## ON THE UNIDIMENSIONALITY OF SROLE'S FIVE-ITEM ANOMIA SCALE

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Probably the most widely used operational definition of anomie has been a five-item scale developed by Leo Srole. Curtis Miller and Edgar Butler report a number of investigations which have used various techniques to analyze the internal composition of the Srole items, attempting to determine how the items are interrelated, in what manner they may be called a scale, and of what use they may be. The investigators Miller and Butler, Arthur Neal and Salomon Rettig, and Elmer Struening and Arthur Richardson<sup>4</sup> factor analyzed the items to determine if all the items related to the same dimension. Miller and Butler utilized two different samples, one of which consisted of 981 household interviews from an area probability sample of the entire Los Angeles Standard Metropolitan Statistical Area and the other of 213 household interviews from a similar sample of a "surburban type" city thirty miles from the civic center of Los Angeles. Both samples were subjected to a Principal Axis Factor Analysis with squared multiple correlations in the diagonals serving as communalities. For the Los Angeles sample, there was only one factor whose latent root was non-negative. In the surburban sample a second factor was found; but since it accounted for only three per cent of the common variance and since the loadings on it were extremely small, it was ignored. The Neal and Rettig sample consisted of 1,094 subjects drawn randomly from the Columbus, Ohio, City Directory. The questionnaires were then mailed and, after four appeals, yielded a return of 57.4 per cent. The five Srole items were included with other items measuring powerlessness, normlessness, and status-orientation in a Principal Axis Factor Analysis. Nine of the resulting twenty-two factors were retained and rotated toward maximizing simple structure by the Varimax (orthogonal) criterion and also be the Oblimax (oblique) criterion. They found that the dimensions delineated by each were very similar and that the Srole items constituted a factor by each rotational criterion. Struening and Richardson administered questionnaires containing statements designed to measure alienation, anomia, and authoritarianism in individual and group sessions to inmates of "criminally insane" wards, long-term female mental patients, institutionalized juvenile delinquents, male patients ready for discharge, persons over seventy-five years of age, relatives of mental patients, college undergraduates, and adult education students. The responses from the sample of 422 informants were then correlated and principal component factors were extracted with unity as the diagonal value. Ten factors judged salient on the basis of magnitude of factor loadings were rotated to oblique simple structure by the Carrol's biquartimin procedure. The authors conclude that Srole's Anomia scale retained its unidimensional structure since all five items loaded heavily on one factor which they labeled "Alienation via Rejection." All Anomia factors extracted in the studies discussed above are presented in Table I.

The fourth entry in the table is the result of a factor analysis of the Srole Anomia scale included in a study of Anomie, Alienation, and Aspirations Among A Middle Class Control Sample conducted at The University of Kansas under the direction of M. Elaine Burgess. The Srole items comprised part of a questionnaire filled out by female heads of household during interviews with them. A random, stratified area sampling procedure was used in white, middle class areas of four Kansas communities, resulting in a sample of 200 informants. The Srole items were followed by five conventional agree-disagree response categories; Principal Axis Factor Analysis was applied to the items using unity as the diagonal value; and a single factor was extracted on which all items loaded substantially.

Lastly, Srole's items were included in a questionnaire designed to study sexual permissiveness and administered to students enrolled in beginning sociology courses at The University of Kansas during the Fall Semester, 1967. A population of 437 informants resulted; and again, Principal Axis Factor Analysis produced a single factor.

Six empirical studies have been presented in this paper which examined the Srole items by various techniques of factor analysis, some using orthogonal criteria for rotation and others using oblique. Correlation matrices composed only of Srole items were factored in some of the studies while others analyzed matrices containing both Srole items and other variables. A variety of samples were used in these studies as well as techniques for obtaining responses. Yet in each study the five Anomia items were found to load substantially on a single factor. The variation of the items loadings on this factor remind the researcher that each item also has its own specific sources of variation which may foster different configurations of these items on a factor in different populations. But the diversity of the research which consistently found the items loading together on a factor suggests a substantive basis for considering the items to be a unidimensional measure, thus laying the foundation for investigating the usefulness of the measure and attempting to specify the variable that is being measured.

## FOOTNOTES

- Srole, Leo, "Social Integration and Certain Corollaries: An Exploratory Study," American Sociological Review, 21 (December, 1956), pp. 709-716.
- 2. Miller, Curtis R. and Edgar W. Butler, "Anomia and Eunomia: A Methodological Evaluation of Srole's Anomia Scale," American Sociological Review, 31 (June, 1966), pp. 400-406.
- 3. Neal, Arthur G. and Salomon Rettig, "On the Multidimensionality of Alienation," American Sociological Review, 32 (February, 1967), pp. 54-64.

		FACTORS					
_1	ITEMS	Los Angeles	Los Angeles Suburb (Second Factor in Parentheses)	Columbus, Ohio (Oblique Rotation in Parentheses)	, Institutional Sample	Kansas Adult	Kansas Student
164 1.	In spite of what some people say, the lot of the average man is getting worse.	.62	.57 (.07)	.73 (.76)	.57	.69	.61
2.	Nowadays a person has to live pretty much for today and let tomorrow take care of itself.	.45	.40 (.15)	.57 (.53)	.59	.54	.55
3.	These days a person doesn't really know who he can count on.	.62	.60 (.12)	.67 (.69)	.64	.53	66
4.	There's little use writing to public officials because often they aren't interested in the problems of the average man.	.41	.48 (.07)	.49 (.43)	.54	.59	.54
5.	It's hardly fair to bring children into the world with the way things look for the future.	.55	.64 (.03)	.68 (.70)	.58	.71	.63

- 4. Struening, Elmer L. and Arthur H. Richardson, "A Factor Analytic Exploration of the Alienation, Anomia, and Authoritarian Domain," American Sociological Review, 30 (October, 1965), pp. 768-778.
- 5. The 1960 census lists the populations of the communities as: Topeka, 119,484; Emporia, 18,190; Burlington, 2,113; Gridley, 321; and Linwood, 261. Topeka and Linwood are located approximately 60 and 30 miles respectively from the center of the Kansas City Metropolitan Area. Emporia, Burlington, and Gridley are located in South-Central Kansas.