Structure of Human Values: Testing the Adequacy of the Rokeach Value Survey

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Rokeach's (1973) Value Survey has received widespread use in the past decade, but little attempt has been made to examine the extent to which the 36 items provide comprehensive and representative coverage of the value domain. Our data provide qualified support for the comprehensiveness of the instrument. The major weaknesses in sampling involve the facets of physical well-being and individual rights. Other areas not represented are thriftiness and carefreeness. The need for multi-item indexes for value constructs are discussed, as are the advantages of a rating procedure over a ranking procedure from both psychometric and empirically valid perspectives. An alternative instrument based on the work of Rokeach is proposed.

In recent years, one of the most widely used instruments for measuring personal and social values has been the Rokeach Value Survey. Part of its popularity is undoubtedly due to the success researchers have had in finding specific values that differentiate various political, religious, economic, generational, and cultural groups and that relate to a range of social attitudes (Feather, 1975; Rokeach, 1973, 1979). The versatility of the instrument adds to its attractiveness. Feather (1972), for instance, used the survey to assess the match between own and perceived value systems, a variable that he related to personal adjustment.

A further advantage of the instrument is that success can be achieved relatively economically, because respondents need only deal with 36 concepts in all, each being conveyed by two or three short phrases. The task of rank ordering 18 end states of existence (terminal values) followed by 18 modes of conduct (instrumental values) in terms of their importance as guiding principles in life

is, from all accounts, one that subjects complete quickly and easily.

In addition to these attractions, the Rokeach Value Survey is one of the few instruments based on a well-articulated conceptualization of value. Like Kluckhohn (1951), Williams (1968), and Smith (1963), Rokeach (1973) located values in the realm of conceptions of the desirable. Having done so, he followed Scott's (1965) example, elaborating the notion to provide clearer guidelines for the operationalization of the construct. Scott's value attributes of absoluteness (applicability in all circumstances) and universality (acceptance by others) were endorsed by Rokeach (1973) as he defined values as constructs that transcend specific situations and that are personally and socially preferable. Rokeach differed from Scott, however, in using value to incorporate not only modes of conduct, but also goals in life, the proviso being that such goals are not object specific. The goals are described as terminal values, thereby acquiring the quality of ultimacy referred to by Scott.

Hereupon follows Rokeach's (1973) major innovation. He set out a model of the belief system in which beliefs, attitudes, and values are clearly differentiated. The value construct is restricted to that special class of enduring beliefs concerning modes of conduct and end states of existence that transcend specific objects and situations and that are personally

and socially preferable to an opposite mode of conduct or end state of existence. For the first time, the value domain has been clearly differentiated from that of other beliefs and attitudes.

The clear and restricted sampling frame for the Rokeach Value Survey carries with it the important implication that one can readily assess the adequacy of Rokeach's (1973) operationalization of the construct. Yet in spite of the widespread popularity of the instrument, empirical research addressing this issue is markedly absent. At the same time, researchers have been quick to express concern about Rokeach's operationalization. In particular, the criteria for item selection have been criticized on the grounds of arbitrariness and subjectivity (Jones, Sensenig, & Ashmore, 1978; Keats & Keats, 1974; Kitwood & Smithers, 1975; Lynn, 1974). Indeed, Rokeach (1973) himself acknowledged the overall procedure for selecting the 36 items to be "an intuitive one" (p. 30).

Rokeach (1973) chose the terminal values from several hundred that he compiled from the value literature, from personal experience, from the terminal values expressed by a representative sample of 100 inhabitants of an American city, and from those expressed by a small sample of graduate students. Items were then eliminated if they did not conform to Rokeach's definition of value or if they were regarded as semantically or empirically overlapping with others.

The point of departure for selecting the instrumental values was a list of 555 personality trait words that Anderson (1968) derived from the 18,000 trait names compiled by Allport and Odbert (1936). As with the terminal values, Rokeach's (1973) final selection was based on a long list of criteria. The most important criteria involved eliminating semantically or empirically equivalent items; selecting those considered to be important across culture, status, and sex; and avoiding values that would be strongly linked with a social desirability response bias (Rokeach, 1971, pp. 23–24).

Directly addressing the issue of the comprehensiveness and representativeness of the Rokeach Value Survey is Jones et al.'s (1978) comparison of spontaneously mentioned values with Rokeach's (1973) 36 items. Jones et al. concluded that the correspondence was poor, but it is of note that they restricted the spontaneously elicited values to the 36 that were most frequently mentioned, which constituted only 42% of those available for analysis. Consequently, it would be fallacious to assume that Jones et al.'s items constitute a representative sampling of the value domain against which Rokeach's values should be compared.

In defending his instrument, Rokeach (1973) maintained that the final 36 items provide a "reasonably comprehensive" coverage of the most important human values (p. 27) and that the values are "negligibly correlated with one another" (p. 43). Gorsuch (1970), although expressing some reservations about the sampling of items, concurred that the values selected indeed "cover a broad spectrum" (p. 139) and, when compared with the empirically derived responses reported by Scott (1959), give an impression of representativeness. Gorsuch noted, however, that the self-ipsatizing nature of the instrument would make the correlations between items less strong than they would be with other measurement techniques. Thus the relative independence of the items and the absence of any strong underlying structure noted by both Rokeach (1973) and Feather and Peay (1975) may be more a function of the rank ordering task than of the values being ranked.

The rank ordering task has met with criticism on other grounds. Apart from the awkwardness associated with the analysis of ipsative data, researchers have questioned the meaningfulness of the task (Gorsuch, 1970; Keats & Keats, 1974; Kitwood & Smithers, 1975; Lynn, 1974). How does the researcher know from the data if the respondent endorses the total set of values or focuses on one or two at the expense of others? If values are not hierarchically organized, or if several values occupy the same level in the hierarchy, how does the individual respond to the task? If value constructs are being measured through single items, do differences between individuals "reflect variations in linguistic usage rather than variations in underlying constructs" (Gorsuch, 1970, p. 139)?

Certainly the success with which the Rokeach Value Survey has been used vindicates the item sampling procedures and the mea-

surement technique to some extent. Nonetheless, the question of the comprehensiveness and representativeness of the items and the suitability of the hierarchical model are empirical questions that need to be subjected to more systematic investigation.

Research Goals

The starting point for our analysis of the adequacy of Rokeach's item set was the criteria for "comprehensiveness and representativeness." Following McKennell (1974), we defined comprehensiveness and representativeness in terms of the values that are salient for a particular population (in this case, inhabitants of a large Australian city). Such values can only be known to the researcher through consultation with a representative sample of informants. Reliance on literature searches, on previous questionnaires, or on the researcher's intuitions does not necessarily result in the identification of values that are meaningfully used by the population of interest. Similarly, the adequacy of the hierarchical model must be evaluated ultimately by its concordance with the value priority structure of individuals in the general population.

Thus our first task was to elicit from a sample of respondents the goals in life and ways of behaving that serve as guiding principles in their lives, and to understand how they are organized—that is, the priorities assigned to some over others. Like Rokeach (1973), we made no attempt to differentiate goals as means from goals as ends at the operational level. Thus in this research, as in that of Rokeach, the label *terminal value* is a misnomer. "Ways of behaving" refer to any characteristic that describes an individual's manner of conduct in either a social or nonsocial setting and follows the conceptualization first outlined by Lovejoy (1950) and later adopted by Rokeach. At a conceptual level, we also acknowledged that a way of behaving may become a goal for a particular individual. Not all goals, however, constitute ways of behaving. These guidelines provided the basis for distinguishing goals in life and ways of behaving.

With a more comprehensive and representative item set and some knowledge of priority setting in hand, one can achieve four further

aims. First, one can examine interrelations among the items to identify the major dimensions underlying the value domain. It is reasonable to assume that values do not exist in isolation and that many of the items in a new instrument are interrelated. Second, by locating Rokeach's (1973) values within this new framework, one can on an empirical basis evaluate criticisms relating to the comprehensiveness and representativeness of items in the Rokeach Value Survey. Third, this research paradigm provides an opportunity to investigate alternatives to single-item measures. Rokeach's (1973) approach deviated from the well-established psychometric principle of relying on several different measures when operationalizing a psychological construct. The inherent dangers in such a practice cannot be readily dismissed when the objects of the measurement exercise, values, are characterized by such a high degree of abstraction. Such abstraction is bound to generate problems of item ambiguity, leaving both the researcher and respondent with flexibility in interpretation. If researchers find that several measures correspond to Rokeach's single-item measures, they will have made progress toward more clearly defining the nature of the psychological constructs represented in the Rokeach Value Survey.

Fourth, data on the major dimensions of human valuing and on priority setting should provide the basis for a new value instrument, incorporating Rokeach's (1973) principal concepts, but at the same time extending and amplifying them.

Experiment 1: Development of Three Inventories

Method

Subjects. A sample of 115 adults was selected from the electoral roll for a single electoral division in the city of Brisbane, Australia. The division was chosen because it was characterized by a demographically heterogeneous population living in a relatively confined geographical area. Given compulsory electoral enrollment for all over the age of 18, this procedure provided a satisfactory way of obtaining a sample stratified on sex and occupation.

Of the 115 adults chosen, 73 (63%) participated in the study, 27 (24%) refused to participate, and 15 (13%) no longer resided at the given address. This sample constituted a wide cross-section of the community. The sample was 48% male. Twenty-seven percent of the sample were less than 30 years of age, 37% were between 30 and 49 years

of age, and 36% were 50 or over. Of the 66% who were in paid employment, 17% had professional or managerial occupations, 26% clerical or sales, 19% trades, and 38% semiskilled or unskilled work.

Procedure. Intensive semistructured interviews were conducted with each subject. All interviews shared the same starting point: the Rokeach Value Survey. This approach offered a number of advantages. First, it was considerably easier to define the universe of content through example than in abstract terms. Second, it provided valuable data on subjects' reactions to the Rokeach Value Survey. Interviewees were asked to comment on the nature of the task, the clarity of items, and the instrument's comprehensiveness. Third, the survey eased respondents into a discussion of their own values and their value priorities, a topic that many broached with some hesitation. Initial reticence seemed most often due to subjects not being experienced in verbalizing their thoughts on such matters. Values were very much taken-for-granted phenomena.

In developing a new instrument, there is always the danger that the subjective judgments of the researcher distort the way in which interviewees define the content domain. In order to reduce this effect, successive drafts of the instrument were returned to 6 of the subjects who volunteered to act as informants and critics. In addition, 6 university students acted in the same capacity because the instrument was intended for use in this population as well.

Results

On the basis of the interviews, four modifications were made to the Rokeach Value Survey. First, additional values emerged from discussion with participants, and many of Rokeach's (1973) original items were broken into components, which made them narrower in scope. This avoided most of the ambiguities perceived by respondents in the original items. Second, a rating scale became the preferred mode for responding. Apart from being a change of necessity with the increase in the number of values in the scale, the interview data suggested that it was also a desirable change. Although all respondents were able to produce a rank ordering of the items, some values were considered equally important, some were not to be compared, and priority was sometimes determined by the situation.

Furthermore, most respondents (83%) perceived some of Rokeach's (1973) values to be interrelated. Two strategies emerged for dealing with this problem and for producing a single hierarchy of values. The approach used by 54% was to group the related values together in the hierarchy. Criteria for deciding

priority included not only importance, but also which was the most general or which was the means to achieving others. The second strategy, used by 20%, was to optimize the attainment of several values by placing one representative of each value group at the top of the hierarchy while relegating the remainder to the bottom. In other words, interrelations perceived among values influenced the importance assigned to a particular value. The remaining 9% who saw value relationships used a mixture of the two strategies.

Although the possible effects of respondents' ranking strategies on correlational structure have not yet been investigated empirically, they do highlight the advantages of a rating procedure. After discussions with respondents, we adopted an asymmetrical 7-point rating scale:

1. I reject this as a guiding principle in my life.
2. I am inclined to reject this as a guiding-principle in my life.
3. I neither reject nor accept this as a guiding principle in my life.
4. I am inclined to accept this as a guiding principle in my life.
5. I accept this as important as a guiding principle in my life.
6. I accept this as very important as a guiding principle in my life.
7. I accept this as of the greatest importance as a guiding principle in my life.

The asymmetrical scale, first suggested as an option by Gorsuch (1970), involves finer discriminations by respondents on the positive end, because distributions tended to be negatively skewed. The fact that respondents found most of the values highly desirable was not surprising, given that values are widely accepted as phenomena transmitted by society's major institutions (Kluckhohn, 1951; Rokeach, 1973).

The third deviation from Rokeach's (1973) instrument was that the goals in life were presented in two parts rather than one. Interviewees consistently differentiated personal goals (e.g., a sense of accomplishment) from societal goals (e.g., a world of peace), regarding the latter as something they did not have direct influence over. This led to confusion as to whether they should be ranked according to the respondents' beliefs or their actions to achieve the goal. As a result, the 18 societal goals were separated from the 36 personal

goals and given a new set of instructions. We ensured greater uniformity in interpretation in the Social Values Inventory by asking subjects to judge the importance of the societal goals in guiding not only their actions, but also their judgments about national or international events.

Fourth, for the 71-item Mode Values Inventory, the measure of Rokeach's (1973) instrumental value system, the word *being* was inserted in front of each way of behaving. This served to remind subjects to evaluate the items as behavior patterns that they may or may not try to emulate, rather than as traits that describe the sort of person they are.

The test–retest reliabilities for the items were examined over a 4-week period with a sample of 208 university students. For the Goal Values Inventory, the coefficients ranged from .43 to .94; the median was .62. The range for the Mode Values Inventory was .43 to .90 (*Mdn* = .61), whereas that for the Social Values Inventory was .46 to .92 (*Mdn* = .62). These reliability coefficients are comparable to those reported by Rokeach (1973) and Feather (1971) for the Rokeach Value Survey.

Experiment 2: Factor Structures of the Three Inventories

Method

Subjects. We used three independent samples to investigate factor structure: one from the general population and two from the student population. The General Population Study was based on a stratified random sample of 483 adult inhabitants of Brisbane, Australia. Details of the procedure and nature of the sample have been provided elsewhere (Braithwaite, 1982). The students who participated in the other studies were introductory psychology students at the University of Queensland, Australia. They numbered 208 and 480 in Student Studies 1 and 2, respectively.

Procedure. In the General Population Study, questionnaires were mailed to respondents on the understanding that a research worker would call 2 weeks later to collect the completed questionnaire and to answer any queries. As well as responding to the Goal, Mode, and Social Values Inventories, participants were asked to provide basic sociodemographic information. Of those contacted, 61% participated.

For the student studies, questionnaires were administered in a classroom situation. In the Student Study 1, only the Goal, Mode, and Social Values Inventories were completed. In the Student Study 2, the value inventories were part of a battery of tests administered over a 3-week period. Included in the battery was a rating form of the Rokeach Value Survey. Because a major goal of the research was to examine the adequacy of the items in the Rokeach Value Survey, the response format used in the value instruments was identical. The order of presentation of the tests in the battery was systematically varied.

In all three studies, the value inventories were undertaken in a fixed order: first the Goal Values Inventory, then the Mode Values Inventory, and finally the Social Values Inventory. All respondents were assured of anonymity.

Results

To identify the dimensions underlying the more comprehensive and representative value sample derived in this research, we factor analyzed the three data sets separately, giving serious attention to only those factors that showed some stability across studies. We intercorrelated items by using the Pearson product–moment correlation coefficient, subjected the resulting matrix to an alpha factor analysis, and subsequently rotated the solution by using the promax procedure ($k = 4$). The resulting solution was comparable to those obtained with other factoring and rotational procedures,[1] but produced a better simple structure. The number of factors criterion used in each study was an eigenvalue cutoff of 1, Guttman's lower bound for the number of factors (Guttman, 1954; Kaiser, 1960). The factor structure showed most stability in spite of changing the number of factors for rotation in the vicinity of this cutoff.

Comparisons across data sets were made by means of the coefficient of congruence (Burt, 1948; Tucker, 1951; Wrigley & Neuhaus, 1955) and the salient variable similarity index (Cattell, 1949; Cattell & Baggaley, 1960). The coefficient of congruence indicates the degree of relation between loadings on pairs of supposedly matching factors. The salient variable similarity index is a nonparametric technique that provides the probability that identical variables defining two factors of interest have occurred by chance. Given the exploratory nature of the research, we considered comparisons of factors on an individual basis preferable to comparisons of

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[1] Other procedures used were principal axes factor analysis and Guttman–Lingoes nonmetric factor analysis (Lingoes & Guttman, 1967) and varimax rotation.

Table 1

Coefficients of Congruence (C) and Salient Variable Similarity (S) Indexes for Factors Stable Across the General Population (GP) and Student (S1, S2) Studies

| | Comparison | | | | | |
| | GP–S1 | | GP–S2 | | S1–S2 | |
Factor	C	S	C	S	C	S
Goal and Social Values Inventories						
International harmony and equality	.93	6/7	.96	6/7	.94	5/7
National strength and order	.89	6/7	.90	5/7	.93	7/7
Traditional religiosity	.86	5/7	.89	4/7	.87	6/7
Personal growth and and inner harmony	.78	5/7	.91	6/7	.85	5/7
Physical well-being	.82	3/7*	.88	4/7	.91	4/7
Mode Values Inventory						
Positive orientation to others	.91	7/10	.92	6/10	.86	7/10
Competence and effectiveness	.89	6/10	.93	8/10	.88	7/10
Propriety in dress and manners	.86	7/10	.92	8/10	.85	6/10
Religious commitment	.79	5/10	.85	8/10	.68	6/10
Assertiveness	.73	4/10	.83	6/10	.77	4/10
Withdrawal from others	.78	7/10	.82	6/10	.73	7/10

Note. S based on the number of coincidences found between the most saliently loading variables on pairs of factors (marker variables excluded) and on the associated probability values given by Cattell and Baggaley (1960). The seven highest loadings were considered for the Goal and Social Values Inventories; the 10 highest loadings were considered for the Mode Values Inventory.

* $p = .01$. For all other S values, $p < .005$.

factor solutions achieved through procrustes rotation methods or confirmatory factor analysis.

Within each data set, the Goal and Social Values Inventories were analyzed together; the Mode Values Inventory was analyzed separately. Although separate instructions were given for the goal and social values, they were analyzed together to maximize compatibility with Rokeach's (1973) conceptualization of two value systems: a terminal value system and an instrumental value system.

Goal and Social Values Inventories. Between 46% and 53% of the total variance in the item set was accounted for in the three factor solutions. Nine factors were regarded as representing potentially important value dimensions, though indexes of stability were consistently satisfactory for only five of them (see Table 1). The factors, whose items and loadings are given in Table 2, were interpreted as representing (a) international harmony and equality (representing a political ideology directed toward achieving a more cooperative,

equitable, and humanistic social order); (b) national strength and order (emphasizing the attainment of economic and political might together with internal order); (c) traditional religiosity; (d) personal growth and inner harmony; (e) physical well-being; (f) secure and satisfying interpersonal relationships; (g) social standing; (h) social stimulation; and (i) individual rights. For the last four factors, coefficients of congruence were not sufficiently high for us to claim a match, though the salient variable similarity indexes were significant at the .01 level for all except social stimulation.

Mode Values Inventory. Between 49% and 54% of the total variance was accounted for by the three factor analyses of the Mode Values Inventory. We regarded ten dimensions as potentially important because of their re-emergence across the three data sets. Once again, however, not all satisfied both criteria for stability across studies. (See Table 1 for those with satisfactory coefficients of congruence and salient variable similarity indexes.) The factors were labeled as follows (their

items and loadings are shown in Table 3): (a) positive orientation toward others (describing ways of interacting with others that reflect warmth, concern, and kindness); (b) competence and effectiveness (concerned with the capacity to get a job done; items incorporate what are essentially ability items with a desire to perform a task well); (c) propriety in dress and manners (behaving in a conventionally upright and decent manner); (d) religious commitment (forsaking self-interest and pursuing a higher cause); (e) assertiveness; (f) withdrawal from others; (g) carefreeness; (h) honesty; (i) thriftiness; and (j) getting ahead. For the last four factors, neither stability coefficient proved consistently satisfactory over the three data sets.

Comparison of the Three Inventories With the Rokeach Value Survey

Using data from the Student Study 2 ($n = 480$), we formed scales from the items listed in Tables 2 and 3 as defining the most stable factors. Fifteen showed sufficient internal consistency to be considered measures of specific value constructs. From the items that were not sufficiently intercorrelated to form a scale, single items were selected as the best available representatives of underlying constructs. The scales with their alpha reliability coefficients and the items with their test–retest reliabilities appear in Tables 4 and 5.

The scales and single-item measures were subsequently related to Rokeach's (1973) 36

Table 2
Factors, Items, and Loadings for the Goal and Social Values Inventories

Item	Loadings		
International Harmony and Equality			
A good life for others: improving the welfare of all people in need	.59,	.60,	.72
Rule by the people: involvement by all citizens in making decisions that affect their community	.53,	.40,	.56
International cooperation: having all nations working together to help each other	.77,	.70,	.66
Social progress and social reform: readiness to change our way of life for the better	.68,	.57,	.61
A world at peace: being free from war and conflict	.53,	.73,	.55
A world of beauty: having the beauty of nature and of the arts (music, literature, art, etc.)	.38,	.64,	.34
Human dignity: allowing each individual to be treated as someone of worth	.33,	.35,	.47
Equal opportunity for all: giving everyone an equal chance in life	.53,	.63,	.64
Greater economic equality: lessening the gap between the rich and the poor	.59,	.65,	.64
Preserving the natural environment: preventing the destruction of nature's beauty and resources	.34,	.61,	.38
National Strength and Order			
National greatness: being a united, strong, independent, and powerful nation	.74,	.68,	.68
National economic development: having greater economic progress and prosperity for the nation	.67,	.63,	.70
The rule of law: punishing the guilty and protecting the innocent	.58,	.59,	.58
National security: protection of your nation from enemies	.70,	.86,	.80
Traditional religiosity			
Salvation: being saved from your sins and at peace with God	.85,	.86,	.87
Religious or mystical experience: being at one with God or the universe	.80,	.66,	.73
Upholding traditional sexual moral standards: opposing sexual permissiveness and pornography	.53,	.62,	.53
Sexual intimacy: having a satisfying sexual relationship	−.19,	−.39,	−.43
Personal growth and inner harmony			
Self-knowledge or self-insight: being more aware of what sort of person you are	.56,	.66,	.66
The pursuit of knowledge: always trying to find out new things about the world we live in	.37,	.65,	.48
Inner harmony: feeling free of conflict within yourself	.46,	.48,	.51
Self-improvement: striving to be a better person	.36,	.44,	.42
Wisdom: having a mature understanding of life	.44,	.27,	.46
Self-respect: believing in your own worth	.44,	.13,	.49

Table 2 (*continued*)

Item	Loadings		
Physical well-being			
Physical development: being physically fit	.64,	.83,	.82
Good health: physical well-being	.46,	.67,	.62
Physical exercise: taking part in energetic activity	.56,	.76,	.69
Secure and satisfying interpersonal relationships			
Mature love: having a relationship of deep and lasting affection	.70,	.74,	.47
True friendship: having genuine and close friends	.41,	.54,	.59
Personal support: knowing that there is someone to take care of you	.38,	.63,	.37
Security for loved ones: taking care of loved ones	.36,	.47,	.36
Acceptance by others: feeling that you belong	.53,	.18,	.59
Social Standing			
Recognition by the community: having high standing in the community	.49,	.56,	.52
Economic prosperity: being financially well off	.37,	.21,	.39
Authority: having power to influence others and control decisions	.13,	.42,	.39
Social Stimulation			
An active social life: mixing with other people	.51,	.62,	.56
An exciting life: a life full of new experiences or adventures	.61,	.31,	.54
Individual Rights			
Privacy for yourself: being able to keep your business to yourself	.45,	.65,	.28
A sense of ownership: knowing that the things you need and use belong to you	.41,	.45,	.30
A leisurely life: being free from pressure and stress[a]	.54,	.09,	.03
Carefree enjoyment: being free to indulge in the pleasures of life[a]	.42,	.07,	.03
The protection of human life: taking care to preserve your own life and the life of others[b]	.00,	.36,	.40
Comfort but not luxury: being satisfied with the simple pleasures of life[b]	.18,	.35,	.33

Note. Factor pattern loadings from the General Population Study, the Student 1 Study, and the Student 2 Study, respectively. Complete factor solutions are available from the authors on request.
[a] Loadings are salient for the general population, suggesting an interpretation of this factor as individual rights and the good life.
[b] Loadings are salient for the student samples, suggesting an interpretation of this factor as individual rights and basic necessities.

terminal and instrumental values. From the two instruments, items that were almost identical or that could be considered semantically equivalent were used as marker variables in order to hypothesize matches between the factor analytically derived value constructs and those measured by the Rokeach Value Survey.

Terminal Values

Pearson product–moment correlation coefficients were calculated between the newly derived value constructs and their hypothesized counterparts in Rokeach's (1973) instrument (see Table 4). Seven of the nine factors are represented in the Rokeach Value Survey, and four of these—International Harmony and Equality, Personal Growth and

Inner Harmony, Secure and Satisfying Interpersonal Relationships, and Social Standing—are represented by more than one item. Those with only single-item representation are National Strength and Order, Traditional Religiosity, and Social Stimulation.

Factors with no clear counterparts at all were Physical Well-Being and Individual Rights and Basic Necessities (see Footnote b, Table 2). Physical Well-Being was not included in any guise in the Rokeach Value Survey. The item in the instrument with which it correlated most highly was Social Recognition (respect, admiration), $r(456) =$ .30, $p < .001$. Individual Rights and Basic Necessities, on the other hand, might be expected to bear some relation to the Rokeach Value Survey item Freedom (independence, free choice), the common ground being in-

dividualism. Representation through this item, however, is not impressive, $r(456) = .29, p < .001$.

Regarding the items of the Value Survey, three terminal values could not be successfully linked a priori with the newly derived factors. The first, Freedom, has already been mentioned as a possible correlate of Individual Rights and Basic Necessities. It was, however, far more strongly related to International Harmony and Equality, $r(456) = .45, p < .001$. Rokeach's (1973) measure of freedom appears to connote democratization rather than individualism (Braithwaite, 1982). Given that Rokeach conceptualized freedom as rep-

resenting a value dimension that was orthogonal to equality, the construct validity of this item can be justifiably questioned.

The second of Rokeach's (1973) values that is not represented in the newly derived factor structure is Pleasure (an enjoyable, leisurely life). Pleasure was represented in the Goal Values Inventory by two items: A Leisurely Life (being free from pressure and stress) and Carefree Enjoyment (being free to indulge in the pleasures of life). They played a central role in defining the Individual Rights factor in the General Population Study, but defined a separate specific factor in the student data sets. Specificity, however, is not synon-

Table 3

Factors, Items, and Loadings for the Mode Values Inventory

Item	Loadings		
A Positive Orientation to Others			
Tolerant: accepting others even though they may be different from you	.48,	.65,	.58
Helpful: always ready to assist others	.58,	.50,	.56
Forgiving: willing to pardon others	.54,	.62,	.68
Giving others a fair go: giving others a chance	.46,	.61,	.53
Tactful: being able to deal with touchy situations without offending others	.47,	.56,	.34
Considerate: being thoughtful of other people's feelings	.61,	.67,	.63
Cooperative: being able to work in harmony with others	.38,	.37,	.42
Loving: showing genuine affection	.39,	.47,	.47
Trusting: having faith in others	.37,	.40,	.30
Grateful: being appreciative	.48,	.31,	.52
Understanding: able to share another's feelings	.54,	.43,	.66
Friendly: being neighborly	.52,	.39,	.43
Generous: sharing what you have with others	.52,	.53,	.67
Competence and Effectiveness			
Bright: being quick thinking	.45,	.38,	.48
Adaptable: adjusting to change easily	.49,	.32,	.48
Competent: being capable	.60,	.54,	.54
Resourceful: being clever at finding ways to achieve a goal	.57,	.70,	.70
Self-disciplined: being self-controlled	.37,	.48,	.34
Efficient: always using the best method to get the best results	.54,	.61,	.72
Realistic: seeing each situation as it really is	.64,	.34,	.61
Knowledgeable: being well informed	.54,	.52,	.54
Perservering: not giving up in spite of difficulties	.42,	.57,	.33
Progressive: being prepared to accept and support new things	.43,	.44,	.37
Conscientious: being hardworking	.33,	.54,	.32
Logical: being rational	.52,	.47,	.56
Showing foresight: thinking and seeing ahead	.49,	.76,	.45
Propriety in Dress and Manners			
Polite: being well-mannered	.53,	.65,	.55
Patriotic: being loyal to your country	.44,	.41,	.40
Prompt: being on time	.51,	.24,	.56
Refined: never being coarse or vulgar	.60,	.64,	.54
Clean: not having dirty habits	.68,	.63,	.57
Neat: being tidy	.67,	.73,	.63
Reliable: being dependable	.26,	.19,	.44

Table 3 (*continued*)

Item	Loadings		
Religious Commitment			
Committed: being dedicated to a cause	.57,	.67,	.50
Devout: following your religious faith conscientiously	.62,	.51,	.50
Self-sacrificing: putting the interest of others before your own	.48,	.57,	.48
Idealistic: living according to how things should be rather than how things are	.42,	.03,	.65
Assertiveness			
Standing up for your beliefs: defending your beliefs no matter who opposes them	.58,	.42,	.43
Having your say: confidently stating your opinions	.64,	.60,	.50
Determined: standing by your decisions firmly	.55,	.70,	.68
Withdrawal From Others			
Keeping to yourself: being content with your own company	.57,	.68,	.52
Independent: doing things on your own	.39,	.34,	.45
Carefreeness			
Acting on impulse: doing things on the spur of the moment	.42,	.64,	.67
Spontaneous: doing what comes naturally	.32,	.55,	.53
Cautious: not rushing into things	−.05,	−.36,	−.34
Honesty			
Open: not hiding anything from anyone	.51,	.48,	.43
Honest: never cheating or lying	.26,	.43,	.40
Thriftiness			
Thrifty: being careful in spending money	.52,	.57,	.46
Never missing a chance: taking advantage of every opportunity that comes your way	.13,	.56,	.21
Getting Ahead			
Ambitious: being eager to do well	.41,	.23,	.63
Competitive: always trying to do better than others	.61,	.53,	.61

Note. Factor pattern loadings from the General Population Study, the Student Study 1, and the Student Study 2, respectively. Complete factor solutions are available from the authors on request.

ymous with unimportance. Until further research has been conducted to clarify the interrelations and status of the pleasure values, there is little justification for omitting them from instruments such as the Rokeach Value Survey.

The third terminal value that could not be placed within the newly derived factor structure was Happiness (contentedness). The corresponding item in the Goal Values Inventory, Happiness (feeling pleased with the life you are leading), was found to have low to moderate loadings on a number of factors. Mirroring this finding, Rokeach's (1973) item correlated between .2 and .3 with eight of the ten factor analytically derived scales. Loose yet interpretable associations with several value constructs support the view that happiness is a more fundamental value than the majority of items in the value instrument

(Braithwaite, Law, & Braithwaite, 1984). Because of its fundamental nature, happiness deserves representation in any instrument with which one seeks to provide a means of assessing individual or cultural values.

Instrumental Values

As can be seen from Table 5, seven of the ten constructs derived from the Mode Values Inventory have been represented in the Rokeach Value Survey, and those that have been overlooked are not serious omissions.

Religious commitment is one of the few ways of behaving that is represented in the Goal Values Inventory. Predictably, Traditional Religiosity and Religious Commitment correlated highly, $r(456) = .61, p < .001$. The single-item measures, Acting on Impulse and Being Thrifty, had no counterparts in the

Table 4

Correlations of the Goal and Social Values Inventories Indexes With Corresponding Items From the Rokeach Value Survey

Goal and Social Values Inventories Index	Rokeach Value Survey item	r
International Harmony and Equality ($\alpha = .86$)	A world at peace: free of war and conflict	.50
	A world of beauty: beauty of nature and the arts	.52
	Equality: brotherhood, equal opportunity for all	.61
National Strength and Order ($\alpha = .66$)	National security: protection from attack	.59
Traditional Religiosity ($\alpha = .75$)	Salvation: saved, eternal life	.79
Personal Growth and Inner Harmony ($\alpha = .76$)	A sense of accomplishment: lasting contribution	.33
	Inner harmony: freedom from inner conflict	.27
	Self-respect: self-esteem	.38
	Wisdom: a mature understanding of life	.51
Physical Well-Being ($\alpha = .79$)	—	
Secure and Satisfying Interpersonal Relationships ($\alpha = .70$)	Family security: taking care of loved ones	.42
	Mature love: sexual and spiritual intimacy	.36
	True friendship: close companionship	.48
Social Standing ($\alpha = .70$)	A comfortable life: a prosperous life	.48
	Social recognition: respect, admiration	.56
Social Stimulation ($\alpha = .58$)	An exciting life: a stimulating, active life	.44
Individual Rights and Basic Necessities ($\alpha = .55$)	—	

Note. $N = 458$. All r values are significant at the .001 level.

Rokeach Value Survey. These values appear to be unrelated to other major value clusters, and their status at this stage remains unclear.

With regard to multi-item representation, three scales—A Positive Orientation to Others, Competence and Effectiveness, and Propriety in Dress and Manners—are represented by sets of items in the Rokeach Value Survey. Two other scales—Assertiveness and Getting Ahead—are covered by single items. The remaining two constructs, Being Honest and Being Independent, have single-item representation in both the Rokeach instrument and the Mode Values Inventory.

Discussion

We conducted this study to answer two questions concerning the Rokeach Value Survey: (a) Does the instrument provide a comprehensive and representative coverage of the major value constructs? (b) In rank ordering the values, does one use the optimal measurement technique? We initially approached the second question by examining the fit between Rokeach's (1973) hierarchical model

and self-reports of priority setting from a sample from the general population. Subsequently, we investigated the option of measuring each value construct through several items rather than one.

In general, the Rokeach Value Survey is successful in covering the many and varied facets of the value domain. The major exception is the neglect of values relating to physical development and well-being. This is clearly an oversight in the development of the instrument, particularly given the representation of values associated with mental health (e.g., inner harmony and self-respect). Such values could be expected to have relevance to a number of substantive research areas, not the least important of which would be the social determinants of physical illness.

A second problem area relates to basic human rights such as dignity, privacy, the protection of human life, and freedom. None of these are adequately represented in the Rokeach Value Survey and yet are among the most fundamental tenets of our society.

The importance of other neglected values is more ambiguous and remains a question

for future research. In this category are the mode values related to thriftiness and care-freeness.

The inclusion of two of Rokeach's terminal values—pleasure and happiness—was not supported empirically by the results of our research, but their representation in the instrument was defended. The different patterns of interrelations of the pleasure variables in the student and general population samples were considered worthy of further investigation. They may, for instance, be attributable to the varying connotations attached to pleasure by different age groups. In the case of happiness, the value is regarded as a basic building block, a value in terms of which other values are justified (Braithwaite, Law, & Braithwaite, 1984). Not surprisingly, there-

fore, it was moderately related to a number of different value constellations rather than being strongly related to one.

With regard to the question of multi-item measurement, our data suggest that Rokeach (1973) actually did have more than one measure of each of several constructs in his instrument. There remains, however, a significant number of single-item indexes for such constructs as Pleasure, Happiness, Traditional Religiosity, Social Stimulation, National Strength and Order, Assertiveness, Withdrawal From Others, Honesty, and Getting Ahead. In some cases, the items representing these facets of the value domain have proven themselves both reliable and valid as single indicators. Salvation, for instance, falls into this category. The usefulness of others,

Table 5

Correlations of the Mode Values Inventory Indexes With Corresponding Items From the Rokeach Value Survey

Mode Values Inventory Index	Rokeach Value Survey Item	r
A Positive Orientation to Others ($\alpha = .89$)	Forgiving: willing to pardon others	.55
	Broadminded: open-minded	.37
	Helpful: working for the welfare of others	.52
	Loving: affectionate, tender	.48
	Cheerful: light hearted, joyful	.40
Competence and Effectiveness ($\alpha = .90$)	Capable: competent, effective	.45
	Intellectual: intelligent, reflective	.54
	Logical: consistent, rational	.55
	Self-controlled: restrained, self-disciplined	.49
	Imaginative: daring, creative	.44
Propriety in Dress and Manners ($\alpha = .83$)	Clean: neat, tidy	.59
	Obedient: dutiful, respectful	.47
	Polite: courteous, well-mannered	.63
	Responsible: dependable, reliable	.57
Religious commitment ($\alpha = .68$)	—	
Assertiveness ($\alpha = .69$)	Courageous: standing up for your beliefs	.52
Being Independent: Doing things on your own (test–retest $r = .65$)[a]	Independent: self-reliant, self-sufficient	.55
Acting on Impulse: doing things on the spur of the moment (test–retest $r = .69$)[a]	—	
Being Honest: never cheating or lying (test–retest $r = .60$)[a]	Honest: sincere, truthful	.48
Being Thrifty: being careful in spending money (test–retest $r = .64$)[a]	—	
Getting Ahead ($\alpha = .67$)	Ambitious: hardworking, aspiring	.55

Note. All r values are significant at the .001 level.
[a] Single items chosen to represent the factor.

however, is more questionable. For instance, Rokeach's measures of honesty, independence, and pleasure are not particularly stable over a period of weeks (Feather, 1975; Rokeach, 1973).

The factor necessitating the use of single-item measures in Rokeach's (1973) instrument is the rank ordering task itself. Yet these data fail to demonstrate that a single rank ordering of values reflects the priorities operating for members of the general population. Individuals do hold some values as equally important; some values never come into conflict, and others just aren't compared. In the absence of strong evidence to support Rokeach's hierarchical model, a rating procedure with multi-item measures for each value construct becomes an attractive alternative.

The findings of our research provide the basis for the development of such an instrument. These data provide psychometrically satisfactory measures of 14 value constructs. The number of items in these scales, their test–retest reliabilities, and their alpha reliability coefficients for the aggregated student samples and the general population sample, respectively, are presented in Table 6.

Seven additional constructs need to be assessed. A psychometrically satisfactory scale to measure individual rights has, unfortunately, proven elusive, though these data provide a sound basis for further developmental work. Refinements to the items should produce a scale with sufficient stability and coherence. For the remaining six values, single-item measures must suffice at this time. Rokeach's (1973) items—(a) Pleasure (an enjoyable, leisurely life), (b) Happiness (contentedness), (c) Independent (self-reliant, self-sufficient), and (d) Honest (sincere, truthful)—are probably the best available measures of these constructs. The Mode Values Inventory produced two additional single-item indexes: Acting on Impulse (doing things on the spur of the moment) and Being Thrifty (being careful in spending money).

This raises the question of whether it is possible within the confines of Rokeach's (1973) conceptualization of value to derive multiple-item measures of these constructs, or, for that matter, to increase the number of items in some of the indexes mentioned

Table 6

Fourteen Value Constructs for Aggregated Student Samples and General Population Sample

Variable	No. items	Test–retest reliability	Alpha reliability
1. International harmony and equality	10	.73	.85, .83
2. National strength and order	4	.81	.81, .83
3. Personal growth and inner harmony	6	.70	.74, .73
4. Physical well-being	3	.71	.79, .74
5. Secure and satisfying interpersonal relationships	5	.71	.70, .68
6. Social standing	3	.77	.70, .65
7. Social stimulation	2	.58	.53, .53
8. Traditional religiosity	4	.93	.75, .70
9. Religious commitment	4	.81	.66, .66
10. Positive orientation toward others	13	.80	.89, .88
11. Competence and effectiveness	13	.81	.89, .88
12. Propriety in dress and manners	7	.84	.83, .82
13. Assertiveness	3	.68	.67, .72
14. Getting ahead	2	.72	.66, .59

earlier. Given that we undertook lengthy interviewing procedures to ensure adequate representation of the domain, deriving additional measures of the construct may prove more difficult than might be assumed. The nuances of the English language may be such that there are only one or two options for expressing such values as thriftiness or pleasure within Rokeach's framework. This does not, of course, preclude the possibility of inferring values from measures involving sets of ideal goals in life and ways of behaving that are more specific in their focus—statements that Rokeach would regard as attitudinal in nature.

In suggesting an alternative to the Rokeach Value Survey, we are not denigrating the usefulness of this instrument nor offering a panacea for the problems of value measurement. As outlined previously, the survey has clear conceptual advantages over earlier instruments, it fared well in terms of its representativeness and comprehensiveness, and, unwittingly, it has even more than one mea-

sure of some value constructs. The self-ipsatizing nature of the instrument, however, is a feature that does not seem to be justified either psychometrically or in terms of empirical validity. This is not to say that the alternative procedure suggested here, rating the values, is without weaknesses. Indiscriminate use of the more favorable categories remains a problem, and the development of category labels and appropriate instructions to limit such behavior deserves high research priority. At the same time, overuse of positive categories is not at all surprising when one remembers what values are. With this in mind, one must guard against developing an instrument that forces discriminations for statistical neatness while failing to reflect psychological realities. After all, it may not be the holding of particular values but rather the ability to assign priorities among one's values that is the key to understanding the way in which values influence behavior.

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