

Chapter 7

A Proposal for Measuring Value Orientations across Nations

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7.1. Suggestions for the ESS core module from Shalom Schwartz

Introduction

Most social scientists view values as deeply rooted, abstract motivations that guide, justify or explain attitudes, norms, opinions and actions (e.g., Halman & de Moor, 1994; Rokeach, 1973; Schwartz, 1992; Williams, 1968). Values are basic orientations presumed to underlie and influence individual variation on many of the constructs that researchers from different disciplines will want to study through the ESS. Values can provide predictive and explanatory power in the analysis of attitudes, opinions and actions. Moreover, values can reflect major social change in societies and across nations. Hence, values are a prime candidate for inclusion in the core module of the ESS.

Survey researchers, like other social scientists, also view values as deeply rooted, abstract motivations. In practice, however, they distinguish little between values and attitudes (Halman & de Moor, 1994: p.22). They usually measure values with sets of attitude questions in specific domains of life such as religion, morality, politics, work, etc. In part, this is due to the absence of a comprehensive theory of the basic motivations that are represented socially as values. In part, too, it is due to the lack of a theory-based instrument to measure basic values. As a result, most empirical studies of values provide less integrated and more piece-meal understandings of socially meaningful issues than one would hope to attain. What is needed is a value theory and instrument that represent the broad and basic motivations that are relevant to a wide variety of attitudes and behavior across the different domains of life.

The approach proposed below draws on a well-validated theory of the full range of basic motivational contents of values (Schwartz, 1992, 1994). It specifies a set of ten value orientations that are probably comprehensive of the major different orientations that are recognized across cultures. By measuring each of these orientations, the ESS would be able to provide information on the basic values that are relevant to whatever topics might be chosen. Researchers interested in a detailed study of the value antecedents or consequences of particular opinions, attitudes or behavior could build on and add to the core information on values.

This paper begins with a discussion of the concept of values. It then comments on common practice in measuring values and its relation to the conception of basic values. A third section outlines the theory of values on which the proposed instrument is based and it reviews some of the research supporting this theory.¹ A fourth section describes the approach to measuring values that I recommend, its rationale, and some of the findings from cross-national studies that are relevant to it. The final section presents the set of 20 value items I propose and discusses some of the technical details pertaining to their proper use.

¹ Because the relevant psychological and cross-cultural literature may be unfamiliar to some readers of this document, I will provide numerous bibliographical references, mainly in footnotes.

7.1.1 *The Nature of Values*

Consensus regarding the most useful way to conceptualize basic values has emerged gradually since the 1950's (Braithwaite & Scott, 1991). We can summarize the main features of the conception of basic values implicit in the writings of many theorists and researchers² as follows:

1. **Values are beliefs**, cognitive structures that are closely linked to affect. When values are activated, they become infused with feeling. People for whom independence is an important value discuss it passionately, become aroused if their independence is threatened, despair when they are helpless to protect it, and are happy when they can express it.
2. **Values refer to desirable goals.**³ For example, social equality, fairness and helpfulness are all values.
3. **Values transcend specific actions and situations.** Obedience and honesty, for example, are values that may be relevant at work or in school, in sports, business and politics, with family, friends or strangers. This feature of values distinguishes them from narrower concepts like norms and attitudes, concepts that usually refer to specific actions, objects, or situations.
4. **Values serve as standards or criteria.** That is, values guide the selection or evaluation of actions, policies, people, and events. People decide whether actions, policies, people or events are good or bad, justified or illegitimate, worth approaching or avoiding, by considering whether they facilitate or undermine the attainment of cherished values.
5. **Values are ordered by importance** relative to one another. The ordered set of values forms a system of value priorities. Cultures and individuals can be characterized by their systems of value priorities. Do people attribute more importance to achievement or to justice, to novelty or to tradition, to wealth or to spirituality? Which of these values are more or less important as guides and justifications for the decisions taken by actors in societal institutions (legal, political, economic, educational, family, religious, etc.)?
6. **The relative importance of the set of relevant values guides action.** Any attitude or behavior typically has implications for multiple values. For example, attending church might express and promote tradition, conformity, security, and benevolence values for a person, but at the expense of hedonism, self-direction and stimulation values. Consequently, it is the tradeoffs among the competing values that are implicated simultaneously in the attitude or behavior that guides them (Schwartz, 1992, 1996; Tetlock, 1986). Each value contributes to action as a function both of its relevance to the action—and hence the likelihood of its activation—and of its importance to the actor.

Researchers are interested in basic value orientations not only as independent variables, but as dependent variables that reflect the influences to which individuals and groups are exposed. We therefore note briefly the major sources to which theorists trace differences in the values people hold dear.

A first source is needs or inborn temperaments (Rokeach, 1973; McCrae, et al., 2000). This source is significant for social scientists because it sets limits on the value priorities that a group or society can socialize or transmit successfully. Schwartz and Bardi (2001), for example, argue that socializers must accept a non-negligible emphasis on hedonism and

² e.g., Allport, 1961; Feather, 1995; Hofstede, 1980; Inglehart, 1977; Kohn, 1969; Kluckhohn, 1951; Morris, 1956; Rokeach 1973; Scott, 1965; Schwartz & Bilsky, 1987; Smith, 1969.

³ Although some theorists (e.g., Rokeach) also consider as values modes of conduct that promote goals, I find neither conceptual nor empirical support for this view (Schwartz, 1992).

stimulation values even if these are sometimes disruptive to smooth social functioning. This source is also significant because the particular value priorities that emerge as expressions of needs and temperaments are adaptations to the specific social environment to which people are exposed. People evolve value priorities that cope simultaneously with their basic needs and with the opportunities and barriers, with the ideas of what is legitimate or forbidden, in their environment.

The other major source refers directly to social experience. The common experiences people have because of their shared locations in the social structure (their education, age, gender, occupation, etc.) influence their value priorities (e.g., Inglehart, 1997; Kohn, 1989; Schwartz, 2003; Schwartz & Bardi, 1997). In addition, individuals have unique experiences (trauma, relations with parents, immigration, etc.) that affect their value priorities (e.g., Feather, 1985). Consequently, comparisons of the value priorities of groups and individuals can reveal the impacts of major social changes (e.g., changes in economic and political conditions) and of distinctive experiences (e.g., emigration, illness) to which subgroups in the population are exposed.

7.1.2 Current Practice in Measuring Values

Survey Practice and the Conception of Values

Ideally, the ESS should measure basic value orientations in a way compatible with the prevailing conception of values. I briefly review some of the current practices, focusing on methods prevalent in survey research. Implicitly, most survey researchers probably hold conceptions of values close to the one outlined here. However, many of the value *items* used in survey research are consistent only with features 1, 2, and 4.

Contrary to feature 3, these items often refer to specific situations or domains (“fighting rising prices,” “making sure this country has strong defense forces”). Consequently, they do not measure “basic” values in the sense of values that are relevant across virtually all situations. However, survey researchers often combine responses to items from specific domains in order to infer underlying, trans-situational values (e.g., materialism). One key problem with such an approach is that situation-specific items are highly sensitive to prevailing conditions. Responses presumed to measure the same underlying value orientation might therefore vary substantially with a change in conditions.

Clarke, et al. (1999) illustrate this problem in an examination of the Inglehart four-item battery. They demonstrate that substituting “creating more jobs” for “fighting rising prices” substantially changes the number of respondents classified as materialist or post-materialist. In economic conditions of high unemployment, the former item yields more materialists; in conditions of high inflation, the latter yields more materialists. It is necessary to avoid highly context-specific items in order to measure basic, trans-situational value orientations.

Contrary to features 5 and 6, many survey items do not measure values in terms of importance. Instead, they present attitude or opinion statements and employ agree-disagree, approve-disapprove, or other evaluative response scales. The researcher may then try to infer indirectly the importance of the values presumed to underlie these attitudes or opinions. Because multiple values may underlie any given attitude or opinion, it is hazardous to infer basic value priorities from responses to specific attitude and opinion items. In order to discover basic values with this approach, one must ask a large number of attitude or opinion questions across many domains of content. One can then search for underlying consistencies of response that may or may not be present. Such an approach requires many more items than the ESS can afford to include and it may well fail to discern clear and systematic sets of basic value priorities.

Popular Scales

The most popular scales for measuring values in recent years are those of Hofstede (1980, 1991), Rokeach (1967, 1973), Inglehart (1971), and Schwartz (1992). I discuss each in turn.

Hofstede.

Hofstede proposed four value dimensions for comparing cultures. He characterized the value profiles of 53 nations or cultural regions, using data from IBM employees. A great deal of research has built on Hofstede’s findings (see, Kagitcibasi, 1997, for example). His scale is unsuited for the ESS, however. This scale is not intended for use in linking individuals’ value orientations to their opinions or behavior. The dimensions it measures (e.g., individualism, power distance) discriminate among national cultures but do not discriminate among

individual persons. Moreover, most of the Hofstede items refer to work values. They do not measure the range of human values relevant in many life domains.

Rokeach.

The Rokeach scale asks respondents to rank each of two sets of 18 abstract values from the most to the least important. Many studies with this scale have identified meaningful relations of values to a variety of demographic variables, opinions, attitudes, and behavior (bibliography in Braithwaite & Scott, 1991). This scale is not well-suited for the ESS either, however. Despite its intention of covering the range of human values comprehensively, it leaves out critical content (e.g., tradition and power values). The selection of items was not theory-driven, so predictions and explanations based on it are typically ad hoc. Finally, on technical grounds, it is both too long (36 items) for the ESS and too abstract for use with the less educated subgroups in representative samples.

Inglehart.

The widely used Inglehart measures of materialism/postmaterialism (MPM) are short enough in both their four and twelve item versions to be considered for the ESS. They are based in theory, they are apparently well-understood by the respondents in representative samples, and they have shown meaningful relations to many variables of interest to survey researchers (Inglehart, 1997). Moreover, persuasive arguments have been made to support the view that they tap an important value shift in the West. On the other hand, these scales suffer from a number of limitations that make them less than optimal scales for the ESS.

First, as noted above, some of the Inglehart items are highly sensitive to prevailing economic conditions. And others may be sensitive to whether or not the respondent supports the current governing party (see below). Such sensitivity is desirable for items intended to measure changing opinions, but it may yield a misreading of deeply rooted value orientations and their vicissitudes.

Second, this scale measures individuals' values only indirectly. It asks about preferences among possible goals for one's country, not about personal goals. These preferences presumably reveal individual's own valuing of economic and physical security, of freedom, self-expression, and the quality of life. But multiple individual values are likely to underlie responses to questions about political, economic and security aspirations for one's country. Choosing "protecting freedom of speech" as the most important future goal for society, for example, presumably reflects individual values of intellectual openness and tolerance of others. But in particular personal or sociopolitical circumstances, it might be the choice of an intolerant member of a conservative fringe group who fears government control.

Third, the Inglehart scale measures only a single value dimension. Broad and important as the MPM dimension may be, it is not fine-tuned enough to capture the rich variation in individual value orientations. Research in seven countries (see below) suggests that MPM combines many distinguishable value emphases into a single score. As discussed below, each of these ten value emphases have distinct correlates. These cannot be studied with scores on the single dichotomous MPM variable.

Although MPM would not provide adequate coverage of basic value orientations for the ESS, it would make sense to include the 4-item scale in the first one or two surveys, if possible. This would permit comparisons of the associations with other variables of MPM and the values included in the ESS. Such comparisons would make it possible to link

findings from past surveys with MPM to the more fine-tuned value orientations studied in the ESS.

Schwartz.

The Schwartz (1992) Value Survey (SVS) is currently the most widely used by social and cross-cultural psychologists for studying individual differences in values. The conception of values that guided its development derived directly from the six features of values outlined above. This scale asks respondents to rate the importance of 56 specific values as “guiding principles in your life” [e.g., SOCIAL JUSTICE (correcting injustice, care for the weak)]. These specific values measure ten, theory-based value orientations. Studies in over 65 countries support the distinctiveness of these value orientations (Schwartz, 2003). However, the length of this scale precludes its use in the ESS. Moreover, people with little or no education encounter difficulty when responding to it. The method I propose for the ESS is based on the same theory as the Schwartz scale and research with this scale is relevant to the proposed method as well. I therefore turn next to an overview of this (my) theory and some of the research that supports it.

7.1.3 A Theory of the Content and Structure of Basic Human Values

The Ten Basic Types of Values

As noted above, I follow the literature in defining values as desirable, transsituational goals, varying in importance, that serve as guiding principles in people's lives. The crucial content aspect that distinguishes among values is the type of motivational goal they express. In order to coordinate with others in the pursuit of the goals that are important to them, groups and individuals represent these requirements cognitively (linguistically) as specific values about which they communicate. I derived ten, motivationally distinct, broad and basic values from three universal requirements of the human condition: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups.

The ten basic values were intended to include all the core values recognized in cultures around the world. These ten values cover the distinct content categories I found in earlier value theories, in value questionnaires from different cultures, and in religious and philosophical discussions of values. It is possible to classify virtually all the items found in lists of specific values from different cultures⁴ into one of these ten motivationally distinct basic values. Empirical research, reported below, has addressed the question of their comprehensiveness.

Schwartz (1992, 1994, 2003) and Schwartz and Bilsky (1990) detail the derivations of the ten basic values. For example, the conformity value was derived from the prerequisites of interaction and of group survival. For interaction to proceed smoothly and for groups to maintain themselves, individuals must restrain impulses and inhibit actions that might hurt others. The self-direction value was derived from organismic needs for mastery and from the interaction requirements of autonomy and independence.

Each basic value can be characterized by describing its central motivational goal. Table 1 lists the ten values, each defined in terms of its central goal. Specific, single value items that primarily represent each basic value appear in parentheses, following it. A specific value item represents a basic value when actions that express the specific value item or lead to its attainment promote the central goal of the basic value. The 57 value items in the full scale have been translated into 39 languages.

Table 1. Definitions of Motivational Types of Values in Terms of their Goals and the Single Values that Represent Them

<p>POWER: Social status and prestige, control or dominance over people and resources. (social power, authority, wealth, preserving my public image)</p> <p>ACHIEVEMENT: Personal success through demonstrating competence according to social standards. (successful, capable, ambitious, influential)</p> <p>HEDONISM: Pleasure and sensuous gratification for oneself. (pleasure, enjoying life, self-indulgence)</p> <p>STIMULATION: Excitement, novelty, and challenge in life. (daring, a varied life, an exciting life)</p>

⁴ Bales & Couch, 1969; Braithwaite & Law, 1985; Chinese Culture Connection, 1987; Dempsey & Dukes, 1966; Fitzsimmons, Macnab, & Casserly, 1985; Gordon, 1960, 1967; Lorr, Suziedelis, & Tonesk, 1973; Levy & Guttman, 1974; Munro, 1985; Rokeach, 1973; Scott, 1965.

- SELF-DIRECTION: Independent thought and action-choosing, creating, exploring.
(creativity, freedom, independent, curious, choosing own goals)
- UNIVERSALISM: Understanding, appreciation, tolerance and protection for the welfare of all people and for nature. (broadminded, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment)
- BENEVOLENCE: Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. (helpful, honest, forgiving, loyal, responsible)
- TRADITION: Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self. (humble, accepting my portion in life, devout, respect for tradition, moderate)
- CONFORMITY: Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms. (politeness, obedient, self-discipline, honoring parents and elders)
- SECURITY: Safety, harmony and stability of society, of relationships, and of self. (family security, national security, social order, clean, reciprocation of favors)
-

Multidimensional analyses of the relations among the single value items within 210 samples from 67 countries⁵ provide replications that support the discrimination of the postulated ten basic values. Confirmatory factor analyses of data from 23 countries yield similar results (Schwartz & Boehnke, 2003). Comparisons of the analyses within each society also establish that the 46 value items listed in Table 1 have nearly equivalent meanings across cultures. These 46 items serve to index the ten distinct basic values in the SVS. The method proposed below draws upon these items. This makes it likely that translations of the proposed items will attain an adequate level of functional equivalence across languages.

The Structure of Value Relations

In addition to identifying ten motivational basic values, the value theory explicates a structural aspect of values, namely, the dynamic relations among them. Actions in pursuit of any value have psychological, practical, and social consequences that may conflict or may be congruent with the pursuit of other values. For example, the pursuit of achievement values may conflict with the pursuit of benevolence values—seeking success for self is likely to obstruct actions aimed at enhancing the welfare of others who need one's help. However, the pursuit of achievement values may be compatible with the pursuit of power values—seeking personal success for oneself is likely to strengthen and to be strengthened by actions aimed at enhancing one's own social position and authority over others. Another example: The pursuit of novelty and change (stimulation values) is likely to undermine preservation of time-honored customs (tradition values). In contrast, the pursuit of tradition values is congruent with the pursuit of conformity values: Both motivate actions of submission to external expectations.

The circular structure in Figure 1 portrays the total pattern of relations of conflict and congruity among values postulated by the theory. The circular arrangement of the values represents a motivational continuum. The closer any two values in either direction around the

⁵ Samples include those representative of a nation or a region in it (16), grade k-12 school teachers (74), undergraduate students from a variety of fields (111), adolescents (10), and adult convenience samples (22). A total of 64,271 respondents came from countries located on every inhabited continent.

circle, the more similar their underlying motivations. The more distant any two values, the more antagonistic their underlying motivations.

The conflicts and congruities among all ten basic values yield an integrated structure of values. This structure can be summarized with two orthogonal dimensions. Self-enhancement vs. self-transcendence: On this dimension, power and achievement values oppose universalism and benevolence values. Both of the former emphasize pursuit of self-interests, whereas both of the latter involve concern for the welfare and interests of others. Openness to change vs. conservatism: On this dimension, self-direction and stimulation values oppose security, conformity and tradition values. Both of the former emphasize independent action, thought and feeling and readiness for new experience, whereas all of the latter emphasize self-restriction, order and resistance to change. Hedonism shares elements of both openness and self-enhancement.

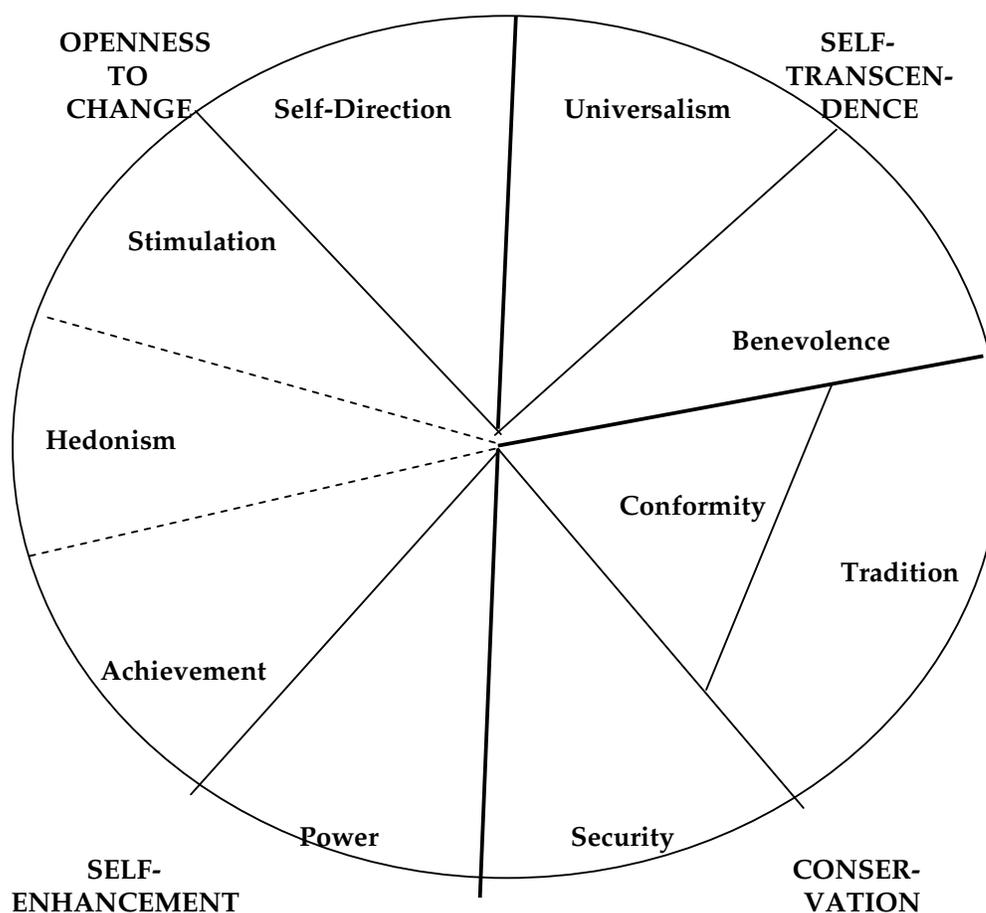


Figure 1. Theoretical model of relations among ten motivational types of values

This basic structure has been found in samples from 67 nations (Fontaine & Schwartz, 1996; Schwartz, 1992, 1994, 2003; Schwartz & Sagiv, 1995). It points to the broad underlying motivations that may constitute a universal principle that organizes value systems. People may differ substantially in the importance they attribute to values that comprise the ten basic values, but their values are apparently organized by the same structure of motivational oppositions and compatibilities. This integrated motivational structure of relations among values makes it possible to study how whole systems of values, rather than single values, relate to other variables.

Considering the structure of values adds importantly to our ability to predict and understand relations of values to attitudes, opinions, behavior and social experience. If a particular value is relevant to another variable, both the values adjacent to this value and those opposed to it in the value structure are likely to be relevant to that variable. For example, stimulation values relate positively to readiness to adopt innovative social practices (e.g., using the internet). So do hedonism and self-direction values, the value types adjacent to stimulation in the value circle. In contrast, conformity, tradition and security values, the opposing values in the structure, relate negatively to adopting innovations. This exemplifies feature (6) of the conception of values outlined above. It is the tradeoff among the importance that individuals attribute to this set of relevant competing values that guides their adoption of innovations.

Comprehensiveness of the Ten Basic Values

The comprehensiveness of any set of value orientations in covering the full range of motivational goals cannot be tested definitively. However, some evidence is consistent with the comprehensiveness of the ten basic values. Local researchers in 18 countries added to the survey value items of significance in their culture that they thought might be missing. We assigned these value items a priori to the existing basic values whose motivational goals we thought they express. Analyses including the added value items revealed that these items correlated as expected with the core, marker items from the basic values to which they were assigned.

Examination of the spatial representations of relations among the value items in the multidimensional analyses in each country also supports the comprehensiveness of the ten basic values. If values with significant, unique motivational content were missing, empty regions would appear in the two-dimensional value space. No extensive empty regions were identified, however. Thus, it is likely that the ten basic values in the theory do not exclude any significant, basic value orientations. The near comprehensive coverage of the basic values recognized across cultures by the ten values is an important advantage of the approach proposed for the ESS.

Values, Behavior, and Attitudes

The methods I propose to assess values, like those in survey research in general, are based on individuals' self-reports of the importance they attribute to values. Such self-reports might largely reflect lip-service to values rather than true endorsement. It is therefore critical to establish that self-reports of value priorities relate meaningfully to actual behavior. For this purpose, I briefly mention some of the findings that address this issue. Following is a sample of behaviors and behavioral intentions to which the ten values are related in the hypothesized manner: choice of medical specialty, choice of university major, consumer purchases, cooperation and competition, counselee behavioral style, delinquent behavior, environmental behavior, intergroup social contact, occupational choice, religiosity and religious observance, and voting.⁶

This evidence for the systematic relation of value priorities to behavior comes from a wide range of countries around the world (Brazil, China, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, Hungary, Israel, Italy, Mexico, the Netherlands, Poland, Portugal, Spain, the USA, and Venezuela). Even more work has examined attitudinal and belief correlates of the ten values.⁷ There are also studies of the role of values in personal identity formation in various regions of Spain (Grad, 1999) and in Israel (Roccas, 1998). There is evidence from Finland and Israel, moreover, that socially desirable responding does not confound self-reported values (Schwartz, et al., 1997). That is, the tendency to present oneself as graced by the qualities especially valued in one's own group or society is unrelated

⁶ Bardi & Schwartz, 2003; Barnea & Schwartz, 1998; Bianchi & Rosova, 1992; Bond & Chi, 1997; Grunert & Juhl, 1995; Karp, 1996; Puohiniemi, 1995; Roccas & Schwartz, 1997; Ros, Grad, & Alvaro, 1994; Sagiv, 1997; Sagiv & Schwartz, 1995; Schubot, Eliason, & Cayley, 1995; Schwartz, 1996; Schwartz & Barnea, 1995; Schwartz & Huismans, 1995; Srnc, 1995. Schwartz (2003) provides additional examples.

⁷ For example, Feather (1995) on attitudes to a various daily activities, Altemeyer (1998) and Rohan & Zanna (1996) on authoritarianism, and Altemeyer (1998) on social dominance orientation.

to the tendency to report that values are important. Studies of value priorities and value meanings have also examined the impact of living under communist regimes in East and Central Europe on basic individual and cultural orientations.⁸

It is useful to examine relations between the ten values and individual scores on materialism/postmaterialism. This can clarify relations between the MPM and basic values approaches and suggest how value priorities can be used to address questions previously studied with MPM. Eleven samples from seven countries (Australia, Japan, Hungary, Germany, Israel, Turkey, Brazil) completed the Schwartz Value Survey (SVS) and Inglehart's 4-item index. I explored relations between each of the four MPM items and the ten values with an MDS on the 14 variables in each sample and by examining intercorrelations.

The ten values formed the usual circular structure in all samples. The comparisons indicate that the MPM "law and order" item reflects an emphasis on conformity and security (conservation) values as opposed to stimulation, self-direction and hedonism (openness) values, consistently across samples. The other materialism item, "fighting rising prices," was closely related to "law and order" in only 5/11 samples. Nor did it reflect a cross-nationally consistent set of value priorities. In about a third of the samples it appeared to express conservation values and in another third self-enhancement values (power and achievement), with varied associations in the other samples. This reinforces the view, noted above, that the inflation item may not be a good indicator of basic value orientations.

The two postmaterialism items were closely related in 8/11 samples. Comparison with the basic values indicated that in nine samples both expressed the opposition of self-direction and universalism values to power and security values. The postmaterialism item "giving the people more say in important government decisions" exhibited a revealing deviation from this pattern of relations in the Israeli data, however. Those who emphasize conservation values (conformity, security and tradition) endorsed this item most strongly. This may reflect political conditions at the time of data gathering. The government was pursuing policies that were an anathema to conservative groups who were loudly protesting that their views were being ignored. If so, this is another example of the sensitivity of situation-specific items to prevailing conditions.

The value axis for postmaterialism is shifted slightly in a clockwise direction as compared with materialism (see Figure 1). Postmaterialism expresses support for intellectual openness and tolerance on the one hand and rejection of forceful social control on the other. Materialism focuses more on living in a personally secure, traditional environment as opposed to one in which change and self-indulgence are common. The overall results suggest that conservation vs. openness values might be used as parallels for MPM, if needed, but that using scores for the full range of value types provides finer distinctions.

⁸ Bardi & Schwartz, 1996; Schwartz & Bardi, 1997; Schwartz, Bardi & Bianchi, 2000.

7.1.4 The Recommended Method for Measuring Values in the ESS

Rationale and Design of the PVQ.

The method I recommend for measuring values in the ESS is a modification of a recently developed scale called the Portrait Values Questionnaire (PVQ; Schwartz, 2003; Schwartz, Lehmann, & Roccas, 1999; Schwartz, Melech, Lehmann, Burgess, & Harris, 2001). The PVQ was designed to measure the same ten basic value orientations measured by the Schwartz Value Survey. However, it presents respondents with a more concrete and less cognitively complex task than the earlier value survey. This makes it suitable for use with all segments of the population including those with little or no formal schooling.

The PVQ includes short verbal portraits of different people. Each portrait describes a person's goals, aspirations, or wishes that point implicitly to the importance of a single value type. For example: "Thinking up new ideas and being creative is important to him. He likes to do things in his own original way" describes a person for whom self-direction values are important. "It is important to him to be rich. He wants to have a lot of money and expensive things" describes a person who cherishes power values. By describing each person in terms of what is important to him or her—the goals and wishes he or she pursues—the verbal portraits capture the person's values without explicitly identifying values as the topic of investigation.

For each portrait, respondents answer: "How much like you is this person?" They check one of six boxes labeled: very much like me, like me, somewhat like me, a little like me, not like me, and not like me at all. Thus, respondents' own values are inferred from their self-reported similarity to people who are described in terms of particular values. The similarity judgments are transformed into a 6 pt. numerical scale. A few exemplary items and the instructions and format for the written form of the PVQ appear below.

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Put an X in the box to the right that shows how much the person in the description is like you.

HOW MUCH LIKE YOU IS THIS PERSON?

	very much like me	like me	some- what like me	a little like me	not like me	not like me at all
Thinking up new ideas and being creative is important to her. She likes to do things her own original way.						
Being very successful is important to her. She likes to impress other people.						
She thinks it is important that every person in the world be treated equally. She wants justice for everybody, even for people she doesn't						

know.						
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Note that respondents are asked to compare the portrait to themselves rather than themselves to the portrait. Asking them to compare other to self directs attention only to the aspects of the other that are portrayed. Thus, the similarity judgment is also likely to focus on these value-relevant aspects. In contrast, asking to compare self to other would focus attention on self and might cause respondents to think about the large number of self-characteristics accessible to them (Srull & Gaelic, 1983; Holyoak & Gordon, 1983; Tversky, 1977). Not finding these characteristics in the portrait, respondents might overlook the similarity of values.⁹

Construction and Administration of the PVQ

The valued goals, aspirations, and wishes included in the portraits were selected in three ways: (1) Building portraits from the conceptual definitions of the basic value (see Table 1) using terms not in the SVS. For example, the definition of achievement values yielded: "It is very important to him to show his abilities. He wants people to admire what he does." (2) Paraphrasing items from the SVS. For example, the universalism item "protecting the environment" became "He strongly believes that people should care for nature." (3) Making abstract terms or phrases from the SVS more concrete. For example, the hedonism item "pleasure" became "It is important to him to do things that give him pleasure."

The PVQ was developed in decentered Hebrew and English, male and female, versions. The level of language was simplified until 11 year olds in Uganda, Canada and Israel understood all items. Twenty, 29, and 40 item versions of the PVQ have been used with different populations in face-to-face interviews, telephone interviews, internet surveys, and written questionnaires. The PVQ is also suitable for a self-completion questionnaire. Based on these experiences, I estimate that the proposed 21-item version should take about 5-6 minutes to answer. Respondents to the PVQ report no difficulty in making judgments and rarely ask questions or comment on the significance of the research. They treat the PVQ as a simple task.

One or another version of the PVQ has been completed in one of 21 languages by 31 samples from 18 nations. These include representative samples in eight nations—approximately 1000 each in the Czech Republic, France, Germany, Great Britain, Spain and Sweden, 5800 in Italy, and 3123 in South Africa (8 languages). Other samples include adults in Argentina, Germany, Israel, Italy, Poland, and Ukraine, adolescents in Germany, Indonesia, Israel, Peru, Russia and Uganda, university students in Chile, Germany, Hong Kong, Indonesia, Israel, Peru, Poland, South Africa, Ukraine and the United States, and handicapped native-American adults in the USA.

⁹Greater accessibility of self-knowledge as compared with knowledge of others presumably characterizes those from cultures where people have an independent construal of self (Markus & Kitayama, 1991). This is thought to include most of the population in European countries. It may not, however, characterize immigrant groups in European countries, or those from rural areas. An interesting methodological study would examine the effects of reversing the direction of comparison (i.e., asking: "How similar are you to this person?") on value ratings in different subpopulations.

In each of these samples, multidimensional scaling analyses of relations among the value items were performed. These analyses yielded good approximations of the theoretical structure of ten basic values and of their circular order in the motivational circle in almost all samples. In the representative sub-sample of Black South Africans and in the sample of 12-yr. old Ugandan girls, the discrimination of a few basic values was not clear. However, the observed structure was much better than the structures found in these countries with the SVS. Thus, with minor exceptions, the basic value constructs exhibited functional equivalence.

Correcting for Response Tendencies

Respondents differ systematically in their tendencies to report that values are important to them in the SVS. Some respondents report that most values are highly important, others use the middle of the scale, and others tend to rate only a few values highly. Such differences in use of the response scale also appear in the ratings of other persons as more or less similar to self in the PVQ. To retain accuracy of value measurement when comparing individuals or groups, it is critical to correct for individual differences in use of the response scale. It is the tradeoffs between relevant values that influence behavior and attitudes, so it is the *relative* importance of the ten values to an individual that should be measured.

The most frequently employed correction is to treat each individual's mean response to all the items in the scale as a covariate in analyses (Schwartz, 1992). This removes the effects of individual differences in mean response level. The covariate approach does not multiply the effects of error in individual responses, as is the case if scores are standardized within individuals. It also leaves the distribution of responses within individuals unchanged. It assumes that differences in the distribution of responses are real. They reflect differences in the extent to which individuals discriminate among their values. The covariate approach to correcting scale use differences can be used with the ESS values items. An alternative is to center each respondent's responses around his/or her mean response to all 21 items.

Validation of the PVQ against the SVS

Because the PVQ has been used in many fewer studies than the SVS, it is important to examine the equivalence of the PVQ to the SVS as a measure of the ten values. A study with Israeli students applied a multitrait-multimethod approach to assess the convergent and discriminant validity of the values using the two methods. Table 2 (next page) presents critical parts of the multitrait-multimethod matrix. The correlations are partialled on the mean ratings of all items in each method.¹⁰

The correlations between the same value measured by the two different instruments (single trait-multimethod correlations) appear on the diagonal. The correlations between a value measured with one method and the other nine values measured with another method (multitrait-multimethod correlations) appear above and below the diagonal. Omitted are the multitrait-single method triangles. The last row and last column contain means, standard deviations, and alpha reliabilities of the indexes for each value.

¹⁰ A replication of this MMT study with 321 German students, using the 40 item PVQ, yielded virtually the same findings (Bamberg, et al., 2001). So did a replication with student data from East Ukraine (Renuka Sethi, 2002, unpublished data).

Table 2: Multitrait-Multimethod Matrix of Correlations among Ten Values with the Schwartz Value Survey (SVS) and the Portraits Questionnaire (PVQ)

<u>Value</u>	<u>SVS</u>										Mean* Sd Alpha
	PO	SE	CO	TR	BE	UN	SD	ST	HE	AC	
Power	.60	.09	.05	-.20	-.18	-.43	-.09	-.02	-.04	.39	3.00 1.12 .50
Security	.02	.67	.22	.20	.07	-.23	-.32	-.30	-.19	-.19	4.16 1.05 .64
Conformity	-.08	.32	.44	.27	.09	-.03	-.28	-.27	-.30	-.24	3.21 .89 .48
Tradition	-.28	.12	.20	.50	.15	.19	-.29	-.16	-.26	-.35	2.60 .81 .37
Benevolence	-.40	.16	.14	.11	.55	.20	-.21	-.21	-.19	-.24	4.63 .86 .61
Universalism	-.26	-.33	-.08	-.01	-.08	.55	.25	.04	.03	-.23	3.96 .82 .57
Self-direction	-.02	-.47	-.40	-.26	-.23	.04	.63	.38	.12	.20	4.23 .87 .53
Stimulation	.07	-.35	-.42	-.24	-.21	-.16	.27	.70	.49	.06	3.47 1.22 .76
Hedonism	.27	-.24	-.25	-.22	-.15	-.16	.13	.18	.50	.12	4.02 1.13 .79
Achievement	.42	.01	-.11	-.32	-.16	-.33	.08	-.03	.04	.53	3.94 1.03 .52
Mean*	3.08	4.29	3.63	2.59	4.60	3.98	4.66	3.92	4.26	4.47	
Sd	1.30	1.11	1.13	1.11	.94	.87	.88	1.34	1.27	1.13	
Alpha	.65	.70	.63	.53	.67	.62	.45	.72	.76	.76	

*The raw means for each value type based on the PVQ should not be compared with those based on the SVS because the two instruments employ different response scales.

The correlations in Table 2 support both the convergent and discriminant validity of the values. For every value, the single trait-multimethod correlation is significant ($p < .0001$) and is higher than any of its 18 multitrait-multimethod correlations. Despite the relatively low reliabilities of the PVQ indexes, the single trait-multimethod correlations are substantial.

This suggests that the motivational content of each value is largely the same regardless of method of measurement. Close analysis of the full multitrait-multimethod matrix (not shown) indicated that method of measurement also influences responses to a minor degree.

However, the theoretical relations of compatibility or opposition could account for most of the pattern of correlations among the value types measured by a single method.

Reliability of the PVQ indexes

The internal reliabilities of several PVQ indexes shown in Table 2 are relatively low. This is not surprising. It reflects two facts. The items in the indexes were selected to cover the different conceptual components of the value, not to measure a single concept redundantly. For example, the power value items tap both wealth and authority, and the universalism items tap understanding, concern for nature, and social concern. Moreover, each of these indexes is based on only two to four items.

The 21 item limit in the ESS values approach will necessarily produce indexes with relatively low reliability for the same reasons. This is less of a problem than it might appear, however. Meaningful and substantial associations have been found between two-item value indexes and other variables, as discussed below. Moreover, because the ten values form an integrated structure, one can combine items from motivationally adjacent values to form more reliable indexes of broader value orientations. Indeed, the values theory can be simplified by moving to the level of four higher-order value orientations of conservation, openness to change, self-enhancement, and self-transcendence, if finer distinctions are not needed. The indexes of the higher-order orientations will include sufficient items to permit estimation of reliable latent variables.

Two studies with students have assessed the test-retest reliability of the ten values, as measured by the PVQ. Respondents completed the PVQ twice, separated by an interval of two-weeks in Israel and 6 weeks in Germany. The test-retest reliabilities (Israel & Germany) were moderate to high: power .84 & .77, security .88 & .70, conformity .86 & .72, tradition .81 & .80, benevolence .82 & .62, universalism .83 & .75, self-direction .66 & .70, stimulation .74 & .76, hedonism .84 & .65, achievement .83 & .82.

Using the PVQ indexes to Measure Sample Means (Hierarchies)

In studies across more than 60 countries, Schwartz and Bardi (2001) identified a high level of pan-cultural agreement regarding the hierarchy of importance of the ten values. They argue that this hierarchy reflects the social and psychological functions of the different values. Characteristics of each sample (e.g., distributions of age, occupation, religion, and family size, as well as unique economic, social, technological and historical experiences) cause variation from the pan-cultural value hierarchy. If the PVQ is an adequate measure of the ten basic values, it should yield value hierarchies for samples similar to those obtained with the SVS.

Three comparisons provide evidence of the similarity of the sample hierarchies measured with the PVQ and the SVS. Consider first the Israeli sample whose value data appear in Table 2. The correlation between the two sets of importance means of the ten values, one based on the SVS and the other on the PVQ, was $r=.95$. Second, the importance means of the

ten values in an Italian representative sample, based on the PVQ, correlated .83 with means based on the SVS in a smaller representative Italian sample (n=235) studied one year earlier. Third, in a German student sample (Bamberger, et al., 2001), the corresponding correlation was .99. These correlations indicate that the relative importance of the ten basic values is not strongly dependent on method of measurement. Thus, PVQ value scores can be used to represent and compare the importance attributed to values across samples as well as across individuals.

Validation of PVQ Value Priorities: Relations to Other Variables

As compared with the SVS, the PVQ has been used in a relatively limited number of studies. It is therefore important to examine findings that test predicted associations of value priorities, measured with the PVQ, with selected background, personality, attitude, and behavioral variables. In choosing the variables whose relations to values I report, I sought to maximize diversity of content and to include several variables that researchers have studied in the past. Space precludes all but a minimal presentation of the grounds for each of the hypotheses tested. All analyses were controlled for the effects of scale use in the PVQ, as described above. The 29-item version of the PVQ was used in the reported studies.¹¹

Age.

As people grow older, they tend to become more embedded in social networks, more committed to habitual patterns, and less exposed to arousing and exciting changes and challenges (Glen, 1974; Tyler & Shuller, 1991). This gives rise to hypotheses that age correlates most positively with conservation values (tradition, conformity, security) and most negatively with openness to change values (self-direction, stimulation) and with hedonism. Once people enter families of procreation and attain stable positions in the occupational world, they tend to become less preoccupied with their own strivings and more concerned with the welfare of others (Veroff, Reuman, & Feld, 1984). This leads to the hypotheses that age correlates positively with self-transcendence values (benevolence, universalism) and negatively with self-enhancement values (power, achievement).

The first and second columns of Table 3 (next page) report correlations of age with values in the representative national samples from Italy and South Africa. The South African sample included Asians, Blacks, Coloureds, and Whites. In both countries all correlations were in the hypothesized direction and significant.

Education.

Educational experiences presumably promote the intellectual openness, flexibility, and breadth of perspective essential for self-direction values (Kohn & Schooler 1983). These same experiences increase the openness to non-routine ideas and activity, central to stimulation values. In contrast, these experiences undermine conformity and tradition values by challenging unquestioning acceptance of prevailing norms, expectations and traditions. Education data were available for the South African representative sample. Column three of Table 3 reveals the expected positive correlations of education with self-direction and stimulation values and negative correlations with conformity and tradition values.

¹¹ See Schwartz (2003b) for further examples using other versions.

Religiosity.

Prior research with the SVS in ten countries confirmed theorizing that individual religiosity relates positively to giving priority to conformity and tradition values and negatively to giving priority to hedonism, self-direction, and stimulation values (Roccas & Schwartz, 1997; Schwartz & Huismans, 1995). Less consistent positive associations have been found for benevolence values and negative associations for achievement and power values. The last column of Table 3 presents a pattern of correlations between religiosity and values that largely replicates past findings with the SVS. Tradition and conformity values were positively correlated with religiosity, and hedonism, self-direction, achievement, and power negatively correlated. In contrast with past studies, stimulation values did not correlate significantly with religiosity, although the correlation was in the expected negative direction.

Table 3: Correlations of the Ten Types with Age, Education, and Religiosity

<u>Value</u>	Age Italy (N=5867)	Age South Africa (N=3210)	Education South Africa (N=3210)	Religiosity Israel (N=200)
Security	.24***	.18***	.11***	.07
Conformity	.23***	.15***	-.18***	.17*
Tradition	.26***	.21***	-.13***	.48**
Benevolence	.14***	.16***	.13***	.03
Universalism	.13***	.14***	.05**	-.08
Self-Direction	-.16***	-.04	.17***	-.16*
Stimulation	-.29***	-.22***	.12***	-.08
Hedonism	-.35***	-.29***	.00	-.21**
Achievement	-.24***	-.17***	-.04**	-.19**
Power	-.07***	-.11***	-.12***	-.14*

* $p < .05$, ** $p < .01$, *** $p < .001$

Gender.

Psychoanalytic, role learning, cultural feminism, and evolutionary theories of gender difference led values researchers to postulate that men emphasize agentic-instrumental values like power, while females emphasize expressive-communal values like benevolence (e.g., Prince-Gibson & Schwartz, 1998). Interactionist theories (e.g., Deaux & Major, 1990) postulated no consistent gender differences. Studies across many cultures reveal small differences that are reliable only in large samples. In the Israeli student sample, the only significant gender difference was that women gave higher priority than men to benevolence values. Because of large sample sizes, all gender differences were significant in both the Italian and South African national samples. However, only three differences showed effect sizes greater than .25: In Italy, men attributed more importance to power and stimulation values and, in South Africa, women attributed more importance to tradition values. Thus, findings with the PVQ are consistent with past research on gender and values.

Major Subject of Study.

Most Israeli students view their university major as the initial step toward a professional career. Consequently, choice of major is a significant behavioral indicator of individuals' goals and personal strivings, hence of their values. Two broad groups of students were available to compare: economics (economics, accounting, business administration) and

humanities (language and literature, history, philosophy, Jewish studies). Theoretical and empirical analyses of the values most compatible with various majors and professions (e.g., Roccas, 1997) suggest the following hypotheses for these two groups: Economics majors are likely to give higher priority to power and achievement values, humanities majors to universalism values. The left side of Table 4 (next page) shows that economics majors attributed significantly more importance to power and achievement values. The groups differed in the expected direction for universalism values, but not significantly. In addition, humanities majors attributed more importance to tradition values.¹²

Political Orientation.

Previous research in Israel revealed systematic associations between political party preferences and basic values measured with a version of the SVS (Barnea & Schwartz, 1998). The major political cleavage lies on a dimension ranging from conservative and nationalist (strongly emphasizing tradition, national aspirations and security) to liberal and anti-traditional (strongly emphasizing tolerance, civil liberties, and individual freedom). One might therefore expect the strongest value differences for security, tradition, and conformity values (nationalists high) and for universalism and self-direction values (liberals high). The right side of Table 4 reveals significant differences in the expected direction for four of these five value types.

Table 4. Mean Importance of the Ten Values as a Function Major Field of Study and of Political Orientation (Israeli Students)

Value	Major Subject			Political Orientation			
	Economics (N=47)	Humanities (N=36)	F	Nationalist (N=30)	Centrist (N=100)	Liberal (N=47)	F
Security	4.15	4.32	.95	4.63	4.19	3.72	11.1**
Conformity	3.23	3.27	.07	3.23	3.21	3.16	.13
Tradition	2.50	2.89	5.5*	2.91	2.50	2.43	4.7*
Benevolence	4.54	4.65	.35	4.56	4.60	4.70	.45
Universalism	3.73	3.87	.69	3.45	3.96	4.33	17.4**
Self-Direction	4.10	4.28	.92	4.31	4.11	4.48	3.7*
Stimulation	3.45	3.51	.06	3.29	3.54	3.37	.82
Hedonism	4.07	4.03	.03	3.72	4.09	4.06	1.6
Achievement	4.17	3.76	4.1*	3.87	4.01	3.91	.37
Power	3.54	2.66	25**	3.12	3.06	2.87	.82

* $p < .05$, ** $p < .01$

Autocratic Interpersonal Behavior.

Attributing extremely high priority to a value induces overly intense and rigid pursuit of that value. Thus, people who value power and achievement highly may engage in an exaggerated pursuit of power, success, and influence. This would lead to problems of autocratic interpersonal behavior (manipulating, controlling, dominating, aggressing toward, and trying to change others; Alden, Wiggins, & Pincus, 1990). In contrast, people who attribute high importance to the opposing values in the motivational circle

¹² The unexpectedly high importance of tradition values and low importance of universalism values to the humanities majors probably reflects the presence in this group of orthodox religious students who major in Jewish studies.

(universalism, benevolence, conformity, and tradition), are likely not to experience problems with autocratic behavior. The Israeli data in column one of Table 5 (next page) confirm these hypotheses: Attributing importance to power and achievement values correlated positively with problems of autocratic behavior; attributing importance to universalism, benevolence, conformity, and tradition values correlated negatively.

Authoritarianism.

To relate value priorities to this personality construct, Bamberger, et. al (2001) used a 3-item scale developed by Schmidt, Stephan and Hermann (1995) designed to measure belief in the essential role in life of discipline and obedience to authorities and their expectations. By definition, the values likely to correlate most positively with this scale are conformity, with its adjacent values of security and tradition also correlating positively. Those likely to correlate most negatively are self-direction and universalism, both of which emphasize basing one's actions and ideas on independent, personal judgment. The correlations in column two of Table 5 confirm these hypotheses.

Change Seeking.

South African respondents completed the Change Seeker Index (Steenkamp & Baumgartner, 1995), a scale that measures sensation-seeking and is highly correlated with exploratory consumer behavior. By definition, the values likely to correlate most positively with change seeking are stimulation and hedonism values. Those likely to correlate most negatively are the self-restraining values, tradition, conformity and security. Because the scale captures a tendency to materialistic self-indulgence, it might also correlate negatively with benevolence values that emphasize concern for the needs of others rather than self. The correlations in column three of Table 5 confirm these hypotheses.

Use of Alcohol.

Alcohol consumption entails some risk to one's physical health and well-being and to one's relations with others. Advertising associates alcohol with pleasure and stimulation through linking it to partying, nightlife, leisure, travel and sports (Aitken, 1989). One would therefore expect that high priorities for stimulation and hedonism values correlate positively with alcohol use. In contrast, high priority for conservation (tradition, conformity, security) values that oppose risk should correlate negatively with alcohol use. The data in column four of Table 5 confirm these expectations, though the correlations are small, indicating that other factors are critical determinants of alcohol use.

Table 5. Correlations of the Ten Values with Autocratic Behavior, Authoritarianism, Change Seeking, and Alcohol Use

<u>Value</u>	Autocratic Behavior: Israel (N=200)	Authoritarianism :Germany (N=395) ¹³	Change Seeker Index: South Africa (N=3210)	Alcohol Use: South Africa (N=3210)
Security	-.07	.30***	-.31***	-.06***
Conformity	-.36***	.54***	-.20***	-.07***

¹³ From Bamberger, et al. (2001)

Tradition	-.26**	.29***	-.25***	-.18***
Benevolence	-.18*	-.14**	-.26***	.02
Universalism	-.24**	-.38***	-.18***	-.03
Self-Direction	.27**	-.40***	.17***	.08***
Stimulation	.13	-.08	.37***	.09***
Hedonism	.22**	-.05	.26***	.12***
Achievement	.24**	-.02	.17***	.04
Power	.42***	.15**	.06***	.03

* $p < .05$, ** $p < .01$, *** $p < .001$

Use of Mobile Phones.

One-third of the Italian representative sample indicated that they owned and used a mobile phone. According to attitude items administered together with the PVQ in Italy, mobile phone use was an innovative behavior engaged in because it is fun, exciting, gives people freedom to move around, and contributes to getting one's work done. This suggests that stimulation, hedonism, self-direction and achievement values should be more important among mobile phone users than among non-users and that tradition, conformity, and security values should be less important. A multiple analysis of variance of the ten values confirmed all these hypotheses. Effect sizes were greater than .25 for all but security (.10) and conformity (.06) values.

In sum, studies that measure values with the PVQ have confirmed many predicted associations between value priorities and background, personality, attitude and behavior variables in samples from diverse countries. The data are also quite supportive of the two hypotheses regarding overall associations of the whole set of values with other variables that Schwartz (1992: 54) derived from the circular structure of value relations:

1. Any outside variable tends to be similarly associated with values that are adjacent in the value structure (cf. Figure 1).
2. Associations with any outside variable decrease monotonically as one goes around the circular structure of values in both directions from the most positively associated value to the least positively associated value.

The order of values in Tables 3-5 follows their order around the circular structure of values. Examination of the data in these tables reveals that associations generally exhibit both hypothesized patterns. This is evidence that the PVQ, measures values in a way that reflects their underlying motivational continuum.

Conclusion

My recommendation to use the PVQ method to measure values in the ESS is based on three major considerations.:

1. Theory: The PVQ operationalizes the theory of basic human values well. It would therefore permit use of this cross-culturally validated theory of the content and

structure of value relations to predict and explain variation in phenomena that interest ESS researchers.

2. Properties: The PVQ demonstrates adequate psychometric properties for a short scale intended to measure multiple constructs. There is sound evidence of its predictive validity, evidence based on studies in many different countries.
3. Practical Issues: The PVQ method can provide scores for a wide range of value priorities, in a short period of time, from the variegated populations the ESS will study. It can be administered face-to-face, in writing, by telephone, and by internet, offering flexibility that may be useful if the ESS changes its methods of data gathering in the future.

7.1.5 Proposed Value Items for ESS

The ESS methodology committee has allocated 21 items for the measurement of values. To achieve optimal coverage of the distinctive basic motivational orientations, I recommend two items for nine of the ten values and three for the universalism value. Universalism is the most complex value construct (Schwartz, 1992). As noted earlier, it includes three distinct, though consistently interrelated, components—understanding, concern for nature, and social concern. I have therefore chosen one item for each component. The other values include only one or two components, so two items per value suffice.

Below, I suggest 21 items that I currently think can measure the range of values best. In the appendix, I list an additional 20 items. Based on results of pretests with the suggested items, some items might be modified or replaced by items from the appendix.¹⁴

I used two criteria to choose items. First, I chose items that emerged consistently together with the other items intended to measure the same value in past studies. For this purpose, I examined both the item intercorrelations and the proximity of items in the multidimensional space analyses. Each item had been included in research in eight to 21 different samples. Second, I chose items that could provide coverage of the different aspects of the motivational goal that characterizes each value.

For a few values, insufficient items were available from past studies to fulfill these criteria. Consequently, I constructed a few new items together with the staff that developed the PVQ in the past. We combined different parts of earlier items that had worked well or added new elements to them. The new or modified items operationalize the definition of the relevant value and use wording tested in earlier versions of the PVQ or in the SVS.

Table 6 lists the recommended value items for each basic value. These items are phrased for male respondents. The female version requires the obvious minor changes. The instructions and format for the PVQ were presented on page 18, above. The numbers indicate the order of each item in the recommended PVQ.

Table 6. List of 21 PVQ Items for ESS
BENEVOLENCE
12. It's very important to him to help the people around him. He wants to care for other people.
18. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.
UNIVERSALISM

¹⁴ If one of the ESS rounds devotes a module to values, it would be desirable to use the full 40-item version presented in the appendix in order to increase the reliability of the indexes.

Table 6. List of 21 PVQ Items for ESS
<p>3. He thinks it is important that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know.</p> <p>8. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.</p> <p>19. He strongly believes that people should care for nature. Looking after the environment is important to him.</p>
SELF-DIRECTION
<p>1. Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.</p> <p>11. It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.</p>
STIMULATION
<p>6. He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life.</p> <p>15. He looks for adventures and likes to take risks. He wants to have an exciting life.</p>
HEDONISM
<p>10. Having a good time is important to him. He likes to "spoil" himself.</p> <p>21. He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.</p>
ACHIEVEMENT
<p>4. It is very important to him to show his abilities. He wants people to admire what he does.</p> <p>13. Being very successful is important to him. He likes to impress other people.</p>
POWER
<p>2. It is important to him to be rich. He wants to have a lot of money and expensive things.</p> <p>17. It is important to him to be in charge and tell others what to do. He wants people to do what he says.</p>
SECURITY
<p>5. It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.</p> <p>14. It is very important to him that his country be safe from threats from within and without. He is concerned that social order be protected.</p>
CONFORMITY

Table 6. List of 21 PVQ Items for ESS

7. He believes that people should do what they're told. He thinks people should follow rules at all times, even when no-one is watching.

16. It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong.

TRADITION

9. He thinks it's important **not** to ask for more than what you have. He believes that people should be satisfied with what they have.

20. Religious belief is important to him. He tries hard to do what his religion requires.

Testing the structure

The instrument can be used simply as a way to measure ten motivationally distinct values, that is, to yield ten scores each of which can be associated with other variables. In that case, one criterion would be to ask if one has an internally reliable index of each type of value. Given that nine values are measured by only two items and the tenth by three, we cannot expect high internal reliabilities. Despite sometimes relatively low reliability (as low as .40), validity coefficients for the somewhat longer scales obtained with the 40 item PVQ, derived from correlating the value scores with other variables, have been quite good. Frankly, I do not know what level of reliability to use as a criterion for the two item indexes.

My criteria are based on considering the whole continuum of values by performing multidimensional scaling and examining the configuration of items in a two-dimensional space (2 dimensions are usually sufficient to obtain a good representation of the associations, though 3 may rarely be required) (cf. Davison 1983; Borg & Lingoes, 1987). The SSA programs usually yield the clearest structures. With 40 items, it is a fairly simple matter to place boundaries around the three or more items intended to operationalize each value and to see whether they form a distinct region in the space. With only two items this can still be done, though placing boundaries may not always be as simple. A possible approach to defining a region is that a line joining two items for the same value should not cross the line joining the items from any other value. If the items do indeed form a region, reflecting their own inter-correlation and their similar pattern of correlations with other items, I would treat them as an acceptable index for a value.

If other items are found within the region, I would ask whether these are items from values expected to be adjacent to the value in question, according to the theory. If so, I would consider combining the items into a broader joint value including both values. However, I would retain the a priori index if the a priori items are not separated by more than one other item. The Schwartz & Sagiv (1995) article, attached, explains why I do not view minor deviations from a priori expectations in the spatial arraying of items as grounds for abandoning indexes based on many past studies. If the items intended to index a value do

not meet this criterion in a sample, the given value cannot be measured in that sample as a distinct value. If one or both of the items intended to index a value (2 of 3 for universalism) do fall in a region consisting of the other items that form a higher-order value, they can be included in an index of that higher-order value.

Second, one may be interested in validating the values model itself. Although this is of central interest to me, it may not be critical to the ESS. The model specifies the structure of relations among value items at various levels of detail. Each of these can be tested. Simplest is the discrimination of value items into those that serve primarily individual interests, those that serve primarily collective interests, and those that serve both. Next is the discrimination into the four higher-order types. Next is the discrimination of the ten values. Finally, is the arraying of the ten values according to the theorized structure shown in Figure 1 in the proposal. I will mention two approaches, configurational verification and confirmatory factor analysis (CFA), for testing the model. The articles I attach illustrate both approaches. Schwartz and Boehnke (2003) demonstrates the CFA approach. The article on the Structure of Worries (Boehnke, et al.) does not deal with values, but it demonstrates the overlap between the configurational verification and the CFA approaches.

Using the configurational verification approach (Davison), each of these discriminations can be tested by examining the SSA projection for a sample.

1. Is it possible to partition the total space into distinct regions of value items that serve individual, collective, and both interests? All self-direction, stimulation, hedonism, achievement and power items should form an individual interests region, all benevolence, conformity, and tradition items should form a collective interests region, and the universalism and security items that serve both should be found between these two regions. With 21 items, I think a criterion of 17 correctly placed items is a reasonable level of certainty, though a case could be made for a looser, a tighter, or a more sophisticated criterion. An alternative assessment focuses only on the 16 items intended to measure either individual or collective interests clearly and partitions the space into two regions. I think a criterion of correct placement of 14 of the 16 items other than universalism and security items is reasonable.
2. Is it possible to partition the total space into four distinct regions of value items that represent each of the four higher-order values? With 21 items and four classifications, I think a criterion of 16 correct placements is reasonable, though, again, a case could be made for another criterion.
3. Is it possible to partition the total space into 10 distinct regions of value items that include the items intended to measure each of the ten values? With 21 items and ten classifications, I think a criterion of 6 fully distinct regions and the remainder of the items forming joint regions with items from values that are theoretically adjacent in the theorized structure is reasonable. I would require at least 8 distinct regions if the other items do not form regions with items from values expected to be adjacent to them by theory. Of course, a case could be made for another criterion here too.
4. Are the regions for the 10 values ordered in space according to the structural theory? Using the PVQ, we have found that power values are usually located peripheral to achievement values, a location that was discussed as possible in the original development of the theory (Schwartz, 1992). For testing the overall structure, the criteria set in Schwartz (1992) for the SVS and used in subsequent articles (e.g., Schwartz, 1994; Schwartz & Sagiv, 1995; Schwartz 2003a,b) can be extrapolated to the PVQ, with modifications required by indexing the values by only 2 (3 for universalism) values.

As a measure of the fit between the observed structure of value relations and the hypothesized structure, we count the number of single inversions of the order of adjacent values (= moves) required to rearrange the observed order to match the ideal order. Where two values form a joint region, the value items are split into separate regions in the hypothesized order and a full move is counted. If, for example, the hedonism region were located between the stimulation and self-direction regions instead of in its postulated position between stimulation and power, and all other regions were as postulated, one move would be required to match the ideal structure. If tradition were located between security and power, and all else were as postulated, 1.5 moves would be required: one to move tradition past security and 0.5 to place it behind conformity.

With the structure in Figure 1 of the proposal, 181,440 different arrangements of the ten values are possible. Any arrangement requiring fewer than 5 moves differs significantly ($p < .01$) from a random arrangement in the direction of the postulated structure. This seems a reasonable criterion to use here as well. Perhaps, however, the structural model should be modified to place power values peripheral to achievement for research with the PVQ. This model was assessed as almost as good as the model presented in 1992 and given a theoretical basis too (cf. Schwartz & Bilsky, 2003).

Confirmatory factor analysis has been used by Schwartz and Bilsky (2003) to test the whole structural model of values. They replicated the analysis on two sets of 23 samples each from 23 countries, using the 46 items from the 57 item version of the SVS that had shown stability of meaning across cultures in earlier configurational analyses. Results of that study confirmed (1) partitioning the total space into distinct regions of value items that serve individual, collective, and both interests, (2) partitioning the total space into four distinct regions of value items that represent each of the four higher-order values (though it indicated that all other combinations of adjacent values into higher-order types were also legitimate), (3) partitioning the total space into 10 distinct regions of value items that include the items intended to measure each of the ten values, and (4) the theorized order of the 10 values into a circular motivational continuum.

Estimation of value orientation scores

The total score for each value is obtained by calculating the mean of the scores for the items that index it. Note, however, that when examining associations of the ten values with any other variable, it is necessary to correct for response tendencies in using the response scale. This is best done by using the individual's mean for all items as a covariate. Alternatively, one may center each individual's responses to each item around his or her mean response to all items. The items to include in the score for each of the ten values are expected to be those designated as measuring the value a priori, unless problems with particular items are found in the structural analyses.

For less refined distinctions among values, it is possible to form four scores, one for each of the higher-order types of values. Self-transcendence is measured by the mean of the benevolence and universalism items, self-enhancement by the mean of the power and achievement items, conservation by the mean of the conformity, security and tradition items, and openness by the mean of the self-direction, stimulation and hedonism items. If structural analyses show that hedonism is closer to self-enhancement, it could be included in that higher-order index. However, for purposes of cross-national comparison, it is desirable to have the same indexes in all nations, if possible, and our experience is that hedonism is

closer to openness in about 75% of over 200 samples we have studied. This has been the case with both the earlier SVS and the new PVQ.

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Appendix

Recommendations for 40 PVQ Items
BENEVOLENCE
<p>12. It's very important to him to help the people around him. He wants to care for other people.</p> <p>18. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.</p> <p>27. It is important to him to respond to the needs of others. He tries to support those he knows.</p> <p>33. Forgiving people who might have wronged him is important to him. He tries to see what is good in them and not to hold a grudge.</p>
UNIVERSALISM
<p>3. He thinks it is important that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know.</p> <p>8. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.</p> <p>19. He strongly believes that people should care for nature. Looking after the environment is important to him.</p> <p>23. He believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him.</p> <p>29. He wants everyone to be treated justly, even people he doesn't know. It is important to him to protect the weak in society.</p> <p>40. It is important to him to adapt to nature and to fit into it. He believes that people should not change nature.</p>
SELF-DIRECTION
<p>1. Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.</p> <p>11. It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself.</p> <p>22. He thinks it's important to be interested in things. He likes to be curious and to try to understand all sorts of things.</p> <p>34. It is important to him to be independent. He likes to rely on himself.</p>
STIMULATION

Recommendations for 40 PVQ Items
<p>6. He thinks it is important to do lots of different things in life. He always looks for new things to try.</p> <p>15. He likes to take risks. He is always looking for adventures.</p> <p>30. He likes surprises. It is important to him to have an exciting life.</p>
HEDONISM
<p>10. He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.</p> <p>26. Enjoying life's pleasures is important to him. He likes to 'spoil' himself.</p> <p>37. He really wants to enjoy life. Having a good time is very important to him.</p>
ACHIEVEMENT
<p>4. It's very important to him to show his abilities. He wants people to admire what he does.</p> <p>13. Being very successful is important to him. He likes to impress other people.</p> <p>24. He thinks it is important to be ambitious. He wants to show how capable he is.</p> <p>32. Getting ahead in life is important to him. He strives to do better than others.</p>
POWER
<p>2. It is important to him to be rich. He wants to have a lot of money and expensive things.</p> <p>17. It is important to him to be in charge and tell others what to do. He wants people to do what he says.</p> <p>39. He always wants to be the one who makes the decisions. He likes to be the leader.</p>
SECURITY
<p>5. It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.</p> <p>14. It is very important to him that his country be safe from threats from within and without. He is concerned that social order be protected.</p> <p>21. It is important to him that things be organized and clean. He doesn't want things to be a mess.</p> <p>31. He tries hard to avoid getting sick. Staying healthy is very important to him.</p> <p>35. Having a stable government is important to him. He is concerned that the social order be protected.</p>

Recommendations for 40 PVQ Items
CONFORMITY
<p>7. He believes that people should do what they're told. He thinks people should follow rules at all times, even when no-one is watching.</p> <p>16. It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong.</p> <p>28. It is important to him to be obedient. He believes he should always show respect to his parents and to older people.</p> <p>36. It is important to him to be polite to other people all the time. He tries never to disturb or irritate others.</p>
TRADITION
<p>9. He thinks it's important not to ask for more than what you have. He believes that people should be satisfied with what they have.</p> <p>20. Religious belief is important to him. He tries hard to do what his religion requires.</p> <p>25. He believes it is best to do things in traditional ways. It is important to him to follow the customs he has learned.</p> <p>38. It is important to him to be humble and modest. He tries not to draw attention to himself.</p>

7.2 Evaluation of the Human Values scale

7.2.1. *The definition of values*

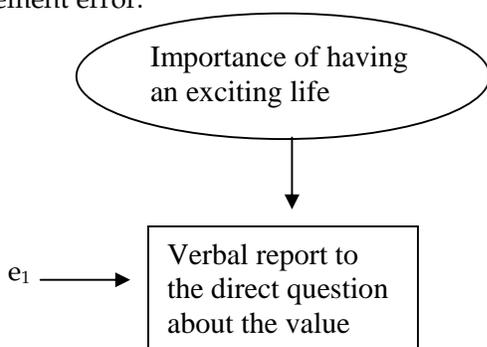
Shalom Schwartz has commented on his definition of the value construct as follows: Values are affect laden beliefs that refer to a person's desirable goals and guide the selection or evaluation of actions, policies, people and events. In other places I speak about values as expressing "motivational goals." The PVQ items operationalize this definition by describing the target person as one who is motivated to attain particular broad goals (the goals of the ten basic value orientations). It does this by explicitly mentioning his/her important goals, aspirations, wishes, strivings, etc. Each item contains two different ways of expressing what is essentially a motivation for the same goal. Most use a formulation that express this motivation by pointing to what is important to the person. In addition all use at least one or more other terms that also point clearly to a motivation for this goal: 'wants to devote himself to', 'wants', 'likes', 'strongly believes', 'looks for', 'seeks every chance', 'is concerned' that a particular state be maintained, 'thinks people should' promote a particular state of events, 'tries hard' to attain a goal. Every one of these expressions elicits a response that fits the definition of a value because all point directly to the fact that the person is motivated to attain one of the ten valued goals.

The CCT made the following comment on this approach. Most items of the scale consist of two parts: a sentence mentioning the importance of a value and a second sentence indicating what a person likes or wants to do. The importance statements are indeed clear value statements. The second sentence presents a feeling or a behavioral intention. If these different concepts generate a different reaction of the respondents this is a problem, because then it is not clear which question a respondent should answer. In that case we speak of a double barreled question. Whether the reaction to the two parts is different is an empirical matter but it can not be excluded. Let us look at an example.

The value is "having an exciting life". How important this is for a person can not be observed directly but one can obtain a verbal report using a statement that is very close to this latent variable :

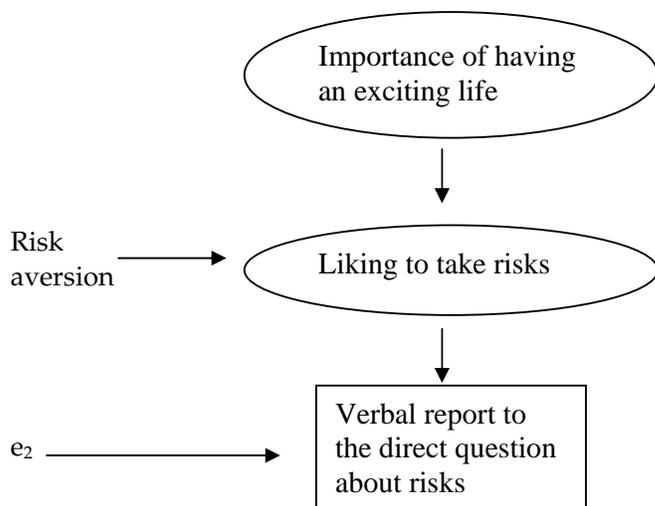
Having an exciting life is important to him ?

Probably the difference between the variable to be measured and the observed variable is only measurement error:



The second sentence in the item says: "He looks for adventure and likes to take risks". The second part (he likes to take risks) clearly is a feeling but is that the same as a value ? It is more likely that it is a consequence of the value. These two don't have to be the same

because there may be other variables that influence the feeling and not the value. For example what is called “risk aversion”. People with the same idea about the importance of an exciting life might differ in their feeling about taking risk due to differences in risk aversion. This could be modeled as follows:



It will be clear that the two measures will be the same, except for measurement error if the effect of the variable risk aversion or another specific variable on the feeling would be zero. In that case the relationship between the importance of the value and the feeling would be perfect and the two could be combined in one item. However if there is a third variable that affects the feeling and not the value then the two would measure different concepts and one would have a double barreled survey item.

Shalom Schwartz replies: We did experiments with alternatives. We tried single sentences and found that respondents reacted that they “are not rich enough to feel like a real person is being described.” The two sentences are built to specify that a particular goal is important, usually by directly mentioning importance, and then by indicating that the same goal is important through using a motivational term that shows the person strives toward that goal (wants, tries, seeks, looks for, avoids, believes...should, etc.). Giving two sentences solved the problem of richness but raised another: People sometimes thought the two sentences contained inconsistent information. We did cognitive testing on items, changing them until this reaction was eliminated or very rare. The idiosyncratic theories of individuals regarding how some values are organized inevitably lead to occasional perceptions of inconsistency.

Since the CCT was not convinced about this issue and it is an important issue to clarify it was decided to perform an experiment in the pilot study to test if the direct value measures (importance part) measure the same as the feeling part (likes part) of each item.

7.2.2 *The question format*

Another point mentioned by the CCT was that people have to indicate 'how much like you is this person'. Does this approach have advantages above a direct question such as :

How important is it for you to be

Shalom Schwartz replies to this question as follows. The suggested format is similar to that used in my SVS and by Rokeach and Kohn. It is not unreasonable to try it in a methodological experiment, but I would definitely not use it as the core approach because it is likely to suffer from one or more of the following limitations.

1. The meanings of single phrases are more likely to be understood differently by different people. Rokeach added explanatory phrases in parentheses to sharpen the meaning of the phrases he used, and I did the same. The two sentence description focuses the basic meaning of each item and reduces variation in the meanings attributed to it by different people. The overall meaning of the item is also more likely to be retained in translations to other languages, if the meaning of the item does not depend entirely on the exact translation of a single word or term. Translators can use the two sentences to explicate nuances more fully.
2. Many of the single phrases are basically abstract concepts. This was a problem in using the SVS and the Rokeach with elderly and uneducated respondents and with those from countries where Western schooling is not prevalent. People who are not accustomed to thinking in abstract terms about themselves do not find it easy to respond to such items.
3. Such items require a response scale of importance that is problematic for some respondents. Extensive pretesting of importance scales for value items led me to the non-symmetric 9-point scale (-1 to 7) I use in the SVS, with labels at four points. This scale, stretched at the top, reflects the tendency of people to view most values as important. To obtain substantial variance in importance ratings, the scale for the direct question would have to be stretched as well and include a lot of points. Our experience with elderly and low education respondents is that some have difficulty translating their sense of their own values into a point on an importance scale. If numbers are used, they have difficulty translating ideas to numbers. But even if phrases are used, they are not at ease with reporting importance ratings.
4. In everyday life, few people spend time thinking about what is and is not important to themselves. Some can do so in response to questionnaires, but others find this a difficult task. First, they really don't have clear answers, so responses are not especially accurate. Second, if they think hard, they may be puzzled or disturbed by what they conclude about what is more and less important to them. Consequently, problems of self-presentation arise in response to direct questions about importance to self. Comparing others to self, the format I propose, is a much more common activity in everyday life. People constantly assess others and compare them to themselves. There remains the alternative of changing the question to: "how similar are you to this person?" That is also a common activity of social comparison. The reason for not adopting that format is given in the proposal. Using it in a methodological experiment might be interesting, however.
5. While not a problem with the direct question format itself, that format, unlike the PVQ, has not been validated against SVS with a multimethod-multitrait methodology, nor do we have any evidence that it yields the theorized structure of values. Hence we do not know whether it would measure the same ten values or the structure of their relations according to the theory.

These arguments were sufficient to convince the CCT. So the CCT accepted the formulation as suggested by Shalom Schwartz.

7.2.3 *Variation in the formulation*

The statements use different formulations. Here are some basic structures:

1. To is (very) important (to him). He likes to
2. It is (very) important to him to He likes to ...
3. He thinks that it is (very) important to He likes ...

Next to these three basic forms the order of the like and importance sentences can be reversed. This gives 6 basic structures. Besides that some words can be introduced or not. What is mentioned between brackets is sometimes mentioned and sometimes not. I have no idea if these variations of the basic structure make a difference.

Introducing or omitting the word 'very' will certainly make a difference in the response. Certainly the distribution of the answers will be different but even the correlations can change. I would suggest always to use 'very' because that makes the position of the described person on the scale clear: it is the end point. Without this word we do not know the position very well and that will also be true for the respondents.

Introducing 'to him' or not will also make a difference: Without 'to him' one asks a reaction on a general values while with 'to him' it becomes a personal value. In this case I think that we should add always 'to him' because you want to measure personal values.

Shalom Schwartz comments: Variations in the 6 basic structures: My team was aware of this when constructing the items. In many instances we tried reversing the order of the two sentences in pretests, and in all we discussed and agreed that the order proposed was preferred. There are subtle differences in what the two sentences in each item convey. Sometimes one is stronger than the other and more likely to elicit less judgment of similarity. Sometimes one shifts the meaning of the other or clarifies its meaning. Sometimes one makes the other more concrete. Based on these differences, we chose the order that we thought did a better job of capturing the pure motivation we sought for the particular value. When data were available, we also chose the order that yielded the best pattern of correlations with the other items of the same value and with the other nine values.

The use of 'very'. We spent a great deal of work deciding when to use 'very' and when not to do so. We have used it 4 times, once in benevolence (12), twice in achievement (4,13), and once in security (14). It probably appeared in pretests at one time or another in three or four other items, though I would have to search deeply in my records to find where. Our criterion for including 'very' is when the item has elicited low variance and high endorsement, probably because these are conventionally highly desirable goals for most respondents in most cultures. Almost all respondents think that a person for whom these goals are important is like them. It is only by describing the target person as extreme in his or her motivation for this goal (very) that there is good variance. We did not find that the pattern of correlations for the items including 'very' was problematic and fear that changing the use of this term may be detrimental to the correlations. Even more important, it is likely that adding 'very' to all items will reduce the distinctiveness of these 4 items that "need" it and weaken their quality and introduce an overall method effect of endorsing extreme items. A methodological experiment to assess this would be informative, though I have my doubts given our experience and the above comments. Still, it could be that by portraying all targets at the extreme point, as you suggest, we would get more variance in general on the responses. 'Very' could be included in one of the two sentences even if neither uses "important."

Inclusion of "to him". Frankly, I have not thought systematically about this. We did what came naturally and apparently our inclination was to include "to him" where it fit. I agree that including it does make the item more a personal value. Changing items 3, 6 and 9 to include it would be straight-forward, requiring only that the phrase be changed from "He thinks it is important" to "It is important to him." That makes some sense to me, even though it reduces the variety we were seeking in the questions. Items 15 and 7 don't fit this solution. I think item 15 is already personal because both sentences refer to what he is motivated to pursue. Item 7 is problematic. It might be changed to "It is important to him that people do what they are told."

The CCT accepted these arguments and did not see a reason for any changes.

7.2.4 *The homogeneity of the value scores*

All 21 items were evaluated with respect to reliability and validity using the SQP program. SQP predicted for the individual items rather low reliability coefficients. This raises the problem of how reliably the different values can be measured.

The reliability of the constructs is also reduced by the heterogeneity of the different items for the different values. Universalism, especially, has very heterogeneous items. Item 19 differs very much of the other two.

The same argument would hold for the tradition value. Would there be an alternative with more homogeneous items ?

The reply of Shalom Schwartz on these comments was as follows: More homogeneous items could indeed be substituted for those I have chosen. However, it is important to capture the full breadth of meaning of each of the types of values. If criteria like maximizing alpha are used, homogeneity will increase but at the expense of breadth.

It is impossible to attain high reliability for all ten values, because we are trying to cover the range of content of the full motivational continuum of values with only ten types of values and, here, with only 21 items. A more reasonable goal is to obtain good alphas for the four higher-order types of values. They have sufficient numbers of items and are also conceptually meaningful constructs. However, working only with them rather than the ten values when relating values to other variables loses a great deal of information, as shown by the distinctive and patterned relations of the set of ten values to other variables.

Universalism: This value is indeed complex, including three sub-components "social concern" (#3), "tolerance" (#8) and "nature/environment" (#19). The latter content may appear on its face to be less similar to the others than each is to the other. Empirically it is no less highly inter-correlated within and across samples. The concept of universalism includes appreciation and concern both for human beings and for the natural environment, types of concern that are correlated. Dropping this component by replacing it with item #23 would leave out an element of universalism of great importance in understanding value bases of attitudes and behavior toward the environment and consumption of natural resources.

Tradition: The items to measure this value cover two components of tradition. #9 measures a self-denial component, # 20 a religious component. These components are indeed not highly inter-correlated, but both measure submission of self to external forces in the wider reality. The alternative items measure the same components (#25 religious, #38 self-denial). No other combination of items that measured both components gives higher inter-correlations. In the structural analyses, the two tradition items are not close together, but they usually form a clear region peripheral to the conservation region. This reflects their moderate inter-correlation and the similarity of their correlations with other items. Hence, I think this is the best choice.

7.3. Results of the Pilot study

In order to test whether the importance part of the items measures the same as the feeling part three Schwartz value statements have been decomposed into an importance assertion and a feeling assertion and these parts and the full items have been asked twice in the drop off form. Here we present only the analysis of the Dutch data, but the same results have been found for the British data. First we present the results of a standard MTMM analysis.

Table 7.3.1. *Reliability and validity of the Schwartz values and its components in the Dutch sample*

Reliability of	item 1		item2		item3	
	1	2	1	2	1	2
Importance	.87	.84	.94	.87	.96	.86
Feeling	.89	.93	.89	.91	.97	.88
Complete item	.82	.91	.76	.93	.81	.97

Validity of	item 1		item2		item3	
	1	2	1	2	1	2
Importance	.99	.92	.99	.93	.99	.93
Feeling	.99	.97	.99	.97	.99	.97
Complete item	.99	.98	.99	.98	.99	.99

This table does not give an indication that one of the measures is better than the other. The next test which can be done is to check if the correlations between the three items would be the same after correction for measurement error. This test is presented in the next table.

Table 7.3.2. *The correlation between the three items obtained for the three different items using only the importance part, the feeling part or the combination.*

Correlation of the variables	items only importance	items only feelings	items combinations
1 with 2	.74	.70	.71
1 with 3	.55	.52	.49
2 with 3	.50	.50	.49

Without a formal test, one can say that there is no substantively relevant difference between these correlations. This is very strong evidence of the equality of these measures. However, one can still argue that the variables are different but that the intercorrelations between these items may be the same.

Given that there is hardly any difference in validity, i.e, there is hardly any method effect, one can directly test the equality of the measures by testing if the correlations between the importance and the feeling assertion for each separate item are equal to 1, using the congeneric test model of Jöreskog (1971). The results of this test are presented in the table below.

Table 7.3.3. *The test of the equality of the importance and feeling variables*

Number of The item	assumption corr=1			corr= free		
	chi2	df	n	chi2	df	corr
1	26.0	2	200	4.0	1	.85
2	16.6	2	200	0.1	1	.91
3	15.6	2	200	9.4	1	.95

Formally the assumption that the correlation=1 between the importance judgement and the feeling, after correction for measurement error, has been rejected. However, due to the high loading of these items, the power of the test is very high. If this correlation is estimated, it varies between .85 and .95. Most people would see this as not substantially different from 1.

Conclusion: For this topic we draw two conclusions. The first is that we are inclined to accept that the importance judgement and the feeling assertion measure the same thing for all practical purposes. This means that it also does not matter if these two items are combined in one statement. The second is that we have no indication that the combination of the two assertions in one combined statement improves the quality of the statement with respect to reliability and validity.

We have also seen that the underlying structure can be discovered very exactly by all three types of statements. Combining the two different assertions in one statement should therefore be based on an argument other than data quality, but it does not harm the quality of the items.

In order to make improvements in the pretest questionnaire for use in the final questionnaire, studies of the reliability of the ten basic values and of the four higher-order values and of the structure of relations among the values and among the value items were carried out. Attention was also paid to the distribution of responses and to the relative importance attributed to the ten values. Based on these analyses, Schwartz proposed changes in 5 items, some small, some larger. Below are the rationales for the proposed changes. Following that is the set of 21 items proposed for in the final questionnaire. Those that have been changed are marked with an asterisk. Following each item are initials indicating the type of value it measures.

Rationales for the proposed changes were based on the problems identified in these analyses discussed below:

7.3.1 Means and standard deviations of the items and of the ten value indexes

The standard deviations of the 21 items ranged from .98 to 1.75, with all but a few between 1.00 and 1.37. This was as expected and indicated sufficient variance. The means for the ten values exhibited an order of importance compatible with prior studies in these countries that used alternative instruments with more items per value, with one exception. The relative importance of achievement values was much lower. Achievement ranked 9th of the 10 values in both pilot samples rather than somewhere between 3rd and 7th, as in all previously studied European samples. The relatively low rating of item #13 suggested that its phrasing was more socially undesirable than items used in other instruments. To overcome this, it was proposed to add 'very' before 'successful' in this item.

7.3.2 *Similarity structure analyses (SSA) of the items*

Presentation of these results follows the questions and criteria for assessing the structure of value relations presented in the chapter. The first question is whether it possible to partition the total space into distinct regions of value items that serve individual, collective, and both interests. In both the UK and Netherlands samples, this partitioning was possible. 19 of the 21 items emerged in the expected regions. The two security items emerged in the collective region rather than the region of both interests

The second question is whether it is possible to partition the total space into four distinct regions of value items that represent each of the four higher-order values. In both samples, this partitioning was possible, with no misplaced items.

The third question is whether it is possible to partition the total space into 10 distinct regions of value items that include the items intended to measure each of the ten values. The suggested minimum criterion was to find six fully distinct regions with the remaining items forming joint regions of items from values that are theoretically adjacent in the theorized structure. In the UK sample, there were eight distinct regions, and the items indexing hedonism and stimulation, theoretically adjacent values, were intermixed. In the Netherlands sample, there were seven distinct regions, and the items indexing tradition, conformity and security, theoretically adjacent values, were intermixed. Thus, the partitioning into 10 regions was well-approximated, with only minor deviations.

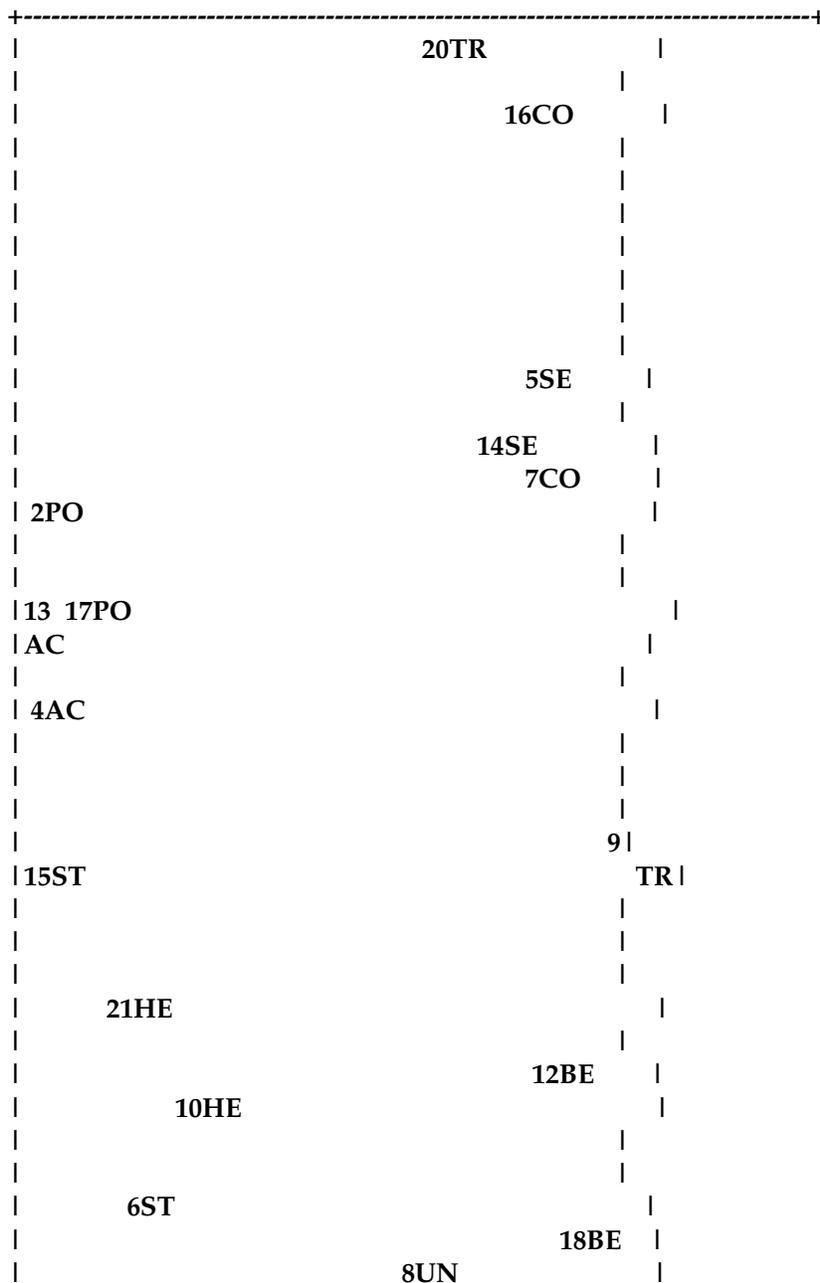
The final question is whether the regions for the 10 values are ordered in space according to the structural theory. As noted above, any arrangement requiring fewer than 5 moves (reordering of a pair of values) differs significantly ($p < .01$) from a random arrangement in the direction of the postulated structure. This was set as a minimum criterion. In both samples, only 1.5 moves were required, indicating a good fit to the motivational order of values around the circle in the theory.

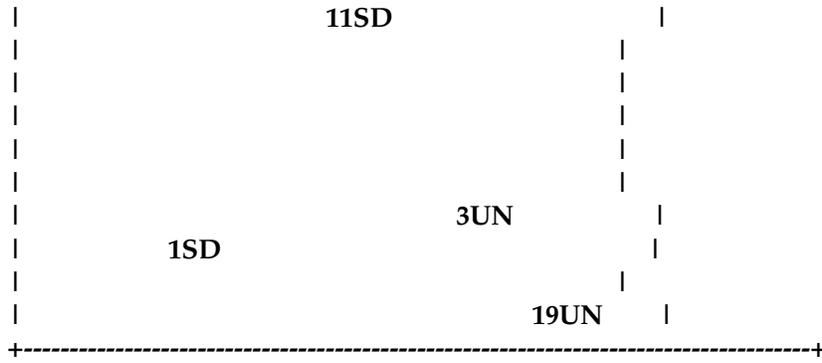
The Similarity Structure Analysis for the sample from the Netherlands is presented below. The structure in the UK sample was very similar.

Although the fit to theory was good, two deviations were sufficiently striking to warrant examination of possible problems with single items. The security items were closer to the benevolence items than expected and they were distant from the power items. Second, there was a hole in the circular structure opposite the region of universalism, where the border between security and power is supposed to be. This hole has also been found in studies that used a short values scale similar to the ESS pilot scale in six countries. Detailed comparison of the ESS scale and of the other short values scale with the longer instrument used in studies that did not show these deviations from theory revealed a likely cause of the problem: The short scales exclude the substantive content of the items that filled the region between power and security. To overcome this, revisions were proposed to items #14 and #17. The revision to item #14 reintroduced the idea of 'national strength' as a source of security, and the revision to item #17 reintroduced the idea of 'protecting one's face' as an aspect of power. This was intended to restore the missing content and provide more complete coverage of the conceptual domain of values.

The findings related to item #20 also raised questions. This item measures the religious belief aspect of tradition values. In both pilot samples, it was rated the least important of the 21 items. While low ratings of the religious belief item are not unusual, here it also emerged in an extreme position in the structural analyses, due to negative correlations with a larger proportion of the other values. This distorted the structure somewhat. In past, longer value instruments, we devoted only one of four or five items to this aspect of tradition. In light of the pilot results, it appears that devoting one of only two tradition items to the religious belief aspect gives too much weight to this aspect of tradition. This reduces the usefulness of the index as a general measure of the importance of tradition. The proposed revision to item #20 retains a more limited religious component and emphasizes the more general aspects of tradition.

SSA Dimensions 1 X 2, Netherlands pilot study, N=223, Coef. Alien. = 0.17





SD = self direction, SR = stimulation , HE = hedonism , AC = Achievement , PO = Power,
 SE = Security, CO = Conformity , TR = Traditionalism , BE = Benevolence , UN = Unoversalism

7.3.3 Intercorrelations among the 21 items

Zero-order correlations among the 21 items as well as intercorrelations partialled on each person's mean response to all 21 items (an indicator of the tendency to use the upper or lower part of the response scale) were examined. These correlations revealed lower than usual correlations between power and security items. This further emphasized the problem just discussed that led to the proposed revisions of items #14 and #17. The correlations also indicated that the two self-direction items (#1 & 11) were less highly intercorrelated than desired in the UK sample (.282). Item 11 seemed more problematic because of its greater length, complexity, and unexpected correlations with some of the universalism items and others. The proposed revisions to item #11 were intended to simplify it, increase its correlations with #1, and reduce its undesirable correlations.

7.3.7 Reliabilities of the ten basic values and four higher-order values

Below we report the reliabilities of the indexes used to measure values with the PVQ in the total pretest sample from the UK and the Netherlands evaluated using Cronbach's alpha. The consistency in the two separate samples were similar. Considering the small number of items used to measure each of the ten values, the reliabilities are reasonable. They compare quite favorably with the reliabilities reported for the 40 item PVQ in Table 2 of section 7.1.

Table 7.3.7.1 Cronbach alpha of the ten basic values and the four higher-order values for combined UK and Netherlands samples (N=444)

<u>VALUE</u>	<u>Number of Items in Index</u>	<u>Cronbach's alpha</u>
Self-Direction	2	.49
Stimulation	2	.66
Hedonism	2	.64
Achievement	2	.75
Power	2	.57
Security	2	.70
Conformity	2	.63
Tradition	2	.40
Benevolence	2	.55
Universalism	3	.66
<u>HIGHER-ORDER VALUES</u>		
Openness to Change	6	.75
Conservation	6	.75
Self-Transcendence	5	.74
Self-Enhancement	4	.81

The two most problematic values, as suggested by the reliabilities, are self-direction and tradition. The SSA results discussed above pointed to the same values as problematic. The proposed changes were intended to increase the reliability of these values.

The reliabilities of the higher-order values were substantial for 4-6 item indexes. Hedonism was included in the Openness to Change higher-order value. If hedonism is removed from openness, the alpha drops to .67. If hedonism is added to self-enhancement, the alpha drops to .79. This reflects the stronger relation of hedonism to openness.

Based on the above, the following items were recommended by Schwartz.

Table 7.3.8. Human value items recommended for the first wave of the ESS and their classification into the ten basic values.

1. Thinking up new ideas and being creative is important to him/her. He/she likes to do things in her own original way. SD
2. It is important to him/her to be rich. He/she wants to have a lot of money and expensive things. PO
3. He/she thinks it is important that every person in the world be treated equally. He/she believes everyone should have equal opportunities in life. UN

4. It's very important to him/her to show his/her abilities. He/she wants people to admire what he/she does. AC
5. It is important to him/her to live in secure surroundings. He/she avoids anything that might endanger his/her safety. SE
6. He/she likes surprises and is always looking for new things to do. He/she thinks it is important to do lots of different things in life. ST
7. He/she believes that people should do what they're told. He/she thinks people should follow rules at all times, even when no-one is watching. CO
8. It is important to him/her to listen to people who are different from him/her. Even when he/she disagrees with them, he/she still wants to understand them. UN
9. It is important to him/her to be humble and modest. He/she tries not to draw attention to herself. TR
10. Having a good time is important to him/her. He/she likes to "spoil" him/herself. HE
11. *It is important to him/her to make his/her own decisions about what he/she does. He/she likes to be free and not depend on others. SD
12. It's very important to him/her to help the people around him/her. He/she wants to care for their well-being. BE
13. *Being very successful is important to him/her. He/she hopes people will recognize his/her achievements. AC
14. *It is important to him/her that the government insure his/her safety against all threats. He/she wants the state to be strong so it can defend its citizens. SE
15. He/she looks for adventures and likes to take risks. He/she wants to have an exciting life. ST
16. It is important to him/her always to behave properly. He/she wants to avoid doing anything people would say is wrong. CO
17. *It is important to him/her to be in charge and tell others what to do. He/She wants people to do what he/she says. PO
18. It is important to him/her to be loyal to his/her friends. He/she wants to devote herself to people close to him/her. BE
19. He/she strongly believes that people should care for nature. Looking after the environment is important to him/her. UN
20. *Tradition is important to him/her. He/she tries to follow the customs handed down by his/her religion or his/her family. TR
21. He/she seeks every chance he/she can to have fun. It is important to him/her to do things that give him/her pleasure. HE

7.4 The final choice

On the basis of these arguments, the CCT accepted the proposed changes to five values. Separate male and female versions of the Schwartz human values questionnaire were used in the first wave of the ESS. The difference between the two in English is in the prepositions: 'he', 'his', 'him' in the male version, 'she', 'hers', 'her' in the female version. Following is the male version used. This version is to be included without further amendment at the start of the drop-off questionnaire. The rest of the drop-off questionnaire will be devoted to methodological work.

RESPONDENT: IF YOU ARE MALE, ANSWER G1 TO G21. IF YOU ARE FEMALE, ANSWER G22 TO G42

MALE RESPONDENTS

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Tick the box to the right that shows how much the person in the description is like you.

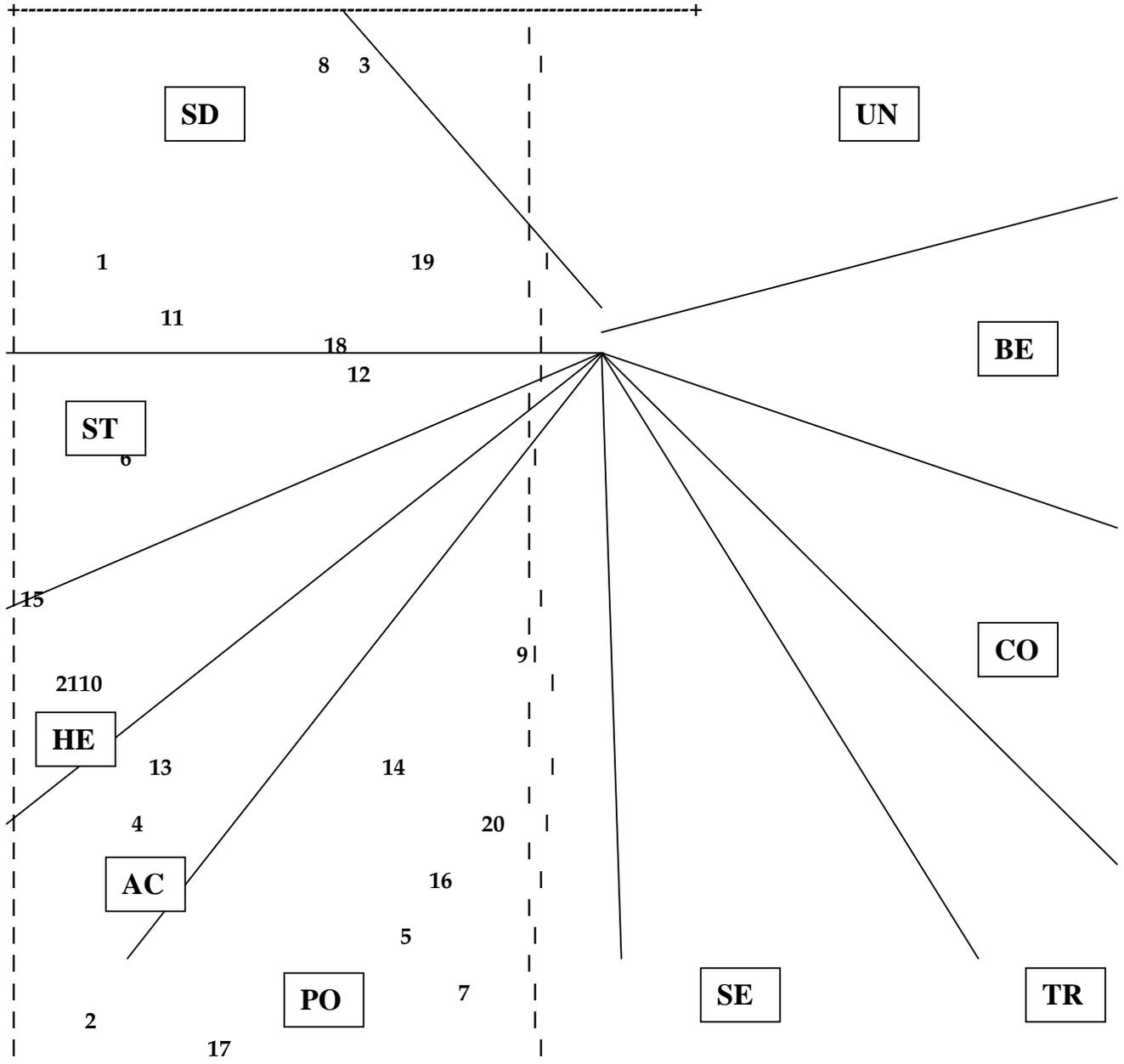
	<i>How much is this person like you?</i>						
	<i>Very much like me</i>	<i>Like me</i>	<i>Some- what like me</i>	<i>A little like me</i>	<i>Not like me</i>	<i>Not like me at all</i>	
G1 <i>Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G2 <i>It is important to him to be rich. He wants to have a lot of money and expensive things.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G3 <i>He thinks it is important that every person in the world should be treated equally. He believes everyone should have equal opportunities in life.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G4 <i>It's important to him to show his abilities. He wants people to admire what he does.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G5 <i>It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G6 <i>He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G7 <i>He believes that people should do what they are told. He thinks people should follow rules at all times, even when no-one is watching.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G8 <i>It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6
G9 <i>It is important to him to be humble and modest. He tries not to draw attention to himself.</i>	<input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	<input type="checkbox"/>	6

7.5 Results with the final version of the human values scale in six national samples

Structural and reliability analyses were performed on the human values data from six national samples in order to assess the modified questionnaire and to provide guidance to users regarding indexing the values. The samples studied were from Finland, Israel, Poland, Slovenia, Sweden, and the UK.

The Smallest Space Analysis for the combined sample from all six countries (N=11,128) is shown below. Partition lines are drawn according to the criteria set out in the chapter. As can be seen, it is possible to partition the space into ten distinct regions, one for each of the ten values. Every one of the 21 items falls in the region of its expected value. Moreover, the order of the ten values around the circle follows the theorized motivational order with only one minor deviation. Tradition values are located between benevolence and conformity values rather than outside conformity on the periphery (.5 moves). This order was the initial order proposed by Schwartz in 1992 that he modified based on findings with the SVS.

2-Dimensional SSA on Values Data from 6 Countries, N=11,128, Coef. Alien. = .12 where
 SD = self direction, SR = stimulation , HE = hedonism , AC = Achievement , PO = Power,
 SE = Security, CO = Conformity , TR = Traditionalism , BE = Benevolence , UN = Universalism



In this projection, all 21 items fall in their a priori individual (left), collective (right), or mixed individual-collective (top and bottom, UN and SE) broad regions. The four higher-order values are also perfectly distinguished and form the two motivational oppositions of openness to change (SD/ST) vs. conservation (TR/CO/SE) and self-transcendence (BE/UN) vs. self-enhancement (PO/AC). Hedonism falls between openness and self-enhancement, somewhat closer to openness. There is no longer a large hole in the space opposite universalism and between security and power values. This suggests that the modifications reintroduced the motivational content that security and power values share.

Based on this SSA, I recommend using the a priori indexes for each of the ten values in cross-national research in the ESS. I also recommend using the a priori indexes for the four higher-order values, including hedonism in openness to change.

For studies within single countries, separate within-country SSAs may reveal variations in structure that would suggest modifying some of the value indexes. Separate SSAs in each of the six samples were examined to assess the frequency and seriousness of possible variations. These analyses yielded structures very similar to the theoretical prototype and the combined sample. The following table summarizes the results by country.

Table 7.5.1 Summary of the structure of value relations based on SSA in six countries

Country	# Basic Values in Distinct Regions	# Items in Expected Value Region	4 Higher-Order Values Present & Form Oppositions?	Observed Order of Basic Values
Finland	10	21	Yes	Same as combined
Israel	10	21	Yes	Like combined but CO peripheral to SE
Poland	10	20 (SE14 in UN)	Yes	Like prototype but UN peripheral to BE
Slovenia	10	21	Yes	Like prototype but SE and CO reverse
Sweden	8	21	Yes	Like combined but SE and CO intermixed
United Kingdom	10	21	Yes	Same as prototype

With the exception of one item in the Polish sample, the SSAs all support the use of the a priori indexes both for the ten basic values and the four higher-order values. All variations in order occurred within the conservation higher-order value or within the self-transcendence higher order value. This indicates that there were no serious shifts in the meanings of either the basic values or the value items across these countries, with the one exception in Poland. That exception may reflect chance factors. Nonetheless, it is worthwhile to consider possible shifts in the meaning of single value items within a country, especially if a deviation is found consistently across national subsamples.

Table 7.5.2 reports the Cronbach reliability coefficients for the ten basic values and the four higher-order values. The observed reliability coefficients are similar to those found in the

pretests and, more importantly, to those observed in earlier research with the 40-item PVQ. The significance of the latter is that, despite similarly low internal reliability, even the least reliable values have shown substantial predictive and discriminant validity in earlier research, as described in the chapter. The reliability coefficients reflect the small number of items indexing each value and the fact that each value encompasses different subconstructs. Even with relatively few items (4-6), the higher-order values show reasonable reliability despite encompassing broad meanings.

Table 7.5.2 Cronbach alpha reliabilities of the ten basic values and the four higher-order values for samples from Finland, Israel, Poland, Slovenia, Sweden, and the UK

<u>BASIC VALUES</u>	Number of Items in Index	Total Six Countries	Finland	Israel	Poland	Slovenia	Sweden	UK
Self-Direction	2	.45	.38	.40	.49	.45	.46	.52
Stimulation	2	.64	.70	.68	.62	.51	.69	.65
Hedonism	2	.75	.81	.72	.79	.64	.70	.75
Achievement	2	.74	.77	.61	.63	.67	.74	.74
Power	2	.50	.61	.47	.36	.35	.46	.47
Security	2	.59	.56	.50	.52	.53	.55	.53
Conformity	2	.62	.67	.59	.57	.53	.59	.67
Tradition	2	.39	.33	.45	.47	.43	.23	.31
Benevolence	2	.54	.53	.48	.55	.49	.63	.60
Universalism	3	.55	.59	.77	.53	.49	.59	.58
<u>HIGHER-ORDER VALUES</u>								
Openness to Change	6	.76	.77	.75	.79	.75	.75	.76
Conservation	6	.74	.72	.69	.74	.73	.70	.73
Self-Transcendence	5	.68	.70	.65	.71	.65	.72	.69
Self-Enhancement	4	.75	.81	.68	.65	.66	.75	.75

The two least reliable values are tradition and self-direction. The SSA results discussed above pointed to the same values as problematic. The changes instituted did not increase the reliability of these values.

It is appropriate to attend more to the SSA results as the basis for forming value indexes than to seek to form different combinations of more items that yield different values with higher internal reliabilities. Two rationales buttress this view.

First, the SSA based indexes are grounded in and consistently support an a priori theory of the distinctive nature of the motivationally distinct values. The ten values this theory distinguishes have been operationalized successfully in studies in 70 countries using

different instruments. Studies of the antecedents and consequences of these ten values have yielded meaningful results in more than 20 countries. The theory of a motivational continuum of ten values, elaborated in the chapter, provides a firm theoretical source for predicting and explaining relations of values to a wide variety of other variables.

Second, the SSA based indexes draw on more information relevant to the essence of values—their motivational significance in the universe of motivational goals—than indexes that attempt to maximize internal reliability. The position of each item in the SSA reflects not only its high positive correlations with particular values that share motivational meaning but its full set of correlations with all the other values. Therefore, two items that are close in the space and are combined to index one of the ten basic values tend to have similar low positive, near-zero, and negative correlations with the other items. The full pattern of item correlations is relevant in defining a value's motivational significance, because values form a coherent system of complementary and competing motivations. By focusing only on the positive correlations of an item, approaches that seek to maximize internal reliability ignore the grounding of value systems in trade-offs between opposing and often incompatible motivational goals.

In sum, the analyses of the 21 value items in six countries in the first wave of the ESS suggest that it is usually desirable to use the a priori indexes of the ten basic values to measure human values in different countries. The classification of value items into the ten basic values appears in Table 7.3.8 above.