

The Structure of Community Satisfaction in a British and an American Community

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Community Satisfaction Scale scores from a British and an American community were compared for similarity of factor structure. Factor did not replicate in the two data sets. Results are discussed in relation to the cultural relativity of the community concept and the need for empirical validation of community measurement.

The attitude of residents toward their communities has been the subject of an increasing literature in community psychology and sociology. Traditionally, satisfaction with community has been defined as social psychological reflection of perceptions of community service delivery and, to a lesser extent, perceptions of the quality of the physical environment (see Ladewig & McCann, 1980, for reviews). Recently, broader models of community satisfaction have been devised relating individuals' perceptions of the local community to their places within interaction networks (Bardo, 1977; Bardo & Bardo, 1980, 1983; Heller, Rasmussen, Cook, & Wolosin, 1981; Young & Willmott, 1957), norms and values systems (Gans, 1962), and life experience (Bardo & Bardo, 1983; Keller, 1968). In the present study this broader model of community satisfaction is further examined and defined with regard to its specificity and cultural-situational nature.

The term community has many meanings as applied in the social sciences (Hillary, 1955); here it refers to a grouping of people who share a general sense of place within a particular geographically defined territory (Arensberg, 1961; Feldman, 1980). Satisfaction with community, in this sense, entails not merely perceptions of the adequacy of services but orientations of individuals as to their places within the grouping, satisfaction with locally based interactions, and a general perception of the quality of life in the locale. Traditional definitions of community satisfaction that stress institutional functioning service delivery, and environmental quality fit within this framework, but they represent only the formally organized portion of the community as a whole; social relationships and the web of socioemotional ties that bond people to their communities are ignored.

The individual's sense of satisfaction with the community, if this broader model is applied, is a consequence of perceptions of the community's adequacy at meeting his or her needs and desires. As is generally argued in interactionist social psychology (Becker, 1965; Jones, 1980; Karp, Stone, & Yoels, 1977), manifestations of needs and desires are socially defined and reified through culture, subculture, learning, socialization, and interactions with significant others. Conceptions of community are thus learned, shared, and modified with time and concomitant changes in expectations.

One of the implications of community as a learned, socially supported phenomenon that is often overlooked in the social science as well as in the planning literature is that any learned behavior or attitude is subject to change and variation with time and place. This position has been recognized in relation to most attitudinal variables, but it is often ignored in empirical measurement. Even though a particular concept (such as satisfaction with community) may be generalizable across groups, the domain of the concept and specific relationships among components within that domain may vary with culture, subculture, place, and passage of time. If this is the case, then it will be necessary to examine the empirical definitions of community satisfaction when based on attitude tests or other procedures prior to engaging in other aspects of comparative research. In fact, examination of variations in patterns of the concept of satisfaction across groups and cultures may provide significant data concerning the integration of people in their life situations. The remainder of this paper reports an attempt to replicate the factor structure of a measure of community satisfaction, the Community Satisfaction Scale (CSS) (Bardo & Bardo, 1980).

Method

Two random samples were drawn from a British new town, Hemel Hempstead, and a medium-size American community, Knoxville, Tennessee, during the spring of 1981. In Hemel Hempstead the sample ($N = 550$) was drawn from the current Register of Electors, which contains about 95% of the adult population. The Knoxville sample ($N = 310$) was drawn from the city directory. Data-collection procedures were defined as consistently as possible in the two sites: The same questionnaire (with only minor wording differences required by word usage in the two locales) and a single set of instructions were used. The questionnaire contained 54, community-satisfaction items as well as a personal data section. For the British sample 412 questionnaires were completed, and 250 completed questionnaires were obtained in Knoxville. For the British sample 58% of the respondents were female, 41% were from white-collar households, 28% were under age 30, 30% were between ages 30 and 44, 30% were between 45 and 65, 12% were over age 65, and about 75% were married. In the Knoxville sample about 70% of the respondents were female, 61% were married, and 32% were white collar. In terms of age, 30% were under age 30, 24% between ages 30 and 44, 31% between ages 45 and 64, and 15% over age 65.

The community-attitude responses from the British new-town sample were examined for internal consistency, and 34 items meeting scaling criteria were factor analyzed to oblique, simple structure using proplane rotations (see Bardo & Bardo, 1980, for details of this analysis); nine factors resulted. The first eight factors in the solution were interpretable and related to community satisfaction: (1) Degree of Alienation from Generalized Others, (2) Hominess and Belongingness, (3) Political and Other Institutional Responsibility, (4) Excitement/Dullness, (5) Peacefulness and Courtesy, (6) Quality of the Physical Environment, (7) Individual/Parental Responsibility, and (8) Peer Cynicism.

In this comparative analysis of British and American samples, these same nine factors were chosen as the target. In the analysis, responses to the 34 items on the CSS by the Knoxville respondents were rotated (on the basis of the factor-pattern matrix, V_{fp} , and the lambda matrix) into the geometric space defined by the solution for the British subjects. This procedure, Procrustes, rotates the data from the second sample as closely as is possible into the space of the first to assure comparability of factors. Once the dimensions were set, coefficients of factor congruence were calculated. For interpretive purposes, where congruence coefficients of $> |.80|$ were obtained, the factors were considered to have been replicated (Gorsuch, 1974). Also, the quality of the solution was determined by examining the number of factor loadings within the .10 hyperplane as a measure of the achievement of simple structure.

Results

As previously reported (Bardo & Bardo, 1980), over 79% of the loadings were within the .10 hyperplane for the British sample. For this American sample a 50.3% .10 hyperplane was obtained, which represents only a 10.5% increase in hyperplane count, compared to the unrotated matrix. But subjecting the Knoxville data to a separate proplane rotation resulted in a 75.2% .10 hyperplane, a much more acceptable solution.

The congruence of equivalent factors is reported on the matrix diagonal of Table I, and off-diagonal elements report the congruence of American factors with nonequivalent British factors. As can be seen in Table 1, all diagonal elements except the last were statistically significant at $p < .01$ and in the expected direction; only one off-diagonal element (the comparison of British Factor 6 with American Factor 1) obtained significance. Thus, factors in both solutions showed a relatively clean statistical relationship to one another in the expected pattern. In terms of reproducibility of factor patterns, however, only Factors 2, 3, and 6 met the $|.80|$ general criterion. Also, in terms of significance of simple structure for the individual factors, 2 and 3 were significant at $p < .01$ (Cattell, 1978), whereas Factor 6 did not attain significance ($p < .05$). Therefore, although the overall pattern was nonrandom, the results from the two samples were not equivalent, and the geometric positioning of the solution was artificial for the Knoxville data.

Table 2 reports the congruence coefficients for the factor solutions from the two samples when subjected to separate proplane rotations. In this instance only the diagonal element (2, 2) replicated, though several off-diagonal elements obtained statistical significance. Therefore, equivalent factors were not extracted in different order in the two solutions.

TABLE 1
Congruence Coefficients:
Procrustes Solution*

British	American								
	1	2	3	4	5	6	7	8	9
1	.64	.22	.24	-.04	.04	-.41	-.07	-.17	-.18
2	.27	.80	-.07	.05	.21	-.34	-.08	.10	-.03
3	.31	-.07	.83	.06	.05	-.08	.20	.13	.26
4	-.05	.04	.05	.76	.21	.38	.09	-.35	.26
5	-.04	.15	.04	.17	.60	.07	-.01	.10	.38
6	-.54	-.35	.08	.42	.09	.84	-.20	.16	.41
7	-.07	-.07	.16	.07	-.01	-.16	.65	-.15	-.09
8	-.15	.07	.09	-.27	.10	-.11	-.13	.57	.10
9	-.15	-.02	.16	.18	.34	.26	-.08	.10	.53

*Coefficients > |.54| are statistically significant at $p < .01$. Coefficients > |.80| are considered to show replication.

TABLE 2
Congruence Coefficients:
Comparison of Best Solutions*

British	American								
	1	2	3	4	5	6	7	8	9
1	.59	.19	.16	.01	-.06	.13	.03	-.31	.19
2	.07	.84	.15	.08	-.01	.08	-.19	-.07	.08
3	.07	.12	.20	.22	-.04	-.24	-.12	-.75	-.11
4	-.02	-.02	.00	.14	.02	.01	.69	-.01	.02
5	-.31	-.08	.11	.24	-.01	.02	.36	.18	.39
6	-.02	-.06	-.60	.56	-.03	.27	-.02	-.15	-.16
7	.33	-.08	.03	.13	.60	-.03	.09	-.11	.08
8	-.16	.30	.07	.36	.01	-.03	-.40	-.19	.01
9	-.37	-.08	.10	-.02	-.02	.19	.15	-.06	-.02

*Coefficients > |.54| are significant at $p < .01$. Coefficients > |.80| are considered to show replication.

Discussion

The data suggest that although the respondents from both samples understood the concept *community satisfaction*, the domain and structure of the concept were not the same cross-culturally. Of

the nine factors only Factors 2 (Hominess and Belongingness), 3 (Political and Other Institutional Responsibility), and 6 (Quality of the Physical Environment) were replicated; the rest were statistically related but not equivalent. Only a few off-diagonal elements in either matrix of congruence coefficients achieved statistical significance. Although statistical relationships may exist, the magnitude of the relationships is not sufficient for reproducibility. The patterns of response, therefore, are not equivalent in the two samples.

At a more general level the data show that although the general concept *community satisfaction* is relevant in both research locales, the structure and domain of the concept vary to a great extent. The implications of this finding lie in both theoretical and applied areas. In terms of theory, the data suggest that formal structural issues may be generalizable across communities in various cultures. The formal structure provides services to the local area, and, whereas the nature of services desired may shift with time and place, abstract concepts of quality are apparent in both locales studied. Second, in both communities an identifiable concept of belongingness was found, suggesting that attachment to local areas is generalizable. Other aspects of community—such as the significance of certain peer relationships, forms of possible alienation from others, and generalized expectations for interaction within the community—are more local phenomena. Conceptions of community, therefore, may entail both universalistic and particularistic judgments by individual residents.

But because the samples were drawn from two very similar cultures, generalizations concerning the replicability across settings need to be considered tentative. For example, communities in developing countries or possibly in other areas of Europe might not reflect patterns found above. What is crucial is the idea that the structure of community perception has been shown to be variable with place. Therefore, in theoretical treaties and empirical research community satisfaction concepts cannot be assumed to have a particular domain.

There is, thus, support for the general interactionist social psychological position that stresses relativity of attitudinal constructs. In-sofar as both communities studied exist within a highly complex, technological, industrial socioeconomic system, it is likely that their integration within the larger systems of which they are part impinges on perceptions of local conditions: One of the most significant aspects of modernization as a process is the linking of locales within larger systems. On the other hand, no single locale is totally a reflection of macro conditions. Individualistic patterns of interaction and normative evaluations, possibly based on local traditions and history as well as current population composition, will still operate. Indeed, the social psychological literature on migration within and among developed countries stresses the difficulties of adjustment to local norms and patterns of interaction as well as to services and ecological location (Cuba, in press; Handlin, 1973; Jones, 1980; Maines, 1978). Therefore, it is unreasonable to expect empirical analyses of various communities even within one country wholly to reflect generalized universalistic patterns. The present study also suggests that empirical analyses of community concepts or satisfaction based on social psychological measurements should be examined closely for domain consistency as a first priority.

In terms of applications of community theory, the data support a relativistic approach rather than the more traditional unitary formulation often practiced in urban and community planning. Instead of planning (either socially or environmentally) for a specific outcome from a general plan, a much more viable approach would be to examine the specific structure of residents' orientations and community structures. Although it would be expected that in many settings formal organizational issues would be problematic (according to the results of this study), other issues might appear in localized form that would affect both the efficiency and effectiveness of the plan as implemented. In this sense, cultural and situational relativity take on increased, localized importance. Planning formulations emphasizing large-scale differences in orientations and structure, such as those between Western and Eastern cultures or between various social strata in a particular society, may still be overgeneralized and inadequate as predictors of behaviors within a particular community setting.

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