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Concepts of Success and Failure

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In this paper, we present a method for eliciting and describing indigenous concepts of success and failure. The domains of success and failure are first identified by obtaining from respondents a large number of statements that describe people in terms of perceived "success" and "failure." This pool of statements is systematically reduced and the final items are submitted to similarity judgments by additional respondents. Multidimensional scaling and cluster analysis techniques are used to analyze the similarity data. The final success and failure schemes are represented by three-dimensional models. The results are highly robust and reliable. Reliability is above .90. The methods for the collection and analysis of data are applied to four samples in the Los Angeles area. The results constitute a cultural description of the domains of success and failure that should be valid for comparable populations in the United States. The results have "external validity" since the methods are "respondent centered" and free from any

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researcher-imposed categories or structure. For this reason, the approach is suited for use in other cultures.

In every culture, community, and group, a cluster of attributes and properties is highly valued for a variety of historical, economic, and social reasons—the manifestation of particular interpersonal traits, the possession of specific material resources, and the holding of certain social positions. Individuals who inherit and achieve these socially valued attributes are awarded respect, standing, and recognition in their communities. They accrue power, formal and informal influence, and generally benefit from their superior positions in diverse ways, including longevity, comfort, and social structural opportunities for their offspring.

The issues surrounding the identification and understanding of the "successful" community member are critical to work in the different social sciences, and various concepts are used to describe the processes by which individuals negotiate and master their environments. They include "social adjustment," "adaptation," "achievement," and "social mobility." The cumulative effort at theory development and the accompanying empirical research is truly voluminous and literally defies synthesis and integration (LeVine, 1973). Diversity in ideological, conceptual, and methodological commitments of investigators is related to the variety of views and ambiguity of findings on the importance of different personal, interpersonal, and social attributes in identifying successful and unsuccessful community members, and on specifying the importance of different determinants of success and failure.

Notwithstanding, there are several generally accepted propositions that guide efforts to evaluate community members' competence in negotiating and mastering their milieu. First, success is culture bound. In a Mid-Western town it may be money earned and extent of participation in community activities; in a Costa Rican seacoast village, it may be skill at fishing and the ability to drink large quantities of rum without losing consciousness. Second, and implicit in the above illustration, is the view that success not only is culture specific but mulitdimensional. Even in communities in which ascribed attributes dominate social structural arrangements, more than a single cluster of attributes is taken into account in judging an individual's social worth and position. Third, success not only is culture bound but peer-relative in the sense that judgments of individuals have meaning only in terms of either relevant membership or reference groups. Thus, "successful" peasant farmers often are seen as "failures" in the eyes of their upper-class urban countrymen.

In all of the social sciences, the force of these propositions pervade efforts at inter- and intracultural research. Psychologists concerned with cognitive competence falter in their interpretations of the meaning of test score differences for social performance within different groups (Berry

and Dasen, 1974; Serpell, 1972); sociologists interested in social stratification are stymied by the problem of including and weighing different characteristics of social economic position in community studies (Treiman, 1975); and anthropologists are uneasy about generalizing across cultures about social structural arrangements related to social power (LeVine and Campbell, 1972).

It is pretentious to suggest that any single methodological innovation can solve the dilemmas involved in measuring the success and failure of individual community members. At the same time, there are critical macro- and micro-issues that require the application of a replicable methodology for assessing the relative social standing of community members in relevant terms (Freeman, 1972). A particular impetus is the widespread employment of social, economic, and medical interventions on populations that differ substantially in social and cultural backgrounds. Repeated use of the same outcome measures raises serious questions of cultural bias, as in the case of cognitive measures for early child programs (Klein, Freeman, Spring, Nerlove, and Yarbrough, 1976). Across the human resource field, both intra- and internationally, similar action programs are attempted with the expectation that they can impact on various dimensions of success and competence among populations with a wide range of cultural and economic characteristics. These include, for example, programs of early child stimulation, adult education, child and adult nutrition, preventive medical care, and rural development. It is essential that there be procedures for indigenously based evaluations; one wishes to know if what works in the plains of West Africa also is useful in the hills of Central America in culturally relevant terms, and if what benefits people in Watts also is valuable in the South Bronx, again in culturally relevant terms.

In this paper, we report on methodological efforts to identify and measure attributes of success and failure using data on U.S. adults. The same methodology is being applied to a Guatemalan group. The procedures described, we believe, are particularly relevant for large-scale evaluation studies, thus responding to the often-made criticisms of the lack of relevance of outcome measures for judging the worth of various intervention programs.

Within a relativistic view, there are competing criteria of social success. We are concerned with characteristics of persons that reflect the consensual conceptions of success by community members within the individual's social life-space. We begin by acknowledging the uniqueness of cultural values and their importance in shaping the configuration of attributes that measure social success. We aspire to develop a general procedure for measuring with sensitivity the attributes on which groups judge their peers with respect to success in negotiating their environments.

From our perspective, the measurement of social success requires that the following conditions are met:

1. That the range of attributes that indigenously defines successful and unsuccessful group members be identified and reported by group members.
2. That the attributes be synthesized into clusters or dimensions so that the universe of attributes can be economically represented and, for purposes of efficient measurement, be sampled.
3. That the attributes can be identified reliably and validly in ways that allow the measurement of individual differences within large study groups.

In most general terms, the effort requires the following series of steps:

1. Eliciting from a group of informants descriptions of human traits that community members consensually acknowledge reflect "social success" or "social failure."
2. Describing the conceptual space that summarizes this set of traits.
3. Developing a survey instrument that measures a representative set of these traits.
4. Demonstrating external validity by obtaining peer agreement on the ordering of persons from the survey data.

We turn now to the empirical study carried out in Los Angeles. Since the methods are new and are intended for use in a variety of contexts, we present the analysis and description of the study in more detail than if the substantive results were the primary interest.

The Empirical Study

Eliciting Characteristics and Features of Success and Failure

The first step in the research was to elicit a large body of statements from respondents that represent their notion of characteristics and features associated with success and failure. The aim was to design a relatively unstructured interview that would elicit beliefs about success and failure; one that would not circumscribe or predetermine the responses received. In a pretest, we had three experienced survey interviewers question a sample of 30 adults (15 females, 15 males) randomly selected from upper-, middle-, and lower-class Los Angeles neighborhoods (determined from 1970 census figures on the percentage of "white-collar" residents). Interviews were conducted in homes.

One-half of the respondents were asked to name people they knew who they considered to be successes or failures. They were then asked to list the attributes of these people. Verbatim responses were recorded by the interviewers. The other one-half of the respondents were asked to name

several friends, using no *a priori* criteria, and were interviewed about the success and failure attributes of these acquaintances. Pretest results assured us that informants were able to describe the attributes of success and failure easily and articulately. The concept of social success was readily understood. However, when asked to name persons *in advance* using the criterion of success or failure, much more extreme (less normative) descriptors ("He regularly appears on television.") were elicited than when friends were discussed. Men and women tended to discuss same-sex persons. Because of the possibility of sex differences in social attributes, we arbitrarily decided to obtain attributes only from male respondents.

On the basis of the pretest, a second interview was designed in which male respondents were asked to list five friends and then to characterize each of these friends in terms of the ways in which each was successful and also the ways in which each might be considered a failure. Respondents were encouraged to use their own definitions of success and failure. Again, responses were recorded verbatim. The respondents were 20 "working-class" men (defined as coming from neighborhoods in Los Angeles County having fewer than 50 percent "white collar" residents).

Survey interviewers collected 515 separate statements containing characteristics and features of people in terms of success and failure. Since the analysis depends upon collecting judgments of similarity between statements, the list of 515 statements needed to be shortened to a manageable size and standardized.

The criteria for standardizing statements were as follows:

1. Correct grammar and speech;
2. Autonomous statements, so that antecedents from other statements were repeated if referenced in a new statement (e.g., the sentence "He works hard *at it*," rewritten becomes ". . . *at his job*.");
3. Present tense statements;
4. Personal references to respondents deleted;
5. "Target" pronouns and references made masculine;
6. Specific words and phrases avoided where possible. A generic word or phrase is substituted for the specific when the intent of the statement is not destroyed—when such specificity serves no special service (e.g., we would *not* substitute "expensive car" for "Rolls Royce").

The criteria for reducing the number of statements were as follows:

1. Redundant sentences were deleted.
2. References to capacities, characteristics and events alien to the target population, urban adult U.S. males, such as age-related

achievements, handicaps, and references to foreign and minority achievement barriers, were deleted.

3. "Ascribed" characteristics were deleted in favor of "achieved" characteristics. In this way, only attributes and properties over which individuals have some control were retained.

On the basis of these criteria, we selected 120 statements representative of the range of statements on success and failure.

Describing the Conceptual Space

In order to describe the structure among the statements, we applied methods of multidimensional scaling and cluster analysis. Multidimensional scaling is a tool for quantitatively indexing similarity in judgments. The various techniques available are discussed in Kruskal and Wish (1978). In their introduction, they describe the basic function of multidimensional scaling as follows:

> Suppose you are given a map showing the locations of several cities in the United States, and are asked to construct a table of distances between these cities . . . . It is a simple matter to fill in any entry in the table by measuring the distance between the cities with a ruler, and converting the ruler distance into the real distance by using the scale of the map (e.g., one cm. = 30 kilometers).
>
> Now consider the reverse problem, where you are given the table of distances between the cities, and are asked to produce the map. Geometric procedures are available for this purpose, but considerably more effort would be required. In essence, multidimensional scaling, or MDS, is a method for solving this reverse problem. (Kruskal and Wish, 1978, p. 7.)

Our aim is to represent the interrelationships among the success and failure statements in Euclidean space. Within this space, statements judged similar appear close together while dissimilar statements appear further apart. After determining the appropriate number of dimensions in which to represent this data, we attempted to interpret these dimensions in terms of substantive content.

A complementary method of analysis examines the clustering of the statements and represents their interrelationships in terms of a "tree structure" in which closely related items occur in the same branch with unrelated items occurring in more remote branches (Johnson, 1967).

Because of the number of items, we collected judged-similarity data through the use of a pile-sort task. Each statement was typed on a card and the respondents were handed randomly ordered stacks of cards. Stack preparation was done by computer. They were asked to read through the stack of cards and then to sort them into piles, so that items in the same pile were more similar to each other than items in the other piles. The interviewer did not define the meaning of similarity and respondents used their own definitions.

The task was administered to four samples of respondents. In the first

three samples, each respondent was given a stack of cards containing all 120 statements of both success and failure items. These three samples may be viewed as pretests, although they are of critical importance in providing reliability and replication checks. On the basis of the results of the first three samples, and for reasons to be outlined below, the procedures for the fourth sample were altered in two ways.

First, each respondent received two stacks of 50 cards rather than a single stack of 120 cards. One stack consisted of success statements and one of failure statements. Distinction between success and failure along an evaluative first dimension was empirically determined from multidimensional scaling analyses of the prior three samples. Second, respondents were asked to sort the items into no less than five and no more than nine piles. In the first three samples, no limit was placed on the number of piles produced by respondents. The restriction was placed on the fourth sample because the wide variance in number of piles produced led us to worry about reliability and replicability in the analysis of data.

The first two samples were drawn from UCLA undergraduates taking classes in psychology. Samples three and four were selected to represent "working-class" neighborhoods in Los Angeles County. Census tracts and blocks within census tracts were randomly selected with the restriction that they contain no more than 40% "white-collar" heads of households. Each sample consisted of 30 adult males and 30 adult females. The only educational requirement was the ability to read English.

All of the interpretations concerning the structure of the domains of success and failure are based on the fourth sample. Reliability is high in the first three samples, as will be seen, and the four samples are indistinguishable in conceptual space. Data from the first three samples, however, are used only for supporting analyses.

In the final sample, we collected separate data on 50 success statements and 50 failure statements, rather than on the single total set of 120 statements. A 120×120 matrix surpassed the limits of the KYST program used for two-mode multidimensional scaling analysis (Kruskal, Young, and Seery, 1973). Also, a critical problem arose because the distinction between "good" and "bad" statements was so strong that it produced an evaluative multidimensional scaling dimension that obscured substantive distinctions within either the success or failure statements. Therefore, 20 neutral items on this evaluative dimension were eliminated. On the basis of the first three samples, we chose the 50 success and 50 failure items which were polar on the evaluative dimension. By separating the success and failure items, we were also able to obtain clearer substantive patterns from the analysis.

The final items are shown in Tables 1 and 2. All further analysis will be reported as if the four samples had received the two separate stacks of 50 statements each. Replicability was checked against the first three samples

TABLE 1
Success Statements

1. He's ambitious.
2. Everything works out for him and always for the good.
3. He's stable. Always there when he's supposed to be.
4. He has personality.
5. He's good-looking.
6. He is attractive to women.
7. He's intelligent.
8. He has an independent income.
9. Financially he has no problems. He has plenty of money to do the things he would like to do.
10. He has a nice home life.
11. He's a self-made man who made it.
12. He is witty.
13. He's got a good sense of humor.
14. He is dynamic.
15. He is alert.
16. He has a pleasing appearance.
17. He understands other people's problems and is willing to listen to them.
18. He is friendly.
19. He has the ability to get along with others.
20. He has the ability to figure out problems.
21. He is well dressed without being gaudy.
22. He's working at what he likes.
23. He doesn't have to worry about losing his job.
24. He's a hard worker.
25. He has good ideas.
26. He has a lot of patience.
27. He's at the top of his field.
28. He has lots of hobbies.
29. He's a very happy person.
30. He has a well-rounded life.
31. He can carry on a conversation on most subjects better than most.
32. He is an enthusiastic person. He's always eager to do things.
33. He's a very religious person.
34. He has a healthy state of mind.
35. He has a good attitude toward people.
36. He learns quickly.
37. He pays great attention to detail.
38. He has a lot of determination.
39. He will bend over backwards to help a friend out.
40. If he becomes sick, he will fight it off. He refuses to give in to it.
41. He has the ability to like friends.
42. He has a quick wit.
43. He would help you if you needed help.
44. He is considerate of other people.
45. He goes out of his way to do things for other people.
46. He is honest with himself and everyone around him.
47. He is willing to give and not expect something in return.
48. He respects other people's beliefs. He doesn't expect other people to believe the way he does.
49. He lives up to his beliefs.
50. He respects people by helping them.

TABLE 2
Failure Statements

1. He drinks too much.
2. He seems to want things for free.
3. He feels he has to cheat to get ahead.
4. He has a "don't give a damn" attitude.
5. He's become lazy. He doesn't like to work.
6. He wants something for nothing.
7. He is moody.
8. A lot of times he yells before he should.
9. He doesn't think before he makes a decision.
10. He has a mean streak in him a mile long.
11. He's very loose morally.
12. He is not forceful enough in some things.
13. He's lacking in self-discipline.
14. He doesn't remember very well.
15. He's pessimistic.
16. He'll not try something. He'll put it off without even trying it because he's afraid he won't do a good job.
17. He smokes.
18. He mumbles when he talks.
19. He over-maneuvers. He gets what he wants by maneuvering other people.
20. He has trouble enjoying things sometimes.
21. He's afflicted with a lack of true goals.
22. He's slow at doing things.
23. He thinks that not too many people like him.
24. He usually does things his way.
25. He has a very bad temper.
26. You have to know him to understand him. He isn't confident with people he hasn't known for long.
27. He has a lack of education.
28. He accepts no responsibility.
29. He puts things off.
30. He puts on a hard front.
31. He hasn't learned how to handle people older than himself.
32. He acts like a dictator.
33. If someone flatters him, he can be sold anything.
34. He feels a bit insecure.
35. He doesn't feel he has any good friends.
36. He is always moving from place to place. He can't seem to sink his roots.
37. He is his own stumbling block because he wastes time.
38. He is too quick to form an opinion.
39. He is prone to use drugs.
40. He is always getting in trouble.
41. He is a loser.
42. He can't accept rejection of any kind. He is too sensitive.
43. He doesn't like human nature.
44. He has difficulty expressing himself.
45. He drinks a lot. He gets drunk and has to go home from work.
46. He never accomplishes all the things he plans.
47. He lacks organization.
48. He's a little insecure of himself in doing mechanical things.
49. He has the ability but not the ambition.
50. He tries to seduce most of the women he sees.

TABLE 3
Stress Figures for KYST Success Solutions for the Four Samples in Dimensions 1 to 5

Number of dimensions	Sample[a]			
	1	2	3	4
5	.075	.063	.070	.077
4	.092	.078	.085	.092
3	.118	.101	.109	.125
2	.166	.148	.157	.193
1	.292	.259	.310	.368

[a] Each of the four samples contains 60 respondents.

by selecting each appropriate set of 50 cards from the stack of 120 and treating it as if it were the only stack of cards sorted.

The first question that must be answered in the analysis of conceptual structure is the appropriate number of dimensions to be used (Shepard, 1974; Kruskal and Wish, 1978). We used four criteria: (1) Goodness of fit in successively higher dimensions; (2) Interpretability; (3) Ease of use; and (4) Stability. The goodness of fit measure is called stress. We utilize stress formula 1 from KYST (Kruskal, Young, and Seery, 1973). Stress is the square root of a normalized "residual sum of squares" (Kruskal and Wish, 1978, p. 49). It may be thought of as the amount of unexplained variance between the fit of the original input data and the predicted spatial relationships. Tables 3 and 4 present stress values for success and failure domains.

The three-dimensional solution of success statements in sample four "accounts for" 6.8% more of the variance than the two-dimensional solution (Table 3, sample four, line 3, .125, subtracted from line 2, .193). In the nature of the case, one can always account for more of the data in the higher dimensions since there are more parameters to be fit. Note also

TABLE 4
Stress Figures for KYST Failure Solutions for the Four Samples in Dimensions 1 to 5

Number of dimensions	Sample[a]			
	1	2	3	4
5	.076	.079	.089	.094
4	.095	.100	.113	.115
3	.120	.124	.148	.151
2	.181	.167	.204	.231
1	.331	.279	.328	.416

[a] Each of the four samples contains 60 respondents.

that the amount of variance accounted for in the four-dimensional solution (Table 3, sample four) increases somewhat less. Here, the improvement over the three-dimensional solution is only 3.3%. Thus, we selected a three-dimensional solution both for success and failure statements.

In terms of the criterion of interpretability, we found that the three-dimensional solutions produced interpretable results while higher dimensional solutions led to ambiguous or inconsistent interpretations. For the ease of use criterion, the three-dimensional solution was most appropriate.

In terms of stability, we ran a variety of studies that enabled us to determine whether or not the dimension in the solutions of sample four were the same as the solutions in samples one, two, and three. Complete stability of solutions among all four samples occurred in three dimensions but not in higher dimension solutions. All further discussion will be in terms of the three-dimensional solutions.

An important issue is the reliability of the results. There are two different ways to view the general reliability question. One is to pose the question at a global level of overall similarity among the four analyses. A second more revealing approach is to compare the solutions dimension by dimension.

Two INDSCAL analyses were performed for analyzing overall group similarity (Chang and Carroll, 1974). In one, the four three-dimensional KYST solutions for the success statements were analyzed and in the other, the four three-dimensional KYST solutions for the failure statements were analyzed.

INDSCAL provides a measure called "variance accounted for," i.e., the fit between the input data and the model provided. In the case of the four sets of success data, the variance accounted for was .85. For the failure samples, the variance accounted for was .81. Thus, in terms of overall similarity, the values indicate a high degree of agreement.

A more detailed way of comparing the four analyses is on the individual dimensions. We used PROFIT, a computer program for "property fitting" by optimizing linear correlations among dimensions (Chang and Carroll, 1968). Taking sample four as the standard, we asked whether or not the other samples had the same dimensions. PROFIT does this by taking the coordinates for dimension 1, sample one, for example and fitting them to the standard solution, sample four. The solution indicates (a) the correlation between the coordinates taken as a vector and the best fitting vector in the standard, and (b) the direction of that vector. Table 5 shows the correlation between the dimensions of the final sample and each of the corresponding dimensions of the first three samples for success. For example, it shows that dimension 1 in sample one has a correlation of .95 with dimension 1 in sample four. Table 6 shows the cosines of these fitted vectors in the space of the standard. Not only do all four

TABLE 5
Correlation between the Dimensions of Sample Four and Each of the Corresponding Dimensions of the First Three Samples for Success

	Sample[a]		
Dimension	1	2	3
1	.95	.97	.85
2	.89	.86	.87
3	.65	.65	.71

[a] Each of the four samples contains 60 respondents.

samples share the dimensions but, in all samples, these dimensions are ordered the same.

As shown in Table 5, the correlations for dimension 1 are generally better than for dimension 2, which in turn are generally better than for dimension 3. Note that all these solutions were based on rotated KYST solutions. The implication is that the solution obtained in sample four is completely replicated in each of the previous three samples. In Tables 7 and 8, we provide the same data for the failure statements. The correlations are a little lower than those for the domain of success, but all remain high and significant. The generally lower correlations of sample three, seen in Tables 5 and 7, are explained by our aforementioned failure to control the number of sorted similar piles each respondent could produce.

TABLE 6
Direction of Fitted Vectors in the Normalized Standard (Sample 4) Space for Success[a]

	Dimension		
	1	2	3
Sample 1			
Dimension 1	**.96**	−.27	−.05
Dimension 2	.18	**.98**	.07
Dimension 3	.01	−.13	**.99**
Sample 2			
Dimension 1	**.98**	.14	−.07
Dimension 2	−.04	**.99**	.07
Dimension 3	.07	−.38	**.92**
Sample 3			
Dimension 1	**.97**	−.06	−.25
Dimension 2	−.01	**.98**	−.20
Dimension 3	−.11	−.18	**.98**

[a] Each of the four samples contains 60 respondents.

TABLE 7
Correlation Between the Dimensions of Sample Four and Each of the Corresponding Dimensions of The First Three Samples for Failure

	Sample[a]		
Dimension	1	2	3
1	.93	.94	.89
2	.88	.91	.73
3	.65	.60	.39

[a] Each of the three samples contains 60 respondents.

Many individuals in this sample of working-class adults produced as few as two final piles. This resulted in slightly lower reliability.

Interpretation

The final stage of the multidimensional scaling analysis involved the interpretation of the results. The interrelations of the statements may be represented in two different forms. First in three-dimensional Euclidean space, and second as clusters of a taxonomic "tree structure." Interpretation involves intuition. There is no automatic recipe. Figures 1 and 2 present the three-dimensional Euclidean solutions, two dimensions at a time, for the success domain. Figures 3 and 4 present the comparable pictures for the failure domain. Representations of the two domains in terms of tree structures are presented in Figs. 5 and 6. Johnson's diameter

TABLE 8
Direction of the Fitted Vector in the Normalized Standard (Sample 4) Space for Failure[a]

	Dimension		
	1	2	3
Sample 1			
Dimension 1	**.94**	−.34	.08
Dimension 2	.31	**.95**	−.09
Dimension 3	.11	−.05	**−.99**
Sample 2			
Dimension 1	**.94**	−.35	−.05
Dimension 2	−.29	**.92**	.26
Dimension 3	−.03	−.46	**−.89**
Sample 3			
Dimension 1	**.91**	−.37	.21
Dimension 2	.46	**.87**	−.19
Dimension 3	−.25	.10	**.96**

[a] Each of the three samples contains 60 respondents.

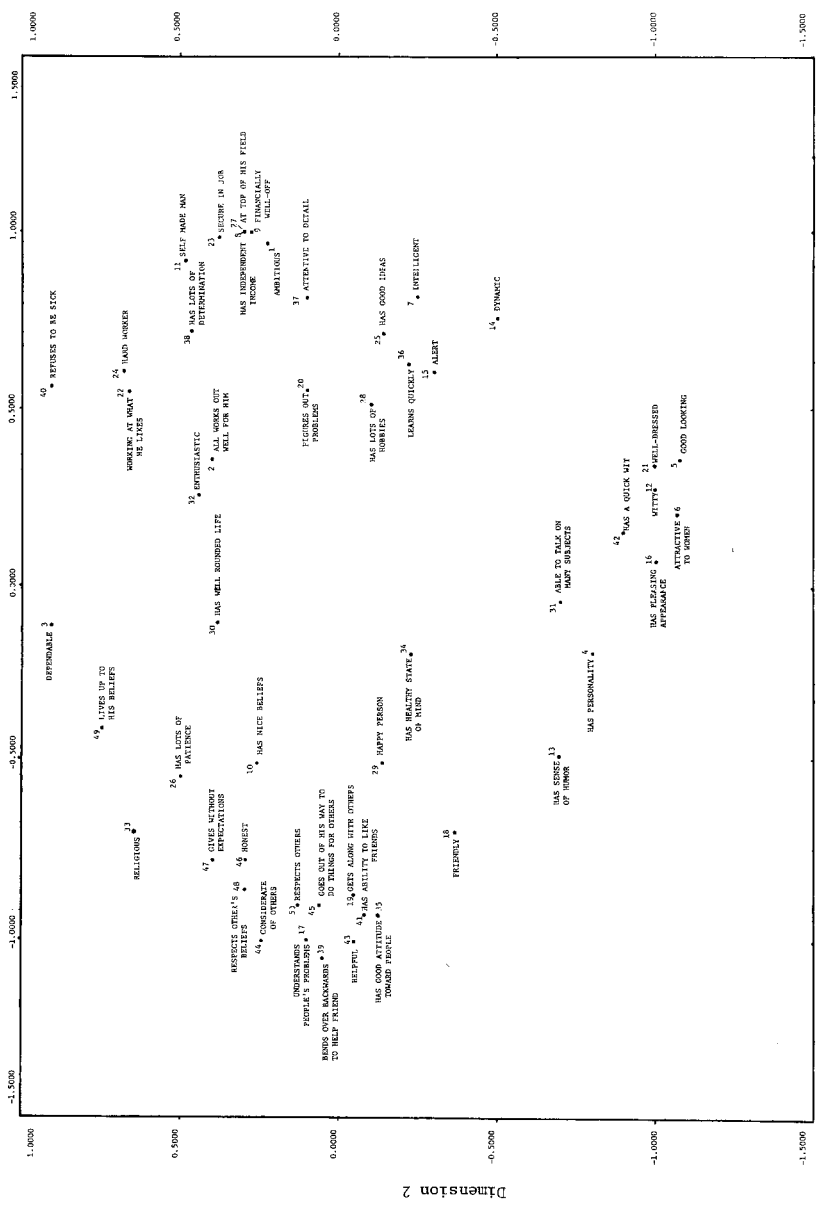

FIG. 1. Spatial configuration of the success statements, dimension 1 by dimension 2, Sample Four ($N = 60$).

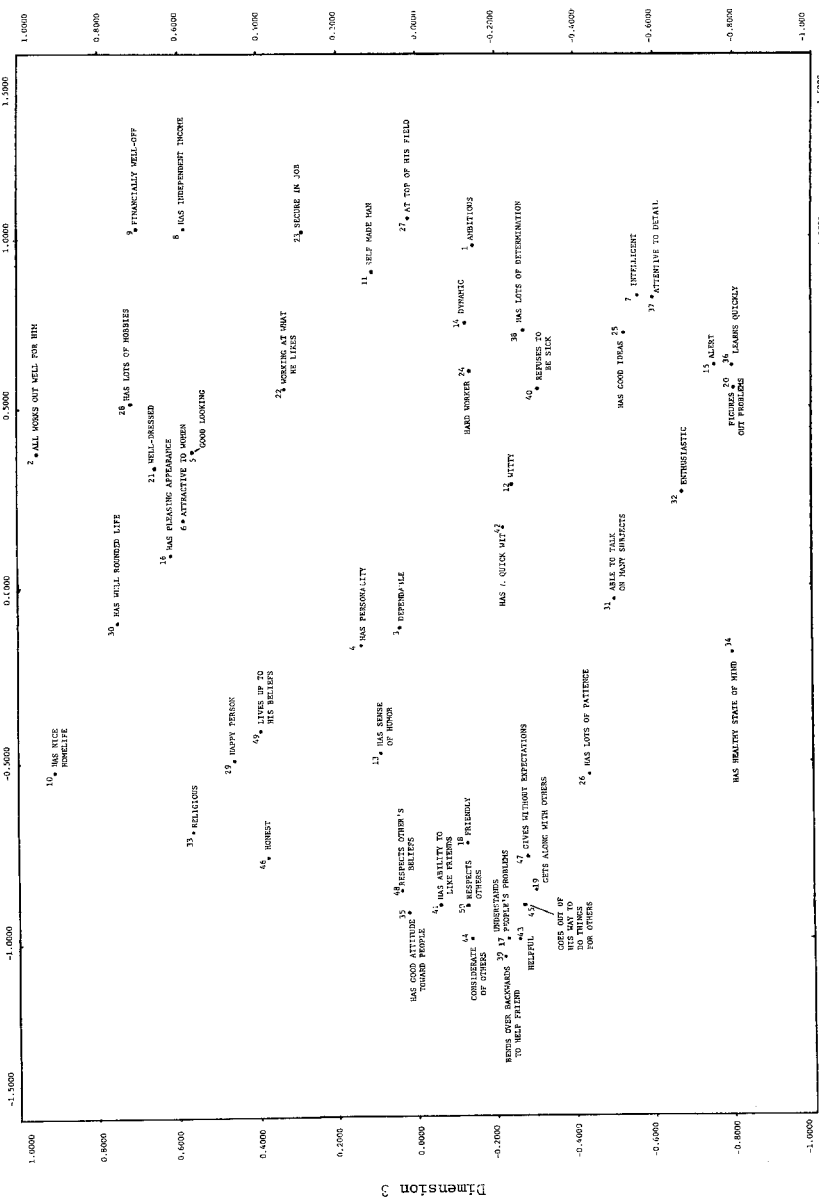

FIG. 2. Spatial configuration of the success statements, dimension 1 by dimension 3, Sample Four ($N = 60$).

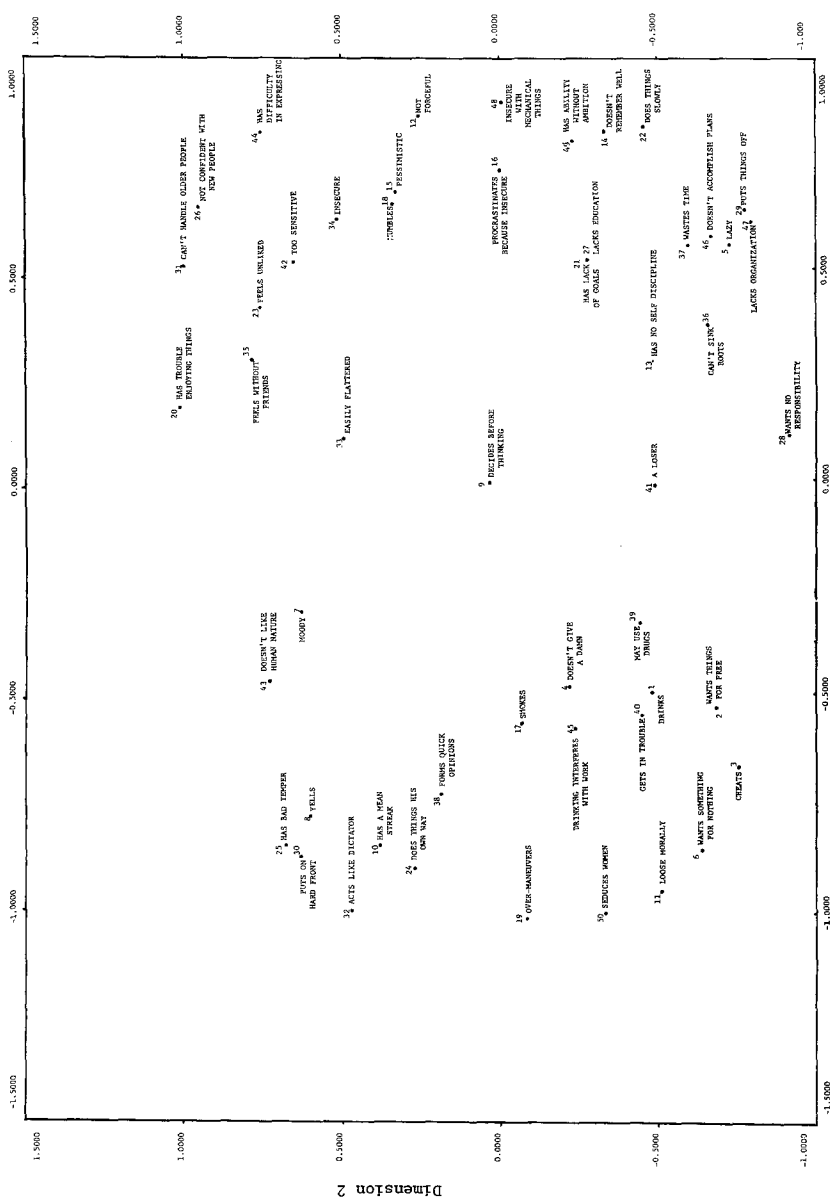

FIG. 3. Spatial configuration of the failure statements, dimension 1 by dimension 2, Sample Four ($N = 60$).

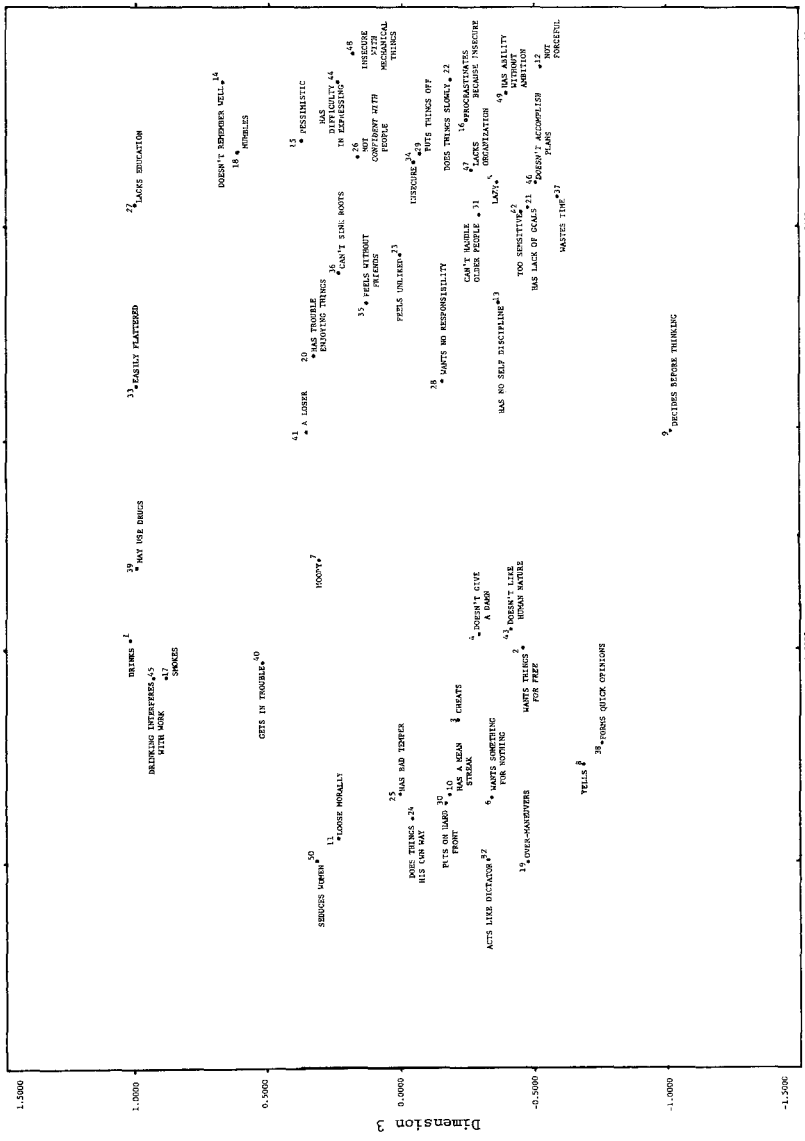

FIG. 4. Spatial configuration of the failure statements, dimension 1 by dimension 3, Sample Four ($N = 60$).

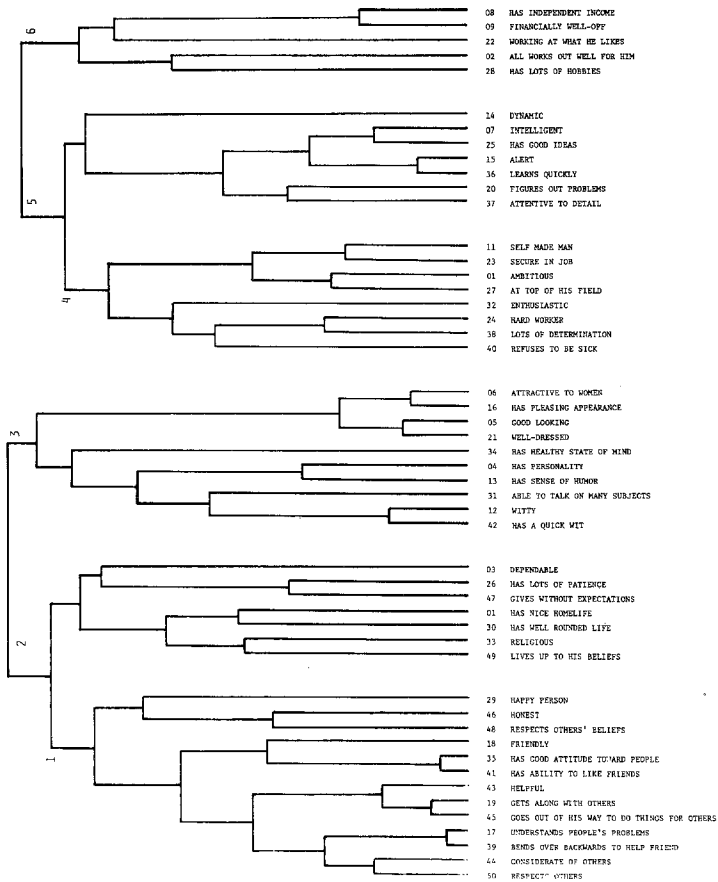

FIG. 5. Hierarchical clustering of the success statements.

method was used on the three-dimensional KYST distances to obtain these figures (Johnson, 1967).

To aid in the interpretation of the dimensions, we have extracted the seven extreme statements from each end of each KYST dimension. These statements for the success domain are presented in Table 9 and for the failure statements in Table 10.

Before turning to the substantive interpretation of the two models, the dimensional model and the clusters model, let us first point out a few of the characteristics of each model and their similarities and differences. It needs to be stressed that the two methods are simply alternative ways of representing the same data. Each provides additional perspective and insight into the whole picture.

Multidimensional scaling represents the "nearness" or "farness" of the items from each other in Euclidean space. In this representation, the similarity is a direct function of how close the items are in ordinary

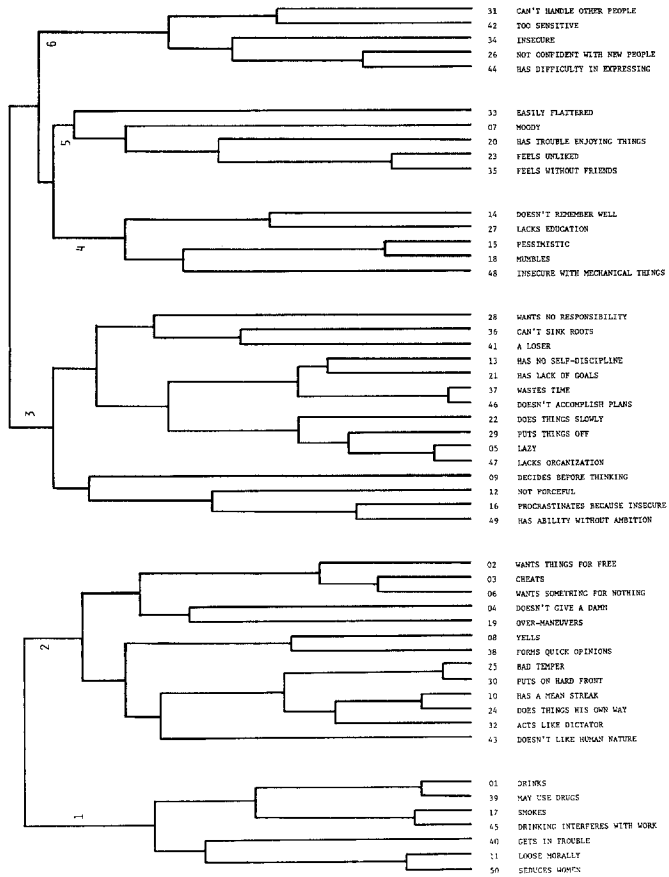

FIG. 6. Hierarchical clustering of the failure statements.

distance. Thus, for example, in Fig. 1, the items "attractive" and "good-looking" are found close to each other at the bottom of the figure. This indicates that they were judged to be very similar items by the respondents. The degree of their similarity compared with other items is represented by the relative distance involved. For example, the item "fights off sickness" at the top of the figure is very distant from "attractive" and "good-looking."

Since a dimension serves to distinguish among all items, the qualities or characteristics it represents are necessarily very abstract or general. In interpreting the dimensions, it is not always possible to relate directly the relevance of every item to every dimension. We have observed empirically that it is frequently easier to interpret one extreme of a dimension than the other. It is as if some dimensions do not have polar opposites but rather are characterized by the presence or the saturation of a quality at one end while the other end is rather ill defined. In any event, the labels

TABLE 9 Polar Ends of the Three Success Dimensions[a]

Dimension	Statement Number		Position along dimension	Statement Number		Position along dimension
1	27	He's at the top of his field.	1	39	He will bend over backwards to help a friend out.	50
	9	Financially he has no problems. He has plenty of money to do things he would like to do.	2	44	He is considerate of other people.	49
	8	He has an independent income.	3	17	He understands other people's problems and is willing to listen to them.	48
	23	He doesn't have to worry about losing his job.	4	43	He would help you if you needed help.	47
	1	He's ambitious.	5	35	He has a good attitude toward people.	46
	11	He's a self-made man who has made it.	6	41	He has the ability to like friends.	45
	7	He's intelligent.	7	50	He respects people by helping them.	44
2	5	He's good looking.	1	40	If he becomes sick, he will fight it off. He refuses to give in to it.	50
	6	He is attractive to women.	2	3	He's stable. Always there when he's supposed to be.	49
	16	He has a pleasing appearance.	3	49	He lives up to his beliefs.	48
	21	He is well dressed without being gaudy.	4	24	He's a hard worker.	47
	12	He is witty.	5	22	He's working at what he likes.	46
	42	He has a quick wit.	6	33	He's a very religious person.	45
	4	He has personality.	7	26	He has a lot of patience.	44
3	20	He has the ability to figure out problems.	1	2	Everything works out for him and always for the good.	50
	36	He learns quickly.	2	10	He has a nice homelife.	49
	34	He has a healthy state of mind.	3	30	He has a well-rounded life.	48
	15	He is alert.	4	9	Financially he has no problems. He has plenty of money to do the things he would like to do.	47
	32	He is an enthusiastic person. He's always eager to do things.	5	28	He has lots of hobbies.	46
	37	He pays great attention to detail.	6	21	He is well dressed without being gaudy.	45
	7	He's intelligent.	7	16	He has a pleasing appearance.	44

[a] These results are derived from the data of sample four, $N = 60$.

TABLE 10
Polar Ends of the Three Failure Dimensions[a]

Dimension	Statement Number		Position along dimension	Statement Number		Position along dimension
1	19	He over-maneuvers. He gets what he wants by maneuvering other people.	1	48	He's a little insecure of himself in doing mechanical things.	50
	32	He acts like a dictator.	2	12	He is not forceful enough in some things.	49
	50	He tries to seduce most of the women he sees.	3	44	He has difficulty expressing himself.	48
	11	He's very loose morally.	4	22	He's slow at doing things.	47
	24	He usually does things his way.	5	14	He doesn't remember very well.	46
	30	He puts on a hard front.	6	49	He has the ability but not the ambition.	45
	6	He wants something for nothing.	7	16	He'll not try something. He'll put it off without even trying it because he's afraid he won't do a good job.	44
2	28	He accepts no responsibility.	1	31	He hasn't learned how to handle people older than himself.	50
	47	He lacks organization.	2	20	He has trouble enjoying things sometimes.	49
	29	He puts things off.	3	26	You have to know him to understand him. He isn't confident with people he hasn't known for long.	48
	3	He feels he has to cheat to get ahead.	4	35	He doesn't feel he has any good friends.	47
	5	He's become lazy. He doesn't like to work.	5	44	He has difficulty expressing himself.	46
	2	He seems to want things for free.	6	23	He thinks that not too many people like him.	45
	46	He never accomplishes all the things he plans.	7	43	He doesn't like human nature.	44
3	9	He doesn't think before he makes a decision.	1	33	If someone flatters him, he can be sold anything.	50
	38	He is too quick to form an opinion.	2	1	He drinks too much.	49
	8	A lot of times he yells before he should.	3	27	He has a lack of education.	48
	37	He is his own stumbling block because he wastes time.	4	39	He is prone to use drugs.	47
	12	He is not forceful enough in some things.	5	45	He drinks a lot. He gets drunk and has to go home from work.	46
	46	He never accomplishes all the things he plans.	6.5	17	He smokes.	45
	19	He over-maneuvers. He gets what he wants by maneuvering other people.	6.5	14	He doesn't remember very well.	44

only represent a preliminary attempt to interpret observed regularities and could be modified without changing our overall interpretation.

The alternative and complementary method of representation is to interpret items in terms of a hierarchical cluster diagram. The tree structure segments the items into distinct clusters at various levels of interrelationship. The similar clusters frequently are composed of items that are similar in content and, hence, the labels we apply to them in our interpretation are quite specific.

In labeling both the dimensions and clusters, we should keep in mind that the labels are just reminders of the general content for meaning of the dimension or cluster. They are not meant to be interpreted literally or in a narrow sense, but rather provide means of referring to the overall meaning of the dimension or cluster. The reader may want to provide somewhat different labels. We include the data for such alternative interpretations.

The first dimension in the success domain distinguishes between interpersonal characteristics (see Table 9 for the extreme items on each dimension) and personal characteristics of success, mostly economic. In order to obtain a better feel for the "meaning" of this dimension, refer to Fig. 1. Note that the seven interpersonal items occur at the extreme left-hand part of the picture and that the items referring to personal economic characteristics occur on the extreme right-hand part of the picture. Items occurring toward the center of the picture may be in between or neutral in terms of the quality represented by the dimension.

The second dimension in the success domain involves, at one end, a set of items that contain socially valued traits, such as "pleasing appearance," "quick-wit," and "personality." The items at the other end of the dimension involve more traditional inner-directed traits or virtues such as "he lives up to his beliefs," "he is a hard worker," and "he is a very religious person." This dimension revolves around the distinction between "personal integrity" and "externally directed" characteristics. The third dimension in the success domain distinguishes characteristics related to intellectual or cognitive competence from symbols of personal adjustment.

An alternative way of labeling this dimension is "cognitive ability" vs "life-adjustment." The latter end of the dimension implies an ability to cope with life's problems in socially sanctioned ways.

The first dimension in the failure domain (see Table 10) may be interpreted as involving a forceful or active vs passive distinction. The first three items on the active dimension are "he over-maneuvers," "he gets what he wants by maneuvering other people," and "he acts like a dictator." These all involve a forceful component as compared to the three most extreme items on the passive end, which are "he is a little insecure

of himself in doing mechanical things," "he is not forceful enough in some things," and "he has difficulty expressing himself."

The second dimension in the failure domain involves the differences between interpersonal skills and personal traits. This dimension seems to have a close parallel to the first dimension in the success domain.

Dimension three in the failure domain parallels, to a small extent, dimension two, externally directed bad habits or attitudes vs inner-directed traits, in the success domain. It involves bad habits that affect others such as smoking and drinking as opposed to inner failings such as "he doesn't think before he makes a decision," "he is too quick to form an opinion," and "a lot of times he yells before he should."

We turn now to the interpretation of the cluster data as shown in the tree structures in Figs. 5 and 6. In both Fig. 5, which represents the items in the success domain, and in Fig. 6, which represents the items in the failure domain, we have distinguished six clusters.

In the success domain, cluster one contains interpersonal traits, cluster two internal characteristics, cluster three appearance, cluster four motivational items, cluster five items related to intelligence, and cluster six economic symbols. In the failure domain, cluster one contains addictions and bad habits, cluster two contains egoistic traits, cluster three includes motivation items (such as lazy, no self-discipline, and wastes time), cluster four items on lack of education, cluster five items that might be labeled insecurities, and cluster six interpersonal items.

Overall there is some but not complete correspondence between the success and failure domains. Two of the three dimensions have close parallels in both domains, and four of the six clusters have close parallels in both domains. It is also interesting to note that since the clusters by definition occupy concentrated small areas in the special domain, they can frequently be seen to have a characterization in terms of the substantively more general dimensions.

SUMMARY AND PROSPECTS

In this paper, we have outlined a method for eliciting statements relevant to success and failure and analytically determining the semantic space in which these exist. The results are "culture free" in the sense that they represent the cognitive scheme of the respondents of a given culture rather than preconceived notions of the investigator.

We are currently undertaking research in Guatemala to replicate the present study from a methods standpoint. Since the items being elicited will necessarily vary from those of the United States, it will not be possible to map exactly the results of the Guatemala study item by item on the results presented here. The method makes it possible, however, to compare the generalized content of clusters and the substantive interpre-

tation of dimensions. That is, we should be able to determine whether or not the dimensions identified in Guatemala correspond to the dimensions represented here. We should be able to see also whether or not the Guatemala items cluster into the same general content areas. Thus, one of the future uses of the current methods should be the facilitation of comparative research.

Another extension of our approach is to measure, in large study groups, individual achievement in terms of a culturally relevant definition of social success. We are currently engaged in research in the Los Angeles area in which we are constructing a survey research instrument that measures behavior related to each of the clusters discovered in this study. From this instrument, we hope to be able to develop a precise set of measures that will distinguish the social competence of individuals in the content areas represented by the clusters.

Such a profile of individual differences along general dimensions of perceived social competence within a given community should prove a worthwhile supplement to traditional social indicators. Our approach also can be used effectively in developing outcome measures of social change and social implementation programs—ranging from the simple effects of time to the much more targeted impact of social action efforts. There are numerous examples of extensively applied innovations that could benefit from indigenously based assessments. For example, there is a presumption that fertility control results in smaller families and, consequently, increases opportunities for social achievement. These views stem from observations and correlations between family size and social standing, wealth, and occupational achievement in industrialized countries. Whether or not programs of fertility control can similarly impact on indigenously compatible measures in lesser developed countries in different parts of the world requires a systematic procedure for identifying and developing outcome measures. Similarly, within the United States, it is important to know whether or not, among age, sex, and different ethnic groups, the same criteria of success are used internally when group members judge each other. Our four samples reported in this paper which come from markedly different subpopulations, college students, and "working-class" persons, suggest they may be. The answer, however, requires considerably more study. We believe our United States and Guatemalan work will substantially prove the utility of the procedures described in this report.

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