</i>	17	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Residential preference status also proved to be an important influence on migration intentions. If a respondent lived in their preferred community size, the likelihood of a consideration to move was reduced.

The only individual characteristic variable that was statistically significant in the model was number of years lived in the community. The longer a respondent has lived in their

community, the less likely they were to be considering a move. Variables that did not show a statistically significant relationship to the migration intentions variable were: satisfaction with environmental, consumer, local government, health, human and transportation services; satisfaction with income factors; age; household income; education; and family life cycle status.

Discussion

Residential preference status is an important determinant of migration intentions. If a respondent is currently living in their preferred community size, the likelihood of a consideration to move is greatly diminished. This finding is consistent with Heaton et. al (1979) who found that residential preference status had a somewhat larger effect on mobility intentions than did community satisfaction.

Evaluations of certain community attributes were statistically significant in predicting migration intentions: social attributes, education (K - 12), employment factors and environmental factors. This is consistent with the findings of Stinner and Van Loon (1992) and Sofranko and Fliegel (1984) where evaluations of local economic opportunity, school quality and friendliness of neighbors were all found to influence migration intentions. In addition, Stinner and Van Loon (1992) also found satisfaction with environmental amenities decreased migration intentions among nonmetropolitan respondents in their study.

The only individual characteristic that was statistically significant in the model was number of years the respondent had lived in their community. The longer a respondent had lived in their community, the less likely they were to be planning a move. This is consistent with the finding of Speare et. al (1982) where duration of residence had the strongest effect of all the background variables used in their analysis on migration.

The findings of this paper are especially important for Nebraska since, as mentioned earlier, over one-half of the nonmetropolitan counties in the state have continued to experience population declines between 1990 and 1997. Thus, by discovering which community attributes influence migration intentions, community leaders can determine what they can do to improve them so that current population can be retained. For example, community social attributes, satisfaction with education (K - 12), satisfaction with employment factors and satisfaction with environmental factors could all be enhanced to some degree. Leaders could work to enhance social networks in their communities, improve their local schools, bring varied employment opportunities to their communities and protect the quality of the natural environment. By working in these areas, it could reduce the likelihood that the current population will consider moving from the community.

The population used for this analysis, nonmetropolitan Nebraskans, needs to be considered when examining the results. Further research is needed with both metropolitan and more diverse nonmetropolitan populations. Stinner and Van Loon (1992) found that slightly different attributes influenced migration decision-making for metropolitan residents compared to nonmetropolitan residents. Research that examines regional, urban/rural and ethnic differences would provide specificity for communities who want to enhance or maintain a viable population base.

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