

A Scaled-Projective Measure of Interpersonal Values

RALPH H. KILMANN
Graduate School of Business
University of Pittsburgh

Summary: A projective instrument entitled the "Kilmann Insight Test" (KIT) was devised to measure the Interpersonal Value Constructs (IVCs) of individuals, defined as: the mental categories through which an individual perceives and interprets the desirable and undesirable features of interpersonal behavior. The KIT requires an individual to differentiate on a seven-point scale, 18 IVCs according to how relevant they are to a series of six ambiguous pictures of interpersonal situations. A factor analysis of the KIT's values resulted in two comprehensive factors: (a) Good Fellowship versus Functional Task Activity, and (b) Interpersonal Restraint versus Boldness. Comparing the KIT with a self-report instrument containing the same value items as the KIT, suggested that the KIT is assessing value *dimensions*, but that the KIT seems to be tapping a different *concept* of values than the self-report assessment.

Four basic methods have been utilized to assess an individual's values: (a) rank ordering (e.g., Catton, 1954; Hunt, 1935; Rokeach, 1969) or via *Q* sort (e.g., Gorlow & Barocas, 1964, 1965; Gorlow & Noll, 1967); (b) paired-comparisons or forced choice (e.g., Allport & Vernon, 1931; Catton, 1954; Thorndike, 1937; Thurstone, 1927); (c) coding of open-ended questions (e.g., Scott, 1959; Smith, 1949), and (d) attitude scaling (e.g., Lurie, 1937; Morris, 1956; Rettig & Pasamanick, 1959; Van Dusen, 1939; Woodruff & DiVesta, 1948).

It is almost surprising that all of the value instruments to date rely on the conscious self-report of a respondent. In his review of the psychological literature on values, Dukes (1955) states,

During the past two decades a number of instruments have been provided for measuring or describing the values of individuals and groups. In this variety, little use has been made of other than "straight-answer" techniques; other devices obviously deserve trial (p. 26).

Dukes goes on to suggest:

The literature on the theory and application of projective techniques, though not often couched in a value framework, no doubt provides many

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examples of the operation of values in one's perception of his physical and social world (p. 43).

Also, in a recent summary on the concept of values, Williams (1968) states, "For values that are concealed by conformity to social conventions and taboos, as well as for those camouflaged by defenses arising from repressions, recourse must be had to indirect approaches through projective testing . . . (p. 285)."

The plan of this paper is twofold: (a) to present a projective measure of interpersonal values, and (b) to investigate the validity of the projective measure by exploring its relationship to a self-report instrument attempting to assess a similar notion of values.

It was decided to develop a concept of values that is specifically relevant to interpersonal behavior since it was felt that values become substantially concrete and expressible at the interpersonal level of analysis. Furthermore, it seemed that values which would affect interpersonal behavior, are values that specify how one should behave in various interpersonal situations. This perspective is similar to Rokeach's concept of instrumental values (Rokeach, 1969). These are defined as specific modes of conduct that are personally or socially desirable to alternative modes of conduct. Rokeach lists 18 instrumental values: honest, broadminded, loving, intellectual, cheerful, obedient, helpful, ambitious, logical, responsible,

forgiving, polite, clean, courageous, independent, selfcontrolled, capable, and imaginative. These values are fairly concrete and operational and therefore, were taken as a referent for developing a projective concept of values specific to interpersonal behavior.

Several studies have sought to investigate the relationship between an individual's values and aspects of his perceptions (i.e., values as they function in organizing cognitive processes). McGinnies (1950), Postman, Bruner, and McGinnies (1948), and Haigh and Fiske (1952) found that individual's values as measured on the Allport-Vernon-Lindsey Study of Values affected the visual recognition threshold of words reflecting the values. The theory advanced for these findings is that values act as sensitizers for acceptable items, and act as a defense for recognition of unacceptable items. Similar findings were obtained with auditory stimuli as opposed to visual stimuli (Vanderplas & Blake, 1949). In addition, values have been related to an increased readiness to respond to words representing valued events (Cantril, 1932; McGinnies, 1950). Finally, evidence suggests that the ambiguity of the stimuli moderates the extent that values act as selective factors in cognitive processes. Research by Bruner and Goodman (1947) and Carter (1949) indicates that the greater the ambiguity of the stimuli, the greater the perceptual effects of an individual's values (see Dukes, 1955, for an extended discussion of these findings).

The foregoing research results are considerably relevant to the possibility for a projective measure of values. In particular, if individual values influence perceptions of ambiguous stimuli, then a projective instrument could assess values as they are actually being applied. Furthermore, since such a concept of values is probably operative on the preconscious or unconscious levels of awareness, and since individuals can distort their self-reports of values (e.g., Edwards, 1953), the use of projective assessment is additionally suggested.

A projective concept of interpersonal values was defined in the following man-

ner: An Interpersonal Value Construct (IVC) is a mental category through which an individual perceives and interprets the desirable and undesirable features of interpersonal behavior (e.g., honest-dishonest, helpful-unhelpful). According to the definition, an individual utilizes his interpersonal value constructs whenever he considers the evaluative aspects of an interpersonal situation, especially when the situation contains ambiguities or is subject to different interpretations (as most real life interpersonal situations are).

The Kilmann Insight Test (KIT)

An instrument entitled the "Kilmann Insight Test" (KIT) was developed to assess an individual's interpersonal value constructs.

The basic form of the KIT was based on the Thematic Apperception Test (TAT), a projective test first developed by Murray (1938). The research by McClelland, Atkinson, and their associates (Atkinson, 1958; McClelland, 1961; McClelland, Atkinson, Clarke, & Lowell, 1953) suggests the usefulness of a picture stimulus to elicit various cognitive processes. In particular, having an individual react to a series of pictures of interpersonal behavior is expected to simulate the use of interpersonal value constructs in actual situations.

Picture Stimuli

The pictures of the KIT were chosen to represent a variety of interpersonal settings that reflect managerial and professional situations. This was decided since the KIT was intended for this type of setting. Pretesting of the KIT found that six pictures of moderate ambiguity (Weisskopf, 1950) seemed most conducive to projection by respondents.

The KIT as a Test of Insight

Instead of a respondent writing a story to each picture, and then having the story coded for various IVCs (analogous to scoring TAT stories for individual motives), a specific set of interpersonal value constructs were predetermined. These were developed by taking the 18 instru-

mental values of Rokeach and stating them in terms of nouns ("love" was changed to "affection" and "cleanliness" was changed to "orderliness;" the latter nouns seemed more compatible for a management and professional population). The values were written as nouns to emphasize the bipolar notion of a construct (Kelly, 1955). For example, the honest-dishonest construct was stated as "honesty." The same was done for the other values.

The instructions to the KIT ask the respondent to indicate on a seven-point scale, the extent that the respondent sees each "concern" to be relevant to each picture. The respondent is asked to reveal his insight by clearly distinguishing the relevance of the listed "concerns" (in actuality, a list of the 18 IVCs).

The KIT is presented as a test of insight for two basic reasons. First, the actual nature of the test is hidden from the respondent and therefore, certain social desirability and other distortion or response biases are minimized (i.e., the KIT is meant to assess values as they are applied, it is not meant to assess how an individual wishes to appear to himself or to others). Second, the notion of an insight test is intended to motivate respondents to discriminate in their use of IVCs.

Administration and Scoring

The time for administering the standardized instructions of the KIT is approximately four minutes. The actual time typically used by respondents to complete the KIT is approximately 10 to 15 minutes. Consequently, as a projective test, the KIT has a fairly short administration time.

The scoring of the KIT is accomplished by viewing the "scale of relevance" as a seven-point scale (7 = extremely relevant, 1 = not relevant). Since the same IVCs follow each of six pictures, a person's score for a given IVC is simply the sum of his assigned relevancy points for the IVC across the six pictures. An alternative method of scoring consists of first standardizing the individual's responses according to his mean response on the relevancy scales. This latter method

which was utilized in all the analyses that follow, makes an individual's scores on the KIT all relative to his own variance.

Factor Analysis of the KIT

In a review of the value literature (Kilman, 1972), it was noted that several value studies attempted to investigate the underlying dimensions of values by factor analysis (e.g., Bales, 1970; Brogden, 1952; Duffy & Crissy, 1940; Gorlow & Barocas, 1964, 1965; Gorlow & Noll, 1967; Lurie, 1937; Morris, 1956; Rettig & Pasamanick, 1959; Scott, 1959). The seven-point scaling of relevance for the 18 interpersonal value constructs from the KIT facilitates a factor analysis based on Pearson's correlation coefficient.

Method

A sample of 82 professional individuals (e.g., educators, lawyers, physicians, psychologists, clergymen) who were partaking in UCLA's Industrial Relations, Management Programs, participated in this research assessment. Their responses to the KIT were utilized to perform a comprehensive factor analysis procedure developed by McKelvey (Note 1, Note 2). Since there were approximately five respondents for each variable in the analysis, it is expected that the resulting factors are reasonably stable for this type of population (managerial and professional people or those pursuing these careers). The sample consisted of 47 men and 35 women and since sex did not relate significantly to KIT responses, the entire sample was included in the analysis.

Results and Discussion

Following standardization of individual response styles and Subjects' IVC scores, a principal factor solution via Varimax rotation resulted in a two-factor solution. This solution was chosen since it had the most internal consistency of factors and the lowest average intercorrelations of any other solution (alpha coefficient = .75, $r = -.12$; McKelvey, Note 2).

Table 1 gives a summary of the items that compose each factor. The labels to these factors attempt to capture the basic nature of the items. While the positive

Table 1
Factor Labels and Items of the
Two-factor Solution from the
Kilmann Insight Test (KIT)

Factor 1:

Good Fellowship versus
Functional Task Activity

- + forgivingness
- + affection
- + cheerfulness
- + helpfulness
- + broadmindedness
- logic
- intellect
- capability
- orderliness
- responsibility

Factor 2:

Interpersonal Restraint versus
Boldness

- + politeness
- + self-control
- + obedience
- courage
- imagination
- honesty
- independence

and negative loadings seem to cluster in an intuitively pleasing manner, it was difficult arriving at the current labels. Perhaps additional research on the KIT that adds other IVCs to the present list of 18 will help to develop a better understanding of what the factors actually reflect.

The two factors also suggest interesting interpretations. To begin with, notions of fellowship or people oriented concerns have often been found to be independent from task oriented concerns (e.g., Bales, 1950; Bass, 1960; Hare, 1962). Yet, according to the factor analysis (particularly the internal consistency coefficients), an individual who is strongly oriented to Good Fellowship values

tends at the same time to be oriented away from Functional Task Activity values. Perhaps the dimensions of Factor I reveal the much discussed trade-offs, compromises, and conflicts of intraindividual application of values (e.g., Rokeach, 1969). Similarly, although more obvious, Factor 2 describes the trade-off between restraint and boldness as IVCs.

A Self-Report Assessment Versus the KIT

The second focus of this paper is to investigate the validity of the KIT by exploring its relationships to a self-report instrument attempting to assess a similar notion of values. In particular, it was felt that applying the notions of the multi-trait-multimethod matrix as developed by Campbell and Fiske (1967, pp. 124-132), would be an appropriate strategy. Consequently, two types of analyses were considered: (a) a comparison of the factor structure of the KIT versus the factor structure of the self-report instrument, and (b) correlations between the two KIT factors and the factors of the self-report measure. These analyses should suggest whether the KIT is actually measuring value dimensions, and if the KIT is tapping a similar concept of values as the self-report instrument.

Method

A sample of 41 graduate students in business administration participated in this study. The students were involved in a one-semester course in behavioral science, during which the students were administered a number of research and personality instruments as a part of their learning experience. These instruments included the KIT and a rank ordering (self-report) of Rokeach's instrumental values (Rokeach, 1969). The KIT was administered one week before the self-report instrument and the students did not receive any information about the nature and results of the two instruments until both were completed.

Results and Discussion

Using a principal factor solution via Varimax rotation (McKelvey, Note 2), it

Table 2

Factor Items of the
Self-report Factors ($N = 41$)

Self-report

Factor 1:

- + forgivingness
- + affection
- + cheerfulness
- + helpfulness
- + honesty
- logic
- intellect
- capability
- ambition

Factor 2:

- + politeness
- + self-control
- + obedience
- + responsibility
- + orderliness
- broadmindedness
- independence

was decided to extract two factors from the self-report responses in order to test factor similarity with the two KIT factors. Table 2 presents the items that compose the two extracted factors from the self-report assessment. The intercorrelation of factors is quite low ($r = -.06$) while the internal consistency of factors is reasonably high ($\alpha = .74$).

Comparing the self-report factor structure (See Table 2) with the KIT's (See Table 1), reveals a close similarity. Looking at the items that compose each factor (KIT versus self-report) suggests that individuals tend to "experience" the interrelationship of "value" items from self-report assessment the same as in projective assessment. Some underlying dimension of values would seem to be operating for each type of value instrument.

Table 3 shows the intercorrelations of KIT factor indices with the self-report

Table 3

Intercorrelations of KIT
Factor Indices with
Self-report Factor Indices ($N = 41$)

KIT	Self-report	
	Factor 1	Factor 2
Factor 1	+ .25	+ .03
Factor 2	- .27	+ .13

Note.—Diagonal of matrix represents convergent validity.

factor indices (equal weighting of items that compose each factor). The diagonal of the matrix which represents convergent validity reveals positive but nonsignificant relationships. The off-diagonals of the matrix which represent discriminant validity, are not different in magnitude than the diagonal coefficients. This suggests that individuals do not tend to discriminate well different value factors from different assessments, nor do their self-report and projective assessment of themselves converge significantly for the same value factors.

In summary, the factor structure for the KIT and the self-report assessment of the 18 value items is quite similar, while the intercorrelations of the two assessments suggest some noncorrespondence between an individual's self-report and projective assessment of his own interpersonal values. This tends to indicate that while individuals experience a particular covariance of value items whether the assessment is self-report or projective, the same individuals will describe or portray their own values differently on the two instruments. It is my speculation that this finding reflects the different psychological dynamics being tapped by the instruments. The self-report seem to assess the conscious, verbal level of awareness of a person's own values (perhaps with vari-

ous response distortions), while the projective assessment might tap the more unconscious aspects of interpersonal values, even though the factor structure of these two value perspectives are quite similar.

Conclusion: Further Validation of the KIT

This paper has presented a projective measure of values as an alternative method to the history of self-report assessments. Comparing the projective measure (KIT) with a self-report instrument attempting to assess the same "value items," suggests that (a) the KIT is assessing value *dimensions* (i.e., similarity of factor structure with the self-report measure), and (b) the KIT seems to be tapping a different *concept* of values than the self-report assessment (i.e., the general lack of convergence and discrimination between the two instruments).

As the KIT is applied to study interpersonal phenomena, it becomes more important to have a thorough understanding of what the KIT is actually measuring. While the present study has suggested some validity to the instrument (i.e., value structure), much more needs to be known about the actual process of values leading to observable behavior. Applications of the KIT to actual interpersonal situations will surely help in developing additional and more refined construct validity. However, the use of controlled experimentation in a laboratory setting to specifically investigate subtle aspects of the KIT, is also necessary.

Some research designs which would further explore the validity of the KIT are: (a) alter and expand the current list of IVCs on the KIT to include a more diversified set of interpersonal values, alter the set of pictures used for the KIT (e.g., from the extreme of ink blots to descriptive paragraphs of interpersonal situations), and factor analyze different KIT instruments for different populations to ascertain if, and in what manner, a general theory of interpersonal value constructs could be developed; (b) apply the notion of the multitrait-multimethod matrix, test the convergent and discriminant validity of the KIT with other in-

struments designed to measure aspects of interpersonal values or perceptions; (c) test whether the self-report of IVCs or the KIT would account for more variance in explaining interpersonal behavior (e.g., the development of respect or attraction); (d) investigate an individual's KIT scores with *his* evaluation of others; and (e) examine KIT factor indices across "known" group differences (e.g., sex, age, occupation, cultural background).

Some of the above studies would certainly be necessary in more clearly understanding what the KIT is measuring and would help to develop a better appreciation of what results can be expected by using the KIT in social science research. Hopefully, the present paper has suggested the potential usefulness and the possibilities for a projective measure of values, and the need for additional research.

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Ralph H. Kilmann
Graduate School of Business
University of Pittsburgh
Pittsburgh, Pennsylvania 15260

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