

Journal of Rural Social Sciences

Volume 08

Issue 1 *Southern Rural Sociology Volume 8,*
Issue 1 (1991)

Article 7

12-31-1991

Community Attachment: A Research Note Examining the Effects of Gender

Stephanie Sayers Fowler
North Carolina State University

Follow this and additional works at: <https://egrove.olemiss.edu/jrss>

 Part of the [Rural Sociology Commons](#)

Recommended Citation

Fowler, Stephanie. 1991. "Community Attachment: A Research Note Examining the Effects of Gender." *Journal of Rural Social Sciences*, 08(1): Article 7. Available At: <https://egrove.olemiss.edu/jrss/vol08/iss1/7>

This Research Note is brought to you for free and open access by the Center for Population Studies at eGrove. It has been accepted for inclusion in *Journal of Rural Social Sciences* by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

Community Attachment: A Research Note Examining the Effects of Gender

Stephanie Sayers Fowler

***North Carolina State University,
Raleigh, North Carolina 27695-7104***

ABSTRACT The purpose of the study is to examine the effects of gender on feelings of community attachment. This is done through the development of a measure of emotional response to a community, which is then tested, using the techniques of confirmatory factor analysis, for gender variation. The data are from a 1985 survey mailed to 1400 residents of four rural North Carolina counties. Responses from 1200 of these residents provide the sample.

The author develops a model which focuses not on the well established relationship between satisfaction with service provision and community attachment, but on the relationship between emotional responses to the community and community attachment. The results indicate that the model has important elements in it, although it is incomplete; and, that it shows definite variation by gender in how response to emotional elements affects feelings of community attachment.

Introduction

As rural areas seek to attract new businesses and more people, one of the more important elements of comparison and competition is communities' "quality of life." This vague term has come to mean everything from having efficient fire and police departments to community friendliness and hospitality. While never being exactly defined, it is clearly important to people when they move. An important part of quality of life is the sense that a person will become attached to the new place. Additionally, and key to this research, is the notion that men and women have different perceptions as to what constitutes quality of life and that this difference is exhibited by men and women when making decisions about where to live. If so, the impact on communities could be substantial because leaders would have to devise mechanisms for making their communities attractive to both men and women. Such mechanisms could have an impact on resources. For example, do county commissioners fund roads to improve or change commuting patterns (for men and working women) or do they fund public recreational facilities, health facilities and libraries (for women who work in the home and children)? Do men

accept or reject transfers or promotions based on the level of attachment of their wives to the community? The purpose of this study is to find out if men and women really do have differences in attachment to their communities.

Much of the research done on rural growth in the 1970s focused on the development of measures of community satisfaction, specifically addressing the issue of rural service delivery (Summers, et. al, 1976; Murdock and Schriener, 1979; Christenson and Taylor, 1983). Rojek et al. (1975) suggest that community satisfaction measures must be developed based on attitudes of individuals toward particular conditions in a specific environment. Kasarda and Janowitz (1974) suggest that length of residence is an important component of community satisfaction and that income is an important predictor of levels of community satisfaction. Ladewig and McCann (1980) argue that the important factors influencing community satisfaction are measures which reflect the individual's perception of control of their environment, and Lovejoy et al. (1983) indicated that age, rather than length of residence, had significant effects on measures of satisfaction. What evolves from this literature is an understanding that community satisfaction is a function of satisfaction with available service delivery and that age, length of residence, and income are important elements in the determination of this satisfaction level.

Satisfaction with service delivery, no matter how efficient a measure, does not describe entirely how an individual relates to his or her community. This is obvious when we examine the low explanatory power associated with these studies. Clearly something is missing. This was emphasized by Fried (1982) who points out that impersonal connections alone are insufficient to produce evidence of community attachment.

One approach to solving the problem of low explanatory power of these studies of community satisfaction has been to expand the scope of the question and examine the underlying concept of emotional attachment to the community. Deseran (1978) suggests that community attachment may be most easily understood as a problem of situation definition. He argues that there will be a cognitive element and a belief element which contribute equally to the concept of community. Using different language to describe a similar idea, St. John (1986) suggests that there is reason to believe that community attachment has both an evaluative component and an affectual component. Strengthening the

argument for the use of an affectual component in determining overall community attachment, Herting and Guest (1985) find that perceptions of the friendliness of neighbors was the only important predictor of community attachment. Stinner et al. (1990) looked at the relationship between size of community and bonds of attachment, finding that the emotional ties of a person to a place are what create community attachment and that community size does not have an important effect upon the formation of these emotional bonds.

It is clear that research has provided support for the use of a measure of satisfaction with service delivery to evaluate levels of community satisfaction, just as other research has shown that components which measure attachment or social relations are good measures. Davis and Sayers, 1988 show the strong relationship between satisfaction with service delivery and overall community satisfaction. However, the Davis and Sayers model did not include a measure of the social psychological elements of community satisfaction or attachment. In another study, Sayers (1988) showed that combining an indicator of attachment with an indicator of satisfaction with service delivery greatly improved the explanation of the variation in community satisfaction.

It is commonly understood that, due to the differences in status and socialization patterns between males and females, there will be differences in social attitudes based on gender. There is evidence that this may be the case when examining the process of developing attachment to community. Hartley (1964) makes it clear that the process of sex-role identification is a developmental process which begins early in life. Similarly, Money and Tucker (1975) describe the ways in which boys and girls are socialized to have different approaches to society.

The process of socialization extends into the formation of social attitudes and attachment to the community. Bardo (1977) demonstrates in his study of British new towns how the process of community attachment is passed on from mother to daughter, while Freudenburg (1980) discusses the effects rapid changes have on the social-psychological state of small town residents, particularly women. Little (1982) describes the serious consequences of relocation on social-psychological indicators for women. Along the same lines, Kessler and McLeod (1984) show how women react more strongly to disruption of their

social situation because of their strong involvement in the lives of people around them.

The literature suggests that emotional attachment to the community is a strong element of overall community satisfaction and that women have a stronger emotional bonding process. Thus it may be hypothesized that women form stronger ties to the community than men. This analysis involves a measure of community attachment and the effect of gender on attachment to community.

Data, method and analysis

The purpose of this analysis is to develop a measurement model of a social psychological concept, community attachment, using the techniques of confirmatory factor analysis. Once developed, this measurement model is tested for invariance based on gender; that is, the effects of the same measurement model, when applied to men and women separately, are examined for differences. The analysis is performed on secondary data coming from a survey conducted in 1985 of four North Carolina counties (Clay, Currituck, Dare and Macon) which experienced rapid population growth due to immigration between 1970 and 1980.

Macon County had a population of 15,788 in 1970 and a population of 20,178 in 1980. Clay County had a population of 5,180 in 1970 and 6,619 in 1980. Currituck County had a population in 1970 of 6,976 and 11,089 in 1980 and Dare County had a population of 6,995 in 1970 and 13,327 in 1980. None of these counties is considered metropolitan, although Currituck County has become part of the Norfolk, VA SMSA. Currituck and Dare are adjacent coastal counties while Macon and Clay are adjacent counties in the North Carolina mountains.

A survey of citizen attitudes toward growth in their county was developed and mailed to a randomly selected sample of 10 percent of the tax listers in each county. The survey asked questions about satisfaction with delivery of basic services in the county, questions about satisfaction with the political organization of the county, and questions designed to evaluate the respondents' feelings about living in the county. The original mailing of 1379 plus two follow-up mailings produced a total of 1200 responses for a response rate of 87 percent. The number of women responding was 657 and the number of men responding was 543. In this analysis, 47 cases with missing data were

dropped from the sample which left 1153 respondents, of which 632 were women and 521 were men.

In this analysis, community attachment is assumed to be a latent variable which is measured by five indicators. The indicators are responses given by residents who were asked to answer five questions concerning their feelings about living in their county ("I feel I belong here," "I feel people are polite," "I feel people have ideas that are similar to mine," "I feel people are accepting of strangers," "and I feel people are neighborly") using a scale of from 1 to 4 which corresponded to graduated levels of agreement from "strong disagreement" to "strong agreement." These variables were chosen as a measure of community attachment as a result of an earlier analysis of these data. In this previous work Sayers (1988) shows, through three separate exploratory factor analyses, plus both oblique and orthogonal rotation, that these variables provide a reliable measure of a unique, identifiable concept, Community Attachment. The analysis was designed to test the hypothesis that all the persons responded equally, regardless of gender. The first part of the analysis consisted of examining factor loadings. Factor loadings are important because they measure the strength of the relationship between the observed variables and an underlying theoretical construct. Also, factor models allow the division of variance into two parts, which means we can attribute part of the variance to the theoretical model and part of the variance to measurement error. Confirmation of this hypothesis would indicate that gender has no effect upon the development of feelings of community attachment. Then, as a second part of the analysis, the model was tested for invariance based on gender to determine what, if any, impact gender would have on the latent construct, community attachment.

In developing the analysis, the initial value for the first lambda parameter was set equal to 1 to remove the indeterminacy in the model. This produces a situation where the slopes of observed indicators represent the effect of the latent variable determined by the correlations among the indicators.

64 Southern Rural Sociology, Vol. 8, 1991

Table 1. Correlations, means and standard deviations of community satisfaction indicators

	<i>PEARSON CORRELATION COEFFICIENTS (LOWER TRIANGLE) AND COVARIANCES (UPPER TRIANGLE)</i>				
	BELONG	POLITE	SIMILAR	ACCEPTING	NEIGHBORLY
Belong	.0000	.1732	.1865	.2124	.1446
Polite	.4220	.0000	.1558	.1838	.1113
Similar	.4510	.3560	.0000	.2265	.1341
Accepting	.4903	.4014	.4891	.0000	.1847
Neighborly	.3315	.3072	.2895	.3804	.0000
Mean	3.029	2.863	3.394	3.015	2.684
Std. Dev.	.6229	.6570	.6647	.6951	.6956

Results

The covariance matrix and correlation matrix in Table 1 were obtained using the SAS statistical package.

The values of the correlations were used in the LISREL program to provide Chi Square values with associated probability levels as shown in Table 2.

Chi square is an indicator of the overall fit of the model. The combined population results show a total coefficient of determination of .786, which indicates that 78.6% of the observed variation is due to the effects of the latent variable, community attachment. The parameter estimates in Table 3, demonstrate which of the indicators are strongest.

An analysis of the combined population shows that all of the indicators, except the first which was fixed, have large T values, as shown in Table 4, and all are statistically significant. However, the variable on acceptance appears to be a slightly weaker indicator than the others.

In analyzing the covariance factor model it is important to remember that, because of the hypotheses being tested, a low Chi square and a high probability level are desirable. Given this desirability of a low Chi square value, the Chi square for the combined population of 10.02 with 2 d.f. and a probability level of .007 would

Table 2. Chi square values for the factor loadings by gender

	CHI SQUARE	DF	PROB.
Equal factor loadings for both groups	10.02	2	.007
Equal factor loadings by gender	9.72	4	.045
<i>COEFFICIENTS OF DETERMINATION</i>			
	MALES	FEMALES	POOLED
	.651	.883	.786
<i>ADJUSTED GOODNESS OF FIT MEASURES</i>			
	MALES	FEMALES	POOLED
	.996	.998	.996

indicate a model that is not a good fit. Technically this means that the proposed model does not recreate the observed correlation matrix very well. Substantively, this means that, as described by the model, the underlying concept of community attachment does not adequately represent the observed responses of people to questions about their community.

The analysis can now proceed to a gender test. A test of invariance represents a test of the equality of effect of the latent variable, community attachment, on all of the observed indicators across gender groups. It is a way of finding out just how much gender affects the way an individual attaches to a community. In this analysis, this was accomplished by fixing the parameters of women to those of men and comparing the Chi square. As shown in Table 2, the Chi square values and the coefficients of determination show real differences between men and women when tested separately and in the combined population test. The Chi square is 9.72 with 4 d.f. and a probability of .045. The invariance model produces a Chi square value which is smaller and a probability level which is higher than that produced by the pooled sample model. Even more importantly, the total coefficients of determination produced by the invariance test reflect gender differences, with the value for males being .651 and the values for females being .883. A comparison with the combined population shows a dramatic improvement in the explanatory power of the latent variable for women and a marked decrease in the explanatory power of the

Table 3. Parameter estimates—maximum likelihood estimates of group specific measurement models

	MALES	FEMALES	POOLED
Neighborhoodness	1.0*	1.0*	1.0*
Similarity	.994	.765	.845
Belonging	.849	1.011	.943
Politeness	1.166	.964	1.042
Acceptance	.829	.650	.720
Community attachment	.384	.557	.481
<i>Measurement error</i> Neighborhoodness	.616	.443	.000
<i>Measurement error</i> Similarity	.620	.674	.657
<i>Measurement error</i> Belonging	.723	.430	.572
<i>Measurement error</i> Politeness	.477	.482	.479
<i>Measurement error</i> Acceptance	.736	.764	.751

* Fixed parameter

latent variable for men. Given these results, it is possible to reject the hypothesis that gender has no effect on community attachment. This leads us to the conclusion that there is a difference between the ways in which men and women bond to their community and that the impact on emotional/affectual elements is stronger for women than for men.

Conclusions

Interpretation of these tests is complicated because the results seem to indicate somewhat contradictory things about the described theoretical model. The confirmatory factor analysis of the measurement model represented by Figure 1 shows that the model does not do a particularly good job of representing what is actually observed. In other words, the model does not fit well. However, it is also clear that the observed indicators of the hypothesized latent variable, community attachment, are all strongly significant. This implies that they are doing their job in showing the effects of community attachment. The lack of good fit is a probable indicator that there are other indicators

Table 4. T-values by separate and combined gender

	FEMALES	MALES	POOLED
Belonging	.000*	.000*	.000*
Similarity	10.804	9.606	14.767
Neighborhoodness	14.048	9.006	16.810
Politeness	12.260	9.939	16.057
Acceptance	9.977	8.850	13.696

* Fixed parameter

of community attachment which are not demonstrated by this model. We can hypothesize that these missing indicators, were they known, would strengthen the model and allow us to more adequately reproduce the observed correlation matrix.

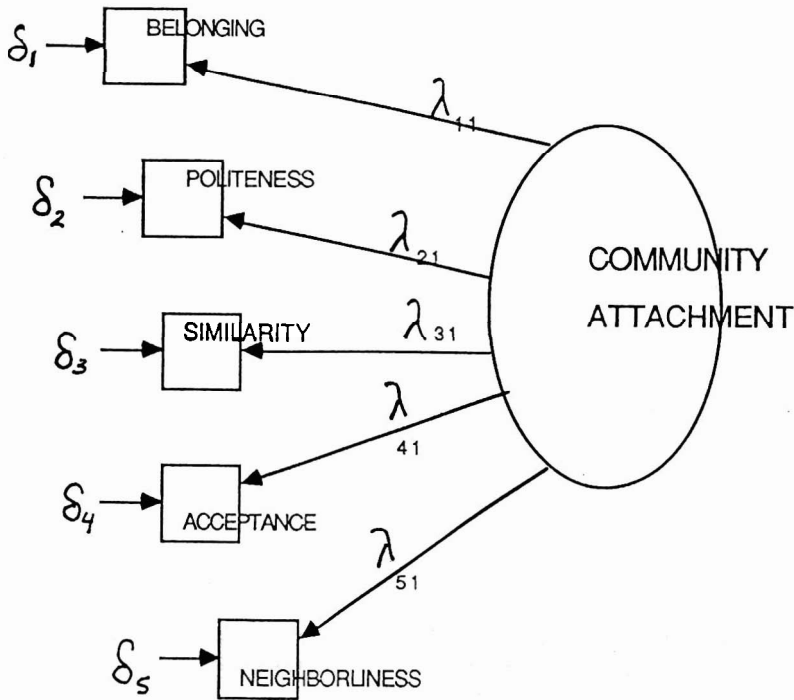
The model may not be an overall good fit, but it is clear from the results of the test of invariance by gender that the model does a much better job of reproducing the observed correlation matrix for women than for men. All important indicators show improvement when tested for gender invariance, and a comparison of the total coefficients of determination, a measure of the overall power of the model, shows that the latent variable, community attachment, has a much more important role in determining how women respond to questions about their community than for men.

Discussion

While not precisely defined in the literature, community attachment is a concept which has been examined from a variety of perspectives for a number of years. Attachment has been studied from a purely cognitive perspective, from a purely emotional perspective, and from a variety of combinations of the two with consistent indications that emotional responses to place of residence are important to people. This study takes the research one step farther and asks if there are differences, based on gender, in these emotional responses to place.

The results indicate that the concept of community attachment, as an underlying social psychological construct, has more importance in explaining the strength of bonds of attachment for women than it does for men. This is not surprising since a large body of literature suggests

Figure 1. Confirmatory factor analysis of the measurement model



this should be the case given the differences in socialization for men and women. However, the fact that we now have ways of testing how this difference in socialization affects the responses of individuals to questions about community attachment may give important insight into the role of women in the formation of emotional bonds to the community (e.g., bonds emerging from the social structure, the daily interaction of people, and residential stability).

As was stated at the beginning of this paper, it is commonly assumed that a good quality of life is important for a community to have. If that is so, it may be mostly women who provide the sense of community and the strength of emotional bonds which give quality of

life to a community. Consequently, the importance of women in developing attachment bonds may be critical to a community's stability, growth and development.

References

- Bardo, J.W.
1977 "Social class, age, sex, mother-daughter role relationships and community satisfaction in a British new town." *Journal of Social Psychology* 103:251-55.
- Christenson, J.A. and G.S. Taylor
1983 "The socially constructed and situational context for assessment of public services." *Social Sciences Quarterly* 64(June):264-74.
- Davis, A.C. and S. Sayers.
1988 "Newcomers: comparative evaluation and community satisfaction." Paper presented at the national meeting of the Rural Sociological Society.
- Deseran, F.A.
1978 "Community satisfaction as definition of the 1978 situation: some conceptual issues." *Rural Sociology* 43(2):235-49.
- Freudenburg, William
1980 "The effects of rapid population growth on the social and personal well-being of boomtown residents." Paper presented at a meeting of the Rural Sociological Society in Scottsdale, Arizona.
- Fried, M.
1982 "Residential attachment: sources of residential and community satisfaction." *Journal of Social Issues* 38:107-19.
- Hartley, Ruth E.
1964 "A developmental view of female sex-role definition and identification." *Merrile-Palmer Urban Affairs Quarterly* 10(1):172-81.
- Herting, J.R. and A.M. Guest
1985 "Components of satisfaction with local areas in the metropolis." *The Sociological Quarterly* 26:99-116.
- Kasarda, J.D. and M. Janowitz
1974 "Community attachments in mass society." *American Sociological Review* 39:328-339.
- Kessler, R.C. and J.D. McLeod
1984 "Sex differences in vulnerability to undesirable life events." *American Sociological Review* 49(5):620-31.
- Ladewig, H. and G.C. McCann
"Community satisfaction: theory and measurement." *Rural Sociology* 45:110-31.
- Little, Ronald
1982 "Some social consequences of boom town." *North Dakota Law Review* 53(3):401-25.
- Lovejoy, S.B., D.J. Brown and J.S. Weitz.
1983 "Immigrants in nonmetropolitan communities: more dissatisfied with public services?" *North Central Journal of Agricultural Economics* 5(2):39-45.

70 Southern Rural Sociology, Vol. 8, 1991

- Money, J. and Patricia Tucker.**
1975 **Sexual Signatures: On Being a Man or a Woman.** Boston: Little Brown.
- Murdock, S.H. and E.C. Schriener**
1979 "Community service satisfaction and stages of community development: an examination of evidence from impacted communities." *Journal of the Community Development Society* 10(1):109-124.
- Rojek, D.G., F. Clemente and G.F. Summers**
1975 "satisfaction: a study of contentment with local services." *Rural Sociology* 40(Summer):177-92.
- Sayers, S.**
1988 "Attachment and service satisfaction as indicators of community satisfaction: a demonstration of the benefit of cooperation between non-correlated variables." Paper presented at the 1989 meeting of the American Sociological Society.
- St. John, C., D.M. Austin and Y. Baba**
1986 "The question of attachment revisited." *Sociological Spectrum* 6:411-31.
- Stinner, William F., Mollie Van Loon, Seh-Woong Chung and Byun Younchan**
1990 "Community size, individual social position and community attachment." *Rural Sociology* 55(4):494-521.
- Summers, G.F., S.D. Evans, F. Clemente, E.M. Beck and J. Minhoff**
1976 *Industrial Invasion of Nonmetropolitan America: A Quarter Century of Experience.* New York: Praeger.