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The Structural Bases of Consistency Among Political Attitudes: *Effects of Political Expertise and Attitude Importance*

Charles M. Judd
University of Colorado

Jon A. Krosnick
Ohio State University

A great deal of research in social psychology and in related disciplines has examined ways in which attitudes are organized or structured. This work has defined attitude structure in a variety of different ways. Some researchers have looked at the structure of single attitudes, hypothesizing three structural components: cognitive, affective, and conative (Breckler, 1984; Insko & Schopler, 1967; Kothandapani, 1971; Ostrom, 1969; Rosenberg, 1960; Rosenberg & Hovland, 1960). Assessments of individual differences in attitude structure in this tradition have focused on differences between individuals or differences within individuals between attitudes in the consistency of these three attitude components (e.g., Chaiken & Baldwin, 1981; Chaiken & Yates, 1985; Millar & Tesser, 1986). Another approach to attitude structure has focused on relationships between attitudes toward different attitude objects, focusing on the degree to which these attitudes are consistent with each other (e.g., Abelson & Rosenberg, 1958; Festinger, 1957; Heider, 1958; Newcomb, 1968; Osgood & Tannenbaum, 1955). Thus, in this second case, attitude structure has been defined by reference to constellations of attitudes rather than by reference to components of a single attitude.

Our purpose in this chapter is to explore factors responsible for differences in attitude structure in the second sense previously defined. That is, we intend to explore the bases of structural consistency between attitudes and factors responsible for differences in such consistency. In particular, we are concerned with the effects of two different factors on consistency between attitudes: expertise in the attitude domain and

the importance or centrality of the attitudes.[1] For the sake of simplicity, we define an attitude as an evaluation of an attitude object that is stored in memory.

Although the theoretical speculations offered have relatively broad implications, our discussion is focused on political attitudes. In particular, we concern ourselves with the structure of attitudes toward government policies. These attitudes were chosen because structural relationships among them are thought to reveal important aspects of political cognition, because they are assumed to be especially consequential determinants of political behavior, and because a large body of research has examined structural consistency among them. In the course of analyzing relationships among attitudes toward government policies, we consider their relationships with basic values, attitudes toward political reference groups, and attitudes toward political actors and candidates.

The chapter is divided into three sections. In the first, we review past research on consistency between attitudes in psychology and political science, focusing on factors presumed to be responsible for differences in attitude consistency. Social psychologists have argued that the importance of an attitude should be positively related to the consistency of that attitude with others. Political scientists have argued that an individual's degree of political expertise should be positively related to the degree of consistency among political attitudes. In reviewing both literatures, we identify the typical procedures used to assess attitude consistency and discuss problems with such assessment procedures. We conclude this section by arguing that nearly all prior work on the assessment of between-attitude consistency has inappropriately assumed that the ability to predict one attitude from another across individuals necessarily reflects consistency between attitudes within a given individual.

Given this problem, we attempt in the second section of the chapter to develop a model for the representation of attitudes or evaluations, defining between-attitude consistency within the context of this representational model. We then attempt to specify the structural effects of attitude importance and political expertise, showing how each may lead to increases in consistency of attitudes within a given individual. The final step in this section is to attempt to identify the conditions that are necessary for this within-individual definition of attitude consistency to translate into between-individual correlations between attitudes. Finally, in the third section of the chapter, we derive a set of predictions from the model and test them with national survey data.

[1] Attitude researchers have used a number of different terms to refer to the subjective importance of an attitude. The most frequently used are *importance, centrality,* and *ego-involvement.* Although a variety of different definitions of these terms have been offered, we think the theoretical distinctions among them are relatively small. We use the term *importance* throughout this chapter, giving it a very precise definition in the second section of the chapter. Our choice to use this term was, however, somewhat arbitrary. We mean to subsume by it the notions of centrality and ego-involvement.

ATTITUDE CONSISTENCY: THEORY AND RESEARCH

Within social psychology, attitude organization has been addressed most extensively by the cognitive consistency theorists. Balance theory (Heider, 1958; Newcomb, 1968), congruity theory (Osgood & Tannenbaum, 1955), and dissonance theory (Festinger, 1957) all presume that people prefer consistency among their attitudes to inconsistency and tinker with them whenever necessary in order to maintain consistency. According to these perspectives, attitude consistency is driven by a system of syllogistic logic (Abelson & Rosenberg, 1958). Similar attitudes (i.e., both positive or both negative) toward two objects are defined as consistent if the objects both constitute instances of the same category or are positively linked to each other through some sort of association. Contrasting attitudes (i.e., one positive and one negative) toward two objects are consistent if the objects are negatively linked to one another.

Consistency theorists asserted that a variety of factors determine whether two linked attitudes are consistent with one another. Probably the factor most often discussed is the importance of the attitudes involved (Festinger, 1957; Newcomb, 1956, 1961; Singer, 1968). For example, according to Festinger (1957), the intensity of discomfort associated with inconsistency between two attitudes is a joint function of (a) the average importance of the two attitudes, and (b) the discrepancy between their importances. Discomfort is presumed to be greatest when two equally and highly important attitudes are inconsistent, and it presumably decreases as the discrepancy increases and as the average falls. This suggests that inconsistency between attitudes may be tolerated if one or both of the attitudes involved are unimportant. If both attitudes are highly important, the inconsistency would presumably be resolved, perhaps by either changing the less important of the two or lowering its importance. As a consequence, an individual's important attitudes tend to be relatively consistent with one another.

Within political science, the origins of attitude consistency and the factors that enhance it have been viewed quite differently. Political scientists' concerns with these questions were motivated initially by an interest in the degree to which citizens' attitudes toward public policies are derived from or *constrained* by ideologies (Converse, 1964). Because the political environment in many countries is structured largely by two political parties,

each on one side of a liberal–conservative ideological continuum, political scientists have focused primarily on liberalism and conservatism as ideological bases for policy attitudes. Campbell, Converse, Miller, & Stokes (1960), Converse (1964, 1970), and others did not argue that most people generally prefer consistency among their policy attitudes to inconsistency. Rather, they claimed, some people derive their attitudes toward policies from ideologies, and others form each attitude on the basis of considerations specifically relevant to it. Presumably, individuals who employ the first approach evidence attitude consistency and structure across a wide array of policy attitudes; those who employ the second approach do not. The difference here is one of style.

Political scientists think of style of policy attitude formation as a relatively stable individual difference variable and assume that domain-specific expertise is a prerequisite for ideologically consistent political attitudes (e.g., Converse, 1964, 1970, 1975, 1980). The confluence of knowledge about past political events and practice at thinking about them presumably helps some individuals to derive policy attitudes from general principles. Political experts are assumed to be best able to (a) manipulate abstract concepts such as political ideologies, (b) recognize the applicability of ideologies to particular policy issues, and (c) derive attitudes toward specific policies from those general principles. Therefore, political experts' policy attitudes are especially likely to evidence consistency among themselves because they are all derived from a single ideological principle.

Because political experts presumably think often about political events and issues and have strong feelings on such matters, these individuals may be likely to consider relevant attitudes to be personally important. If this is so, then the literatures in political science and social psychology can be seen as making complementary, although distinct, predictions about the determinants of attitude consistency. Notice, however, that the focus in the two literatures is rather different. In the psychological literature, importance is seen as a characteristic of an individual attitude, increasing the probability that that attitude will be consistent with other attitudes. The literature in political science has focused on the way in which expertise in a given domain increases consistency. Expertise is a characteristic of a domain of knowledge rather than a characteristic of an individual attitude. The two factors may work in tandem to produce particularly high levels of consistency among attitudes that are important to political experts.

Surprisingly, given the theoretical predictions made by psychological theories of attitude consistency, few studies in the psychological literature have compared the level of consistency among attitudes differing in importance. Not a single study within the dissonance literature on forced compliance or voluntary exposure to information measured or manipulated

attitude or belief importance, and studies of postdecision dissonance reduction examined the importance of the decision, not of the attitudes or beliefs involved (e.g., Converse & Cooper, 1979). Newcomb (1961) and Osgood (Osgood & Tannenbaum, 1955; Tannenbaum, 1967, 1968) incorporated attitude importance into their analyses but did not compare important attitudes to unimportant ones. Some empirical support for the claim that more important attitudes evidence greater consistency comes from studies of interpersonal attraction. Liking of a stranger or a presidential candidate is more consistent with agreement on important attitudes than with agreement on unimportant ones (Byrne, London, & Griffitt, 1968; Clore & Baldridge, 1968; Krosnick, 1986). More direct evidence for the association between attitude consistency and importance comes from studies showing higher correlations between attitudes toward government policies among those who say those attitudes are personally important than among those who say they are less important (Jackman, 1977; Judd & Krosnick, 1982; Schuman & Presser, 1981, pp. 264–266; Smith, 1982).

The hypothesis that political experts should evidence greater policy attitude consistency has been tested more extensively. Support for this notion comes from studies showing that political expertise (as measured directly by political knowledge or indirectly via interest in politics, exposure to political news, or educational attainment) is associated with larger correlations among policy attitudes (Axelrod, 1967–1968; Bishop, 1976–1977; Bishop, Hamilton, & McConahay, 1980; Converse, 1964; Hagner & Pierce, 1983; Judd & Milburn, 1980; Judd, Krosnick, & Milburn, 1981; Kritzer, 1978; Nie & Anderson, 1974; Nie, Verba, & Petrocik, 1979; Pierce & Hagner, 1980). These correlations consistently indicate that people who adopt a liberal position on one policy question tend to adopt a liberal position on others as well, and this tendency is stronger among political experts.

In sum, there is evidence in both the psychological and political science literatures suggesting that attitude importance and political expertise are related to differences in between-attitude consistency. Correlations between different attitudes seem to be generally higher among experts and among those who regard those attitudes as more personally important.

Problems in the Assessment of Consistency

The available literature supports the conclusion that political expertise and attitude importance are both related to larger attitude-attitude correlations. There are, however, a number of problems in using such correlations to assess differences between groups in attitude consistency. In this section, we discuss three particular difficulties:

1. distortions in between-group comparisons due to differences in measurement error,
2. distortions in between-group comparisons due to differences in response variance, and
3. distortions in between-group comparisons due to differences in within-individual structural relations between attitudes.

Measurement Error

The first problem derives from the well-known fact that random errors of measurement attenuate correlation coefficients (Judd & Kenny, 1981). The more random error is present in attitude reports, the lower attitude-attitude correlations will be, assuming all else equal. If political experts and novices differ in the amount of random measurement error in their attitude reports, comparisons of correlations across levels of political expertise may be misleading.

In fact, policy attitude reports by political experts are likely to contain less random error for two reasons. First, these individuals are likely to answer survey questions more easily and precisely because they are likely to have had practice at expressing their policy opinions. Second, because these individuals are generally well-educated, they are likely to be adept at handling testlike survey questions. Consequently, stronger between-attitude correlations among political experts may simply reflect less random measurement error in their attitude reports. Similarly, it seems reasonable to suppose that personally important attitudes might be reported with less random error (Schuman & Presser, 1981). If this is the case, then comparisons of correlations between attitudes differing in importance might erroneously conclude that there is greater consistency between important attitudes when the difference in correlations may simply be due to a difference in measurement error.

Norpoth and Lodge (1985) recognized this problem and estimated attitude intercorrelations after correction for attenuation due to measurement error. They found that political experts did in fact report their attitudes with less random error. However, even after correction for attenuation, these attitudes were still more strongly intercorrelated than were those of novices.

Similarly, Judd and Krosnick (1982) recognized that differences in attitude-attitude correlations as a function of attitude importance may reflect differences in random errors of measurement. However, they found that reports of important attitudes do not contain any more random measurement error than do reports of less important attitudes (see also Krosnick, 1986). Furthermore, they found higher correlations among more important attitudes even after correcting for attenuation due to random errors of measurement.

Response Variance

A second problem with past studies involves the relationship between response variance and the magnitude of correlation coefficients. It is well-known that between-group differences in the variance of attitudes will lead to differences in the size of attitude-attitude correlations even when unstandardized measures of association, such as unstandardized regression coefficients, are equivalent between groups (Barton & Parsons, 1977; Balch, 1979; Blalock, 1967; Weissberg, 1976). Groups displaying more variance in their responses will generally evidence higher correlations. Tesser (1978; Tesser & Leone, 1977) repeatedly showed that merely thinking about an attitude object increases the extremity of one's evaluation of that object. Certainly one might expect those who regard an attitude toward a policy option as important to think about that option more frequently. Similarly, we would expect political experts to think about political and policy options more frequently. As a result, we might expect important attitudes and the attitudes of political experts to be more polarized or variable. Differences in attitude-attitude correlations as a function of attitude importance may then simply reflect differences in variability.

Barton and Parsons (1977) and Hagner and Pierce (1983) recognized this problem and compared policy attitude consistency among political experts and novices using a method unbiased by variance differences. Consistent with theory-based expectations, they found experts' attitudes to be more consistent with one another. However, these investigators failed to take between-group differences in measurement error into account in their analyses, rendering their findings inconclusive.

Judd and Krosnick (1982) used a second-order confirmatory factor analysis procedure to examine differences in consistency as a function of attitude importance while allowing for between group differences in measurement error and variability. They built a model in which attitudes toward five different policy issues were presumed to load on a single latent factor. By the use of multiple measures of each of these attitudes, they were able to examine separately differences between high and low importance groups in attitude variability, measurement error, and second-order factor loadings of the attitudes on the single higher-order latent variable. These second-order factor loadings were presumed to reflect the degree of attitude consistency between different attitudes unbiased by differences in variability and random errors of measurement. Although they found evi-

dence for differences in variability, they failed to uncover any differences in the second-order factor loadings, thus calling into question the assertion that more important attitudes are more highly correlated.[2]

Unit of Analysis

The methodological problems of differences in variability and measurement error certainly complicate the assessment of consistency differences between groups of subjects who differ in attitude importance and political expertise. In addition, however, there is another more fundamental problem with the standard approach to this issue, a problem that pervades all of the research that we have mentioned. In this research, consistency has been assessed by examining correlations, covariances, and factor loadings based on variability in attitude responses across individuals. That is, one typically examines consistency between two attitudes by looking at whether between-subject differences in evaluations of one attitude object are predictive of between-subject differences in evaluations of another attitude object. Yet, conceptually, the notion of consistency is defined by reference to the structural relationships between attitudes *within* individuals rather than *between* them. Our definition of consistency, and the one used most frequently in both the psychological and political research we have reviewed, focuses on the extent to which an individual's attitudes are derived from or are connected to the other attitudes and values of that individual. Thus, consistency refers fundamentally to a structural connectedness between attitudes within any given individual. Individuals with more consistent attitudes should have a tighter attitude structure, with stronger links between different attitudes and between attitudes and underlying values and ideological preferences than individuals whose attitudes are less consistent with each other. If we define consistency in this way, it is not at all clear that consistency differences can be appropriately examined by looking at correlations between attitudes computed across individuals. The structure of such between-subject correlations may or may not reflect internal structural differences in the representation of political attitudes that we think of as attitude consistency. (For similar arguments, see Bennett, 1975; Brown, 1980; and Lane, 1973.)

To illustrate the potential problem here, consider the four hypothetical individuals whose attitudes are described in Fig. 1. Two attitudes have been assessed for each individual: attitude toward Ronald Reagan and

[2]Bielby (1986) subsequently showed that such factor loadings in the unstandardized case may not be an appropriate statistic for examining differences between samples. Although the ratio of loadings is informative, it is probably not the case that individual loadings are informative about the level of consistency within any one sample.

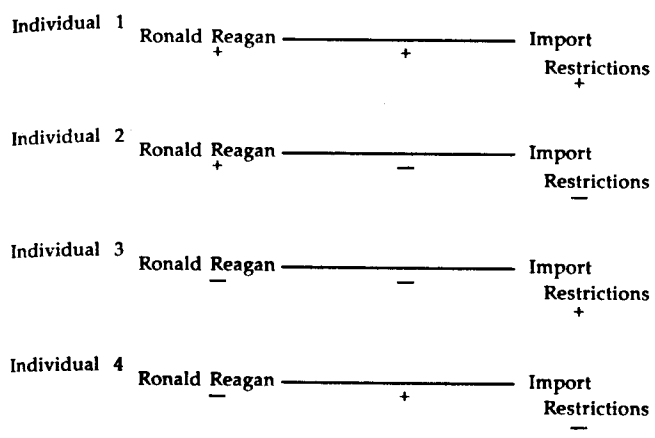

FIG. 5.1. Consistency relations between two attitudes for four individuals.

attitude toward the government policy of import restrictions. For each individual, the valence of each attitude is indicated by the sign associated with the attitude object. Thus, two individuals favor each object and two oppose each one. In addition, individuals have indicated whether or not the two objects go together or imply one another. More concretely, the sign attached to the link between the two objects indicates each individual's belief about whether Reagan favors or opposes import restrictions.

According to syllogistic models of what it means for two attitudes to be consistent with each other (e.g., Abelson & Rosenberg, 1958; Heider, 1958), each of these four individuals displays consistent evaluations of the two attitude objects. Individual 1 likes both objects and believes that Reagan likes restrictions. Individual 2 likes Reagan, dislikes restrictions, and consistently believes that Reagan dislikes restrictions. Likewise individuals 3 and 4 display consistent evaluations. Yet, if we were to compute a correlation between the two attitudes across the four individuals, we would find a correlation of zero! Thus, correlations computed between attitudes across individuals do not necessarily reflect within-individual attitude consistency.

In order to assess attitude consistency and differences in consistency as a function of political expertise and attitude importance, we need to think about the way in which individuals represent political attitudes in memory and then derive within-individual consistency measures. We need to think about the representational structure of political attitudes within individuals rather than examining the structure of correlations computed across individuals. A preliminary version of such a representational structure is offered in the next section.

A REPRESENTATIONAL MODEL FOR THE EVALUATION OF POLITICAL ATTITUDE OBJECTS

Our representational model draws on semantic network models in cognitive psychology (Anderson, 1983; Anderson & Bower, 1973; Collins & Quillian, 1969). Few of these semantic models, however, include provisions for the representation of evaluation. We incorporate evaluation in these models by attaching a positive or negative sign to each node in the network, consistent with the few others who have thought about the representation of evaluation (Bower, 1981; Fiske & Pavelchak, 1986; Sears, Huddy, & Schaffer, 1986). This sign indicates an individual's attitude toward the object represented by the node.

We can think of a variety of politically relevant attitude objects that might be represented in memory. Most abstractly, fundamental or underlying values, such as Rokeach's (1973) terminal values, or abstract ideological principles might be represented. Somewhat less abstractly, political and government policies, such as affirmative action, unilateral nuclear disarmament, and abortion on demand are likely to be represented. Another category of represented attitude objects includes political reference groups such as Democrats, Right to Lifers, and Black Militants. Finally, individual political actors and candidates, such as Ronald Reagan, Jesse Jackson, and Edward Kennedy might be represented.

Represented object nodes have two characteristics. They have associated strengths and they have associated evaluations (or attitudes). The strength of a node is presumed to be a function of prior activation of the node, as in Anderson's (1983) ACT* model. The more one has thought about an object in the past, the greater the strength of its node. Consistent with Anderson's (1983) model, these node strengths affect the probability that an object will come into awareness, along the lines to be discussed. The evaluation associated with a node can be either positive or negative and they also vary in strength. We represent these associated evaluations by a positive or negative sign attached to each node. The relative sizes of the signs indicate the strength or intensity of the associated evaluations. Consistent with Fazio's notions (Fazio, Powell, & Herr, 1983; Fazio, Sanbonmatsu, Powell, & Kardes, 1986), the strength of an object evaluation derives from prior thought about that evaluation and affects, in turn, the probability that the object evaluation will come into awareness whenever the object itself does.

We suspect that there is a relationship in the political domain between the strength of the object node and the strength of the associated evaluation, such that the greater the probability that an object comes to mind, the greater the probability that the associated evaluation comes to mind. We also suspect that the strength of the associated evaluation is highly related to the extremity of that evaluation, consistent with the work of Tesser

(1978), such that object evaluations that have been thought about previously have a greater probability of coming into awareness in the future and are also relatively more extreme.

The representational structure becomes a network under the assumption that nodes may be linked to one another. These links are similar to Heider's (1958) notions of sentiment and unit relations between attitude objects. Links may be between object nodes within a given category of political objects or between different categories. Thus, for instance, the policy of affirmative action may be linked to the policy of school integration. At the same time, the policy of affirmative action is also likely to be linked to more abstract value nodes, such as freedom or equality, as well as to object nodes representing political reference groups (e.g., Blacks) and candidates. It is beyond the scope of this chapter to specify the origins of these links in detail. Briefly, we assume that two nodes become linked when they are thought about simultaneously. This is likely to occur whenever the individual comes to believe that one object implies, favors, contradicts, or opposes the other object.

Links can also be thought of as having two characteristics. Information about the implicational relation between the linked nodes is stored along with each link. Implicational relations, like node evaluations, are either positive or negative. A positive implicational relation means that one represented object is seen as implying the other linked object. A negative implicational relation means that one represented object is seen as implying the converse of the linked object. These implicational relations subsume both unit and liking relations from Heider's balance theory (1958), indicating the perceived relation between two represented political objects.

Consider the following examples that illustrate the meaning of these implicational relations. The policy of affirmative action might have a positive implicational relation with the value of equality and a negative one with the value of freedom. That is, one might believe that affirmative action increases the likelihood of achieving the value of equality while decreasing the likelihood of achieving the value of freedom. The political actor node representing Ronald Reagan might share a link with the node representing "abortion on demand." In all probability, the implicational relation between these linked nodes would be a negative one, because we might expect the individual to believe that Reagan espouses the converse of abortion on demand. A node representing Edward Kennedy as a political actor might be linked to organized labor as a reference group node, and the implicational relation between them would probably be positive.

The second characteristic of a link is its strength, indicating the probability that one node will be activated given activation of the linked node. Following Anderson (1983), we assume that the strength of a link is completely determined by the strength of the two nodes that it connects.

Accordingly, this characteristic of links is actually subsumed by the strength of nodes. Nevertheless, it is heuristically useful to think of link strengths. The probability that the i^{th} node will be activated, assuming activation in the j^{th} linked node, is assumed to equal the strength of the i^{th} node divided by the sum of the strengths of all nodes, including i, with which the j^{th} node is linked. Thus, as the i^{th} node increases in strength, the probability of its activation from any other linked node increases. Heuristically, then, we can think of the strength of links to a node as being a function of the strength of that node. Under this formulation, the strength of the link from the j^{th} node to the i^{th} does not necessarily equal the strength of the link from the i^{th} node to the j^{th}. The strength of the destination node determines the strength of links to that node.

As in semantic network models, link strength derives from prior simultaneous activation of linked nodes. Thus, if in the past one has thought about the Defense Budget whenever Ronald Reagan came to mind, the link from Reagan to Defense Budget nodes would be relatively strong. As a result, activation of Reagan in the future would, with high probability, also activate the Defense Budget node. Activation of a node increases the probability that the represented object will be brought into awareness. Furthermore, as we said earlier, activation of a represented object may also activate the associated object evaluation, depending on the strength of that evaluation.

A simple example of the sort of representational structure we are defining is presented in Fig. 5.2. At the top of the figure the abstract value of equality, with an associated positive evaluation, is represented. Two policy issues, affirmative action and defense spending are represented, with only the former being linked with the Equality value. Affirmative action is positively evaluated, whereas the defense spending attitude is negative. Two political candidates, Jackson and Reagan, are also represented. Finally, Blacks as a political reference group are also represented. In this example, we have indicated evaluation strength by the relative size of the evaluation sign attached to each node. Thus, for instance, the evaluation of affirmative action is strongly positive and likely to be quite accessible. Link strength is indicated crudely by the presence or absence of links between pairs of nodes. The lack of a link between pairs of nodes is as informative as the presence of one. Thus, this individual would rarely think about the two policy issues of affirmative action and defense spending simultaneously, and strictly speaking, given the sparse example we are using, would do so only if the political candidate Jesse Jackson was also considered.

The Definition of Attitude Consistency

Given this set of assumptions about a representational model for the evaluation of political objects, we can specify what it means for different attitudes or evaluations to be consistent with each other. We define two attitudes as

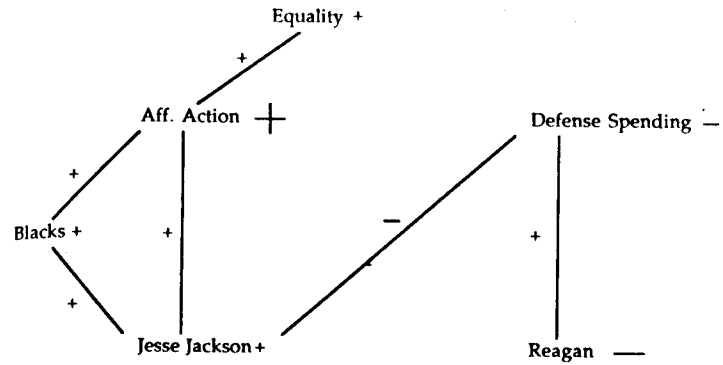

FIG. 5.2. A simple attitude representation structure.

being consistent in this representational model when the product of the signs of the evaluations of the two objects times the sign of the implicational relation between them is positive. When the product of these three is negative, evaluative inconsistency is indicated. Thus, two positively evaluated objects that share a positive implicational link are evaluatively consistent. Similarly, two negatively evaluated objects sharing a positive implicational relation are evaluatively consistent. When the two object evaluations are of opposite sign, evaluative consistency is produced by a negative implicational relation between them. Evaluative inconsistency results when only one of the three signs is negative or when they are all negative. Of course, this specification is completely consistent with earlier specifications from the cognitive consistency literature that we have reviewed (e.g., Abelson & Rosenberg, 1958; Heider, 1958).

Our specification differs from earlier ones, however, in specifying that the strength of the link between two represented objects directly affects the probability that the two associated evaluations will be consistent with each other. We assume that attitude consistency is enhanced as a result of simultaneous activation of the two linked objects. Because the strength of the link indicates the probability that one node will be activated given activation in the linked one, we are thus assuming that the probability of evaluative consistency between two objects will be a positive function of the probability that the two objects are brought into awareness simultaneously. To be more precise, because links do not have strengths in our model and nodes do, we are assuming that the evaluation of any given object will be more likely to be consistent with the evaluation of another linked object the greater the combined strengths of the two object nodes. On average, the greater the strength of any given node, the greater the probability that its evaluation will be consistent with the nodes to which it is linked. In addition, the evaluation of any given node is more likely to be consistent with the evaluation of other linked nodes that are strong than

with the evaluation of other linked nodes that are relatively weak. When two nodes are unlinked, evaluative consistency between the two is undefined.

An interesting case arises when a strong node is linked to two other strong nodes that are each positively valued. When the two implicational relations are both positive or both negative, consistency of evaluation of the focal node is easily accomplished. However, when the focal node shares a positive implicational relation with one linked node and a negative one with the other linked node, evaluative consistency is hard to achieve.

Consider, for instance, the individual who values both freedom and equality and for whom both of these value nodes have considerable strength. This individual may see school busing as enhancing equality and limiting freedom. In this case, if the school busing node is also strong, evaluative consistency may be difficult to achieve. The evaluation of busing that is most consistent is perhaps a moderate one. Such an outcome represents an exception to our earlier hypothesis that nodes with greater strength ought to have more intense evaluations. More generally, when a given node shares a positive implicational relation with another strong node that is positively evaluated, and a negative implicational relation with another strong node that it also positively evaluated, the press toward evaluative consistency implies that the greater the strength of the focal node, the more likely it is that that node will have a moderate evaluation. This hypothesis is consistent with Tetlock's (1983, 1984) value pluralism model, though it does not contradict the hypothesis that, *on average,* objects towards which more thought is devoted (i.e., nodes with greater strength) are associated with more intense or extreme evaluations (Tesser, 1978). Node strength is not isomorphic with evaluative intensity.

Once the consistency between two political attitudes is defined in this way, it is possible to talk about system-wide or domain-wide attitude consistency. The degree of attitude consistency of a domain of attitude objects is defined as the probability that evaluative consistency will hold for any randomly selected pair of objects in that domain. This implies that domain-wide evaluative consistency varies positively with the number of links between pairs of nodes in the domain and with the average node strength in the domain. This definition of domain-wide consistency is quite different from those offered by Cartwright and Harary (1956; Harary, Norman, & Cartwright, 1965).

The consistency between attitudes toward two government policies can be assessed at a global level within a given individual by examining the perceived implicational relations between each of the policies and various candidates and reference groups. If a person's evaluation of one policy is consistent with his or her evaluation of a second policy, then he or she should perceive political candidates and reference groups to take consistent stands toward the two policies. Suppose, for instance, that one has a positive

evaluation of policy 1 and a negative evaluation of policy 2. If there is a relatively high degree of domain-wide consistency relative to these two issues, then candidates who are seen as liking policy 1 (positive implicational relation) should be seen as disliking policy 2 (negative implicational relation). Conversely, candidates seen as disliking policy 1 should be seen as liking policy 2. Hence, within an individual, the consistency between two policy attitudes can be assessed by correlating the individual's judgments of where many candidates stand on each of the two policies.

The Structural Definition of Attitude Importance and Domain Expertise

Given this representational model, we can now define attitude importance and political expertise in structural terms. Our goal in these definitions is to see how they might each be responsible for greater evaluative consistency between attitudes.

Attitude importance has been defined in numerous ways in the attitude literature (see Krosnick, 1986, for a comprehensive review). Two defining characteristics have been used repeatedly. First, important or central attitudes are those that are extensively linked to other attitudes, beliefs, or values (Bem, 1970; Krech & Crutchfield, 1948; Lewin, 1951; Ostrom & Brock, 1969; Sherif & Cantril, 1947). Second, important attitudes are those that the individual thinks about frequently and that are therefore the focus of personal interest or subjective importance (Converse, 1970; Freedman, 1964; Smith, Bruner, & White, 1956). To quote Converse (1970), the centrality or importance of an attitude is reflected by "the proportion of 'mental time' which is occupied by attention to the attitude object over substantial periods" (p. 182).

In order to capture both of these defining characteristics of importance, we define the importance of an attitude in our representational model as the strength of the node representing the attitude object. Because the strength of a node derives from past activation of the node and is a determinant of the strength of the links from other nodes to the focal one, this definition is consistent with both defining characteristics of attitude importance. First, more important attitudes are those that are more potently linked to other political attitudes. Second, important attitudes are thought about more frequently and should therefore be judged to be of greater interest. Note that this definition differentiates between attitude importance and the intensity or extremity of the evaluation of the attitude object. Importance is defined by the strength of the node representing the attitude object, and strong nodes may be associated with moderate evaluations.

In defining evaluative consistency between two attitudes, we suggested

that the probability of consistency ought to be a direct function of the combined strengths of the two nodes. Accordingly, nodes with greater strength ought to be, on average, more evaluatively consistent with other nodes to which they are linked. It follows that more important attitudes ought to be more consistent with other attitudes.

Political expertise is assumed to have structural correlates similar to correlates of expertise suggested in other domains (e.g., Chase & Simon, 1973; Chi & Koeske, 1983; Fiske & Kinder, 1981; Larkin, McDermott, Simon, & Simon, 1980; McKeithen, Reitman, Rueter, & Hirtle, 1981). Specifically, political experts are presumed to know of many more political attitude objects than those who have little expertise. They should know of more policy options, political actors, and reference groups than those who are less expert. Within our representational model, this implies that there ought to be more nodes in experts' representational networks. In addition, experts are presumed to see connections among diverse policy options, political actors, and reference groups that may not be apparent to those who have less expertise. Thus, for instance, the political expert may realize that a restrictive trade policy has implications for affirmative action policies: A tighter job market makes affirmative action goals harder to achieve. The less expert individual may simply not represent these policy options in memory and, if they are represented, may fail to see the connection between them. Similarly, the political expert is more likely to recognize that policy options have implications for values and reference groups. Finally, political experts are more likely to know what policies various political actors endorse and thus see links between policies and actors that the less expert individual is unlikely to see. All this suggests that the political expert will have more nodes represented in memory and will have more links per node. Each node can be activated by a larger number of other nodes than is likely to be the case in the representational network of a less expert individual.

These two structural effects of expertise, more nodes and more links per node, should lead to greater evaluative consistency throughout the political domain. Given more links per node, the average strength of nodes for experts should be higher than that for the nonexpert. As a result, the average degree of evaluative consistency throughout the domain ought to be higher. In addition, when the expert sees a link between two represented objects that the nonexpert fails to see, there is some pressure toward consistency in the evaluations of the linked nodes, whereas the nonexpert feels no such pressure.

These structural differences between the expert and nonexpert do not suggest that we would *always* find greater evaluative consistency between pairs of attitudes with the expert. Even for the most expert person, we would hardly expect all possible pairs to be linked. Furthermore, the expert

may feel conflicting claims of diverse implicational relations with other valued objects that make evaluative consistency with the set of other linked objects difficult. The nonexpert, who perhaps sees only consistent implicational relations, may actually have less difficulty achieving consistency. The notion of *value pluralism* (Tetlock, 1983, 1984) suggests that experts may have a harder time achieving evaluative consistency between specific political attitudes than the less expert individual.

Given this view of political expertise, it is interesting to consider the often-heard claim that political experts' attitudes are more likely to evidence ideological organization. This organization may simply result from greater pressure toward evaluative consistency in diverse political attitudes. Alternatively, it may be that the political expert is more likely to have an explicit ideological node at the highest level of the representational hierarchy than the nonexpert, and nearly all represented policy options and candidates are linked to this ideological node. These two specifications of the structural bases of ideology, although conceptually distinct, may be very hard to distinguish empirically.

Assessing Attitude Consistency

These structural definitions of how attitude consistency derives from attitude importance and political expertise have no necessary implications for covariances or correlations between attitudes computed across individuals. Rather, we simply maintain that more important evaluations ought to be more predictable from an individual's evaluation of other objects given that we know how that individual perceives the implicational relationships between the objects. An important positive evaluation predicts positive evaluations of other linked objects when one object implies the others. When one object imples the *converse* of the others, then a more important positive evaluation predicts more strongly negative evaluations of linked objects than does a less important positive evaluation. Similarly, the political evaluations of the political expert ought to be more evaluatively consistent on average across the domain of political attitudes.

If two individuals perceive different implicational relations between objects, enhanced within-individual consistency will not result in enhanced predictability of one attitude from another across individuals. In order for enhanced within-individual consistency for more important attitudes and for the political expert to translate into greater predictability of one attitude from another across individuals, individuals' perceived implicational relationships between attitude objects must be constant across levels of importance or expertise. If individuals agree on the implicative relationships among policy options, values, and candidates, then structural consistency within an individual will result in between-individual predictability of atti-

tudes. If two people disagree in their evaluations of one object, they should disagree on the evaluation of another object only if they agree on the implicational relationship between the two objects.

This suggests that if attitude consistency is assessed by examining covariances or correlations computed across individuals, attitude importance ought to be associated with larger attitude-attitude correlations only if there is agreement across individuals in the implicational relationship between the two attitude objects. Furthermore, the absence of a between-individual correlation between two attitudes does not necesssarily imply the absence of within-individual attitude consistency. A low correlation computed across individuals can result from disagreements in the perceived implicational relationship between the two attitude objects, even though the links between the two objects may be quite strong within individuals.

Interestingly, attitude importance and political expertise may enhance the probability that individuals will agree on the implicational relationships between diverse political issues and policy options (see, e.g., Krosnick, 1986). Whereas two experts may disagree on their evaluations of two attitude objects, they seem more likely than nonexperts to agree about the implication of one object for the other. As a result, higher associations between attitudes computed across individuals may be found for experts than for nonexperts partly because of enhanced agreement on the implicational relations between different policy options. This may also be the case with attitude importance. Those who regard a particular attitude as important may show greater agreement in the implicational relations between that attitude object and other represented objects. This would produce larger correlations between them when the correlation is computed across individuals.

In sum, when we assess attitude consistency by examining associations between two different attitudes computed across individuals, we need to be sure that those individuals agree on the implicational relation between the attitude objects. If groups differ in their agreement about the implicational relation, differences between groups in between-attitude correlations will be uninformative about between-group differences in attitude consistency.

SOME EMPIRICAL SUPPORT FOR THESE SPECULATIONS

In this section, we report a preliminary evaluation of our speculations regarding the relation of attitude consistency to attitude importance and political expertise. In particular, we test the claims that (a) highly important attitudes evidence greater consistency with other attitudes than do less important attitudes, and (b) attitudes held by experts evidence greater consistency than those held by novices. In the process, we illustrate how traditional approaches to testing these hypotheses lead to inaccurate estimates.

Our model argues that an individual's attitude toward a particular policy should be more consistent with that person's attitude toward a particular presidential candidate or political party to the extent that the policy attitude is important to him or her and to the extent that he or she is a political expert. We evaluate this claim while attempting to control not only for differences in variability and measurement error, but also for differences in agreement on the implicational relations between the attitude objects.

The data we use come from the 1980 National Election Study (NES), conducted by the Center for Political Studies (CPS) at the University of Michigan. Every 2 years since the early 1950s, CPS has interviewed large, representative national samples of American adults both before and after the presidential and midterm elections. In 1980, the study design was somewhat more complex than usual, because it involved interviews with three distinct samples, two of which we made use of in the present analysis. The first sample we examined consisted of 1614 individuals who were interviewed in September and October of 1980. During these interviews, respondents were asked to report their attitudes toward a number of government policies, political candidates, and the major political parties. The policy attitude measure we focus on was phrased as follows:

> Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel it is important for the government to continue the services it now provides even if it means no reduction in spending. Where would you place yourself on this scale, or haven't you thought much about this?

Answers to this question were collected on a 7-point scale with the end points labeled "Government should provide many fewer services, reduce spending a lot" and "Government should continue to provide services, no reduction in spending." Respondents reported their perceptions of the stands taken on this social welfare issue by the major presidential candidates, Jimmy Carter and Ronald Reagan, and by the Democratic and Republican parties, and reported their attitudes toward the candidates and parties on 100-point feeling thermometers. For the analyses reported below, all attitude measures were recoded to range from zero to one in order to facilitate interpretation of unstandardized regression coefficients.

This survey also included measures of the importance of attitudes toward government spending on social welfare programs. Consistent with our definition of importance, this construct has usually been measured by asking individuals how much they think about a particular policy or how

important it is to them personally (e.g., Judd & Krosnick, 1982; Schuman & Presser, 1981). Because the policy attitude measures in the 1980 NES all addressed potential government actions, the measures in that survey were geared accordingly. The policy attitude measures asked respondents what they thought the federal government should do on various issues, and the importance measures asked respondents how important it was to them that the government do what they thought was best on each issue. Ratings of importance were made on 10-point scales.

Political expertise was measured by an extensive battery of questions tapping four constructs. Exposure to political information was measured by nine items asking respondents how often they talk with others about politics and how much political information they are exposed to through various media. Interest in politics was measured by four questions asking about interest in the presidential campaign and its outcome. Political participation was assessed by 10 items asking whether the respondent had voted in recent elections and whether he or she had performed various political behaviors, such as attending political meetings or contacting a congressman. Finally, political knowledge was measured by two items, one asking whether the respondent knew which presidential candidate was ahead in the public opinion polls at the moment, and the other asking respondents to recall the names of their congressmen. Four indicies, constructed by averaging these groups of items, were strongly correlated with each other and were therefore averaged to produce an overall measure of political expertise. Political expertise, as measured in this way, was only very weakly correlated with the importance of attitudes toward social welfare spending ($r=.10$, $n=1162$, $p<.01$).[3]

The traditional method of assessing consistency between two attitudes is to regress one on the other. The larger the correlation or standardized regression coefficient, the more consistent the two attitudes are thought to be. As we argued earlier, however, these are three problems in using this approach. First, differences in standardized regression coefficients or correlations between groups that differ in expertise or attitude importance may emerge because of differences in response variance. To solve this problem, we should examine unstandardized regression coefficients rather than standardized ones. Second, differences in error variance between groups may differentially bias or attentuate regression coefficients. To solve this problem, we should estimate the reliabilities of the variables in each group and

[3]In our model, political expertise increases the number of nodes and the number of links between nodes. In contrast, importance affects the strength of a particular node. The small observed correlation between political expertise and the importance of social welfare attitudes suggests that system-wide attributes, such as the number of nodes and links, cannot be used to predict the strength of any particular node, although on average stronger nodes are those having more links.

disattentuate the unstandardized regression coefficients. Finally, disagreement about implicational relations between the two attitudes may lead to relatively small regression coefficients even when attitude consistency within individuals may be quite large. Furthermore, it is likely that experts and people for whom an attitude is important should show more agreement on implicational relations than those who are less expert or for whom the attitude is relatively unimportant. Accordingly, between-group differences in regression coefficients should be examined only among individuals who agree on the implicational relation between the attitude objects.

In Table 5.1, we report the unstandardized regression coefficients that result if we simply regress respondent's social welfare attitudes on their evaluations of the candidates and parties. This regression was done separately for samples differing in attitude importance and political expertise. By examining unstandardized coefficients, we alleviate the problem of differences in response variance, although the problems of measurement error and lack of agreement on implicational relations persist. The coefficients in this table show a clear trend for both attitude importance and political expertise: The coefficients have larger absolute values among samples high in political expertise or attitude importance.

TABLE 5.1
Effects of Attitudes Toward Candidates and Parties on Attitudes Toward Spending for Social Welfare Programs

	Importance of Attitudes Toward Social Welfare Spending			*Political Expertise*		
Predictor	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
Attitude Toward Carter	.12* (407)	.34** (420)	.57** (301)	.19** (368)	.29** (446)	.43** (453)
Attitude Toward Reagan	−.15** (406)	−.28** (416)	−.50** (297)	−.01 (357)	−.25** (445)	−.50** (452)
Attitude Toward Democrats	.26** (405)	.56** (419)	.66** (307)	.32** (359)	.41** (441)	.63** (458)
Attitude Toward Republicans	−.20** (407)	−.30** (419)	−.38** (307)	.05 (359)	−.19** (443)	−.51** (459)

Note. Entries are unstandardized regression coefficients. Ns are shown in parentheses.
*$p<.05$.
**$p<.01$

In order to assess these relationships more formally, we conducted four regressions across the entire sample. Each utilized just one predictor attitude (toward a candidate or a party) and regressed attitudes toward social welfare spending on the predictor attitude, importance, political expertise, the interaction between the predictor attitude and importance, and the interaction between the predictor attitude and political expertise. The 2 two-way interactions were both large and statistically significant in all four regressions, thus indicating that attitude importance and expertise both enhance the size of the association between the attitudes and do so independently of each other.

To eliminate the problem caused by lack of agreement on implication relations, we selected individuals in each of the importance and expertise groups who correctly identified Carter and the Democrats as being relatively liberal on the issue of social welfare and Reagan and the Republicans as being relatively conservative on the issue. Note that this is a very crude operationalization of agreement on implicational relations. Accordingly, two individuals are said to agree if they place the respective candidates and parties on the same side of the issue, even though they may disagree about exactly where the candidates and parties stand on the issue. Although we selected individuals who agree on the "correct" implicational relation between this issue and the candidates or parties, our argument about the need for agreement on implicational relations does not necessitate the selection of individuals who agree on the correct implicational relations. We could have selected only those individuals who agreed that Reagan and the Republicans were relatively liberal on the issue. We simply need to compute the regressions coefficients using samples that agree on implicational relations.

In Table 5.2 we report the proportions of each sample who correctly identified the candidates' or parties' position on the issue of social welfare. The high importance and expertise groups are more likely than the low importance and expertise groups to place Carter and the Democrats on the liberal side of the issue and to place Reagan and the Republicans on the conservative side of the issue. Therefore, some of the apparent effects of expertise and importance in Table 5.1 may be due to greater agreement among the high importance and expertise groups than among the low ones.

To control for agreement on implicational relations, we selected only those individuals who correctly identified Carter and the Democrats as liberal on the issue and Reagan and the Republicans as conservative. We then regressed respondents' social welfare attitudes on their attitudes toward each candidate and each party, separately for samples differing in attitude importance and political expertise. The resulting unstandardized regression coefficients are presented in Table 5.3. Consistent with our expectations, these coefficients are all greater for individuals who agree on

TABLE 5.2
Proportions of Respondents Who Perceive the Candidate's or Party's Stand on the Issue of Social Welfare Spending Correctly

Political Actor	*Importance of Attitudes Toward Social Welfare Spending*			*Political Expertise*		
	Low	*Medium*	*High*	*Low*	*Medium*	*High*
Carter	65.2% (397)	68.7% (409)	72.3% (292)	56.5% (315)	66.7% (418)	77.6% (437)
Reagan	50.4% (357)	52.5% (379)	63.4% (254)	43.4% (251)	50.4% (375)	64.2% (419)
Democrats	67.7% (356)	77.1% (375)	76.0% (267)	59.0% (249)	72.0% (368)	82.5% (424)
Republicans	45.9% (353)	52.4% (359)	57.2% (257)	41.8% (237)	45.9% (355)	60.8% (418)

Note. Ns are shown in parentheses.

implications than they were for the full samples. Each coefficient in Table 5.3 is larger in absolute value than the corresponding one in Table 5.1. However, the associations between importance and expertise on the one hand and attitude consistency on the other remain strong in Table 5.3. The strength of the attitude association is greater for the high importance and expertise groups than it is for the low importance and expertise groups in all cases but one. Therefore, this evidence supports the assertion that attitude consistency is greater among political experts and among people for whom an attitude is important.

There is one remaining problem with the figures in Table 5.3. These regression coefficients are attenuated due to random measurement error in the assessments of the party and candidate attitudes. In order to handle this problem, it is necessary to estimate the reliability of the candidate and party attitude measures for each importance and expertise group and to disattenuate the coefficients accordingly.

To estimate these reliabilities, we used data collected from a second sample as a part of the 1980 NES. A representative national cross-section of 769 American adults was interviewed on three occasions during the 1980 presidential election campaign, first in January and February, then again in June, and finally in September and October. During each of these interviews, respondents were asked to report their attitudes toward Jimmy Carter, Ronald Reagan, the Democratic party, and the Republican party on the 100-point feeling thermometers. During the third wave, respondents reported their attitudes on the issue of social welfare spending and reported

TABLE 5.3
Effects of Attitudes Toward Candidates and Parties on Attitudes Toward Spending for Social Welfare Programs: Respondents Who Perceive Implicational Relationship Correctly

	Importance of Attitudes Toward Social Welfare Spending			*Political Expertise*		
Predictor	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
Attitude Toward Carter	.33** (251)	.45** (273)	.79** (200)	.52** (170)	.51** (270)	.52** (329)
Attitude Toward Reagan	−.31* (172)	−.67** (192)	−.77** (153)	−.31* (100)	−.52** (184)	−.69** (259)
Attitude Toward Democrats	.35** (239)	.73** (282)	.85** (200)	.55** (140)	.62** (262)	.72** (347)
Attitude Toward Republicans	−.50** (161)	−.62** (184)	−.70** (146)	−.12 (96)	−.50** (162)	−.75** (251)

Note. Entries are unstandardized regression coefficients. Ns are shown in parentheses.
*p<.05.
**p<.01

the personal importance of those attitudes. Finally, during the third interview and during a fourth one conducted shortly after the election in November, respondents were asked almost all of the items that compose the political expertise index described.

Given three waves of data from this panel of respondents, it is possible to estimate the reliability of each candidate and party attitude measure within each importance and expertise group. To do so, we estimated the parameters of a three-wave latent variable model first proposed by Heise (1969) and later refined by Wiley and Wiley (1970). This model assumes that attitude change is a first-order autoregressive process and that the amount of random error variance in responses remains constant across waves. Given these assumptions, it is possible to estimate the reliability of the attitude measure at each wave.

For the present analysis, we used only the reliability of the attitude measures at the first wave, because our primary analyses were based upon data from the first interview with respondents. Using these reliability estimates, we disattenuated the unstandardized regression coefficients shown in Table 5.3. As expected, the resulting coefficients (shown in Table 5.4) are

TABLE 5.4
Effects (Corrected for Unreliability) of Attitudes Toward Candidates and Parties on Attitudes Toward Spending for Social Welfare Programs: Respondents Who Perceive Implicational Relationship Correctly

	Importance of Attitudes Toward Social Welfare Spending			*Political Expertise*		
Predictor	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
Attitude Toward Carter	.43	.51	.86	.64	.56	.69
Attitude Toward Reagan	−.38	−.88	−.93	−.46	−.63	−.77
Attitude Toward Democrats	.50	.84	1.06	.82	.70	.92
Attitude Toward Republicans	−.71	−.76	−.93	−.20	−.75	−.90

Note. Entries are unstandardized regression coefficients. Ns and significance levels are the same as shown in Table 5.3.

larger than the attenuated ones. And consistent with our theoretical arguments, the coefficients are still generally larger for the high importance and expertise groups than they are for the low importance and expertise groups. The relationship between attitude importance and attitude consistency is particularly clear across all of the candidate and party attitudes. The relationship between expertise and consistency is clearly apparent in the case of attitudes toward Reagan and the Republicans, but it is less clear in the case of Carter and the Democrats. For these two attitudes, the low expertise group's coefficient is smaller than the high expertise group's, but the medium group falls below both. Probably the most appropriate conclusion to reach from these numbers is that expertise does not vary with consistency in these cases.

CONCLUSION

In this chapter we have argued that there are serious problems in assessing attitude consistency by examining between-subject correlations between different attitudes. We discussed the problems of heterogeneity of variance

and measurement error, and claimed that between-subject associations may not indicate within-subject attitude structure. To solve this latter problem, we suggested a model for the representation of political attitudes and defined attitude consistency in terms of this model. We then explored some possible structural effects of attitude importance and political expertise, showing how differences in attitude consistency may result from the structural differences imputted to attitude importance and expertise. This representational analysis suggested that attitude consistency is properly examined when looking at between-subject associations only if subjects agree on the implications between the attitude objects in question. If experts and those whose attitudes are important show greater agreement in those implications, differences in associations between attitudes may reflect these agreement differences in addition to or instead of differences in attitude consistency.

To evaluate these hypotheses, in the third section of the chapter we assessed attitude consistency in groups differing in political expertise and attitude importance while controlling for differences in agreement on implicational relations between the attitude objects. Consistent with our expectations, those who are more expert and those whose attitudes are important show more implicational agreement. Furthermore, predicted differences in attitude consistency are found even when controlling for these differences in implicational agreement.

The analyses we reported are only preliminary attempts to validate the model of attitude representation developed here. We view the model as a heuristic tool that is suggestive of further empirical work on attitude consistency. Because the model is a representational one, making assumptions about the activation of attitude objects from memory, it seems appropriate to examine attitude consistency within individuals as well as by examining between-individual associations. We suggested, for instance, that one might examine attitude consistency within an individual by asking the individual to indicate the implicational relations between each issue and a set of political candidates (i.e., "Where do you think this candiate stands on this issue?") and then correlating within each individual the two issues across candidates. Other procedures could be used as well to assess attitude consistency at the individual level. For instance, our model suggests that activation of a given attitude ought to increase the activation of another linked attitude, particularly for individuals who regard the second attitude as important. Consistency, then, might be examined by using priming and response latency procedures, much like they have been fruitfully used in cognitive psychology.

Regardless of the empirical issues raised by this analysis, we hope that the present anaiysis prompts others to explore representational issues in the attitude domain more than has been done in the past. The development of representational models has been a fruitful endeavor in cognitive psychology, but such models have rarely addressed the issue of how evaluations or attitudes are represented in memory. Attitude researchers are perhaps uniquely situated to rectify this omission.

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6

Structure and Function in Political Belief Systems

Philip E. Tetlock
University of California, Berkeley

Different methods of studying attitudes can be likened to looking through a microscope at different levels of magnification. At the most intense levels of magnification—such as provided by highly controlled experimental studies of the information integration rules underlying attitude formation—one can observe the phenomenon in detail. The price of ability to see detail is, however, the inability to see the phenomenon in a broader systems context. At intermediate levels of magnification—such as those provided by laboratory work on cognitive responses to persuasion (Petty, Ostrom, & Brock, 1981) or on defensive avoidance responses to fear appeals (Janis & Mann, 1977)—one gains the ability to monitor complex, naturally occurring psychological processes, but at some cost in experimental control and precision of measurement. Finally, at the least intense levels of magnification—such as provided by archival and interview studies of political belief systems—one can explore context in great detail, but at a very substantial cost in internal validity and ability to observe subsystem detail.

Not surprisingly perhaps, communication across levels of analysis tends to be both difficult and rare. What excites the attention of investigators at one level of analysis may well be invisible at other levels. One can study attitudes at a fundamental information processing level of analysis (e.g., spreading activation networks in memory) without ever referring to work on social or personality functions of attitudes. Conversely, one can study linkages among personality, institutional, and ideological variables without