

# Value Priorities and Behavior: Applying a Theory of Integrated Value Systems

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## Abstract

A major goal of research on values has been to relate individual differences in value priorities to differences in attitudes, behavior and background variables. Past research most commonly adopted one of two approaches. Much research has selected a few single target values whose priorities were postulated to associate with the attitude, behavior and background variable of interest and then examined empirical relationships. Other research has been more exploratory. It has related lists of values to various other variables and then discussed the significant associations that emerge. The focus on relationships with single values make both these approaches unsatisfying. My work has sought to overcome those approaches. It has derived what may be a nearly comprehensive set of different motivational types of values, recognized across cultures. Each value type is represented by a number of single values that are combined to form relatively reliable indexes of values priorities. Value systems can be treated as integrated wholes in their relations with behaviors and, thereby, encourages researchers to abandon the prevailing single-values approaches.

**Key words:** Values. Behavior. Values Systems.

## Resumen

### Prioridad de Valores y Comportamiento: La Aplicación de una Propuesta Teórica acerca de un Sistema Integrado de Valores

Uno de los objetivos centrales de las investigaciones sobre valores ha sido el estudio de las relaciones entre las diferencias individuales en actitudes, comportamientos y marcos o contextos de referencia. Las investigaciones del pasado han adoptado uno de los siguientes enfoques. Muchos estudios seleccionaron un conjunto de prioridades entre valores singulares las que se postularon en asociación con variables específicas

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de interés (actitudes, comportamientos, contexto), y se examinaron las relaciones empíricas existentes. Otras investigaciones han sido más exploratorias. Relacionaron listas de valores con otras variables, discutiéndose luego las asociaciones significativas halladas. El hecho de focalizarse en relaciones con valores singulares o específicos hace que ambos tipos de enfoques resulten insatisfactorios. Mi trabajo personal ha intentado superar estas dificultades. He podido verificar que cabe referirse a un conjunto comprehensivo integrado por diferentes tipos de valores motivacionales, reconocidos en marcos culturales diversos. Cada tipo de valor está representado por un número de valores singulares que, combinados, conforman índices relativamente confiables de prioridades.

Los sistemas de valores pueden ser analizados, en sus relaciones con los comportamientos, en tanto totalidades o conjuntos, hecho que debe alentar a que los investigadores dejen de lado los estudios centrados en valores aislados.

***Palabras claves:*** valores. Comportamientos. Sistemas de valores.

A major goal of research on values has been to relate individual differences in value priorities to differences in attitudes, behavior, and background variables. Past research most commonly adopted one of two approaches. Much research has selected a few single target values whose priorities were postulated to associate with the attitude, behavior, or background variable of interest and then examined empirical relationships (e.g., obedience and social class—Alwin, 1984; world at peace and pacifism—Mayton & Furnham, 1994; equality and civil rights—Rokeach, 1973). Other research has been more exploratory. It has related lists of values to various other variables and then discussed the significant associations that emerged (e.g., with personality inventories—Furnham, 1984; with race, nationality, and age—Rokeach, 1973; with quality of teaching—Greenstein, 1976). The associations with single values that emerge can, of course, almost always be interpreted as making sense, *post hoc*.

The focus on relationships with single values makes both these approaches unsatisfying. It leads to a piecemeal accumulation of bits of information about values that is not conducive to the construction of coherent theories. Three noteworthy problems beset these approaches. First, the reliability of any single value is quite low. Hence chance may play a substantial role in the emergence or nonemergence of significant associations with single values. Second, absent a comprehensive set of values or of a broad theory to guide selection of target values, values that were not included in a study may be equally or more meaningfully related to the phenomenon in question than those studied (e.g., the almost total absence of power values in the literature on values and political orientations).

Third, and most important, these single-value approaches ignore the widely shared assumption that attitudes and behavior are guided not by the priority given to a single value but by tradeoffs among competing values that are implicated simultaneously in a behavior or attitude (Rokeach, 1973; Schwartz, 1992; Tetlock, 1986). Indeed, values may play little role in behavior except when there is value conflict—when a behavior has consequences promotive of one (or more) value but opposed to others that are also cherished by the person. It is in the presence of conflict that values are likely to be activated, to enter awareness, and to be used as guiding principles. In the absence of value conflict, values may draw no attention. Instead, habitual, scripted responses may suffice.

My work has sought to overcome these three problems. It has derived what may be a nearly comprehensive set of different motivational types of values, recognized across cultures. Because the value set is nearly comprehensive, it is unlikely that important types of values will be overlooked in analyses of the relations of values to other variables. Each of these value types is represented by a number of single values that are combined to form relatively reliable indexes of value priorities. Most importantly, the theory conceptualizes the set of value types as an integrated system. Consequently, the full set of value priorities can be related to other variables in an organized, coherent manner rather than in a piecemeal fashion.

This chapter illustrates how value systems can be treated as integrated wholes in their relations with behavior and, thereby, encourages researchers to abandon the

prevailing single-values approaches. For this purpose, it discusses three examples of the relations of value priorities with a diverse set of behavioral variables: cooperative behavior, voting in national elections, and readiness for contact with members of an out-group.

## Overview of Theory

Influenced heavily by Rokeach (1973) and Kluckhohn (1951), the theory defines values as desirable, transsituational goals, varying in importance, that serve as guiding principles in people’s lives (see Schwartz, 1992, for a fuller elaboration of the theory). The crucial content aspect that distinguishes among values is the type of motivational goal they express. I derived a typology of the different contents of values by reasoning that values represent, in the form of conscious goals, three universal requirements of human existence: biological needs, requisites of coordinated social interaction, and demands of group survival and functioning. Groups and individuals represent these requirements cognitively as specific values about which they communicate in order to explain, coordinate, and rationalize behavior.

Ten motivationally distinct types of values were derived from the three universal requirements. A *conformity* type was derived, for example, both from the prerequisite of smooth interaction and of group survival—that individuals restrain impulses and inhibit actions that might hurt others. There is substantial, cross-cultural, support for the distinctiveness of these ten types in research with samples from 41 countries (Schwartz, 1992, 1994; Schwartz & Sagiv, 1995). Table 1.1 lists the value types, each defined in terms of its central goal, and followed, in parentheses, by specific single values that primarily represent it. A specific value represents a type when actions that express the value or lead to its attainment promote the central goal of the type.

**TABLE 1.1 Definitions of Motivational Types of Values in Terms of Their Goals and the Single Values That Represent Them**

POWER (PO): Social status and prestige, control or dominance over people and resources. (Social Power, Authority, Wealth) [Preserving my Public Image, Social Recognition] <sup>a</sup>
ACHIEVEMENT (AC): Personal success through demonstrating competence according to social standards. (Successful, Capable, Ambitious, Influential)[Intelligent, Self-Respect]
HEDONISM (HE): Pleasure and sensuous gratification for oneself. (Pleasure, Enjoying Life)
STIMULATION (ST): Excitement, novelty, and challenge in life. (Daring, a Varied Life, an Exciting Life)
SELF-DIRECTION (SO): Independent thought and action-choosing, creating, exploring. (Creativity, Freedom, Independent, Curious, Choosing own Goals) [Self-Respect]

UNIVERSALISM (UN): 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)

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BENEVOLENCE (BE): Preservation and enhancement of the welfare of people with whom one is in frequent personal contact. (Helpful, Honest, Forgiving, Loyal, Responsible) [True Friendship, Mature Love]

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TRADITION (TR): 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)

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CONFORMITY (CO): 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)

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SECURITY (SE): Safety, harmony and stability of society, of relationships, and of self. (Family Security, National Security, Social Order, Clean, Reciprocation of Favors) [Sense of Belonging, Healthy]

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Note. a. Values in brackets are not used in computing the standard indexes for value types because their meanings are not consistent across samples and cultures (Schwartz, 1992, 1994). For example, self-respect is found almost equally frequently with achievement and with achievement values. Additional values included to measure a possible spirituality value type that was not found were: a Spiritual Life, Meaning in Life, Inner Harmony, Detachment.

In addition to propositions regarding the content of values, the theory specifies dynamic relations among the types of values. Actions taken in pursuit of each type of values have psychological, practical, and social consequences that may conflict with or may be compatible with the pursuit of other value types. The total pattern of relations of value conflict and compatibility among value priorities gives rise to a circular structure of value systems. This structure, has also received substantial support in cross-cultural research (Schwartz, 1992, 1994; Schwartz & Sagiv, 1995).<sup>1</sup> Competing value types emanate in opposing directions from the center; complementary types are in close proximity going around the circle.

The nature of the compatibilities among value types is clarified by noting the shared motivational orientations of the adjacent value types. Viewed in terms of these shared orientations, the adjacent types form a motivational continuum around the circular value structure.

Power and achievement both emphasize social superiority and esteem.

Achievement and hedonism both express self-centeredness.

Hedonism and stimulation both entail a desire for affectively pleasant arousal.

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1. The near universality of the structure of relations among value types indicates that the meaning of each type is similar in the vast majority of samples. However, the importance of the ten value types varies substantially across samples. It is the similarity of meaning that makes it possible to interpret the differences in value importance.

Stimulation and self-direction both involve intrinsic motivation for mastery and openness to change.

Self-direction and universalism both express reliance upon one's own judgment and comfort with the diversity of existence.

Universalism and benevolence both entail concern for enhancement of other and transcendence of selfish interests.

Benevolence and tradition/conformity all promote devotion to one's in-group.

Tradition/conformity and security all emphasize conservation of order and harmony in relations.

Security and power both stress avoiding or overcoming the threat of uncertainties by controlling relationships and resources.

In contrast, the motivational goals of the value types in opposing positions around the circle cannot easily be pursued at the same time. For example, the pursuit of achievement values may conflict with the pursuit of benevolence values: Seeking personal success for oneself is likely to obstruct actions aimed at enhancing the welfare of others who need one's help.

Two major value conflicts that structure value systems have been found in over 95% of samples I have studied in 41 countries (Schwartz, 1994). This enables us to conceptualize the total structure of value systems as organized on two basic dimensions. Each is a polar opposition between two higher order value types.

One dimension opposes Openness to Change (combining the self-direction and stimulation value types) to Conservation (combining security, conformity, and tradition). This dimension reflects a conflict between emphases on own independent thought and action and favoring change versus submissive self-restriction, preservation of traditional practices, and protection of stability. The second dimension opposes Self-Transcendence (combining benevolence and universalism) to Self-Enhancement (combining power and achievement). This dimension reflects a conflict between acceptance of others as equals and concern for their welfare versus pursuit of one's own relative success and dominance over others. Hedonism shares elements of both Openness and Self-Enhancement.

This view of value systems as integrated structures facilitates the generation of systematic, coherent hypotheses regarding the relations of the full set of value priorities to other variables (e.g., behaviors). It also facilitates interpretation of the observed relations of sets of values to other variables in a comprehensive manner. Two statements summarize the implications of the interrelatedness of value priorities for generating hypotheses and interpreting findings:

1. Any outside variable tends to be associated similarly with value types that are adjacent in the value structure.
2. Associations with any outside variable decrease monotonically as one moves around the circular structure of value types in both directions from the most positively associated value type to the least positively associated value type (Schwartz, 1992).

Statement one implies that the associations for value types that are adjacent in the value structure may not differ significantly from one another, unless the sample size is large. Statement two implies that order of these associations is, nonetheless, precisely predicted. Although the order of the value types is set by the theory, it is not necessarily the case that the types most and least positively associated with an outside variable are those in exactly opposing positions in Fig. 1.1. As illustrated in study three below, this is because the specific characteristics of the behavior in question make particular motivational goals more or less relevant to a decision. I now apply these ideas to explain behavior.

## Interpersonal Cooperation

Single behaviors are influenced by a large variety of factors specific to the situation in which they occur. Hence it is difficult to predict single behaviors from a transsituational variable like values. Nonetheless, it should be possible to relate value priorities systematically to a single behavior if the setting is controlled in a manner that reduces random variation and eliminates overwhelming situational influences. This allows individual differences in motivation to have a major impact. Liron Natan, Gary Bornstein, and I chose cooperation in an experimental game as a likely behavioral variable (Natan, 1993). Such games are constructed to tap behaviors that express relatively pure motivations straightforwardly.

Ninety Hebrew University students (45 male, 45 female), recruited for a decision-making experiment, participated in small groups. They first completed a 56-item value survey (Schwartz, 1992) in which they rated the importance of each value “as a guiding principle in my life” on a 9-point scale ranging from 7 (of supreme importance) to 0 (not important) to -1 (opposed to my values). Indexes of the importance of each value type were computed by averaging the importance ratings of the values representative of that type (see Table 1.1).

Each participant then read that, for this task, he or she was paired with another student from their group, whose identity was not revealed. Participants were each given the matrix in Table 1.2, without the labels “cooperation, noncooperation, competition, and individualism.” This matrix was adapted from games like the decomposed prisoner’s dilemma in order to measure cooperation versus noncooperation (Messick & McClintock, 1968; Pruitt, 1967).

**TABLE 1.2 Matrix of Allocation Choices in Cooperation Experiment**

Allocation to:	Cooperation	Noncooperation	
		Competition	Individualism
Self	2.5 SH	2.5 SH	3 SH
Member in own Group	2 SH	0 SH	1 SH

Participants were asked to choose one of the three alternatives for allocating money between self and a member of their group. They learned that each person would receive the amount of money he or she allocated to self plus the amount their partner allocated to him or her. The cooperative choice entailed taking 2.5 shekels (about \$1) for self and giving 2 shekels to the other. Compared to the other choices, this meant sacrificing a little of what one could gain (not taking 3 shekels) and giving the maximum to the other. The other two choices were both noncooperative, maximizing either one's absolute gain (individualism) or relative gain (competition).

In order to derive hypotheses, we consider the consequences of each allocation option for attaining or expressing the motivational goal of each of the ten types of values. In a task of allocating resources between self and other, the relevant value dimension is Self-Enhancement (including power and achievement values) versus Self-Transcendence (including benevolence and universalism values). Analyses of the fit between the consequences of cooperative and noncooperative behavior and the goals of the value types yields the following set of hypotheses:

1. The strongest predictor of failure to cooperate is the importance attributed by the individual to power values. This value type emphasizes competitive advantage. Power values legitimize seeking to maximize own gain even at the expense of others. Achievement values also predict noncooperation because they promote self-interest as well. But they are a weaker predictor because obtaining resources through noncooperation would probably be a weak source of social admiration, the core goal of achievement, as defined in the values theory. Hedonism also predicts noncooperation because cooperation would entail some self-sacrifice inimical to hedonistic goals.
2. The strongest predictor of cooperation is the importance attributed by the individual to benevolence value, with universalism second. The experimental setting probably makes cooperation more an expression of conventional decency and thoughtfulness than of basic commitment to social justice. Thus it is more relevant to the goals of benevolence than of universalism values. Conformity also predicts cooperation because cooperation is the normative, conventional behavior in society.
3. Self-direction, stimulation, security, and tradition are all less relevant to this decision, so we expect correlations near zero for them.

These hypotheses can be viewed as predicting the correlations with cooperation of ten separate value types—three negative correlations (hypothesis 1), three positive (hypothesis 2), and four near zero (null hypothesis 3). If, however, the structure of values is considered as an integrated whole, the predicted correlations with cooperation form a systematic pattern that reflects the structure of dynamic relations among the value types.

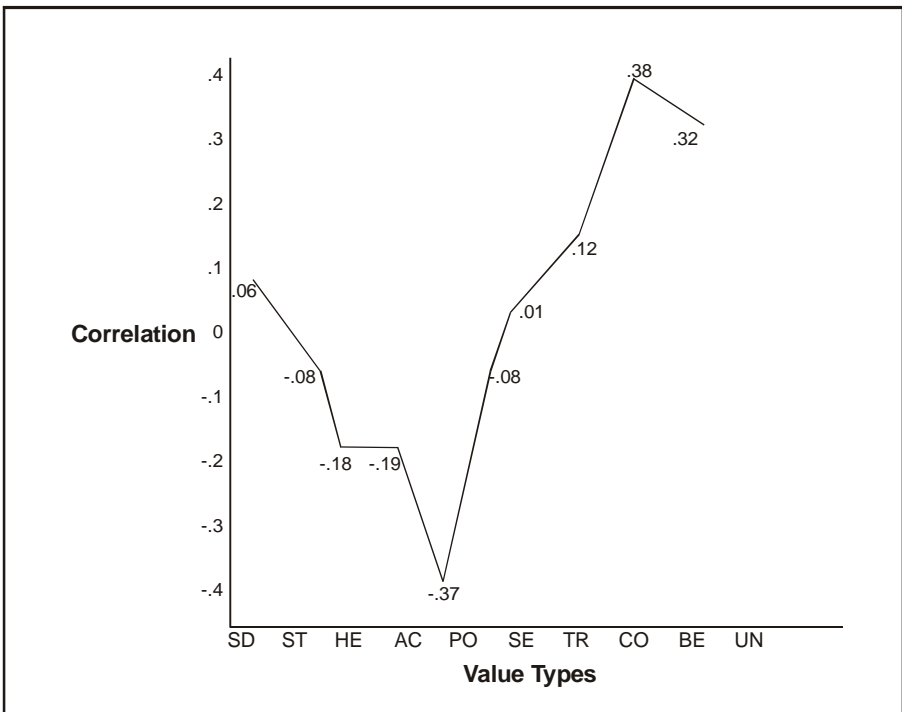
Specifically, the predicted pattern of correlations shows the two earlier noted characteristics regarding the associations of the system of value priorities with any outside variable: Cooperation is similarly related with value types that are adjacent in



the value structure and its associations decrease monotonically as one moves around the circular structure of value types in both directions from the most positively associated value type (benevolence) to the least positively associated value type (power).

Unfolding the value structure circle yields an integrated prediction of values-cooperation correlations with a sinusoidal shape. The observed point-biserial correlations between cooperation (scored 0-1) and the importance attributed to each value type are shown in Fig. 1.2.<sup>2</sup> The hypotheses were largely confirmed. Benevolence was most positively correlated and power most negatively. More important, the order of the correlations followed the order around the value circle from benevolence to power. The fact that self-direction, stimulation, security, and tradition had correlations near zero leads to more than merely accepting the null hypothesis in this context. It conveys information about the systematic relationship of the whole system of values to cooperation.

**FIG. 1.2. Point-biserial correlations of value priorities with cooperation versus noncooperation**



2. Correlations are partialled for each person's mean response to all 56 values, in order to control for differential use of the response scale (see Schwartz, 1992).

The six value types hypothesized to be relevant to cooperation in this setting had a multiple correlation of .53 with the dichotomous behavioral variable. They thus accounted for 28% of its variance, a very respectable proportion for a single behavior.

Although the curve relating value priorities with cooperation is sinusoidal, it is not symmetrical. For example, power is much more negatively related to cooperation than is security, which is adjacent to it. This illustrates the fact that the theory of value structure provides a baseline only for the order of associations. More precise hypotheses about differences in the absolute strength of associations require analyses of the specific relevance of each value type to the behavior in question. The brief explications of the hypotheses presented earlier suggested that power is much more relevant to cooperation than is security.

Another view of the data further clarifies the joint impact of power and benevolence—the two value types that were postulated to be most relevant to cooperation, to have the strongest influence, and to operate in opposing directions. We split the sample at the median on each of these value types and compared the proportion who cooperated in the four subsamples formed by the 2 X 2 cross-classification. Table 1.3 shows that cooperation was twice as frequent among those who attributed high importance to benevolence and low importance to power values (87%) than in any of the other subsamples (35%-43%). That is, a commitment to values that promote cooperation (benevolence), in the absence of conflict with a commitment to values opposed to cooperation (power), was necessary to elicit a high level of cooperation.

**TABLE 1.3 Proportion of Cooperation as a Function of the Importance of Benevolence and Power Values**

		BENEVOLENCE	
		Low	High
POWER	Low	.43 (N = 14)	.87 (N = 30)
	High	.35 (N = 31)	.43 (N = 14)

The next example of how value systems relate, as integrated wholes, to behavior takes us outside the laboratory to the study of voting behavior. Voting is the outcome of a complex of causes, one of which might be the person’s value priorities.

## Voting Behavior

Political psychologists and political scientists have often downgraded the importance of value priorities as predictors of voting (e.g., Campbell, Converse, Miller, & Stokes, 1960; see Sears, 1987). No doubt, other variables such as group membership, special interests, and the character of the candidates are influential (Kinder & Sears, 1985). But parties do convey broad ideological messages that are not entirely obscure and confusing; and the public has some understanding of these messages (Himmelweit, Humphreys, Jaeger, & Katz, 1981). Thus people can form an impression of possible consequences of voting for one party rather than another for the attainment of their values. By identifying the stands of parties on basic ideological dimensions, it should therefore be possible to specify some systematic, predictive relations of values to voting.

Students of politics (e.g., Himmelweit et al., 1981; Janda, 1980; Lipset & Rokkan, 1967; Seliger, 1975) have identified two major dimensions of political ideology on which parties in various countries are differentiated. One dimension is concerned with issues of civil liberties, law, and order, and the other with economic issues. We refer to these as classical liberalism and economic egalitarianism, respectively. In Israel, where this study was conducted, the first dimension, classical liberalism, is critical for discriminating among parties, the second of relatively little importance (Arian, 1989; Arian & Shamir, 1990). We therefore focus on the classical liberalism dimension.

On this dimension, parties differ in their emphases on individual freedoms, minority rights, readiness for social change, and in their views on whether government should give primacy to its role as the guardian of civil rights or as the protector of society against the threat of deviant behavior from within or enemies from without. In contemporary Israel, the problems of security and the Arab-Israeli conflict make this dimension especially salient.

Relations between religion and state constitute a subdimension of liberalism in Israel (Liebman & Don-Yehiya, 1984). Many religious citizens wish to ground all aspects of public life in Israeli society in Jewish religious law. Other citizens oppose this religious conception of the Israeli state. Ideologically, opposition to the penetration of religion into civil law is based in commitment to individual freedoms, hence the link to liberalism. Support for religious penetration into the state emphasizes conformity to religious norms in order to preserve a sacred social order, even at the expense of individual freedoms—a nonliberal position.

Experts were asked to rate Israeli parties on each of the dimensions of political ideology, as they presumably are seen by the public. Ratings of the parties differed little on the economic egalitarianism dimension. They differed substantially on both the classical liberalism and state/religion dimensions. Moreover, ratings on the latter two dimensions were very similar, as expected. Therefore, in our study of values and voting, Marina Barnea and I focused on the liberalism dimension, combining ratings of parties on the two related dimensions. This gave special

emphasis to the parties’ ideological stances on freedom of expression for individual ideas and life styles.

Column 1 of Table 1.4 orders eight Israeli political parties from the one rated most liberal to the one rated least liberal.<sup>3</sup> The religious parties rated lowest because they favor imposing religious law, thereby limiting individual freedom in all domains of life. Following each party name is the number of respondents in a representative national survey done in 1990 who had voted for the party in the 1988 national elections.

**TABLE 1.4 Order of Israeli Political Parties on Classical Liberalism Ideology**

According to Judges’ Ratings		According to Group Centroids on Value-Based Discriminant Function 1	
(1) Mapam-Ratz	(n = 55)	1.012	(1)
(2) Shinui	(n = 19)	.831	(2)
(3) Labor	(n = 248)	.381	(4)
(4) T’hiya	(n = 17)	.490	(3)
(5) Likud	(n = 310)	-.103	(6)
(6) Tsomet	(n = 14)	-.032	(5)
(7) Moledet	(n = 10)	-.259	(7)
(8) Religious	(n = 94)	-1.482	(8)

In order to derive hypotheses, we consider the consequences of electing parties with various stands on the liberalism dimension for attaining or expressing the motivational goal of each of the ten types of values. Because the parties are primarily discriminated according to their views on freedom of individual expression versus maintenance of order and control of “deviance,” the relevant value dimension for predicting voting, as shown earlier in Fig. 1.1, is the Openness to Change (including self-direction and stimulation) versus Conservation (tradition, conformity, security) dimension of values.

3. Religious parties include four different religious parties. Mapam-Ratz includes two parties with similar platforms emphasizing civil liberties. Parties that received fewer than 10 votes in our sample were not included in the analyses.

The associations with the importance attributed to tradition and to self-direction values should be strongest, because the attainment of their core goals is most affected by policy differences on individual freedoms versus order and control. The more a party is seen as emphasizing order and control of deviance at the expense of individual freedoms, the more likely are those for whom tradition values (humility, devoutness, moderation, accepting ones portion in life, respect for tradition) are of great importance and self-direction values (creativity, freedom, independence, choosing own goals, curiosity) of little importance to vote for it.

Giving priority to conformity and to security values should also promote support for parties that favor order and control, because both these value types emphasize preservation of social order and maintenance of harmony in relations. Giving priority to stimulation and hedonism values should promote support for parties that emphasize freedom, because both value types stress the individual's pursuit of pleasant arousal in novel ways and according to personal preference. A concern for opportunities to pursue social recognition for distinctive individual achievements may also lead those who give priority to achievement values to support parties that emphasize freedom.

The remaining value types (benevolence, universalism, and power) are more relevant to the economic egalitarianism dimension of political ideology on which Israeli parties are not strongly discriminated. They are less relevant to the liberalism dimension. We therefore did not anticipate that they would be related to party support in Israel.

As with the hypotheses for cooperation, the hypotheses for voting can be viewed as predicting the relations of ten separate value types with behavior. Here too, however, considering the structure of values as an integrated whole reveals that the hypothesized relations with liberal voting preferences form a systematic pattern that reflects the structure of dynamic relations among the value types (cf. Fig. 1.1). Associations with the priority given to self-direction values are predicted to be most positive, and associations with the other value types are hypothesized to be progressively less positive as one moves in both directions around the circular structure of value types to tradition, the most negatively associated value type.

The hypotheses were tested with data from a representative sample of the Jewish population in Israel above age 19, who responded to a survey in their homes during the summer of 1990. They first completed an abbreviated version of the value survey that included 37, rather than the usual 56, single values selected to represent all ten value types. The values representing benevolence and universalism did not separate empirically in the multidimensional scaling analysis (SSA; Guttman, 1968) on these data. They were therefore combined to form a single Self-Transcendence value type.<sup>4</sup> Because both benevolence and universalism values were expected to have no association

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4. This combination corresponds to a higher-order value type found almost universally with the original 56 value survey (Schwartz & Sagiv, 1995).

with voting, this combination posed no problem. At the end of the survey, respondents indicated the party for which they voted in the most recent national elections (1988). The 769 respondents who voted for parties with at least ten supporters in the sample were included in the analyses.

Discriminant function analysis was used to assess the associations of values with voting. We derived the functions that discriminate significantly among supporters of the eight political parties, using the nine value types as discriminant variables. Two significant discriminant functions were found. The first accounted for 74% of the common variance, the second only for 21%.

As noted earlier, the prevailing view of Israeli politics assumes that the liberalism (freedom of expression) ideological dimension is paramount. Hence, if values are relevant to voting, one would expect the first, value-based function to tap variation among parties essentially on this dimension. To establish if this was so, we examined the ordering of the parties on the group centroids of the first function. We compared the order of the parties on these centroids (Table 1.3, col. 2) with their order on the liberalism dimension based on the a priori, judges' ratings (Table 1.3, col. 1). As shown in the table, the centroids ordered the groups in almost exactly the same order as the judges' ratings (Spearman rank correlation .95). Thus this value-based function ordered the parties on their perceived policies toward classical liberalism.<sup>5</sup>

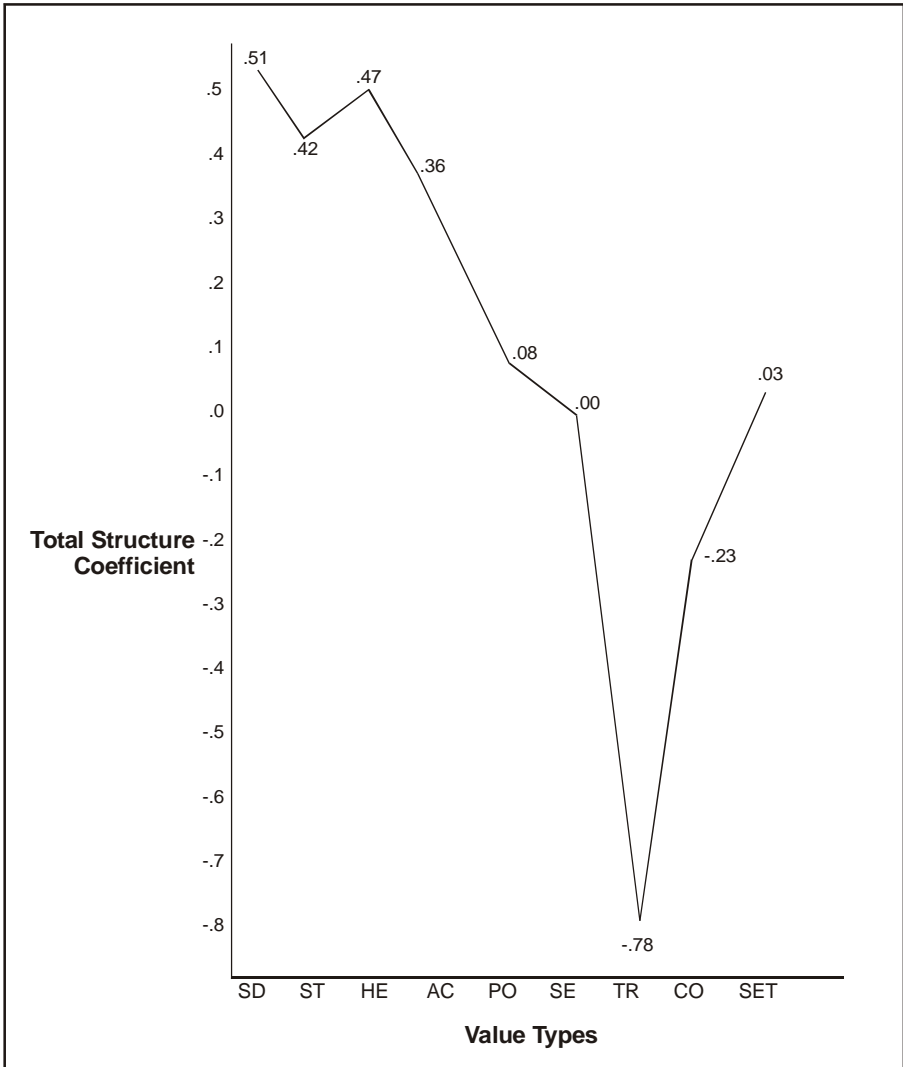
Because the first function can be interpreted as representing party differences on liberalism ideology, we can test the hypotheses for the specific value types by examining the associations of each value type with this function. We ask, do the value types hypothesized to promote support for parties committed to individual freedoms associate positively with the function? And, do value types hypothesized to promote support for parties that emphasize order and control associate negatively? And, is the order of associations of the nine value types the same as the order predicted from the integrated structure of value relations?

The most accurate measures of the association of discriminant variables (here, value types) with functions are the total structure coefficients (Klecka, 1980). For each value type, the total structure coefficient, indicating its association with function 1, is indicated on the graph in Fig. 1.3.

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5. The much weaker second function was largely unipolar and defined mainly by positive associations with achievement, security, conformity, and power values. The group centroids for this function were unrelated to any of the judges' ratings, suggesting no clear ideological interpretation of this weak function.

**FIG. 1.3. Total structure coefficients for the association of value priorities with function 1 for discriminating among party voters**



The four value types hypothesized to associate positively (self-direction, stimulation, hedonism, achievement), and two of the three types hypothesized to associate negatively (tradition, conformity, but not security) with classical liberalism showed significant associations ( $p < .01$ ) in the predicted direction. No significant associations emerged for the value types for which none was expected (power and self-transcendence [benevolence plus universalism]).

Most important, as shown by the sinusoid curve, the order of coefficients was almost exactly as predicted by the integrated hypothesis for the whole structure of values (small reversal for Stimulation/Hedonism): Self-direction was most positive, with the coefficients progressively less positive as one moves around the structural circle (Fig. 1.1) in both directions toward power.<sup>6</sup>

The relationship between value priorities and party voting is also revealed in the comparison of individuals who voted for the two most extreme groups on the liberalism dimension—Mapam-Ratz and Religious. The mean ratings of the importance of value types for these individuals, as well as for supporters of the two major parties, are shown in Table 1.5.

Self-direction, stimulation, and hedonism values were rated more important by supporters of Mapam-Ratz (high liberalism) than by voters for the Religious parties (low liberalism). Tradition and conformity values were rated more important by voters for the Religious parties. Voters for the two major parties attributed intermediate levels of importance to these value types. For these five types, differences between the extreme groups all exceeded .75 standard deviations ( $p < .0001$ ). For the remaining types, differences were smaller and less systematically related to the order of the parties on classical liberalism. In keeping with the integrated hypothesis, the size and sign of the differences between the extreme groups followed the order of the value types around the structural circle with a deviation of only one place for stimulation.

**TABLE 1.5 Mean Ratings of the Importance of Value Types as a Function of Political Party Preference**

Party	Value Types								
	SD	ST	HE	AC	PO	SE	TR	CO	SET
Mapam-Ratz	5.25	4.25	4.59	4.04	2.80	4.83	2.45	3.92	5.15
Labor	4.84	4.09	4.42	4.51	3.46	5.62	3.30	4.73	5.13
Likud	4.51	4.12	4.29	4.71	3.64	5.65	3.87	4.87	4.97
Religious	3.90	3.22	3.21	3.66	3.1	5.48	5.49	5.05	5.08
Difference	1.35*	1.03*	1.38*	.38	-.32	-.65	-3.04*	-1.13*	.07
MR - Relig									

Note \* $p < .01$  SD = Self-direction AC = Achievement TR = Tradition ST = Stimulation  
 PO = Power CO=Conformity HE = Hedonism SE = Security  
 SET=Universalism & Benevolence

6. The security situation in Israel probably led to the absence of an association for security. Regardless of party preference, respondents rated security values much more important than is common across nations (unpublished data).



Overall, the findings supported the hypothesized relationships between value priorities and party voting. Using the value-based discriminant functions to classify voters as supporters of one of the eight political parties yielded 51% correct classifications. As calculated by Goodman and Kruskal's Tau, knowledge of individuals' value priorities permitted a 32% improvement compared with chance classification ( $Z = 10.24$ ,  $p < .01$ ). Finally, the order of associations supported our argument that value systems relate as integrated wholes to other variables.

## Readiness for Outgroup Social Contact

The final study examines how the value priorities of individuals help to explain their readiness for social contact with members of an outgroup. Rokeach (1973) reported the only study I know that directly related to this topic. He found that 21 of the 36 single values in his value lists were significantly associated with an index that included both readiness for social contact and attitudes toward Blacks. In his post hoc discussion, Rokeach portrayed his findings as consistent with descriptions of prejudiced people, but he offered no framework to organize them. The theory of value contents and structure can be used to develop an integrated set of hypotheses to relate the comprehensive system of value priorities to readiness for outgroup contact.

Lilach Sagiv and I applied the theory to study the readiness of Israeli Jews and Israeli Arabs for social contact with one another (Sagiv & Schwartz, 1995). Because the meaning of contact is different for dominant and minority groups, it is important to note that Jews are the dominant group in Israel and Arabs are a minority. Members of dominant groups are likely to understand contact as entailing acceptance of minority group members as fully privileged members of their society. In contrast, members of minority groups are likely to understand broad social contact as implying their own integration into the larger society, or even their assimilation. These different consequences of contact imply different relations with values. I discuss only the dominant group here.

In order to generate hypotheses, we considered the consequences of contact with members of the Arab minority group for the attainment or expression of the motivational goals of the value types by members of the dominant Jewish group. This suggested the following hypotheses:

1. Attributing importance to all three Conservation value types (tradition, conformity, security) correlates negatively with readiness for out-group contact. The most negative correlation is for tradition values because contact entails exposure to divergent traditions and customs, threatening those for whom maintenance of own traditions is important. Moreover, tradition values correlate highly with religiosity (particular among Israeli Jews: Schwartz & Huisman, 1995), and religiosity is related to ethnocentrism (see Wulff, 1991). The negative correlation for conformity values is because contact with culturally different minorities places one in situations where familiar norms

do not apply, making it difficult to maintain smooth relations and to avoid violating expectations. The negative correlation for security values is because outgroup members may disrupt the prevailing social order, especially if they feel oppressed and demand change.

2. Attributing importance to both Openness to Change value types (self-direction and stimulation) correlates positively with readiness for outgroup contact. The positive correlation for self-direction values is strong because intergroup contact provides exposure to new and different ways of life and opportunities to learn about and explore them. Moreover, people who emphasize self-direction values are more likely to reject negative stereotypes of outgroups because they prefer to make independent judgments based on their own experience. A positive correlation is expected for stimulation values because contact with outgroups provides opportunities for novelty and excitement. But, in the context of conflict between Jews and Arabs, the correlation should be weakened because outgroup contact may threaten another goal of stimulation values—enjoyable arousal.
3. Attributing importance to both Self-Transcendence value types (benevolence and universalism) correlates positively with readiness for contact. The most positive correlation among all ten value types is for universalism values because they emphasize understanding, accepting, and showing concern for the welfare of *all* human beings. This value type, with its goal of tolerance and acceptance even of those with different ideas and life styles, is most relevant to outgroup contact. A positive correlation is expected for benevolence values because they also emphasize concern for others. But benevolence values are mainly expressed in everyday relations with close others, not with outgroups. This should weaken the correlation, especially because the Jewish-Arab conflict makes group boundaries salient.
4. We expected correlations near zero for the Self-Enhancement value types (power and achievement) and for hedonism. Social contact is relevant to power values both positively and negatively. Contact may provide members of a dominant group opportunities to exercise power and experience superiority over minorities of inferior status. But accepting minorities into society may endanger the current dominance hierarchy, especially if the minority is struggling to gain status. The correlation will depend on the relative strength of these opposing processes. If they are balanced, it may be near zero. Social contact with Arabs is not especially relevant to attaining the goals of achievement values, hence no correlation is expected. This is because, in Israel, the Arab minority has little impact in the occupational and educational arenas where members of dominant group compete for success and recognition (Chemansky, Guvran, & Hmaisi, 1984; Graham-Brown, 1984). Because outgroup contact is not relevant to the goals of hedonism, no correlation is expected.

When the findings reported by Rokeach (1973) are classified according to our value types, the directions of the correlations are compatible with these hypotheses, with the exception of hedonism. This set of hypotheses also forms an integrated whole that reflects the structure of relations among value types. The predicted correlations are progressively less positive as one moves in both directions around the circle from universalism (most positive) to tradition (most negative) values.

The order of associations implied by the set of hypotheses forms the usual sinusoid curve, but this curve is not symmetrical. For example, an especially sharp drop in correlations is expected from universalism to benevolence, despite the fact that these are adjacent types in the structural circle. This reflects the special relevance to the behavior of outgroup social contact of tolerance for *all* (universalism) in contrast to concern for one's ingroup (benevolence).

The types predicted to have the most and the least positive associations with readiness for outgroup social contact are not located in polar opposition in the theoretical structure of value relations. This reflects the most critical motivational issue related to this behavior in this setting—tolerance versus intolerance. On this issue, universalism and tradition are the most opposed. The prototypical opposition of universalism is with power. The issue central to this opposition, protecting the interests of others (universalism) versus exploiting them for personal advantage (power), is less critically relevant here.

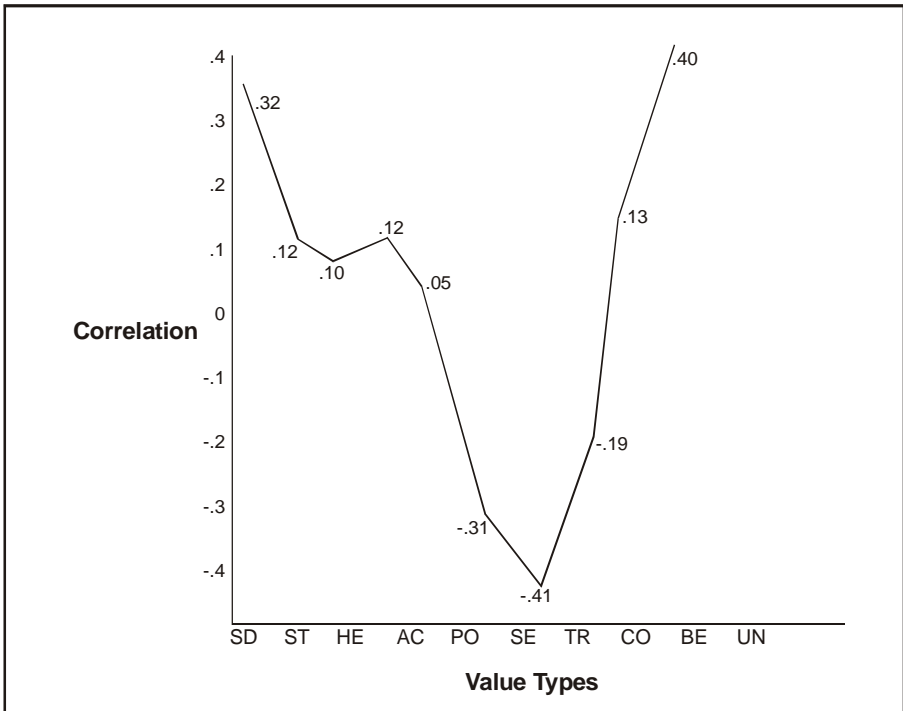
Jewish public school teachers ( $n = 151$ ), in Grades 6 through 10, from schools around the country, provided the data to test these hypotheses. They first completed the 56-item value survey. Subsequently, they indicated their readiness, on a 5-point willingness scale, for 7 types of contact with Israeli Arabs: (1) occasional superficial social contact; (2) business or trade relations; (3) living in the same neighborhood; (4) inviting as a guest to your home; (5) having as a close friend; (6) having as a next-door neighbor; (7) having your children play together. Responses to these items were summed to form an overall index ( $\alpha = .95$ ).

The correlations between value priorities and readiness for social contact are shown in Fig. 1.4.<sup>7</sup> The types of values hypothesized to have negative correlations (tradition, conformity, security), and those hypothesized to have positive correlations (universalism and self-direction), were correlated as expected ( $p < .01$ ). The correlations for the two types hypothesized to have weaker positive correlations (benevolence and stimulation) were in the expected direction, but not reliably different from zero. Finally, as hypothesized, the correlation for universalism was most positive and that for tradition most negative.

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7. Differential use of the response scale for ails was controlled by standardizing value ratings within individuals.

**FIG. 1.4. Correlations of the value priorities of Israeli Jewish teachers with their readiness for social contact with Israeli Arabs**



The order of correlations matched that specified by the integrated hypothesis, as described by a sinusoid curve, with only a slight deviation for achievement. As expected, given their order in the integrated hypothesis, the correlations for power, achievement, and hedonism were close to zero. Together, the seven value types hypothesized to affect readiness for outgroup social contact explained a substantial 39% of the variance in the readiness of Israeli Jewish teachers for contact with Arabs.

Another way to look at these data is to consider the combined effects on readiness for outgroup social contact of the two value types hypothesized to be most relevant and most in conflict in this setting—universalism and tradition. For this purpose, we split the sample at the median on each of these value types. We then compared the readiness for contact of the four subsamples formed by the 2 (universalism: high/low) X 2 (tradition: high/low) cross-classification. The two-way analysis of variance yielded significant main effects for universalism and tradition ( $F(1, 130df) = 21.57$  and  $15.65$ , respectively,  $p < .001$ ), but no interaction. Table 1.6 shows the means for the four subsamples.

**TABLE 1.6 Mean Readiness of Israeli Jews for Outgroup Contact With Israeli Arabs as a Function of the Importance of Universalism and Tradition Values**

		TRADITION	
		Low	High
	Low	3.01 <sup>a</sup>	2.31
		(N = 34)	(N = 37)
UNIVERSALISM			
	High	3.98	2.94
		(N = 34)	(N = 32)

Note. a. Response scale: 1 = Not at all willing; 5 = Definitely willing

The high universalism-low tradition subsample exhibited substantially more readiness for outgroup contact than the low universalism-high tradition subsample ( $M = 3.98$  vs.  $2.31$ ). The other two subsamples, whose members were expected to experience value conflict in the face of outgroup contact, showed intermediate levels of readiness. Whereas universalism and tradition values are strongly opposed with regard to the motivation of critical relevance in this setting, they are relatively independent with regard to the broader motivations they express, as described in Table 1.1 and illustrated graphically in Fig. 1.1. This independence is reflected in the almost equal numbers of respondents found in each of the four subsamples in Table 1.6.

Here, I cannot fully discuss the hypotheses and results of parallel studies of the readiness of Christian Arab and Muslim Arab minority groups for social contact with Jews. However, two aspects of these studies are worth mentioning because they highlight points that are crucial when relating value systems to behavior. First, four of the nine hypotheses that we generated for the minority groups differed from those generated for the Jewish group. Second, the set of hypotheses for the minority groups did not follow the usual order around the value circle.

These differences point to the necessity of analyzing the specific context in which values are expressed or pursued in order to make sense of value-behavior relations. The differences in the hypotheses reflected the different significance of contact for minority and dominant groups, as integration or as assimilation into the larger society, or as acceptance of minorities as full citizens. Clearly, the different meanings of social contact affect its implications for value expression. Moreover, the deviations of the pattern of predicted correlations suggest that the sociopolitical context of Arab minorities in Israel has modified the usual reinforcement contingencies that link individual value attainment to action in social life. When the order of associations does not correspond

to the order implied by the theory of the structure of value relations, it is likely that the “psycho-logic” of conflicts and compatibilities among values is being distorted by externally imposed social constraints.

For example, for the Israeli Muslim Arab minority, in contrast to the dominant Jewish group, outgroup social contact is relevant to the goal of achievement values—success according to prevailing social standards. The arena for most social achievement in Israel, even for minority group members, is the larger societal world of work in which contact with outgroup members is required. Although minority group members might wish to pursue economic or academic success within their ingroup, there are few opportunities to do so. There is no separate Israeli Arab economy and no Arab university. Hence, in order to demonstrate high levels of competence and success, Arabs are almost entirely constrained to obtain higher economic and educational positions by active immersion in the institutions of the larger society (Smootha, 1984).

The foregoing analysis led to the hypothesis that an emphasis on achievement values correlates positively with readiness for outgroup contact among Israeli Muslim Arabs. The combination of this hypothesis with an hypothesized positive correlation for benevolence values violates the order of associations implied by the prototypical structure of value relations. Yet, both these hypotheses were confirmed. This observed pattern of associations reflects the unusual organization of social reinforcements to which a weak minority group that seeks to preserve its uniqueness is exposed.

## Conclusions

This chapter began by identifying three problems in past research on the relations of values to other variables: (1) use of unreliable single-item indexes of value importance; (2) use of value lists that fail to cover the full range of motivations expressed in values that are likely to influence behavior; (3) failure to view value systems as integrated wholes with coherent relations to other variables that entail tradeoffs among competing value priorities. I conclude by summarizing the responses to these problems that are provided by the current approach.

The three studies discussed here demonstrate that using priorities for value types rather than single values permits consistent, theory-based prediction of behavior. When the analyses reported here for the indexes of value types are performed with single values, a much less lucid picture emerges in each study. Of course, many single values do show significant associations with behavior in the directions hypothesized for the value types they represent. However, exactly the pattern expected with unreliable indicators is observed: nonsignificant associations in the predicted as well as the reverse direction for single values from these same types, and a few significant associations for single values from types expected to be unrelated to the behavior.

The same could be demonstrated for the relations of values with attitudinal variables (e.g., environmental attitudes—Grunert & Juhl, 1991) and with background variables (e.g., age—Schwartz, 1992). This gain over single values reflects two advantages of the

indexes of value types. First, as multiple-item indicators, they are more reliable than single values. Second, as sets of value items that share a core of meaning across individuals and cultures, their shared variance is a more valid measure of specifiable motivational goals. In contrast, single values are likely to have idiosyncratic meanings.

Use of the full set of value types also offers considerable—though not complete—protection against the second problem identified, overlooking values that are important for understanding behaviors or attitudes of interest. When researchers in various countries added values that they judged to be missing from the survey, these values emerged empirically as exemplars of the existing value types (Schwartz & Sagiv, 1995). It may well be useful to add values of special relevance when studying a particular topic, but the ten value types probably cover most, if not all, the broad types of motivation that are relevant.

Popular instruments currently used to study values, attitudes, and behavior are considerably more problematic. It is possible to form indexes for value types from the items in the Rokeach survey, for example (Schwartz & Bilsky, 1987). These indexes are less well-defined, however, and the coverage is less broad because power and tradition values are omitted. The List of Values (Kahle, 1983) uses single items to measure nine values, and it omits universalism, tradition, and conformity values.<sup>8</sup> These are important types to miss, as evidenced by their substantial relations to behavior in the studies discussed here.

With regard to the third problem, conceptualizing value types as forming a structure that relates as an integrated whole to other variables promotes systematic theory building and testing rather than ad hoc interpretation. The first step required is a close analysis of the consequences of a behavior or attitude for the expression or attainment of the motivational goals of the value types, leading to the identification of the most relevant type. Once this is done, the structure of value types facilitates the generation of hypotheses for the remaining types. With such an approach, the relative sizes of associations of the types are informative, not only their statistical significance. Indeed, even near zero associations provide meaningful evidence regarding the systematic nature of relations of values with an attitude or behavior, because they help to corroborate the coherent pattern of associations with the whole structure of values.

The data reported in all three examples in the current chapter largely followed the sinusoid curves implied by the structure of value systems. True sine curve patterns were not found, however, nor should they be expected. As noted, the specific relevance (e.g., power in the cooperation study) or irrelevance (e.g., hedonism in the outgroup contact study) of each value type to the behavior in question is likely to produce asymmetries in the curve. The order of associations is ordinarily, preserved, however. If it is not, as with the Israeli Muslim Arabs in the outgroup contact study, distortions in the patterns of reinforcement typical of human social relations should be sought.

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8. Another problem with the List of Values (LOV) is that 5 of its 9 items are values with cross-culturally inconsistent meanings (Schwartz & Sagiv, 1995). A test of the validity of the LOV in five economically advanced nations rejected the cross-cultural comparability of its items (Grunert, Grunert, & Kristensen, in press).

Finally, viewing value types as an integrated system fits the conception that attitudes and behavior are guided by tradeoffs among relevant competing values (Rokeach, 1973; Schwartz, 1992; Tetlock, 1986). The set of hypotheses typically predicts both positive and negative associations, because the structure of relations among value types is based on oppositions between motivational goals that tend to be mutually exclusive. This chapter calls upon researchers into behavior and attitudes to take competition between the relatively enduring systems of individuals' value priorities into account. The promise of this approach has been described here. It should now face the test of extensive research and the inevitable corrections that will bring.

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