WESTERN STATES COMPARISON OF COMMUNITY VITALITY: 1980-1990

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Housing characteristics are frequently omitted in literature regarding community indicators, social indices, and rural indices. While some authors focus their attention on economic indicators, others concentrate on social or quality of life indicators. Often lacking is the role of housing in rural revitalization and community economic development.

The purposes of this exploratory study were to investigate the predictors (housing and household characteristics) of community vitality, and to compare Utah to surrounding states. Further, this research is a result of the authors' participation in the regional research project "North Central Regional Research Project, NC-217," which is being funded by the Utah State University Agricultural Experiment Station.

The theoretical framework for this study is provided by the social systems theory (Deacon & Firebaugh, 1981). Communities are viewed as systems being in constant interaction with their environment. Inputs are goods and services, physical infrastructure, and human capital. For this study, inputs have been operationalized as total labor force, persons 65 years old or over, proportion of vacant housing units, and media value of owner-occupied housing units. Outputs are the impacts brought into the community such as per capita earnings in all industries, per capita personal income, and proportion of persons above poverty. Throughputs are the processes of changing the inputs into outputs. In this study, only a portion of the model was tested since researchers did not take into account throughput processes.

Data used in these exploratory analyses were created by Bureau of the Census and found on the CD-ROM entitled "USA Counties" (1996). For this study, the sample consisted of 25 rural Utah counties; 9 rural Arizona counties; 52 Colorado rural counties, and 42 Idaho rural counties. Rural counties were referred to as "non-metropolitan counties" and defined as counties with less than 50,000 population (CD-ROM 1996).

The dependent variables were ranked to create four community vitality indices: two community vitality indices for Utah, 1980 and 1990, respectively, and two for the Western states (Arizona, Colorado, and Idaho) for 1980 and 1990. The dependent variables consisted of per capita personal income, per capita earnings in all industries, and proportion of persons above poverty level. The independent variables consisted of median value of specified owner-occupied non-condominium housing units, total labor force per capita, proportion of persons 65 years and over, and proportion of vacant housing units to total housing units.

Descriptive statistics (frequencies, means, standard deviations) were generated. Correlations and regressions were performed. Each dependent variable for each state was divided into 10 percentile groups. Once this ranking was created, they were summed to create one single variable, labeled as community vitality. In total, four community vitality indices were generated, two for the state of Utah: one for 1980 and one for 1990; and two for the combined Western states: one for 1980 and one for 1990. A reliability coefficient for internal consistency, Cronbach alpha, was run on each community vitality index. For Utah 1980 the reliability coefficient was .82; for 1990 .77; for Western states 1980 was .79, and for 1990, .76. Independent variables were tested for multicollinearity and highly correlated variables (above .65) were excluded. The analysis consisted of four regression equations: (1) the 1980 Utah community vitality index with the independent variables, (2) the 1990 Utah community vitality index with the independent variables, and (4) the 1990 Western states community vitality index with the independent variables, and (4) the 1990 Western states community vitality index with the independent variables.

The first regression analysis examined the relationship between the 1980 Utah community vitality index and the independent variables (housing and household characteristics). The equation was statistically significant at the .05 level (F=3.295) and accounted for almost 40 percent of the variance R=.397. No variable was statistically significant.

The second regression examined the relationship between the 1990 Utah community vitality index with the independent variables (housing and household characteristics) for 1990. The equation was statistically significant at the .05 level (F=3.524) and accounted for less than half of the variance (R=.413). No variable reached statistical significance.

The third regression examined the relationship between the 1980 Western states community vitality index and the independent variables. This regression yielded one statistically significant variable, total labor force per capita at the .05 level, and accounted for less than 50 percent of the variance R = .422. The equation was statistically significant at the .05 level (F=17.88).

The fourth regression examined the relationship between the 1990 Western States community vitality index and the independent variables. The same variable, total labor force per capita, was statistically significant. The equation accounts for more than fifty percent of the variance (R = .543).

When comparing the two regression equations for Utah with the two regressions for the Western States, total labor force per capita was the only variable that reached statistical significance in the Western State region. In all regressions for the Western states as well as Utah's, proportion of vacant housing units to total housing units was negatively associated to community vitality. The proportion of persons 65 years old or

over was negatively associated with community vitality during the last decade, but is not the case for 1990.

Previous research (Hawks,L., & Delgadillo, L. 1997; Crull, S. & Cook, C., 1996) supported the idea that housing variables were statistically significant when regressed with a community vitality index. This is not the case for this study. In fact, only total labor force seems to be a strong predictor of community vitality. Perhaps the strongest contribution this article makes is to highlight an area in which future research is needed: exploring the relationships between labor force, housing, and community vitality.

Findings in this study suggest that only labor force seems to be a good predictor of community vitality. It is worth mentioning that the link between community vitality and housing and household variables is of practical significance and has implications for housing policies and community leaders. Therefore a closer examination and more research are needed to explore this relationship.

References

Crull, S. R. & Cook, C.C. (1996). Patterns of change in rural community vitality: The role of housing. Paper presented at the Conference on Small Cities and Regional Communities, October 1996. Louisville KY: Small Cities and Regional Communities.

Deacon, R. E., & Firebaugh, F.M. (1981). Family Resource Management.

Boston: Allyn and Bacon.

Hawks, L. K., & Delgadillo, L. (1997) <u>Predictors of rural community vitality</u>. Paper presented at the Conference on Breaking the Housing Disaster Cycle, October 1997. New Orleans, LA.

U.S. Department of Commerce, Bureau of the Census. (1994). <u>USA Counties:</u> 1994. Bureau of the Census, Data User Services Division. Washington, DC: U.S. Government Printing Office.