

# A brief note on second-order community satisfaction factors for two sub-communities in Istanbul, Turkey

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**ABSTRACT** First-order Community Satisfaction factors obtained for a sample of residents of Istanbul, Turkey, were subjected to second-order factor analysis; a solution with two oblique factors ("General Satisfaction" and "Excitement/Dullness") resulted. Findings were compared to those of previous studies and results were discussed with regard to their implications for theories of community satisfaction.

## INTRODUCTION

Social and community psychologists have long been concerned with the nature of people's perceptions of, and satisfaction with, their community environments. The significance of this issue rests on variations in posited relationships between human cognitions and perceptions of community environmental stimuli (see, for instance, Hall, 1969, 1977; Bardo, 1985). Much recent attention has been paid to the possible role of cultural differentiation in determining the structural components of residents' satisfactions with their communities. Some social psychologists (e.g., Rigby & Vreugdenhil, 1986) are seeking measures of community satisfaction which are generalizable across populations drawn from divergent cultures, while others (Bardo & Dökmeci, forthcoming; Hughey & Bardo, 1987) argue that community satisfaction (CS) is a culturally bound construct which will vary in internal structure across populations. This paper extends the debate on the culturally-based instability of structural components of CS through analysis of the second-order factors obtained for the Community Satisfaction Scale (CSS) when it was administered in two Turkish sub-communities.

Previous applications of the CSS on samples drawn from communities in Great Britain and the United States have reported divergent first- and second-order factors (Bardo & Hughey, 1984, 1979; Bardo & Newton, 1976). Divergences in results were found to include both the number and interpretation of factors (when consistent methodologies were employed) and in the results of comparison of factor patterns though Procrustian analysis. Especially at the more theoretical second-order, differences in results between samples drawn from an American and a British community were striking. For the British sample, five relatively specific factors were found (Bardo & Newton, 1976) including: Social Interaction, Comparative Quality of Housing, Degree of Alienation from Community Institutions, Adequacy of Housing and Income, and Social and Physical Livability. For the American sample (Bardo & Hughey, 1979), second-order factors were much more diffuse and included an Acceptance-Alienation and two General Satisfaction dimensions.

This accumulation of research is beginning to provide detailed analyses of culturally-based variations in the conceptualization of affective community response. To date, however, analyses of the CS concept have generally been conducted in Western cultures and in developed societies. Very little is known about the patterning of the CS concept in non-Western or developing situations.

## METHODS

During the fall of 1987, two systematic samples (from random starts) of residents in two neighborhoods in Istanbul, Turkey, were drawn by urban planning students from the Technical University of Istanbul (see Bardo & Dökmeci, forthcoming, for details). The first sample was drawn from a peripheral planned sub-community ( $N = 289$ ), Ataköy, and the second ( $N = 266$ ) from a traditional Bosphorus village,

Arnavutköy, which is more centrally located. Residents of Ataköy tend to be more middle-class, while Arnavutköy is populated by traditional working-class, urban residents and new migrants from the Black Sea region. Very recently, Arnavutköy has begun to experience urban gentrification and displacement of the traditional population.

The CSS was administered to both samples and the total responses were factor analyzed and the factors were rotated to oblique simple structure. Six first-order factors were obtained including "Perceived Quality of Community Life", "Degree of Social Alienation", "Environmental Belonging and Quality", "Effectiveness of Local Political Institutions", "Excitement/Dullness", and "Care for Residences". The correlations of these factors were then subjected to second-order factor analysis.<sup>1</sup>

## RESULTS

Bartlett's Chi Square indicated that the correlation matrix contained significant systematic variance (Chi Square = 829.8,  $Z = 23.21$ ,  $p < .001$ ), so the variables were retained for factor analysis. Eigenvalues were calculated for the correlation matrix. The Scree Test (Cattell, 1968) indicated that two factors should be extracted and maintained for rotation. Both factors also met the Kaiser-Guttman criterion. An iterative principal axis solution was applied to the correlation matrix until communalities stabilized in the third decimal place. A Kaiser Varimax Orthogonal Rotation was applied to the factor matrix, followed by a Promax Oblique Rotation, resulting in an 33.3 percent .10 hyperplane. The resulting factor pattern is reproduced in Table 1. Items loading at .35 or greater were included in factor interpretation.

First Order Factors	I	II
Perceived Quality of Community Life	-.85	-.17
Degree of Social Alienation	-.66	-.05
Environmental Belonging and Quality	-.42	.29
Effectiveness of Local Political Institutions	-.52	.11
Excitement/Dullness	.10	1.03
Care for Residences	-.65	.06

Interpretation of the second-order factors was relatively simple for this data set. Five of the six first-order factors loaded on the first second-order factor; thus, it is a "General Satisfaction" factor. The second is a unitary factor on which loaded the "Excitement/Dullness" first-order factor, so it was reproduced at the second-order. Further, it should be noted that the high loading obtained by the fifth first-order factor is most probably associated with the moderately high negative correlation between the two second-order factors ( $r = -.48$ ). It is not uncommon to obtain loadings greater than unity when a variable loads positively on two negatively correlated factors.

## DISCUSSION

Results from this analysis of the more abstract second-order community satisfaction factors differ substantially from any results obtained in previous studies. First, the number of factors is comparatively limited when viewed in light of studies on American and British samples. Second, while it is not unusual to obtain a general factor at the second-order in studies based on the CSS, this is the first time such a result has been obtained in relative isolation. As was noted above, previous versions of the CSS were found to have general factors as well as specific factors.

Traditionally, many planners and architects have preferred to consider community attachment and satisfaction as generalizable concepts. And, recently social psychologists (Rigby & Vreugdenhil, 1986) have attempted to develop measures which are at once detailed and generalizable. When coupled with previous research, these Turkish results show that extreme variation in sub-structures can be identified cross-culturally. Clearly, CS should be treated as a socially derived psychological construct which varies in specific form across populations and within populations over time.

What is most theoretically interesting in the CS construct is that its form, domain, and structure are mutable to fit circumstances of the people being studied. People seem to organize their perceptions of their community and its various elements in relationship to their current life situation as well as their more enduring cultural traditions. If this is so, then there would be little theoretical utility in seeking a more generalized measure of community satisfaction or perception. Instead, a much more interesting scientific issue involves explication of the specific CS structures within the individual community context and development of prediction models to explain the variations across contexts.

#### FOOTNOTES

<sup>1</sup>It should be noted that the labels of first-order factors reflect their bipolarity. Thus "degree of social alienation" would vary (ideally) from a positive of "not alienated" to a negative of "very alienated." The loadings and details of the analysis of the first-order factors can be found in Bardo and Dökmeci (forthcoming).

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