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ABSTRACT

Focusing on migrant decision making processes in the selection cf nonmetropolitan or metropolitan destinations, the main and interactive effects of Kentucky migration behavior were examined in terms of community size preference, economic condition, and value adherence. Data were gathered in a 1979 mail survey of registered voters in Kentucky which yielded 11,015 respondents for a response rate of 69.1%. Data were examined using log-linear analysis, bivariate cross tabulations, and analysis of covariance: and the results indicated that place of origin and value adherence had a significant effect on destination, while moves related to employment had only a slight effect on destination. Results also indicated: migrants tended to move to communities similar in size to those left behind: migrants moving for employment reasons tended to make inter metro or inter nonmetro area mcves: and migrants moving for nonemplcyment reasons were more likely to move according to adherence to Gemeinschaft (patriotism, humanitariansim and salvation) or Gesellschaft (personal freedom, individualism, and leisure) value crientaticns. Therefore, value adherence was seen as the key to the metrc/nonmetro switch, and an understanding of value orientations was seen as essertial for understanding population redistribution in contemporary American society. (AN)

THE EFFECTS OF NONMETRO/METRO ORIGIN, JOBS, AND VALUES ON MIGRATION BEHAVIOR

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ABSTRACT

Focusing on the decision-making process in the selection of a nonmetropolitan or metropolitan destination, this article assesses the main and interactive effects of three major explanations of migration behavior: size preferences, economic conditions, and value adherence. Exploiting Goodman's method of log-linear analysis to uncover relationships among categorical variables we find: (1) migrants tend to move to communities similar in size to those left behind; (2) migrants moving for employment reasons tend to make inter metro or inter nonmetro area moves; and (3) migrants moving for nonemployment reasons are more likely to move between metro/nonmetro areas or to move to a similar area depending on adherence to Gemeinschaft-Gesellschaft value orientations. Data came from a large mail survey of recent migrants to Kentucky.

THE EFFECTS OF NONMETRO/METRO ORIGIN, JOBS, AND VALUES ON MIGRATION BEHAVIOR

Introduction

Over the last decade, many nonmetropolitan places in all regions of the United States have experienced net migration gains (DeJong and Sell, 1977; McCarthy and Morrison, 1978; Williams and Sofranko, 1979). This migration turnaround has challenged traditional explanations of migration. It has been an article of faith that a substantial portion of migratory behavior, especially migration to metro as well as within metro areas, can be explained in economic terms, primarily as a response to changing labor market conditions (Greenwood, 1975; Shaw, 1975; Ritchey, 1976). However, a growing literature suggests that noneconomic factors, such as quality of life amenities, preferences for particular sizes and types of communities or ties to destination areas, more fully explain the current trends in migration, especially the recent nonmetro turnaround (Zuiches, 1977; Blackwood and Carpenter, 1978; Williams and Sofranko, 1979).

The proliferating research on the migration turnaround suggests there is a need to re-evaluate the relative importance of and interrelationships among the major factors commonly used to explain migration behavior. In this article the interactive effects of three factors (size of point of origin, jobs, and values) which have been shown to have significant effects in explaining nonmetro/metro migration behavior will be explored. The analysis will focus on migration within and between metro and nonmetro communities (no intra city migrants are included), and the concluding discussion will focus on the implications of the findings for population redistribution.

Major Approaches to Explaining Migration

Migration behavior may be divided into two stages: first, the decision to move, and then, the selection of a destination (Speare, 1974; Bach and Smith, 1977). The research on migration intentions focuses on the first stage in an

attempt to delineate those factors which lead individuals to select migration as a behavioral response. Research has centered on the costs and benefits (economic and psychic) associated with moving (Lansing and Mueller, 1967; Morrison; 1967; Speare, 1971) and the assessment of stress or dissatisfaction thresholds beyond which migration will occur (Wolpert, 1966; Bach and Smith, 1977).

This paper will focus on the second stage of the decision-making process--the selection of a desination. Research in this area can be subsumed under three major approaches: economic factors, size preferences, and values. The literature on economic factors associated with the selection of a destination generally focuses on migration as a response to labor market opportunities, and has been especially prominent as an explanation of rural to urban and intra-urban migration (Blanco, 1963; Lowry, 1966; Miller, 1967; Fabricant, 1970; Raymond, 1972). These studies examine patterns of migration for areas with different wage rates, levels of unemployment, occupational opportunities, or working age cohorts. The findings have been mixed: while net migration is associated with earnings and income differences between areas (Tarver and Gurley, 1965), this seems to vary with the length of the observational period (Lianos, 1970), the size of the working age population (Blanco, 1963), the specified labor force (Miller, 1973), and nonmarket conditions (Ritchey, 1974). Overall, while employment opportunities do play a major role in migration trends (especially for individuals in the labor force), the significance of job opportunities or employment-related explanations seems to vary by type and size of destination community (Shaw, 1975; Williams and Sofranko, 1979).

The size preferences literature examines the factors associated with the selection of a destination from three perspectives: (1) the characteristics of persons preferring metro or nonmetro destinations; (2) elements conditioning preferences for different sizes of destinations; and (3) probabilities of

destination preferences being satisfied through migration (Fuguitt and Zuiches, 1975; Carpenter, 1977; DeJong, 1977; Zuiches, 1977; Blackwood and Carpenter, 1978). In general, the research indicates that about a third of American households would prefer to live in a different, usually smaller community (Zuiches, 1977). However, preferences for smaller or nonmetro communities depend upon distance to the nearest metro area and the economic opportunities available in the destination community (Fuguitt and Zuiches, 1975; Carpenter, 1977). In addition, longitudinal analysis indicates that persons desiring destinations similar to their current residence are most likely to achieve their residential preference (DeJong, 1977). In short, preferences only become a criterion variable when size of point of origin is consistent with size of destination community; and, in this case, point of origin is a crucial variable in predicting point of destination. Finally, it should be noted that Blackwood and Carpenter (1978) report a strong independent relationship between preferences for nonmetro areas and a concern for population size. When these are linked with a metro place of residence, the odds of being a potential migrant increase. These authors argue a concern for size, when linked with a preference for smaller places, represents an ideology of anti-urbanism which contributes to a more positive evaluation of quality-of-life attributes in nonmetro as opposed to metro areas.

The research on the role of values in the migration decision process is not as extensive as that of the preceding explanations even though the effect of values on people's preferences and behavior has been documented (Williams, 1970; Rokeach, 1973; Christenson, 1976, 1979). Indeed, Mangalam (1968) argues that the entire migration decision process rests upon a "value hierarchy" which influences the selection of behavioral alternatives. Williams and Sofranko (1979:254) conclude that migrants to nonmetro from metro areas are noteworthy because "quality-of-life kinds of considerations seem to rank higher in their

perceived causal structure." This suggests a migration-decision-making process based on a hierarchy of values different from that utilized by other migrants. These conclusions substantiate the suggestion made by Blackwood and Carpenter (1978) and Williams and Sofranko (1979:254): migrants to nonmetro areas from metro places "tend to view their behavior in the context of the relative merits of rural versus urban living." An examination of the characteristics attributed to nonmetropolitan communities by anti-urbanites reveals a perception of a moral order comparable to Tonnies' (1957) Gemeinschaft-Gesellschaft dichotomy (Blackwood and Carpenter, 1978; Williams and Sofranko, 1979). A recent study of persons moving to different sized communities reveals they hold value orientations significantly different from nonmovers in the origin and destination populations (Christenson and Garkovich, 1981). Persons moving to nonmetropolitan destinations endorse values which seem to be identified with a Gemeinschaft community membership.

This brief review of the literature indicates that while economic factors, type of origin and destination, and value orientations have been used to partially explain migration within and between metro/nonmetro areas, the effect of each of these factors is influenced by the others. Hence, the combination of these may be more useful in exploring the actual distribution of population among places (Ritchey, 1976; Bach and Smith, 1977; Zuiches, 1977). The empirical question now becomes, can we assess the interrelationships among and between these variables to determine which combination of factors predicts the movement to metro or nonmetro destinations?

Procedures

Data were gathered in 1979 as part of a statewide mail survey in Kentucky. A 1/1,000 sample of registered voters was drawn with the number of respondents in each of the 120 counties selected according to the county's percentage of the total population. To facilitate investigation of the extent of migration between counties (not presented here), an oversample was drawn in 118 counties

and added to the proportionate sample to attain a minimum of 150 registered voters in each county. Having removed those individuals who were deceased, moved out of state, moved with no forwarding address, or whose mail could not be delivered after 4 followups, a sample of 15,945 potential respondents was obtained with 11, 015 respondents returning usable questionnaires for a response rate of 69.1 percent.

Several biases were involved in this sampling procedure. Registered voting lists did not include all the adult population, yet this sampling frame provided the most complete listing of adults 18 years of age or older in Kentucky nonmetro counties. Over one-half of the nonmetro counties had 80 percent or more adults registered to vote in 1978. To increase the likelihood that our sample would contain recent migrants, a 5 year time interval was used when identifying individuals who had moved to a new community. No intra city migrants were included.

The Dillman and associates' (1974) mail survey procedure involving 3 followups, the last being a certified letter, was utilized. Possible biases caused by use of mail survey include the slight underrepresentation of the young, mobile, and the poorly educated. In a limited comparison of sample characteristics of mail survey respondents with relevant census data, Dillman and his associates (1974) found only minor variations in age, income, sex, or home ownership categories. When interpreting the results of this study, the single time period of the study (1979), the location (Kentucky), the sampling frame (voters registration), and the procedure (mail) must be kept in mind.

The data contained 1,351 respondents who indicated they had moved to a new community within the past 5 years. These data have a rural bias as most respondents included in the oversample were located in nonmetro areas. Since we will be dichotomizing metro and nonmetro points of origin and destination in the analysis, the nonmetro bias of the data will not be a serious limiting factor; and the large

sample will facilitate more indepth investigation of counterflows of persons between metro and nonmetro areas. However, to insure that the results are not distorted by the nonmetro oversample, a weighted sample of migrants proportionate to a county's population was derived from the total sample of 1,351 migrants.[2] Both the total sample and weighted sample of migrants will be used. The limited number of migrants in the weighted sample inhibits indepth cross-tabular analysis. Thus, the total sample will be employed in the following analysis, and these results will be checked against the weighted sample to ascertain if any rural biases are present.

Goodman's (1972, 1973) method of log-linear analysis is used because this statistical technique offers several advantages for the analysis of categorical data over the more traditional tabular approach. Log-linear analysis allows the systematic examination of both main and interaction effects of a set of independent variables on a dependent variable. The testing of the significance of both types of effects in an overall model facilitates an understanding of the decision-making process in metro/nonmetro migration behavior.

Respondents were asked the location (name of city and state) and size of community of their point of origin (O). Using a U.S. Atlas, the size of the migrant's former community was coded. For the present analysis, size of community of origin is dichotomized between those who lived in a community of less than 50,000 people coded 1 and those who lived in a community with 50,000 or more people coded 2. While this classification procedure does not exactly correspond to the official definition of a SMSA, the terms metro and nonmetro will be employed in the discussion. These terms seem to approximate more closely the meaning of size used in this research than terminology such as urban/rural or large community and small community and is consistent with dichotomies employed by others (Blackwood and Carpenter, 1978). The same coding procedures are used for the present place of residence resulting in dichotomous categories of metro/nonmetro destination (D).

Migrants were asked to indicate, in an open ended question, their main reason for moving. Approximately 90 different types of reasons for moving were coded, ten of which were job related, such as being transferred, changing employers or jobs, seeking a better job or working conditions, or retirement.[3] In the following analysis, jobs (J) is a dichotomous variable: a score of 2 indicates migration for employment reasons, and a score of 1 indicates non-employment reasons for moving.

In previous research (Christenson, 1979; Christenson and Garkovich, 1981), six values were found to be significantly associated with metro/nonmetro migration preferences and behavior even after adjustment for differences in the social, economic, and demographic characteristics of movers. Greater adherence to three values, hereafter called Gemeinschaft values,--patriotism, helping others (humanitarianism), and salvation--was associated with migration from metro to nonmetro area; and greater adherence to three other values, hereafter called Gesellschaft values,--personal freedom, individualism (nonconformity), and leisure (recreation and taking it easy)--was associated with migration from nonmetro to metro areas. The value scale was labeled Gemeinschaft-Gesellschaft because relative adherence to the two different value sets seems to represent conceptions of desirable types of social interactions as described by Tönnies (1887). The Gemeinschaft concept suggests values involving mutual concern for others' welfare (helping others), a common and binding unity (patriotism), and a shared morality (salvation). The Gesellschaft concept emphasizes individualism, personal freedom, the spirit of self-interest, pleasure, and self-gratification (leisure). The scale (V) was constructed so that a score of 1 indicated that a respondent placed greater importance on the Gemeinschaft values and less importance on the Gesellschaft values. A score of 3 indicated that a respondent placed greater importance on the Gesellschaft values and less importance on the Gemeinschaft values. A score of 2 would indicate that the respondents place

equal importance on both clusters of values.[4] While variables used in log-linear analysis are usually dichotomized, Reynolds (1977) indicates that in some situations, variables should not be dichotomized if they lose their interpretive meaning and that use of multi-level variables will not distort analysis.

In the following analysis we use Goodman's (1971) exploratory procedure by presenting first the most general model representing all possible associations among the 4 variables; then, using Goodman's selection procedure, we proceed to discard models until we find one that most parsimoniously represents the relationship among the variables. Finally, we examine the effect parameters (lamda coefficients analogous to partial correlations) to explicate the nature of the influence of nonmetro-metro place of origin (O), values (V), jobs (J) on the metro/nonmetro destination (D) of the migrant.[5]

Findings

The bivariate cross-tabulations between place of origin, job, and values with nonmetro/metro destination are presented in Table 1. The Gemeinschaft-Gesellschaft value scale and nonmetro/metro place of origin are related to destination while employment criteria for moving (Job) are not. Gemeinschaft values are associated with a nonmetro destination while Gesellschaft values are associated with a metro destination. The overall percentages in the origin/destination bivariate cross-tabulations are numerically biased toward nonmetro destinations because of the rural oversample. However, close inspection reveals that migrants from metro areas are significantly more likely to move to metro areas and less likely to move to nonmetro areas when compared with individuals from nonmetro areas (the converse holds for migrants from nonmetro areas). The only difference between the total and weighted sample in Table 1 concerns the job/nonjob reason for moving with metro/nonmetro destination. In the weighted sample, a slight relationship can be observed between job related reasons for moving and a metro point of destination.

(Table 1 about here)

Since previous research (see review by Zuiches, 1977) has indicated that certain socioeconomic characteristics are associated with migration behavior between and within metro and nonmetro areas, analysis of covariance was used to determine whether the bivariate relationships for the variables in Table 1 were significantly altered with adjustment for the covariates: education, income, age, sex, and/or race. No significant changes in the bivariate relationships were detected (data not presented) after introduction of these socioeconomic covariates. In previous research on this and related data (Christenson, 1979; Christenson and Garkovich, 1981), a significant relationship was apparent between the six value items used in the Gemeinschaft-Gesellschaft scale and nonmetro/metro destination, and between point of origin and destination, both at the bivariate level and after adjustment for the covariates (education, age, and race). The labor force variable was not included in previous research. While this limited assessment of the influence of certain socioeconomic characteristics does not preclude the interactive influence of such characteristics on place of origin, job, values, or destination in a multivariate context, no socioeconomic variables will be included in the log-linear analysis because (1) the introduction of socioeconomic variables has not been shown to alter the results in previous research or to alter the results at the bivariate level in this study, and (2) the introduction of additional variables to the log-linear procedure would greatly increase the complexity of the models and not necessarily improve accuracy (Reynolds, 1977). These comments must be kept in mind throughout the subsequent analysis.

Although the bivariate cross-tabular relationships are useful in providing an initial impression of the relationships between the variables under consideration, they do not reveal the interrelated effects of the explanatory variables on the dependent variable. To determine the multivariate

relationships among these variables, the technique of loglinear analysis will be used as described in the preceding section. A statistical procedure for developing a sufficient and parsimonious model is presented followed by an explication of the substantive implications of the model.

The log-linear technique first requires the construction of a four-way contingency table including nonmetro/metro origin by job by values by destination. Then an exploratory strategy is utilized to determine the model (representing relationships among variables) that is at once sufficient to explain the data and is at the same time parsimonious. Table 2 represents models of decreasing complexity which are tested by the likelihood ratio X^2 (LR X^2) to determine if they fit the data. Since the technique is hierarchical, a higher order effect contains all lower effects (i.e., Model 3 implicitly contains the terms of Model 4).[6]

(Table 2 about here)

Inspection of Model 4 reveals that the data cannot be explained by the specified variables acting independently; there are interaction effects which influence the observed data. Furthermore, from the test of Model 3, it is apparent that the two-way interactions among the variables are not sufficient to explain the association present in the four-way contingency table. Since Model 2 is sufficient, we can eliminate further consideration of the four-way interaction among the variables because, although it fits the data, it is not necessary. The data can be adequately explained by a lower order model. However, Model 2 does not reveal which of the individual three-way interactions and lower order effects are the most useful explanatory factors.

To resolve this issue, and to further reduce the complexity of the model, a test of the partial association of factors contributing to the models specified in Table 2 was conducted (see Table 3). This procedure successively removes individual terms from the overall model to determine which terms are

statistically unnecessary. This procedure does simplify the model sufficient to explain the data. Essentially, Table 3 shows that the data in the four-way contingency table can be explained by the main effects of the four variables place of origin, job, values, and destination, the two-way interactions (OV), (OD), and (VD), and the three-way interaction (OJD) and (OJV) as represented by Model 5. Remembering that the specified model is hierarchical, the terms (OV) and (OD) along with (OV), (JV) and (JD) are still present due to the inclusion of the three-way interactions. However, noticing that the term (OJV) is barely significant (.05), a further attempt was made to simplify this model by eliminating this term as manifest in Model 6. A comparison of Model 5 with Model 6 reveals that while both are sufficient to explain the data, the difference in the two likelihood ratio X^2's is 8.76. This is not significant at the .05 level (4 degrees of freedom). Thus, (OJV) does not contribute significantly in explaining the data and is not necessary for further analysis. Subsequent analysis revealed (OJD) was necessary for explaining the data and could not be eliminated from the model. The terms which have been eliminated reveal that values do not vary across categories or combinations of categories of job/non-job and nonmetro/metro origin.

Table 4 presents the lamda coefficients derived from Model 6. These coefficients are useful in describing the hypothesized relationships among these four variables. Lamda coefficients are based on the average or overall probability of migration to a metropolitan destination. A positive coefficient indicates that, controlling for other independent variables, there is a greater than average probability that individuals will migrate to a metro than nonmetro area. A negative coefficient has the same implications for nonmetropolitan migration. A coefficient statistically equivalent to zero indicates no difference from the overall probability of moving to a metro area. Utilizing these coefficients, we may now substantively

discuss the various interactions among the variables and their relative strengths.

(Table 4 about here)

Turning first to the main effects of the independent variables on the dependent variable we see that, controlling for other factors, those migrants who came from a metro place of origin have a greater than average likelihood of moving to a metro destination. Whether individuals migrate for job or non-job related reasons has little effect on the overall likelihood of moving to a metro destination (although in the weighted sample this relationship is significant, with those migrating for job reason more likely to move to metro areas). Gesellschaft values have a significant effect on the probability of migrating to a metro area. As noted before, the absence of more complex relationships involving values indicates the effects of this variable do not vary significantly over categories, or combinations of categories, of the other variables. Such is not the case for place of origin and jobs.

The three way interaction (OJD) reveals that migrants from nonmetro/metro origins who move for job related reasons are likely to move between the same type of area (metro to metro, .13; nonmetro to nonmetro, -.13). When OJD is combined with the statistically significant main effect OD, the findings indicate that origin has a significant effect on destination for those who move for job related reasons (metro to metro, .17 + .13 = .30; nonmetro to nonmetro, -.17 - .13 = -.30) but does not for those who migrate for nonjob reasons (metro, .17 - .13 = .04; nonmetro -.17 + .13 = -.04). However, as the analysis shows, values do have an independent effect and may influence destination apart from the (OJD) interaction. Perhaps this can be seen more clearly if we consider those who move for non-job reasons. Migrants for nonemployment reasons are equally probable to move to a metro or nonmetro area (±.04). And, for these people values are an important independent factor influencing destination.

For example, a migrant from nonmetro areas moving for non-job reasons will likely move to another nonmetro area if he adheres more strongly to Gemeinschaft values but will likely move to metro area if he adheres more strongly to Gesellschaft values. These conclusions are not changed substantially when the lambda coefficients of the total sample are compared to those of the weighted sample.

In summary: first, place of origin has a significant effect on destination. People moving from nonmetro areas tend to move to other nonmetro areas. Likewise, people moving from metro areas tend to move to other metro areas. Second, values has a significant effect on destination. People who adhere to more Gemeinschaft values tend to move to nonmetro areas and people with more Gesellschaft values tend to move to metro areas. Third, job as a reason for moving seems to have a slight effect on destination. However, fourth, those moving from nonmetro or metro areas for job-related reasons are likely to move within their respective areas. Fifth, those moving for non-job related reasons from either nonmetro or metro areas are equally likely to move to either area; although, with the additive influence of values, such migrants are likely to move between or within areas to be consistent with their Gemeinschaft-Gesellschaft value orientations.

Discussion

DeJong's 1977 assertion that most people move to communities similar in size to those left behind is supported by this study. When people move for job-related reasons, they tend to make intra-area rather than inter-area moves. It is when people move for non-employment reasons combined with the additive influence of values that they tend to switch metro with nonmetro (or vice versa) locations, suggesting an attempt to achieve a moral order consistent with their Gemeinschaft-Gesellschaft value orientations. Values appear to be the key to the metro/nonmetro switch. This clarifies some of

the recent research on values and migration (Blackwood and Carpenter, 1978; Christenson, 1979; Williams and Sofranko, 1979) concerning the interactive relationship between jobs as a reason for moving and the adherence to values.

The findings suggest that, while migration behavior can be and still is influenced by labor force conditions (Greenwood, 1975; Shaw, 1975; Ritchey, 1976; Williams and Sofranko, 1979), jobs do not represent the only explanation for the population redistribution between metro and nonmetro areas. The findings show that people giving job-related reasons for moving are most likely to move within areas (i.e., metro to metro or nonmetro to nonmetro). This suggests that employment opportunities may now be equalized between metro/nonmetro areas, a conclusion substantiated by recent studies on metro/nonmetro employment trends (Petrulis, 1979; Brown and O'Leary, 1979). We must look to other factors to explain the migration stream which switches type of origin and destination (i.e., metro to nonmetro or nonmetro to metro). As suggested by Beale (1976) and demonstrated by Williams and Sofranko (1979), for the metro to nonmetro migration stream, noneconomic factors appear to represent more important considerations than jobs in the migration decision. (See Shaw, 1975; Goldstein, 1976; Morrison and Wheeler, 1976.) This suggests that while in the past economic differences between metro and nonmetro places often led migrants to select those destinations which maximized economic ends, the future may see migration decisions increasingly based on noneconomic factors.

While these findings must be interpreted in light of the geographical limitations (Kentucky) and the time of the study (1979), they do have some important implications for future studies. Blackwood and Carpenter (1978) argue a strong anti-urban bias is linked to preferences for and likelihood of migration to nonmetro places. Historically, this anti-urban bias has contributed to many sociopolitical tensions between rural and urban areas, especially in the areas of legislative control and state finances (White and White, 1962;

Hadden and Barton, 1973).

These findings could suggest a "growing apart of American society" if enough people moving for value realization can polarize Gemeinschaft-Gesellschaft values in society. If the switching factor is value orientations, then consolidation of value orientations within nonmetro and metro areas combined with movement to attain value consistency could lead to fundamental societal conflicts in the years to come. Population redistribution for attainment of moral orders of like values appears to be consistent with other recent studies (Graber, 1974; Campbell et al., 1977; Ploch, 1978) where researchers have documented population redistribution resulting from conflicting lifestyles or attempts to live out unique lifestyles. While only a few people migrate in relation to the majority of the population, and while the realization of certain values through migration often stimulates conflicts between movers and nonmovers on other values (Christenson, 1979), it seems clear that an understanding of value orientations is essential for understanding and predicting population redistribution in contemporary American society.

Footnotes

[1]Work on this article was supported by the Kentucky Agricultural Experiment Station, journal article #79-14-249, and is published with approval of the Director. We would like to thank Drs. Ann Tickamyer, Richard Clayton, E.H. Carpenter, and James Zuiches for their suggestions on earlier drafts of this article.

[2]A representative sample for the state was achieved by weighting respondents from a county according to a 1/1000 proportional representation of a county's population. Metropolitan county respondents received a weight approximating 1 while all nonmetro county respondents received a weighting less than 1 depending on the county's population size.

[3]Thirty-one percent of all movers gave job-related reasons for moving. The distribution of reasons for moving within this category was as follows: 35 percent transferred; 37 percent changed employers or moved for a new job; 13 percent moved to find a better job or working conditions; 9 percent retired; and 6 percent reported other job-related reasons for moving. The major non-job reasons for moving included: 19 percent cited family reasons; 17 percent noted living conditions in the place of destination while 9 percent listed living conditions in the place of origins; 5 percent noted each school/military reasons, and cost of living differentials between place of origin and destinations; while the remainder offered other reasons (health, flooded out, desire to travel, etc.).

[4]The question read: There are many things in life which we value. Below are listed common American values and beliefs. How important are these to you? Response categories and scores (in parenthesis) were: (1) slight, (2) moderate, (3) great, and (4) very great. Individual responses to the 3 items in the

Gemeinschaft scale were summed and then trichotomized with approximately equal numbers of respondents. High scores of the Gemeinschaft scale were coded 1; low scores were coded 3. The same procedure was used in development of the 3 item Gesellschaft scale. However, in this scale, high scores were coded 3 with low scores coded 1. Thus the initial Gemeinschaft-Gesellschaft scale ranged from 2 to 6. To minimize the number of categories for log-linear analysis, the 5-point scale was reduced to a 3-point scale. This scale involving 6 value items is part of a larger value scheme of 14 items. The theoretical and methodological basis for this value scheme is available elsewhere (Christenson and Yang, 1976; Christenson, 1979).

[5]Lambda is a proportional reduction of error measure. In this case, it measures the percentage improvement in the ability to predict the value of a variable knowing the value of another variable independently of other possible effects.

[6]Throughout this analytical procedure the traditional interpretation of X^2 is reversed. Essentially, we are attempting to determine if a given model fits the data. Therefore, an X^2 statistic with a p value of greater than a given significance level indicates there is no statistically significant difference between the model and observed data. Conversely, if removing a term from a given model results in an X^2 statistic with a p value of less than a given significance level we may conclude that this term is necessary for the model to fit the data.

TABLE 1. Bivariate Cross-tabulations of Nonmetro/Metro Destination with Values, Jobs and Origin

Independent Variables	Destination			
	Total Sample		Weighted Sample	
	Nonmetro	Metro	Nonmetro	Metro
Values	% (N)	% (N)	% (N)	% (N)
1. Gemeinschaft	94.3 (474)	5.7 (29)	81 (114)	19 (26)
2.	91.3 (577)	8.7 (55)	76 (135)	24 (43)
3. Gesellschaft	84.8 (184)	15.2 (32)	64 (48)	36 (27)
	X^2 = 15.10	p = .01	X^2 = 8.0	p = .01
	γ = .30		γ = .26	
Job				
Non-job	92.0 (860)	8.0 (75)	79 (205)	21 (55)
Job	90.0 (375)	9.9 (41)	70 (92)	30 (41)
	X^2 = 1.28	p = .28	X^2 = 4.44	p = .05
	ϕ = .03		ϕ = .11	
Origin				
Nonmetro	92.7 (930)	7.3 (73)	81 (218)	19 (51)
Metro	87.6 (305)	12.4 (43)	64 (79)	36 (45)
	X^2 = 8.45	p = .01	X^2 = 13.83	p = .01
	ϕ = .08		ϕ = .19	

TABLE 2. Likelihood ratio X^2 values for models testing the association among variables: place of origin (O), values (V), jobs (J) and nonmetro/metro destination (D)

Model	Fitted Marginals	DF	LR X^2	P
1	Saturated model	0	0	
2	All 3 way effects	2	.30	.86
3	All 2 way effects	9	16.53	.05
4	[V] [O] [J] [D]	18	59.20	.00

N = 1351

no p.19 in original

TABLE 3. Test of partial association of factors implicit in models from Table 2 for the variables: place of origin (O), values (V), jobs (J), and nonmetro/metro destination (D)

Model	Effect	DF	LR X^2	P
2	OJV	2	6.22	.05
	OJD	1	6.87	.01
	OVD	2	1.69	.43
	JVD	2	2.10	.35
3	OJ	1	1.12	.29
	OV	2	13.41	.00
	VJ	2	1.78	.41
	OD	1	7.02	.01
	JD	1	1.40	.24
	VD	2	13.49	.00
4	O	1	328.16	.00
	J	1	202.70	.00
	V	2	219.98	.00
	D	1	1067.90	.00
5	Model 4+ [VD] [OJV] [OJD]	20	3.95	.68
6	Model 4+ [OV] [VD] [OJD]	23	12.71	.24

N = 1351

TABLE 4. Effect Parameters (λ's) for the Influence of Place of Origin (O), Values (V), Jobs (J) on Nonmetro/Metro Destination (D)+

Main Effects

	VD		JD			OD		
	Total Sample	Weighted Sample		Total Sample	Weighted Sample		Total Sample	Weighted Sample
Gemeinschaft	-.24*	-.20*	nonjob	-.09	-.13*	nonmetro	-.17*	-.22*
	-.02	-.04	job	.09	.13*	metro	.17*	.22*
Gesellschaft	.25*	.24*						

Interaction Effects

	OJD	
Job as reason for moving		
	Total Sample	Weighted Sample
nonmetro	-.13*	-.14*
metro	.13*	.14*

* $p \leq .05$ (two tailed)

+ coefficients refer to the probability of metro destination

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