

Holbrook, A. L., & Krosnick, J. A. (2005). Meta-psychological vs. operative measures of ambivalence: Differentiating the consequences of perceived intra-psychic conflict and real intra-psychic conflict. In S. C. Craig & M. D. Martinez (Eds.), *Ambivalence and the structure of public opinion*. New York, NY: Palgrave Macmillan.

5. Meta-Psychological Versus Operative Measures of Ambivalence

Differentiating the Consequences of Perceived Intra-Psychic Conflict and Real Intra-Psychic Conflict

Allyson L. Holbrook and Jon A. Krosnick

In building theories about the inner workings of political actors' minds, political psychologists often posit the existence of latent constructs such as attitudes, beliefs, and personality dispositions. Although no one has ever directly seen an attitude, belief, or personality disposition, assuming that these constructs exist helps scholars to explain political behavior. In this sense, psychological constructs are similar to physical constructs (such as energy) that have been proposed by physicists, chemists, and other scientists to explain the observable phenomena of interest to them.

A variety of methods have been employed over the years to measure psychological constructs, varying in the extent to which they rely on people to describe those constructs themselves. Self-report questions in surveys ask respondents to characterize their own mental states, processes, and structures, whereas other measures (e.g., of reaction time, see Fazio *et al.* 1995; or subtle movements of facial muscles, see Cacioppo and Petty 1979) do not rely on individuals' subjective perceptions of their psychological states at all. Alternatively, some indicators use people's self-reports of one construct to create measures of another; for example, the accuracy of answers to factual quiz questions has been used to build indices of political knowledge (Delli Carpini and Keeter 1996).

Attitudinal ambivalence is a particularly interesting construct in this regard, because it can be measured either by asking people how ambivalent they feel toward an object or by asking people to report how positive and how negative they feel toward an object and mathematically building an index from these reports (Kaplan 1972).¹ These are examples of what we call meta-psychological (MP) and operative (OP) measures, respectively.² Political psychologists studying ambivalence have employed both sorts of indicators, seemingly as if they are equivalent vehicles for assessing the same construct.

In this chapter, we describe a program of research comparing MP and OP measures of ambivalence and exploring two questions: (1) Do MP and OP measures of attitude ambivalence assess a single construct or different constructs? (2) Are the effects of MP and OP attitude ambivalence on political cognition and action the same or different? We begin by defining MP and OP measures of ambivalence, reviewing evidence about the relation between the two, and discussing reasons why they might be only moderately positively related to one another. We then propose a set of hypotheses about the distinct consequences that the two types of measures may have for various aspects of political cognition and behavior. This is followed by a review of past research findings regarding the consequences of ambivalence, and a description of results from a new study conducted to test our hypotheses. Finally, we discuss the implications of these findings for research in political psychology.

DEFINING MP AND OP MEASURES OF AMBIVALENCE

Meta-psychological (MP) measures of ambivalence, where people are asked to report the degree to which they feel ambivalent or conflicted, tap the subjective experience of evaluative conflict regarding an object. Priester and Petty (1996), for example, asked respondents to report the extent to which they felt conflict, indecision, and mixed reactions, while Thompson, Zanna, and Griffin (1995) used ten questions developed by Janieson (1988) to probe whether people were "confused" or "torn" about the attitude object. Similarly, Cacioppo and his colleagues have asked people to report the extent to which their reactions to an object were muddled, divided, tense, contradictory, jumbled, conflicted, consistent, uniform, and harmonious (Cacioppo *et al.* 1997; Cacioppo *et al.* 1996; Gardner 1996).

Operative (OP) measures of ambivalence tap the extent of a person's favorable and unfavorable reactions to an object and then determine

whether these reactions are in conflict with one another. Thus, the greatest OP ambivalence occurs when a person feels both very favorable and very unfavorable toward an object. At least six mathematical formulas have been proposed for calculating OP ambivalence using separate measures of positivity and negativity toward an object (Priester and Petty 1996; Thompson *et al.* 1995).³ These formulas make slightly different assumptions about how conflicting reactions combine to yield ambivalence, but the numbers they yield are typically very strongly correlated with one another (Breckler 1994; Priester and Petty 1996; Riketta 2000; Thompson *et al.* 1995).

THE RELATION BETWEEN MP AND OP AMBIVALENCE

Many studies have assessed the relation between MP and OP measures of ambivalence and found only a modest degree of covariation; Thompson, Zanna, and Griffin (1995) found correlations ranging from 0.21 to 0.40, while Priester and Petty (1996) reported coefficients of similar magnitudes. There are several possible explanations for these results. First, MP and OP measures of ambivalence may assess the same underlying construct but with substantial random measurement error (Bassili 1996b). For example, self-perceptions reported on rating scales certainly entail some error due to ambiguities in people's internal cues and ambiguities in the meanings of the scale points, both of which would attenuate the observed relations. Second, the mathematical formulas used to calculate OP ambivalence may misrepresent the way favorable and unfavorable evaluations combine psychologically to yield operative ambivalence.

Third, discrepancies between MP and OP measures of ambivalence could be due to respondents' intentional choices to distort their MP reports (Bassili 1996b). Being viewed favorably by others often brings more rewards and fewer punishments than being viewed unfavorably, so some individuals are motivated (even if by deceit) to construct favorable images of themselves. A great deal of evidence has been accumulated documenting such systematic and intentional misrepresentation when people respond to questionnaires that tap other constructs (e.g., Paulhus 1984; Sigall and Page 1971; Warner 1965), and this may be true for measures of ambivalence as well.

If ambivalence has social desirability connotations, then MP measures of ambivalence may be biased as a result. A number of psychological theories suggest that individuals strive to be internally consistent, that they are uncomfortable with inconsistencies between their attitudes and behaviors,

for example, and that they strive to reduce such inconsistencies (e.g., Festinger 1957; Heider 1958); they also experience social pressure to appear consistent and want others to see them as consistent (Tedeschi *et al.* 1971). Some people may therefore be reluctant to admit that they are ambivalent, particularly those who are concerned about the impressions they make on others. As a result, self-presentational distortions in MP ambivalence reports could lead such reports to diverge from OP measures.

An alternative explanation for the moderate relation between MP and OP measures of ambivalence is that the two types of measures may tap separate constructs that are both meaningful and consequential. For example, OP measures are based only on the extent of conflict between a person's positive and negative evaluative reactions to an object, but MP perceptions of ambivalence may also reflect interpersonal discrepancies such as that between one's own attitude and the attitudes of liked others (Priester and Pery 2001).⁴ The latter may be unique variance not present in OP measures. Additionally, people who are high in OP ambivalence may not be aware of or uncomfortable with the conflicting elements of their attitudes, so their perceptions of internal conflict may be much lower (Newby-Clark *et al.* 2002; Thompson and Zanna 1995). Thus, it may make sense to think not of MP and OP measures as tapping a single underlying construct (i.e., ambivalence) but rather of these measures as tapping two distinct constructs: MP ambivalence and OP ambivalence.

If MP and OP ambivalence are separate constructs, it seems likely that the latter is a *caveat* of the former. That is, people's subjective experiences of conflict about an object are probably at least somewhat reflections of the co-presence of both positive and negative evaluative reactions toward that object. It is also possible, however, that MP and OP ambivalence will each have unique causes and unique effects on individual thought and action. In fact, prior research suggests that people's subjective experiences can indeed be meaningful and consequential even when they are inaccurate (see Bless and Forgas 2000). For example, people take steps to correct judgments to the extent they *perceive* those judgments to be biased, not to the extent they are *actually* biased (Perry and Wegener 1993; Wegener *et al.* 2000; Wegener and Pery 1995). Similarly, people take steps to resolve inconsistencies among their beliefs, attitudes, and behaviors to the extent they are *perceived* to be inconsistent, not to the extent they *actually* are inconsistent (e.g., Zanna and Cooper 1974). Even if inaccurate, then, perceptions of attitude features can be important for understanding people's cognition and behavior.

Our goal in conducting the research reported here was to investigate the possibility that MP and OP measures of ambivalence might tap distinct

constructs. We did so partly by examining the underlying factor structure of these two sorts of ambivalence measures. In particular, we conducted confirmatory factor analyses to determine whether (1) MP and OP measures of ambivalence reflect a single underlying factor, or (2) MP measures of ambivalence reflect one latent factor, and OP measures of ambivalence assess a second.

COGNITIVE AND BEHAVIORAL CONSEQUENCES OF AMBIVALENCE

Even if confirmatory factor analyses were to suggest that MP and OP measures assess different constructs, a single-construct conceptualization may nonetheless be more parsimonious if MP and OP ambivalence have the same effects on cognition and behavior. That is, even if MP and OP ambivalence are not highly related, they may be functionally interchangeable. If treating the two as distinct provides no additional information regarding how and why people think and act as they do, it makes sense to proceed as though they reflect a single construct. We therefore explore whether MP and OP ambivalence have the same or different effects on individual thoughts and action.

Hypothesized Consequences of Ambivalence

If MP and OP ambivalence are separate constructs, they seem likely to have somewhat different impacts by virtue of exerting effects through different mechanisms. In this section, we propose how MP and OP ambivalence might be differently related to a broad range of cognitive and behavioral phenomena: resistance to attitude change, information gathering, the false consensus effect, the hostile media phenomenon, the process of forming evaluations of presidential candidates, and attitude-expressive activism.

Resistance to attitude change. An attitude's ability to withstand attack has been extensively studied, most often by assessing the extent to which an attitude changes in response to a stimulus such as a counter-attitudinal persuasive message (Mutz *et al.* 1996; Perry and Cacioppo 1986a). As people consider a message, they often retrieve relevant considerations from memory that are then used to evaluate the merits of the message. Those ranking higher in OP ambivalence are more likely to generate thoughts consistent with any message, regardless of whether the latter is favorable or unfavorable toward the object. These individuals may therefore be more likely to

accept the plausibility of a persuasive message and to change their attitudes in response to it.

MP ambivalence should also be negatively related to resistance, but via a different mechanism. Individuals who feel conflicted about an object may want to reduce that feeling; as a result, when exposed to attitude-relevant information, they may be especially motivated to accept it in the hope of reducing their sense of conflict. These individuals may, consequently, be particularly likely to embrace a persuasive message that attempts to push their attitudes, regardless of the direction of the push.

Information gathering. People are constantly bombarded with information in their environments, but have only limited capacity to attend to and remember that information. It is therefore often necessary to choose what cues one will attend to, though individuals do not always have time to plan their selective attention carefully and deliberately. When cognitively busy or overloaded, the process of choosing which information to "orient to" and remember sometimes happens automatically, without awareness. Accordingly, information-gathering strategies differ depending on whether an individual (1) can choose which pieces of information to attend to, in a manageable information environment; or (2) must choose only some of the available information to attend to, in a complex information environment when they do not have time to plan their selections carefully and deliberately.

MP ambivalence may be related to choices to attend to and learn attitude-relevant information. One possibility is that people who feel conflicted will be motivated to reduce that conflict and attempt to do so by learning new information about the object. It is also possible, however, that individuals high in MP ambivalence will try to avoid situations that make their sense of conflict salient. Thus, MP ambivalence may lead people actively to stay away from object-relevant information in order to avoid ensuing discomfort. If some ambivalent individuals attempt to reduce their feelings of conflict by accumulating attitude-relevant information, while others avoid such information to prevent discomfort, this would yield the appearance of no net association between MP ambivalence and information choices.

OP ambivalence seems unlikely to be associated with attention to information, regardless of the amount of information in the environment or the time and resources required to make decisions about attention. Specifically, we see no reason to expect that having both positive and negative beliefs about an object will affect a person's motivation to learn attitude-relevant information. We also doubt that OP ambivalence will

result in an automatic or chronic tendency to acquire attitude-relevant information.

Perceptions of social support. The false consensus effect (FCE) is the tendency for people to overestimate the proportion of others who share their opinions, relative to the judgments made by people who hold different attitudes. This phenomenon may be attributable to a number of social and psychological processes and instigators (see Fabrigar and Krosnick 1995; Marks and Miller 1987; Ross *et al.* 1977), including (1) the salience of one's own attitude; (2) the motivation to maintain one's self-esteem; (3) the need for social support; (4) the presumption that liked others have good qualities (including sharing one's own attitudes); (5) the presumption that one's own attitudes are attributable to situational forces that will affect others equivalently; (6) different people construing objects differently; and (7) selective affiliation with others who have similar attitudes.

There are reasons to anticipate that MP ambivalence will tend to decrease the FCE, and other reasons to expect just the opposite. For example, people who feel conflicted about an object may be less likely to see their attitude as a positive quality if ambivalence is unpleasant. Under these circumstances, people who are meta-psychologically ambivalent presumably would manifest weaker false consensus effects. Alternatively, if people high in MP ambivalence are readily influenced by the opinions of others, high ambivalence could lead them to adopt the attitudes of others they know, thereby yielding a stronger FCE. And if it is true that "misery loves company," people high in MP ambivalence may be motivated to believe that many others share their ambivalence, which also would strengthen the FCE. Finally, if MP ambivalence has different effects for different people in opposite directions, these effects may cancel out in the aggregate, leading to the appearance of no association between MP ambivalence and the magnitude of the FCE.

Considering the possible moderating effect of OP ambivalence suggests another possible mechanism for the FCE. Measures of false consensus ask people to judge how many others share their own opinions. But if a person has a mix of favorable and unfavorable feelings toward an object, then he or she will share, by definition, some views with people who are favorable toward the object and others with people who are unfavorable toward the object. This may lead these ambivalent individuals to experience a frequent sense of commonality with others regarding the object, thus possibly yielding overestimation of the prevalence of one's own views. That is, people high in OP ambivalence may experience an exaggerated sense of the number of others who share their attitudes.

Hostile media phenomenon. The hostile media phenomenon (HMP) is one in which individuals interpret a relatively balanced news media story about an issue as being hostile to their own point of view. Two mechanisms have been proposed to account for this effect (Vallone *et al.* 1985). First, if most of the knowledge a person possesses about the issue is consistent with his or her attitude and very little is inconsistent, a story containing equal amounts of consistent and inconsistent information may appear to be biased. Alternatively, if the neutral attitudinal position implied by a balanced news story is within someone's "latitude of rejection," perceptual contrast may lead that individual to perceive the story as more different from his or her attitudes than its information balance implies (see Sherif and Hovland 1961).

People high in OP ambivalence genuinely have a balance between their favorable and unfavorable evaluations of an object, thus matching balanced news stories' balance to a more substantial degree and yielding a lower likelihood of the HMP. Likewise, if OP ambivalence reduces resistance to change, then a balanced news story should pull operatively ambivalent people's attitudes toward neutrality, yielding more of a match between the story and the person, and less perceived bias in the story. Similarly, if MP ambivalence reduces resistance to change, those high in MP ambivalence may adjust their attitudes to be in line with a balanced news story, thereby yielding a greater perceived match and less perceived bias.

The ingredients of political candidate evaluations. People form evaluations of political candidates on the basis of many considerations, including candidates' positions on policy issues. They like a candidate to the extent that the candidate's attitude on an issue is similar to their own (Krosnick 1988b), consistent with the more general finding that people like similar others more (Byrne 1961, 1971). However, not everyone uses every issue equally to evaluate candidates. Some issues are weighted more heavily than others, and these weights vary across individuals (Anand and Krosnick 2003; Krosnick 1988b, 1990).

A person high in OP ambivalence may be especially likely to perceive resonance between his or her own feelings on an issue and the views of all candidates, no matter what the latter's positions happen to be. This perceived resonance should reduce the weight attached to the issue, because the issue does not offer a useful handle for differentiating among candidates. Likewise, MP ambivalence may lead people to hesitate before using an issue to evaluate a candidate, because these individuals recognize their own inability to settle comfortably into an evaluation of the policy in question. Higher MP ambivalence may therefore be associated with a lower weight attached to an issue.

Activism. People can express their attitudes toward policies to government officials by joining others in signing petitions, attending rallies, and the like. When offered an opportunity to take such an action to express a particular attitude, people may assess the extent to which the proposed activity matches their own views. Individuals higher in OP ambivalence are perhaps more likely to have reasons for agreeing with the position being expressed by any petition or rally, so these individuals should be more inclined to accept such invitations. On the other hand, operatively ambivalent individuals may also be better able to see inconsistencies between their attitudes and the agendas of activist behaviors, and this might reduce the probability that these people will engage in activist behaviors. Operative ambivalence could, of course, make some individuals more likely to act and others less likely, thereby giving the appearance of no relation between OP ambivalence and activism at the aggregate level.

It is possible that MP ambivalence affects the decision to engage in attitude-expressive activism as well. People who feel conflicted about an attitude object may also be conflicted about whether or not a particular act will accurately communicate their attitudes to government leaders, and about whether or not to express their attitude. Under such circumstances, MP ambivalence should lead to less activism.

Evidence from Past Research

Most prior research has examined either OP ambivalence or MP ambivalence, but not both. Many studies have shown that operatively ambivalent attitudes have all the defining characteristics of weak attitudes, including openness to change, instability over time, and little impact on thinking and action. Specifically, people higher in OP ambivalence appear to be more likely to change their attitudes in response to consensus information about the attitudes of their peers (Hodson *et al.* 2001), more likely to change their attitudes in response to a persuasive message (Armitage and Connor 2000), and more likely to manifest attitude instability over time (Bargh *et al.* 1992; Lavine 2001; also see chapter 4 in this volume). On the other hand, Armitage and Connor (2000) and Bassili (1996b) found OP ambivalence to be unrelated to attitude stability.

OP ambivalence has been shown to have effects on cognition and behavior in line with the characterization of this construct offered above. For example, being operatively ambivalent toward a parent is associated with less secure attachment to the parent (Maio *et al.* 2000). OP ambivalence toward a low-status in-group is positively related to out-group favoritism (Jost and Burgess 2000). OP ambivalence toward a stigmatized

group is associated with more extreme responses to members of that group (Hass *et al.* 1991). Operatively ambivalent people are more susceptible to priming effects on behavior (MacDonald and Zanna 1998). People higher in operative ambivalence toward political candidates have less extreme attitudes toward those candidates and are less confident in their perceptions of the candidates' stands on policy issues (Guge and Meffert 1998). Operatively ambivalent people tend to decide which presidential candidate to support later in the course of campaigns, and are less likely to use candidates' personalities and issue positions to evaluate them (Lavine 2001). And the impact of attitudes on behavioral intentions and behaviors is weaker among individuals who are more operatively ambivalent (Armstrong and Connor 2000; Lavine 2001; Moore 1973, 1980; Priester 2002; Sparks *et al.* 1991).⁵

MP ambivalence has been examined in only a couple of studies in terms of its effects on attitude crystallization and consequentiality. Tourangeau, Rasinski, Bradburn, and D'Andrade (1989b) found that people with attitudes higher in MP ambivalence (and also higher in personal importance) manifested stronger question order effects in attitude measurement than did those lower in MP ambivalence, while Bassili (1996b) found no effect of MP ambivalence on attitude stability and pliability.⁶ MP ambivalence is clearly understudied in this particular domain, and the evidence that does exist raises questions concerning its utility for explaining cognition and action.

We found only one study that estimated the unique effects of MP and OP ambivalence simultaneously. McGraw, Hasecke, and Conger (2003) found that MP ambivalence led to more negative candidate evaluations, but OP ambivalence did not. This divergence is consistent with the notion that OP and MP measures of ambivalence may assess different constructs with distinct consequences. The McGraw study did not, however, address the consequences that we outlined earlier. As a result, we know almost nothing about the separate effects of these two types of measures when examined simultaneously.

The Need to Distinguish MP and OP Ambivalence Empirically

IFMP and OP ambivalence are distinct but related constructs, it is important to understand how these constructs are different for purposes of theory building, methodology, and the interpretation of results. Rather than assuming that all measures of ambivalence are interchangeable, this perspective suggests that researchers need to consider carefully whether their theory applies to MP or OP ambivalence (or both), to make appropriate

decisions when measuring ambivalence, and to interpret results accordingly. Furthermore, because MP and OP ambivalence are likely to be related, controlling for one is a critical step in identifying the unique consequences of the other.

If MP and OP ambivalence are distinct constructs, a failure to treat them as such could result in researchers employing measures that do not match their theories; the illusory appearance of inconsistent results (reflecting differences in the indicators used in different studies), and the overgeneralization of results. Researchers who think of MP and OP measures of ambivalence as interchangeable also may combine both types into a single index (e.g., Hanzle 2001) and, in so doing, run the risk of masking dissimilar effects of MP and OP ambivalence.

A NEW STUDY OF ATTITUDES ABOUT ABORTION AND CAPITAL PUNISHMENT

Our investigation is the first to use confirmatory factor analysis to test whether OP and MP measures of ambivalence reflect different constructs, and to examine the unique effects of MP and OP ambivalence on a wide range of cognitions and behaviors. Respondents visited a laboratory and completed an extensive questionnaire about a policy issue that included indicators of both OP and MP ambivalence, in addition to measures of resistance, information gathering, perceptions of social support for one's own attitude, perceptions of media bias, the ingredients of political candidate evaluations, and activism.⁷

Method

A total of 654 undergraduates at Ohio State University participated in this study during the fall of 2000 to partially fulfill an introductory psychology course requirement. Three hundred and twenty-five respondents were assigned to answer questions about one target issue (abortion), while the remaining 329 answered questions about a second target issue (capital punishment). Each person completed a questionnaire alone on a computer for approximately one hour.

The questionnaire included items assessing both OP and MP ambivalence regarding the target issue. MP ambivalence was measured via three questions that asked respondents how mixed their feelings were about the issue, how much conflict they felt about it, and how decisive their feelings about the issue were. OP ambivalence was measured by asking respondents to report their positivity and negativity toward the target

policy. Two calculation methods were used to estimate ambivalence: the gradual threshold model (Priester and Petty 1996), and the negative acceleration model (Scott 1966). These two measures were chosen because they are based on slightly different conceptual ideas about how positivity and negativity combine to form ambivalence, and because a model using these variables as indicators of OP ambivalence fit the data well.⁸ Coding was such that higher numbers indicated greater ambivalence.

Resistance to attitude change was measured in two ways. First, respondents were asked three questions about how easy it would be for someone to change their attitudes, how firm their attitudes were, and how firm their attitudes were relative to their other attitudes (MP measures). Second, resistance was assessed operatively by measuring attitude change in response to a persuasive message. Participants answered four questions assessing their attitudes on the issue, read a counter-attitudinal essay, and then reported their attitudes a second time.⁹ Attitude change was coded such that less change in the direction of the message (greater resistance) is indicated by higher numbers. The pre-message attitude measures yield an assessment of attitude extremity.

Deliberate gathering of attitude-relevant information was assessed via two meta-psychological measures. First, respondents rank-ordered pieces of information about a variety of topics, indicating which of these they would most and least like to learn; each list contained one piece of information about the target issue, and responses were coded such that larger numbers reflect a greater preference for information regarding that issue. In addition, respondents were asked three direct questions designed to gauge their interest in learning more about the target issue.

We also implemented an operative measure of information gathering, tapping automatic attention to attitude-relevant information and referred to as "orienting" (Roskos-Ewoldson and Fazio 1992). Respondents were briefly shown four lists of words, then asked to recall as many of these words as they could. Each list contained one word related to the target issue. Because the exposure time was brief, recalling attitude-relevant information from these lists is a measure of how quickly and automatically people noticed and paid attention to that information. For each of the four lists, respondents who recalled the information about the target issue were coded 1, while those who did not were coded 0. Recall scores from the first two lists were averaged to create one index of orienting; recall scores from the third and fourth lists were averaged to create a second index.

Respondents answered a series of questions about the opinions of others on the target issue to gauge the false consensus effect. These questions

assessed the extent to which people thought they were in the majority on the issue, their beliefs about the proportions of others who agreed with them, and their perceptions of the attitudes of "most" Americans. All these variables were coded so that greater perceived consensus is indicated by larger numbers.

To assess perceptions of media bias, respondents were asked about the extent to which they thought media coverage of the target issue was biased; those who said they perceived any bias were then asked the direction of the bias. This variable was coded to range from 1 to -1. For respondents asked about legalized abortion, positive numbers indicate a bias in media coverage toward endorsing the view that abortions should be easy to obtain; negative numbers indicate a bias in favor of the view that abortions should be difficult to obtain. For respondents asked about capital punishment, positive numbers indicate a bias in media coverage toward endorsing the view that capital punishment should be used more often; negative numbers indicate a bias in favor of the view that capital punishment should be used less often. In both cases, a negative association between this measure and attitudes reflects perceived hostile media bias.

To assess the extent to which they used candidates' policy stands as a basis for evaluation, respondents were asked to specify, then-Texas Governor George W. Bush's and Vice President Al Gore's positions on the target issue. Respondents also reported their own attitudes toward each of these candidates. Two variables were created from the answers to these questions. First, candidate preferences were calculated by subtracting respondents' attitudes toward Gore from their attitudes toward Bush; positive numbers indicate a preference for the former, negative numbers a preference for the latter. Second, an issue discrepancy variable was calculated by subtracting the absolute value of the difference between the respondent's position and Bush's position from the absolute value of the difference between his or her position and Gore's position. Positive values mean that a person's attitude was more similar to Bush's than to Gore's, while negative numbers indicate that a respondent's attitude was more similar to Gore's than to Bush's.¹⁰ Issue discrepancy and candidate preference should be positively correlated if people tended to prefer candidates with attitudes similar to their own.

Activism was measured in two ways. Respondents were asked general questions about how involved they were in activities related to the target issue, and also whether they had performed a series of specific activist behaviors to express their attitudes on the issue. Both sets of questions were aggregated to yield separate measures of activism, which were coded so that larger numbers indicated more activism.

Analysis Strategy

To examine the relation between MP and OP ambivalence, parameters of two structural equation models were estimated. The first model posited that all five measures of ambivalence (three MP and two OP; see appendix) are indicators of a single latent construct (figure 5.1). In the second model, MP measures were posited as indicators of one latent construct and OP measures as indicators of a second latent construct, with the two being allowed to covary (figure 5.2). We evaluated these models by examining their goodness-of-fit statistics. The second model also yielded an estimate of the relation between MP and OP measures of ambivalence, disattenuated to correct for measurement error.

To assess the impact of MP and OP measures on cognition and behavior, we estimated the parameters of structural equation models positing that OP and MP ambivalence influenced resistance, information gathering, perceptions of social support, and activism. In these models, each thought and behavior was predicted by three latent variables, indicated by (1) the three MP measures of ambivalence, (2) the two OP measures, and (3) attitude

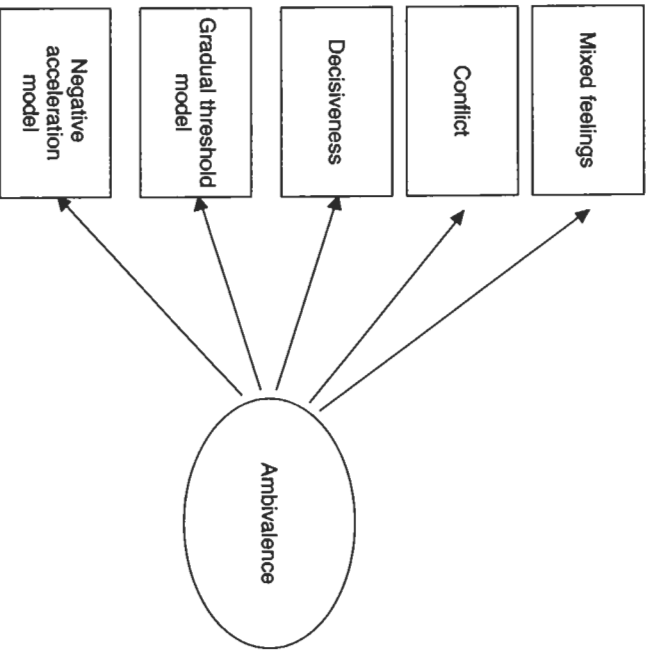


Figure 5.1 One-construct model of ambivalence

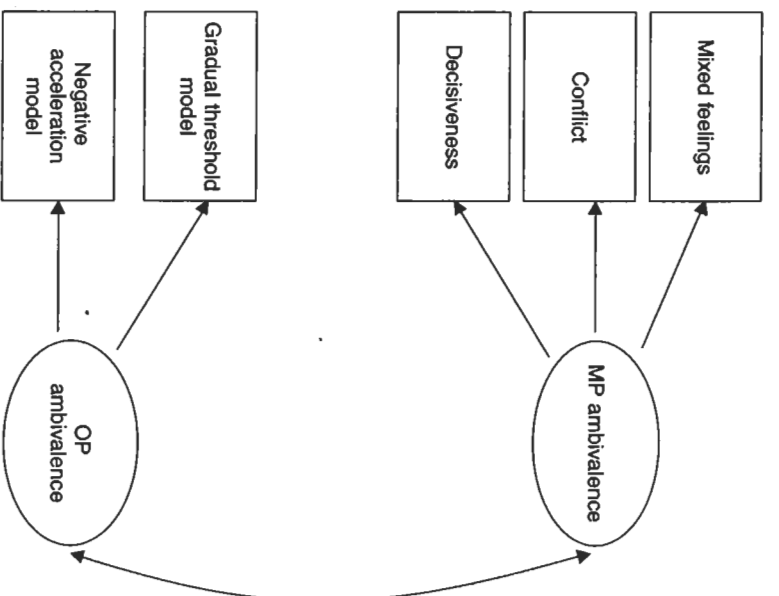


Figure 5.2 Two-construct model of ambivalence

extremity. Each dependent variable was also a latent variable with multiple indicators, in order to allow for disattenuating the parameter estimates to correct for measurement error.

Two of the hypothesized effects of MP and OP ambivalence (moderation of the hostile media phenomenon, use of candidates' issues positions to evaluate them) were tested by interactions. In order to test these interactions, we used a procedure described by Jöreskog *et al.* (2001) and based upon a model first proposed by Kenny and Judd (1984). All measured variables were centered (see Cohen *et al.* 2003 for a discussion of centering), and LISREL 8.51 and PRELIS were used to estimate factor scores for all latent variables (MP ambivalence, OP ambivalence, attitude extremity, and in the case of the hostile media phenomenon, attitudes toward the target policy). Data for manifest variables and factor scores for the latent variables were then imported into SPSS, where OLS regressions were

estimated. Using this approach, we tested whether MP ambivalence, OP ambivalence, and extremity moderated the relation between attitudes and perceived media bias, and the impact of issue discrepancies on candidate preferences.

RESULTS

Factor Structure

For the factor analyses, three goodness-of-fit statistics were examined: the ratio of the χ^2 statistic to degrees of freedom (df), RMSEA, and GFI. χ^2/df ratios smaller than 3.0 indicate acceptable fit (Gefen *et al.* 2000). RMSEAs of 0.05 or less represent good fit, RMSEAs of 0.05 to 0.07 represent adequate fit, and RMSEAs of 0.08 or greater represent poor fit (Browne and Cudeck 1992; Byrne 1998). GFIs of 0.90 or higher indicate acceptable fit (Byrne 1998; Hair *et al.* 1998).

Abortion. For abortion, the model treating all five measures of ambivalence as indicators of a single latent factor fit the data very poorly: $\chi^2/df = 29.46$, RMSEA = 0.30, and GFI = 0.85, suggesting that the five measures of ambivalence do *not* reflect a single latent factor. The model with two correlated factors representing MP and OP ambivalence fit the data well: $\chi^2/df = 1.41$, RMSEA = 0.04, GFI = 0.99, and a relation between MP and OP ambivalence significantly larger than zero but moderate in size ($\beta = 0.49$, $p < 0.01$). The pattern here suggests that MP ambivalence and OP ambivalence are two separate but related constructs.

Capital punishment. Similar results were obtained for capital punishment. The model in which all five measures of ambivalence regarding capital punishment were indicators of a single latent factor fit the data very poorly: $\chi^2/df = 36.82$, RMSEA = 0.34, GFI = 0.81. Again, the model with separate MP and OP factors fit the data much better: $\chi^2/df = 0.98$, RMSEA = 0.00, GFI = 1.00. The relation between MP and OP ambivalence was significantly larger than zero but only moderate in size ($\beta = 0.43$, $p < 0.01$).

Differences across issues. To test whether the factor structure of ambivalence was consistent across both issues, multiple group analyses were conducted comparing unconstrained models for the two respondent groups with models that constrained the factor loadings, variances, and covariances to be equal across issues. The fit of the one-factor model did not differ across

issues ($\Delta\chi^2(5) = 6.11$, n.s.), nor did that of the two-factor model ($\Delta\chi^2(6) = 8.92$, n.s.). We therefore concluded that the structure of MP and OP ambivalence seems equivalent for abortion and capital punishment.

Consequences of Ambivalence

Next, we examined the effects of MP and OP ambivalence on resistance, information gathering, the magnitude of the false consensus effect, perceptions of media bias, the ingredients of candidate evaluations, and activism. Data for the two target issues were combined for these analyses because our results were consistent when they were analyzed separately.

Resistance. Individuals higher in MP ambivalence tended to manifest less OP resistance ($\beta = -0.32$, $p < 0.01$, see row 1 of column 1 in table 5.1). Consistent with past research, resistance was lower among respondents higher in OP ambivalence as well ($\beta = -0.12$, $p < 0.05$; see row 2 of column 1 in table 5.1). A regression predicting MP resistance manifested the same effects (see column 2 of table 5.1): Greater MP ambivalence ($\beta = -0.57$, $p < 0.01$; see row 1 of column 2 in table 5.1) and greater OP ambivalence ($\beta = -0.10$, $p < 0.05$; see row 2 of column 2 in table 5.1) were both associated with less MP resistance.

Information gathering. Respondents scoring higher on MP ambivalence tended to report less interest in learning information about the issue measured meta-psychologically ($\beta = -0.17$, $p < 0.01$; see row 1 of column 3 in table 5.1). However, OP ambivalence was not associated with MP interest ($\beta = -0.03$, n.s.; see row 2 of column 3 in table 5.1). Neither MP ambivalence nor OP ambivalence significantly predicted information choices ($\beta = -0.07$ and -0.00 , respectively; see rows 1 and 2 of column 4 in table 5.1). Likewise, neither was related to the operative measure of information gathering, that is, orienting ($\beta = -0.04$ for MP ambivalence and -0.07 for OP ambivalence; see rows 1 and 2 of column 5 in table 5.1).

The false consensus effect. Greater MP ambivalence predicted a stronger false consensus effect ($\beta = 0.12$, $p < 0.05$; see row 1 of column 6 in table 5.1). In contrast, OP ambivalence was not associated with the magnitude of the false consensus effect ($\beta = 0.06$, n.s.; see row 2 of column 6 in table 5.1).

Perceptions of media bias. Replicating Vallone *et al.*'s (1985) findings, attitudes predicted perceived media bias ($\beta = -0.20$, $p < 0.01$; see column 1 of table 5.2): respondents more favorable toward abortion or capital

Table 5.1 Effects of ambivalence on resistance, information gathering, false consensus, and activism

Predictor	Consequence							
	OP resistance	MP resistance	Reported interest in learning attitude-relevant information	Choices to learn attitude-relevant information	Orienting to attitude-relevant information	Magnitude of false consensus effect	General activism	Specific activist behaviors
MP ambivalence	-0.32**	-0.57**	-0.17**	-0.07	-0.04	0.12*	0.03	0.05
OP ambivalence	-0.12*	-0.10*	-0.03	-0.00	-0.07	0.06	0.11*	-0.04
Extremity	-0.43**	0.04	0.15	0.21*	0.08	-0.32**	0.24**	0.16*
χ^2	267.82	146.69	110.39	89.06	81.26	261.30	111.97	152.01
df	59	48	48	48	38	48	48	59
χ^2/df	4.54	3.06	2.30	1.86	2.14	5.44	2.33	2.58
RMSEA	0.08	0.06	0.05	0.04	0.04	0.09	0.05	0.05
GFI	0.94	0.96	0.97	0.98	0.98	0.93	0.97	0.96
Squared multiple correlation	0.13	0.41	0.09	0.06	0.02	0.19	0.04	0.02
N =	593	601	602	624	621	613	602	602

Note: ** $p \leq 0.01$; * $p \leq 0.05$. Data are from a 2000 study of undergraduate students at Ohio State University. Table entries are standardized LISREL parameter estimates. Note that OP Resistance is coded so that higher numbers indicate *less* attitude change.

Table 5.2 Effects of ambivalence on hostile media bias and ingredients of candidate evaluation

Predictor	Consequence			
	Hostile media bias	Moderation model	Candidate preferences	Moderation model
Attitude discrepancy	-0.20**	-0.14*	n/a	n/a
Issue discrepancy	n/a	n/a	0.27**	0.23**
MP ambivalence	n/a	-0.05	n/a	0.00
OP ambivalence	n/a	0.02	n/a	0.10*
Attitude extremity	n/a	0.00	n/a	0.14**
MP ambivalence X attitude discrepancy	n/a	0.09†	n/a	n/a
OP ambivalence X attitude discrepancy	n/a	n/a	n/a	-0.11*
OP ambivalence X issue discrepancy	n/a	0.01	n/a	n/a
Attitude extremity X attitude discrepancy	n/a	-0.02	n/a	-0.08†
Attitude extremity X issue discrepancy	n/a	n/a	n/a	n/a
$R^2 =$	0.04	0.05	0.07	0.11
Number of cases =	606	606	606	606

Note: ** $p \leq 0.01$; * $p \leq 0.05$; † $p \leq 0.10$. Data are from a 2000 study of undergraduate students at Ohio State University ($N = 654$). Table entries are standardized OLS coefficients from regressions using latent variable factor scores.

punishment perceived media coverage to be more biased against these views. The interaction between MP ambivalence and attitudes indicates, however, that individuals higher in ambivalence were less likely to perceive media bias against their position ($\beta = 0.09$, $p < 0.10$; see row 6 of column 2 in table 5.2). The impact of attitudes on perceived media bias among individuals who reported high levels of MP ambivalence (above the median) was nonsignificant ($\beta = -0.06$, n.s.), whereas the impact of attitudes on perceived media bias was strong and significant among individuals who reported low levels of MP ambivalence (below the median, $\beta = -0.23$, $p < 0.001$). The interaction between OP ambivalence and attitudes was not significant ($\beta = 0.01$, n.s.; see row 8 of column 2 in table 5.2), meaning OP ambivalence did not moderate this effect.

Candidate evaluations. As expected, respondents who agreed more with President Bush on the target issue were more likely to support him

($\beta = 0.27, p < 0.01$; see column 3 of table 5.2). MP ambivalence moderated the impact of issue positions on candidate preferences ($\beta = -0.11, p < 0.05$; see row 7 of column 4 in table 5.2). Respondents low in MP ambivalence (below the median) used the issue to evaluate candidates a great deal ($\beta = 0.72, p < 0.001$), whereas respondents high in MP ambivalence used the issue much less ($\beta = 0.27, p < 0.05$). OP ambivalence also was a marginally significant moderator of the impact of issues on candidate preferences ($\beta = -0.08, p < 0.10$; see row 9 of column 4 in table 5.2). Respondents low in OP ambivalence (below the median) used the issue to evaluate candidates more ($\beta = 0.33, p < 0.001$) than did respondents high in OP ambivalence ($\beta = 0.25, p < 0.001$).¹¹

Activism. MP ambivalence did not predict involvement in activities related to the target issue ($\beta = 0.03, n.s.$; see row 1 of column 7 in table 5.1), but OP ambivalence was positively associated with participation in such activities ($\beta = 0.11, p < 0.05$; see row 2 of column 7 in table 5.1). Neither MP nor OP ambivalence affected the likelihood of performing specific attitude-expressive activist behaviors ($\beta = 0.05$ and -0.04 , respectively; see rows 1 and 2 of column 8 in table 5.1).

DISCUSSION

Confirmatory factor analyses suggested that MP and OP ambivalence measures represent distinct constructs, while subsequent analyses indicated that the two have different impacts on cognition and behavior.

Effects of Meta-Psychological (MP) Ambivalence

High MP ambivalence was found to be associated with less resistance, less reported interest in learning issue-relevant information, a stronger false consensus effect, less perceived hostile media bias, and a reduced tendency to use candidates' issue positions to evaluate them. We hypothesized that individuals high in MP ambivalence would feel discomfort when exposed to information that brings to mind their sense of conflict about the issue, and that they might use either of two strategies to deal with this discomfort. First, when possible, they might avoid any stimuli that brings their discomfort to mind. Consistent with this reasoning, our data showed MP ambivalence to be negatively associated with interest in attitude-relevant information (though not with choices to learn attitude-relevant information). Furthermore, we saw that people high in MP ambivalence were less

likely to use candidates' issue positions as a basis for evaluation. This may reflect an attempt to avoid discomfort by not thinking about the issue.

Even if people who are high in MP ambivalence about an issue try to avoid thinking about their ambivalent attitudes, this may not always be possible; thus, when issue-relevant information cannot be avoided, these individuals may be particularly influenced by such information. Indeed, we found people scoring high in MP ambivalence to be less resistant to change when exposed to a counter-attitudinal essay they could not choose to avoid. Two other observed effects of MP ambivalence also may reflect a lack of resistance. First, respondents higher in MP ambivalence perceived that greater proportions of others agreed with their opinion on the target issue and, second, perceived that media coverage of the issue was less biased. If the false consensus effect occurs because people are persuaded to adopt the attitudes they perceive most others to hold, then we would expect high-ambivalence individuals to manifest a stronger false consensus effect. And if those high in MP ambivalence are more persuaded by the news media stories they encounter, these individuals would presumably be less likely to perceive those stories to be biased against their own positions.

Effects of Operative (OP) Ambivalence

The effects of OP ambivalence on thoughts and behaviors distinguish this construct from its MP counterpart. Our data showed OP ambivalence to be negatively related to resistance, which is consistent with past research (Armitage and Connor 2000; Hodson *et al.* 2001). We also found two new effects: greater OP ambivalence was associated with less use of candidates' issue positions to evaluate them, and with increased reports of general activism (though not reports of specific activist behaviors).

We hypothesized that OP ambivalence will primarily influence how people perceive attitude-relevant information around them. Individuals with a great deal of OP ambivalence feel both positivity and negativity toward the attitude object, so they may be likely to see a broad range of information as consistent with their own attitudes. The diversity of information about the attitude object thus leads them to see elements of their own position in a persuasive message (resulting in less resistance), and in candidates' issue positions (leading respondents to perceive smaller differences between the candidates and using their positions less to evaluate them).

Greater OP ambivalence also was found to be associated with reports of more general involvement in activities related to the issue. This may occur because people high in OP are biased toward thinking of reasons why a

possible activist behavior is consistent rather than inconsistent with their attitudes (reflecting a general bias towards confirmatory thinking that has been observed in other contexts; see Hoch 1984; Klayman and Ha 1987; Koriat *et al.* 1980; Tschirgi 1980; Wason and Johnson-Laird 1972; Yzerbyt and Leyens 1991).

Mediation

It is possible that OP ambivalence is a cause of MP ambivalence, in which case the latter would be expected to mediate any observed effects of the former. If this were so, then OP ambivalence alone would have significant effects that all but disappear when controlling for MP ambivalence. Our evidence that OP ambivalence had unique effects on cognition and behavior challenges a complete mediation hypothesis. Furthermore, in models predicting resistance, activism, information gathering, perceived consensus, perceived media bias, and the ingredients of candidate evaluations, the effect of OP ambivalence changed in only one instance when MP ambivalence was excluded as a predictor: Higher OP ambivalence was associated with a modest false consensus effect ($\beta = 0.09$, $p < 0.05$) when MP ambivalence was not included as a predictor, and had a slightly weaker effect ($\beta = 0.06$, n.s.) when MP ambivalence was added to the equation. A Sobel test of mediation (Baron and Kenny 1986) disconfirmed the hypothesis that this drop indicated significant mediation (Sobel test statistic = 1.48, n.s.). Therefore, our analyses produced no evidence that the effects of OP ambivalence were suppressed due to mediation via MP ambivalence.

Consistency with Prior Findings

Although most of the hypotheses set forth here have not been tested before, a few of them have; as noted, our results are generally consistent with past findings. There is, however, one exception: Our analysis found that high MP ambivalence predicted less resistance to persuasion, but Bassili (1996b) did not. We examined MP ambivalence while controlling for OP ambivalence and attitude extremity, whereas Bassili looked only at the single order correlation of MP ambivalence and resistance. Yet when we examined the relation of MP ambivalence to resistance without controlling for OP ambivalence or extremity, MP ambivalence was associated with both the OP measure of resistance ($\beta = -0.13$, $p < 0.05$) and the MP measure ($\beta = -0.63$, $p < 0.01$) in our data; consequently, different control variables do not explain the discrepancy.

We also measured MP ambivalence with multiple indicators and thus were able to correct for measurement error, whereas Bassili used a single measure. It is possible, then, that the relation we observed may have been attenuated in Bassili's data. However, when the single-order correlations between each of our three measures of MP ambivalence and the three measures of MP resistance were examined, all were highly significant; this suggests that measurement error alone cannot account for the discrepancy between our results and Bassili's.

Finally, our measures of resistance were also somewhat different from Bassili's measure of pliability. The latter involved asking respondents whether they would change their attitudes if particular consequences occurred. For example, those who said that large companies should have quotas to ensure that a fixed percentage of women are hired were asked, "Would you feel the same even if this means not hiring the best person for the job?" Respondents who said they would not feel the same were coded as pliable. There is, however, no evidence that these individuals actually changed their minds or believed they were likely to. Specifically, a person could say that he or she would feel differently if quotas meant not hiring the best person for the job, but not believe that this would be a consequence of quotas. It is therefore unclear how Bassili's measure of pliability would be related to our measures of OP and MP resistance, so the difference in measurement may explain the discrepancy in our findings. Our measure of attitude change is the more conventional one, so our finding that MP ambivalence predicts resistance seems compelling.

CONCLUSION

Meta-psychological (MP) ambivalence reflects individuals' subjective experience of conflict about an object, whereas operative (OP) ambivalence reflects the extent to which people have both favorable and unfavorable orientations toward an object. Thus, the terms "MP ambivalence" and "OP ambivalence" seem more appropriate than MP and OP "measures" of a single ambivalence construct. This insight has important implications for the way that ambivalence is conceptualized in theory building and for interpretation of empirical findings: Researchers studying ambivalence should choose their measures carefully, based on theory rather than simply convenience. A theory about perceptions of ambivalence should be tested using measures of MP ambivalence, and the findings of such research should not be generalized to OP ambivalence. Likewise, a theory concerning the mixture of favorable and unfavorable reactions to an object stored

in memory should be tested using OP ambivalence measures. Furthermore, combining measures of OP and MP ambivalence into a single index may lead to illusory conclusions. We therefore suggest that political psychologists assess both MP and OP ambivalence as often as possible and explore their causes and effects side by side in order to build richer and more accurate theories.

APPENDIX

Question wordings and codings for questions employed in our analysis are shown here. For some constructs, everyone was asked the same questions; for others, questions were asked either about abortion or about capital punishment, with respondents being randomly assigned to the particular target issue.

MP ambivalence: (1) "People's thoughts and feelings about an issue can be all one-sided or very mixed. How mixed are your thoughts and feelings about *[legalized abortion/capital punishment]*—extremely mixed, very mixed, somewhat mixed, a little mixed, or not at all mixed?" (2) "How much conflict do you feel about your opinion about *[legalized abortion/capital punishment]*—none at all, a little, a moderate amount, quite a bit, or a great deal?" (3) "People can be very decisive or very indecisive in their thoughts and feelings about an issue. How indecisive are your thoughts and feelings about *[legalized abortion/capital punishment]*—extremely indecisive, very indecisive, somewhat indecisive, a little indecisive, or not at all indecisive?" [Scores range from 0 to 1, with higher numbers indicating more ambivalence.]

OP ambivalence: (1) "Please ignore any unfavorable thoughts or feelings you might have about *[legalized abortion/capital punishment]* and just think about the favorable thoughts and feelings you have about *[legalized abortion/capital punishment]*. How many favorable thoughts and feelings do you have about *[legalized abortion/capital punishment]*—none at all, a few, some, a lot, or many?" (2) "Please ignore any favorable thoughts or feelings you might have about *[legalized abortion/capital punishment]* and just think about the unfavorable thoughts and feelings you have about *[legalized abortion/capital punishment]*. How many unfavorable thoughts and feelings do you have about *[legalized abortion/capital punishment]*—none at all, a few, some, a lot, or many?" [See n. 8 for calculation formulas, scores range from 0 to 1, with higher numbers representing a greater number of favorable or unfavorable thoughts.]

MP resistance: (1) "How easy do you think it would be for someone to change your opinion about the issue of *[legalized abortion/capital punishment]*—extremely easy, very easy, somewhat easy, somewhat difficult, very difficult, or extremely difficult?" (2) "How firm is your opinion about *[legalized abortion/capital punishment]*—not at all firm, slightly firm, somewhat firm, very firm, or extremely firm?" (3) "Compared

to other issues, how firm is your opinion about *[legalized abortion/capital punishment]*—less firm than other opinions, more firm than other opinions, or about as firm as other opinions? (If Less): Much less firm or somewhat less firm? (If More): Much more firm or somewhat more firm? (If About As Much): Do you lean toward thinking your attitude about *[legalized abortion/capital punishment]* is less firm than your attitudes about other issues, lean toward thinking it is more firm, or don't you lean either way?" [Scores range from 0 to 1, with higher numbers indicating more resistance.]

Attitudes: (1) "Do you favor *[legalized abortion/capital punishment]*, oppose it, or neither favor nor oppose it? (If Favor): Do you strongly favor it or somewhat favor it? (If Oppose): Do you strongly oppose it or somewhat oppose it? (If Neither): Do you lean toward favoring *[legalized abortion/capital punishment]*, lean toward opposing it, or don't you lean either way?" (2) "Do you think *[legalized abortion/capital punishment]* is good, do you think it is bad, or do you think it is neither good nor bad? (If Good): Do you think it is very good, or somewhat good? (If Bad): Do you think it is very bad, or somewhat bad? (If Neither): Do you lean toward thinking *[legalized abortion/capital punishment]* is good, lean toward thinking it is bad, or don't you lean either way?" (3) "Do you think *[legalized abortion/capital punishment]* is wise, do you think it is foolish, or do you think it is neither wise nor foolish? (If Wise): Do you think it is very wise, or somewhat wise? (If Foolish): Do you think it is very foolish, or somewhat foolish? (If Neither): Do you lean toward thinking *[legalized abortion/capital punishment]* is wise, lean toward thinking it is foolish, or don't you lean either way?" (4) "Do you think *[legalized abortion/capital punishment]* is beneficial, do you think it is harmful, or do you think it is neither beneficial nor harmful? (If Beneficial): Do you think it is very beneficial, or somewhat beneficial? (If Harmful): Do you think it is very harmful, or somewhat harmful? (If Neither): Do you lean toward thinking *[legalized abortion/capital punishment]* is beneficial, lean toward thinking it is harmful, or don't you lean either way?" [Scores ranged from 0 to 1, with higher numbers indicating more positive attitudes.] Note: These questions were asked before and after a persuasive message in order to assess resistance operatively. Attitude change was coded so that greater resistance (i.e., less change) was represented by higher numbers. Pre-message answers to the first attitude question were used to calculate issue discrepancies for assessing the ingredients of candidate evaluations.

Choices of information to acquire: Respondents were shown a list of descriptions of information and asked to report which they most and least wanted to learn. (1) Editorials published in the *New York Times*—List 1 (death penalty errors, how taxes trickle down, school vouchers' flaw); List 2 (the fuzzy abortion debate, taking action on hate crimes, jobs and inflation); (2) Pieces of information about people in the United States—List 3 (percent of convicted murderers who are eventually put to death, number of Americans without health insurance, current rate of unemployment); List 4 (average age at which most smokers begin to smoke, number of

abortions conducted in the United States each day, number of homeless people in the United States); (3) Candidates' opinions about the following issues—List 5 (school vouchers, capital punishment, campaign finance reform); List 6 (legalized abortion, education reform, pollution). [Each piece of information was coded 1 if the respondent wanted to learn it the most, 0 if s/he wanted to learn it least, and 0.5 otherwise. For those in the abortion target issue condition, the first editorial from List 2, the second piece of information from List 4, and the first issue on List 6 were treated as attitude-relevant pieces of information. For respondents in the capital punishment target issue condition, the first editorial from List 1, the first piece of information from List 3, and the second issue on List 5 were treated as attitude-relevant pieces of information.]

Interest in information: (1) "How interested are you in learning more about the issue of [legalized abortion/capital punishment]—not at all interested, slightly interested, somewhat interested, very interested, or extremely interested?" (2) "How likely are you to seek out information about the issue of [legalized abortion/capital punishment]—not at all likely, a little likely, somewhat likely, very likely, or extremely likely?" (3) "Compared to other issues, how interested are you in learning more about the issue of [legalized abortion/capital punishment]—less than about other issues, more than about other issues, or about as much as about other issues? (If Less): Much less interested or somewhat less interested? (If More): Much more interested or somewhat more interested? (If About As Much): Do you lean toward thinking you are less interested in learning about the issue of [legalized abortion/capital punishment] than about other issues, lean toward thinking you are more interested in learning about it than about other issues, or don't you lean either way?" [Scores range from 0 to 1, with higher numbers indicating more interest.]

Orienting to attitude-relevant information: "In the next task, you will very briefly be shown a list of words. After you see each list, you will have one minute to list all the words you remember seeing." Each of the following four lists was shown to respondents for 2 seconds; the latter then had one minute to list all the words they remembered seeing.

List #1	List #2	List #3	List #4
Justice Department	Abortion	Senate	National Security
Education	School Vouchers	Interest Group	Social Spending
Death Penalty	Taxes	Fetus	Pro-Choice
Liberal	Capital Punishment	Electric Chair	Health Care
Government Services	Crime	NAFTA	Democrats
Defense Spending	Global Warming	International Peace	Lethal Injection
Pro-Life	Pollution	Weapons Development	Capital Hill
Smog	Military Costs	Republicans	Utility Deregulation
Environment	Conservative	Defense Spending	President

[The number of correctly recalled attitude-relevant words from the first two lists was one indicator of orientation, and the number of correctly recalled attitude-relevant words from the second two lists was a second indicator of orientation. For respondents in the abortion target issue condition, the words "pro-life," "abortion," "fetus," and "pro-choice" were used as target words; for those in the capital punishment target issue condition, the words "death penalty," "capital punishment," "electric chair," and "lethal injection" were used.]

False consensus effect: (1) "In your opinion, what percent of Americans do you think have the same opinion as you about the issue of [legalized abortion/capital punishment]?" (2) "Do you think most Americans strongly favor [legalized abortion/capital punishment], somewhat favor it, slightly favor it, neither favor nor oppose it, slightly oppose it, somewhat oppose it, or strongly oppose it?" (3) "If someone conducted a survey of all U.S. adults, do you think most people would be on the same side of the [legalized abortion/capital punishment] issue as you, or would most people be on the other side?" (4) "Do you think you are in the minority when it comes to your opinion about [legalized abortion/capital punishment], or in the majority?" (5) "Do you think most people agree with your position on [legalized abortion/capital punishment], or disagree with it?" [Scores for the first question range from 0 to 1, with higher numbers indicating a stronger false consensus effect. Scores for the second question range from 0 to 1, with higher numbers indicating more favorable attitudes. The absolute value of the difference between these two scores was calculated and recoded to range from 0 to 1, with higher numbers indicating a stronger false consensus effect. Responses to the last three questions were coded so that 1 indicated the respondent thought s/he was in the majority, and 0 indicated the respondent thought that s/he was in the minority. These scores were then averaged to yield a measure of majority perceptions.]

Hostile media bias: "Some people feel that the news media have been biased in their coverage of [legalized abortion/capital punishment]. Other people feel that the news media have been fair and objective in their coverage of this issue. Do you think the news media have been not at all biased, a little biased, somewhat biased, very biased, or extremely biased in their stories about [legalized abortion/capital punishment]?" (If the respondent said something other than "Not At All Biased"): (a) For abortion, "What kind of bias have you noticed? Have the news media been biased toward saying that abortions should be easy to obtain, or have they been biased toward saying that abortions should be difficult to obtain?" (b) For capital punishment, "What kind of bias have you noticed? Have the news media been biased toward saying that capital punishment should be used more often, or have they been biased toward saying that capital punishment should be used less often?" [Scores range from -1 to +1, with higher numbers indicating greater bias toward saying that abortion should be easy to obtain or capital punishment should be used more often.]

Presidential candidates' policy attitudes: (1) "What is George W. Bush's opinion about [legalized abortion/capital punishment]? Does he favor [legalized abortion/capital punishment], oppose it, or neither favor nor oppose it? (If Favor): Does he strongly favor it or somewhat favor it? (If Oppose): Does he strongly oppose it or somewhat oppose it? (If Neither): Do you think he leans toward favoring [legalized abortion/capital punishment], leans toward opposing it, or don't you think he leans either way?" (2) "What is Al Gore's opinion about [legalized abortion/capital punishment]? Does he favor [legalized abortion/capital punishment], oppose it, or neither favor nor oppose it? (If Favor): Does he strongly favor it or somewhat favor it? (If Oppose): Does he strongly oppose it or somewhat oppose it? (If Neither): Do you think he leans toward favoring [legalized abortion/capital punishment], leans toward opposing it, or don't you think he leans either way?" [Scores range from 0 to 1, with higher numbers indicating more favorable attitudes toward the policy.]

Evaluations of presidential candidates: (1) "Is your opinion of George W. Bush favorable, unfavorable, or neither favorable nor unfavorable? (If Favorable): Is it very favorable or somewhat favorable? (If Unfavorable): Is it very unfavorable or somewhat unfavorable? (If Neither): Do you lean towards being favorable towards George W. Bush, or do you lean towards being unfavorable about him?" (2) "Is your opinion of Al Gore favorable, unfavorable, or neither favorable nor unfavorable? (If Favorable): Is it very favorable or somewhat favorable? (If Unfavorable): Is it very unfavorable or somewhat unfavorable? (If Neither): Do you lean towards being favorable towards Al Gore, or do you lean towards being unfavorable about him?" [Scores range from 0 to 1, with higher numbers indicating more positive attitudes.]

General involvement in activities: (1) "How involved are you in activities related to the issue of [legalized abortion/capital punishment]—not at all involved, a little involved, somewhat involved, very involved, or extremely involved?" (2) "How often do you engage in activities related to the issue of [legalized abortion/capital punishment]—never, occasionally, often, very often, or extremely often?" (3) "Compared to other issues, how involved are you in activities related to the issue of [legalized abortion/capital punishment]—less than other issues, more than other issues, or about as much as other issues? (If Less): Much less involved or somewhat less involved? (If More): Much more involved or somewhat more involved? (If About As Much): Do you lean toward thinking you are less involved in activities related to the issue of [legalized abortion/capital punishment], lean toward thinking you are more involved in activities related to the issue of [legalized abortion/capital punishment], or don't you lean either way?" [Scores range from 0 to 1, with higher numbers indicating more activism.]

Specific activist behaviors: "Have you ever . . . (1) written a letter to a public official about the issue of [legalized abortion/capital punishment]? (2) given money to an organization concerned with the issue of [legalized abortion/capital punishment]? (3) joined an organization concerned with the issue of [legalized abortion/capital punishment]? (4) participated in a protest march or rally on the issue of [legalized

abortion/capital punishment? (5) attended a group meeting to discuss the issue of [legalized abortion/capital punishment]? (6) made a telephone call to a government official to express your opinion on the issue of [legalized abortion/capital punishment]? (7) written a letter to a newspaper or magazine to express your opinion on the issue of [legalized abortion/capital punishment]? (8) called a talk radio program to express your opinion on the issue of [legalized abortion/capital punishment]? [Responses to each question were coded 1 for yes, 0 for no. Scores for the first two behaviors were averaged together to form one measure of activism, scores for the next two were averaged to form a second, scores for the fifth and sixth to form a third, and scores for the final two to form a fourth.]

NOTES

1. Ambivalence has also been gauged by other methods: (1) examining individual-level error variance in models predicting respondents' answers to specific policy questions, on the assumption that greater variance reflects greater conflict between relevant values (Alvarez and Brehm 1995, 1997, 1998); (2) coding responses to open-ended questions asking respondents to report their thoughts (researchers looking for mentions of conflicting values and direct mentions of feelings of ambivalence; Feldman and Zaller 1992); and (3) gauging inconsistencies between attitudes toward specific attitude objects (e.g., abortion or capital punishment) and ideology (Huckfeldt and Sprague 1998a,b). All of these seem to us to be relatively indirect.
2. We borrowed the term "operative" from Bassili (1996b), and generalized his "meta-attitudinal" into "meta-psychological."
3. Also see chapter 4 in this volume for an example.
4. Priester and Petty (2001) found that interpersonal discrepancies predicted unique variance in MP ambivalence, even when controlling for the effect of OP ambivalence. Interpersonal discrepancies primarily influenced MP ambivalence for issues that were important, and when the discrepancies were with the attitudes of liked others. Furthermore, the impact of interpersonal discrepancies on MP ambivalence appeared to be greater when OP ambivalence was high. These findings indicate that interpersonal discrepancies cause MP ambivalence. It is also possible, however, that such discrepancies may influence OP ambivalence. The discovery that a liked other holds an attitude discrepant from one's own may lead to the incorporation of reactions to the attitude object that are similar to those of the liked other, thereby increasing OP ambivalence.
5. Jonas, Diehl, and Bromer (1997) manipulated the consistency of information provided to respondents and found that ambivalence led to *more* attitude-intention consistency. However, this finding has only been demonstrated with attitudes toward newly formed objects and has not been found with existing attitudes toward familiar objects.

6. Although Schuman, Presser, and Ludwig (1981) claimed to show that question order effects were stronger among more ambivalent respondents, these investigators actually were measuring certainty rather than ambivalence.
7. Question wordings and codings are detailed in the Appendix to this chapter.
8. All the proposed formulas for calculating ambivalence yield numbers that are highly correlated with one another (Priester and Petty 1996; Thompson *et al.* 1995), and our own tests of the consequences of OP ambivalence using alternative calculations yielded results comparable to those reported here. The formulas we employed are as follows (see the Appendix for question wording):

Gradual Threshold Model:

If negativity (N) is greater than positivity (P),

$$\text{Ambivalence} = (5 \times (P + 1)^4) - ((N + 1)^{(1/(P + 1))}).$$

If P is greater than or equal to N ,

$$\text{Ambivalence} = (5 \times (N + 1)^4) - ((P + 1)^{(1/(N + 1))}).$$

Negative Acceleration Model:

If positivity (P) is greater than negativity (N),

$$\text{Ambivalence} = (2 \times N + 1)/(P + N + 2).$$

If N is greater than or equal to P ,

$$\text{Ambivalence} = (2 \times P + 1)/(P + N + 2).$$

9. Some respondents read strong arguments, others read weak arguments. Because this manipulation did not affect the amount of attitude change observed, the two groups were combined for the analyses reported below. Attitudes toward abortion manifested significant change in the direction of the persuasive message (mean change = 0.02, $t(294) = 6.41, p < 0.001$), as did attitudes toward capital punishment (mean change = 0.03, $t(299) = 8.09, p < 0.001$).
10. Mean placement of each candidate on the target issue was used to estimate the candidate's actual attitude when calculating this variable. Alternatively, we might have content-analyzed speeches and other public statements by the candidate to gauge his or her position on the attitude continuum. This is difficult to do, however, because candidates often do not clearly and consistently state their positions on issues (Page 1978), and the news media do not always report candidates' positions to the public (Graber 1980; Patterson 1980; Patterson and McClure 1976). Yet another approach would be to treat each respondent's placement of a candidate as a measure of his or her perception of the candidate's position. Yet analyses using this measure may be distorted by projection, whereby people adjust their perceptions so that candidates they like appear to have attitudes more similar to their own, and candidates they dislike appear to have attitudes more different from their own (Krosnick 2002; Page and Brody 1972). We chose to use average perceived candidate positions in our analyses to eliminate this potential confound.

11. Also consistent with our hypotheses about the effects of operative ambivalence on perceptions of candidates' attitudes, greater OP ambivalence was associated with smaller perceived differences between the candidates' positions ($\beta = 0.10, p < 0.05$); MP ambivalence was not associated with the magnitude of perceived differences ($\beta = 0.08, n.s.$).

10. Each probability value is obtained from a multivariate analysis of variance (MANOVA) *F* test that the difference between corresponding coefficients across the two equations is equal to zero. A more general version of this test is used to examine whether *all* of the coefficients are equal across equations (or, equivalently, that observed differences between them are due only to sampling error).

References

- Abelson, Robert P. 1959. "Modes of Resolution of Belief Dilemmas." *Journal of Conflict Resolution* 3: 343-352.
- Abelson, Robert P. 1988. "Conviction." *American Psychologist* 43: 267-275.
- Abelson, Robert P. 1995. "Attitude Extremity." Pp. 25-41 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Abelson, Robert P., Donald R. Kinder, Mark D. Peters, and Susan T. Fiske. 1982. "Affective and Semantic Components in Political Perception." *Journal of Personality and Social Psychology* 42: 619-630.
- Abramowitz, Alan I. 1995. "It's Abortion, Stupid: Policy Voting in the 1992 Presidential Election." *Journal of Politics* 57: 176-186.
- Abramowitz, Alan I. 1997. "The Cultural Divide in American Politics: Moral Issues and Presidential Voting." Pp. 211-226 in *Understanding Public Opinion*, eds. Barbara Norrander and Clyde Wilcox. Washington, DC: CQ Press.
- Achen, Christopher H. 1975. "Mass Political Attitudes and the Survey Response." *American Political Science Review* 69: 1218-1231.
- Adams, Greg D. 1997. "Abortion: Evidence of an Issue Evolution." *American Journal of Political Science* 41: 718-737.
- Allport, Gordon W. 1935. "Attitudes." Pp. 798-844 in *Handbook of Social Psychology*, ed. Carl A. Murchison. New York: Russell and Russell.
- Alvarez, Michael R., and John Brehm. 1995. "American Ambivalence Towards Abortion Policy: Development of a Heteroskedastic Probit Model of Competing Values." *American Journal of Political Science* 39: 1055-1082.
- Alvarez, Michael R., and John Brehm. 1997. "Are Americans Ambivalent Towards Racial Policies?" *American Journal of Political Science* 41: 345-374.
- Alvarez, Michael R., and John Brehm. 1998. "Speaking in Two Voices: American Equivocation About the Internal Revenue Service." *American Journal of Political Science* 42: 418-452.
- Alvarez, Michael R., and John Brehm. 2000. "Binding the Frame: How Important are Frames for Survey Response?" Paper presented at the 2000 Annual Meetings of the American Political Science Association, Washington, DC.
- Alvarez, Michael R., and John Brehm. 2002. *Hard Choices, Easy Answers: Values, Information, and American Public Opinion*. Princeton, NJ: Princeton University Press.

- Cacioppo, John T., Wendi Gardner, and Gary G. Berntson. 1997. "Beyond Bipolar Conceptualizations and Measures: The Case of Attitudes and Evaluative Space." *Personality and Social Psychology Review* 1: 3-25.
- Cacioppo, John T. and Richard E. Petty. 1979. "Attitudes and Cognitive Response: An Electrophysiological Approach." *Journal of Personality and Social Psychology* 37: 2181-2199.
- Cacioppo, John T., Mary A. Snyder-Smith, Stephen L. Cites, and Wendi L. Gardner. 1996. *Bivariate Evaluative and Ambivalence Measures (BEAMS)*. Unpublished manuscript, Ohio State University, Columbus, OH.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: John Wiley and Sons.
- Cantril, Albert H., and Susan Davis Cantril. 1999. *Reading Mixed Signals: Ambivalence in American Public Opinion About Government*. Washington, DC: Woodrow Wilson Center Press.
- Carnines, Edward G., and James A. Stimson. 1980. "The Two Faces of Issue Voting." *American Political Science Review* 74: 78-91.
- Carver, Charles S., Frederick X. Gibbons, Walter G. Stephan, David C. Glass, and Irwin Katz. 1979. "Ambivalence and Evaluative Response Amplification." *Bulletin of the Psychonomic Society* 13: 50-52.
- Carver, Charles S., and Michael Scheier. 1990. "Principles of Self-Regulation: Action and Emotion." Pp. 3-52 in *Handbook of Motivation and Cognition: Foundations of Social Behavior*, vol. 2, eds. E. Tory Higgins and Richard M. Sorrentino. New York: Guilford.
- Chaiken, Shelly, Eva Pomernantz, and Roger Giner-Sorolla. 1995. "Structural Consistency and Attitude Strength." Pp. 387-412 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Chong, Dennis. 1993. "How People Think, Reason, and Feel about Rights and Liberties." *American Journal of Political Science* 37: 867-899.
- Citrin, Jack, Cara Wong, and Brian Duff. 2001. "The Meaning of American National Identity: Patterns of Ethnic Conflict and Consensus." Pp. 71-100 in *Social Identity, Intergroup Conflict, and Conflict Reduction*, eds. Richard D. Ashmore, Lee Jussim, and David Wilder. Oxford: Oxford University Press.
- Cohen, Jacob, Patricia Cohen, Stephen G. West, and Leona S. Aiken. 2003. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Mahwah, NJ: Lawrence Erlbaum.
- Conner, Mark, Paul Sparks, Rachel Povey, Rhiannon James, Richard Shepherd, and Christopher J. Armitage. 2002. "Moderator Effects of Attitudinal Ambivalence on Attitude-Behaviour Relationships." *European Journal of Social Psychology* 32: 705-718.
- Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." Pp. 206-261 in *Ideology and Discontent*, ed. David E. Apter. New York: The Free Press.
- Converse, Philip E. 1970. "Attitudes and Non-Attitudes: Continuation of a Dialogue." Pp. 168-189 in *The Quantitative Analysis of Social Problems*, ed. Edward R. Tufte. Reading, MA: Addison-Wesley.
- Cook, Elizabeth Adell, Ted G. Jelen, and Clyde Wilcox. 1992. *Between Two Absolutes: Public Opinion and the Politics of Abortion*. Boulder, CO: Westview.
- Cook, Elizabeth Adell, Ted G. Jelen, and Clyde Wilcox. 1994. "Issue Voting in Gubernatorial Elections: Abortion and Post-Webster Politics." *Journal of Politics* 56: 187-199.
- Coombs, Clyde H. 1964. *A Theory of Data*. New York: Wiley.
- Cooper, Joel, and Jeff Stone. 2000. "Cognitive Dissonance and the Social Group." Pp. 227-244 in *Attitudes, Behavior, and Social Context: The Role of Norms and Group Membership*, eds. Deborah J. Terry and Michael A. Hogg. Mahwah, NJ: Lawrence Erlbaum.
- Craig, Stephen C., James G. Kane, and Michael D. Martinez. 2002. "Sometimes You Feel Like a Nut, Sometimes You Don't: Citizens' Ambivalence About Abortion." *Political Psychology* 23: 285-301.
- Craig, Stephen C., Richard G. Niemi, and Glenn E. Silver. 1990. "Political Efficacy and Trust: A Report on the NES Pilot Study Items." *Political Behavior* 12: 289-314.
- Craig, Stephen C., Michael D. Martinez, James G. Kane, and Jason Gainous. 2005. "Core Values, Value Conflict, and Citizens' Ambivalence about Gay Rights." *Political Research Quarterly*. (in press)
- Cunningham, William A., Marcia K. Johnson, J. Chris Gatenby, John C. Gore, and Matzarin R. Banaji. 2003. "Neural Components of Social Evaluation." *Journal of Personality and Social Psychology* 85: 639-649.
- Dawson, Richard E., and Kenneth Prewitt. 1969. *Political Socialization*. Boston: Little, Brown.
- De Figueiredo, Rui J. P., Jr, and Zachary Elkins. 2003. "Are Partisans Bigots? An Inquiry into the Vices of In-Group Pride." *American Journal of Political Science* 47: 171-188.
- Delli Carpini, Michael, and Scott Keeter. 1996. *What Americans Know about Politics and Why It Matters*. New Haven, CT: Yale University Press.
- Dennis, Jack. 1966. "Support for the Party System by the Mass Public." *American Political Science Review* 60: 600-615.
- Dennis, Jack, Leon Lindberg, and Donald J. McCrone. 1971. "Support for Nation and Government among British Children." *British Journal of Political Science* 1: 25-48.
- Dunteman, George H. 1984. *Introduction to Multivariate Analysis*. Beverly Hills, CA: Sage.
- Eagly, Alice H., and Shelly Chaiken. 1993. *The Psychology of Attitudes*. Fort Worth: Harcourt Brace.
- Easton, David. 1953. *The Political System*. New York: Alfred Knopf.
- Eismeyer, Theodore J. 1982. "Public Preferences About Government Spending." *Political Behavior* 4: 133-145.
- Emerson, Rupert. 1960. *From Empire to Nation: The Rise to Self-Assertion of Asian and African Peoples*. Cambridge, MA: Harvard University Press.
- Fabrigar, Leander R., and Jon A. Krosnick. 1995. "Attitude Importance and the False Consensus Effect." *Personality and Social Psychology Bulletin* 21: 468-479.

- Fazio, Russell H. 1995. "Attitudes as Object-Evaluation Associations: Determinants, Consequences, and Correlates of Attitude Accessibility." Pp. 247-282 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Fazio, Russell H., Joni R. Jackson, Bridget C. Dunnon, and Carol J. Williams. 1995. "Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A Bona Fide Pipeline?" *Journal of Personality and Social Psychology* 69: 1013-1027.
- Fazio, Russell H., and Michael A. Olson. 2003. "Implicit Measures in Social Cognition Research: Their Meaning and Use." *Annual Review of Psychology* 54: 297-327.
- Feldman, Stanley. 1988. "Structure and Consistency in Public Opinion: The Role of Core Beliefs and Values." *American Journal of Political Science* 32: 416-440.
- Feldman, Stanley. 1989. "Measuring Issue Preferences: The Problem of Response Instability." Pp. 25-60 in *Political Analysis*, vol. 1, ed. James A. Stimson. Ann Arbor: University of Michigan Press.
- Feldman, Stanley, and John Zaller. 1992. "The Political Culture of Ambivalence: Ideological Responses to the Welfare State." *American Journal of Political Science* 36: 268-307.
- Feldman, Stanley. 1995. "Answering Survey Questions." Pp. 249-270 in *Political Judgment: Structure and Process*, eds. Milton Lodge and Kathleen M. McGraw. Ann Arbor, MI: University of Michigan Press.
- Fenno, Richard F., Jr. 1975. "If, as Ralph Nader says, Congress is 'The Broken Branch,' How Come we Love Our Congressmen so Much?" Pp. 277-287 in *Congress in Change: Evolution and Reform*, ed. Norman J. Ornstein. New York: Praeger.
- Festinger, Leon. 1957. *A Theory of Cognitive Dissonance*. Palo Alto, CA: Stanford University Press.
- Festinger, Leon, Henry W. Riecken, and Stanley Schacter. 1956. *When Prophecy Fails*. Minneapolis: University of Minnesota Press.
- Fishbein, Martin, and Icek Ajzen. 1975. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Frankovic, Kathleen A., and Monika L. McDermott. 2001. "Public Opinion in the 2000 Election: The Ambivalent Electorate." Pp. 73-91 in *The Election of 2000: Reports and Interpretations*, by Gerald M. Pomper et al. New York: Chatham House.
- Free, Lloyd A., and Hadley Cantril. 1967. *The Political Beliefs of Americans: A Study of Public Opinion*. New Brunswick, NJ: Rutgers University Press.
- Gardner, Wendi L. 1996. *Biases in Impression Formation: A Demonstration of a Bivariate Model of Evaluation*. Unpublished doctoral dissertation, Ohio State University, Columbus, OH.
- Gefen, David, Detmar W. Straub, and Marie-Claude Boudreau. 2000. "Structural Equation Modeling and Regression: Guidelines for Research Practice." *Communications of the Association for Information Systems* 4: 1-78.
- Gellner, Ernest. 1983. *Nations and Nationalism*. London: Basil Blackwell.
- Gilens, Martin. 1999. *Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy*. Chicago: University of Chicago Press.
- Goren, Paul. 2001. "Core Principles and Policy Reasoning in Mass Publics: A Test of Two Theories." *British Journal of Political Science* 31: 159-177.
- Graber, Doris A. 1980. *Mass Media and American Politics*. Washington, DC: CQ Press.
- Green, Donald Philip. 1988. "On the Dimensionality of Public Sentiment toward Partisan and Ideological Groups." *American Journal of Political Science* 32: 758-780.
- Green, Donald Philip, and Jack Citrin. 1994. "Measurement Error and the Structure of Attitudes: Are Positive and Negative Judgments Opposites?" *American Journal of Political Science* 38: 256-281.
- Green, Donald Philip, and Peter Salovey. 1999. "In What Sense are Positive and Negative Affect Independent?" *Psychological Science* 10: 304-306.
- Greenwald, Anthony G., and Mahzarin R. Banaji. 1995. "Implicit Social Cognition: Attitudes, Self-Esteem, and Stereotypes." *Psychological Review* 102: 4-27.
- Gronke, Paul, and John Brehm. 2002. "History, Heterogeneity, and Presidential Approval: A Modified ARCH Approach." *Electoral Studies* 21: 425-452.
- Gross, Sharon Ruth, Rolf Holz, and Norman Miller. 1995. "Attitude Certainty." Pp. 215-245 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Guge, Michael, and Michael F. Melfert. 1998. "The Political Consequences of Attitude Ambivalence." Paper presented at the 1998 Annual Meetings of the Midwest Political Science Association, Chicago, IL.
- Haddock, Geoffrey. 2003. "Making a Party Leader Less of a Party Member: The Impact of Ambivalence on Assimilation and Contrast Effects in Political Party Attitudes." *Political Psychology* 24: 769-780.
- Hair, Joseph F., Jr., Ronald L. Tatham, Ralph E. Anderson and William C. Black. 1998. *Multivariate Data Analysis*, 5th ed. Upper Saddle River, NJ: Prentice Hall.
- Hanze, Martin. 2001. "Ambivalence, Conflict, and Decision Making: Attitudes and Feelings in Germany towards NATO's Military Intervention in the Kosovo War." *European Journal of Social Psychology* 31: 693-706.
- Hass, Glen R., Irwin Katz, Nina Rizzo, Joan Bailey, and Donna Eisenstadt. 1991. "Cross-Racial Appraisal as Related to Attitude Ambivalence and Cognitive Complexity." *Personality and Social Psychology Bulletin* 17: 83-92.
- Hass, Glen R., Irwin Katz, Nina Rizzo, Joan Bailey, and Lynn Moore. 1992. "When Racial Ambivalence Evokes Negative Affect, Using a Disguised Measure of Mood." *Personality and Social Psychology Bulletin* 18: 786-797.
- Heider, Fritz. 1946. "Attitudes and Cognitive Organization." *Journal of Psychology* 21: 107-112.
- Heider, Fritz. 1958. *The Psychology of Interpersonal Relations*. New York: Wiley.
- Hibbing, John R., and Elizabeth Theiss-Morse. 1995. *Congress as Public Enemy: Public Attitudes toward American Political Institutions*. Cambridge: Cambridge University Press.

- Hill, Jennifer L., and Hanspeter Kriesi. 2001. "An Extension and Test of Converse's 'Black-and-White' Model of Response Stability." *American Political Science Review* 95: 397-413.
- Hoch, Stephen J. 1984. "Availability and Interference in Predictive Judgment." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 10: 649-662.
- Hochschild, Jennifer L. 1981. *What's Fair? American Beliefs about Distributive Justice*. Cambridge, MA: Harvard University Press.
- Hodson, Gordon, Gregory R. Maio, and Victoria M. Esses. 2001. "The Role of Attitudinal Ambivalence in Susceptibility to Consensus Information." *Basic and Applied Social Psychology* 23: 197-205.
- Holbrook, Alyson, Jon A. Krosnick, Penny S. Visser, Wendi L. Gardner, and John T. Cacioppo. 2001. "Attitudes toward Presidential Candidates and Political Parties: Initial Optimism, Inertial First Impressions, and a Focus on Flaws." *American Journal of Political Science* 45: 930-950.
- Huckfeldt, Robert, Jeannette Morehouse Mendez, and Tracy Osborn. 2004. "Disagreement, Ambivalence, and Engagement: The Political Consequences of Heterogeneous Networks." *Political Psychology* 25: 65-95.
- Huckfeldt, Robert, and John Sprague. 1998a. "Extremity, Accessibility, and Certainty: The Role of Ambivalence Regarding Abortion Rights." Paper presented at the 1998 Annual Meetings of the Midwest Political Science Association, Chicago, IL.
- Huckfeldt, Robert, and John Sprague. 1998b. "Sources of Ambivalence in Public Opinion: The Certainty and Accessibility of Abortion Attitudes." Paper presented at the 1998 Annual Meetings of the International Society of Political Psychology, Montreal, Canada.
- Huntington, Samuel P. 1981. *American Politics: The Promise of Disharmony*. Cambridge, MA: Belknap Press of Harvard University Press.
- Hurwitz, Jon, and Mark Peffley. 1987. "How Are Foreign Policy Attitudes Structured? A Hierarchical Model." *American Political Science Review* 81: 1099-1120.
- Jacoby, William G. 1991. *Data Theory and Dimensional Analysis*. Newbury Park, CA: Sage.
- Jacoby, William G. 1994. "Public Attitudes Toward Government Spending." *American Journal of Political Science* 38: 336-361.
- Jacoby, William G. 2000. "Issue Framing and Public Opinion on Government Spending." *American Journal of Political Science* 44: 750-767.
- Jacoby, William G. 2002. "Core Values and Political Attitudes." Pp. 177-201 in *Understanding Public Opinion*, 2nd ed., eds. Barbara Norrander and Clyde Wilcox. Washington, DC: CQ Press.
- Jahoda, Gustav. 1963. "The Development of Children's Ideas about Country and Nationality." *British Journal of Educational Psychology* 33: 143-153.
- Jamieson, David W. 1988. "The Influence of Value Conflicts on Attitudinal Ambivalence." Paper presented at the 1988 Annual Meetings of the Canadian Psychological Association, Montreal, Canada.

- Jamieson, David W. 1993. "The Attitude Ambivalence Construct: Validity, Utility, and Measurement." Paper presented at the 1993 Annual Meetings of the American Psychological Association, Toronto, Canada.
- Jewell, Robert D. 2003. "The Effects of Deadline Pressure on Attitudinal Ambivalence." *Marketing Letters* 14: 83-95.
- Jonas, Klaus, Michael Diehl, and Philip Bromer. 1997. "Effects of Attitudinal Ambivalence on Information Processing and Attitude-Intention Consistency." *Journal of Experimental Social Psychology* 33: 190-210.
- Jöreskog, Karl G., Dag Sörbom, Stephen Du Toit, and Mathilda Du Toit. 2001. *LISREL 8. New Statistical Features*. Chicago: Scientific Software International.
- Jost, John T., and Diana Burgess. 2000. "Attitudinal Ambivalence and the Conflict Between Group and System Justification Motives in Low Status Groups." *Personality and Social Psychology Bulletin* 26: 293-305.
- Jost, John T., Jack Glasier, Arie W. Kruglanski, and Frank J. Sulloway. 2003. "Political Conservatism as Motivated Social Cognition." *Psychological Bulletin* 129: 339-375.
- Kaplan, Kalman J. 1972. "On the Ambivalence-Indifference Problem in Attitude Theory and Measurement: A Suggested Modification of the Semantic Differential Technique." *Psychological Bulletin* 77: 361-372.
- Kareh, George. 2000. "Is Patriotism a Mistake?" *Social Research* 67: 901-924.
- Katz, Irwin. 1981. *Stigma: A Social Psychological Analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Katz, Irwin, Sheldon Cohen, and David Glas. 1975. "Some Determinants of Cross-Racial Helping Behavior." *Journal of Personality and Social Psychology* 32: 964-970.
- Katz, Irwin, David Glass, and Sheldon Cohen. 1973. "Ambivalence, Guilt, and the Scapagoating of Minority Group Victims." *Journal of Experimental Social Psychology* 9: 423-436.
- Katz, Irwin, David C. Glass, David Lucido, and Joan Farber. 1979. "Harm-Doing and Victims Racial or Orthopedic Stigma as Determinants of Helping Behavior." *Journal of Personality* 47: 340-364.
- Katz, Irwin, and R. Glen Hass. 1988. "Racial Ambivalence and American Value Conflict: Correlational and Priming Studies of Dual Cognitive Structures." *Journal of Personality and Social Psychology* 55: 893-905.
- Katz, Irwin, J. Wackenhut, and R. Glen Hass. 1986. "Racial Ambivalence, Value Duality, and Behavior." Pp. 35-59 in *Prejudice, Discrimination, and Racism*, eds. John F. Dovidio and Samuel L. Gaertner. New York: Academic Press.
- Kenny, David A., and Charles M. Judd. 1984. "Estimating the Nonlinear and Interactive Effects of Latent Variables." *Psychological Bulletin* 96: 201-210.
- Kinder, Donald R. 1983. "Diversity and Complexity in American Public Opinion." Pp. 389-428 in *Political Science: The State of the Discipline*, ed. Ada W. Finifter. Washington, DC: American Political Science Association.
- Kinder, Donald R., and Lynn M. Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.

- King, Gary, James Honaker, Ann Joseph, and Kenneth Scheve. 2001. "Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation." *American Political Science Review* 95: 49-69.
- Klayman, Joshua, and Young-Won Ha. 1987. "Confirmation, Disconfirmation, and Information in Hypothesis Testing." *Psychological Review* 94: 211-228.
- Klein, Jill G. 1991. "Negativity Effects in Impression Formation: A Test in the Political Arena." *Personality and Social Psychology Bulletin* 17: 412-418.
- Klein, Jill G. 1996. "Negativity in Impressions of Presidential Candidates Revisited: The 1992 Election." *Personality and Social Psychology Bulletin* 22: 288-295.
- Klopfier, Frederick J., and Thomas J. Madden. 1980. "The Middlemost Choice on Attitude Items: Ambivalence, Neutrality, or Uncertainty?" *Personality and Social Psychology Bulletin* 6: 97-101.
- Kluegel, James R. and Eliot R. Smith. 1986. *Beliefs About Inequality: Americans' Views of What Is and What Ought to Be*. New York: Aldine De Gruyter.
- Koriat, Asher, Sarah Lichtenstein, and Baruch Fischhoff. 1980. "Reasons for Confidence." *Journal of Experimental Psychology: Human Learning and Memory* 6: 107-118.
- Kosterman, Rick, and Seymour Feshbach. 1989. "Toward a Measure of Patriotic and Nationalistic Attitudes." *Political Psychology* 10: 257-274.
- Krosnick, Jon A. 1988a. "Attitude Importance and Attitude Change." *Journal of Experimental Social Psychology* 24: 240-255.
- Krosnick, Jon A. 1988b. "The Role of Attitude Importance in Social Evaluation: A Study of Policy Preferences, Presidential Candidate Evaluations, and Voting Behavior." *Journal of Personality and Social Psychology* 55: 196-210.
- Krosnick, Jon A. 1990. "Government Policy and Citizen Passion: A Study of Issue Publics in Contemporary America." *Political Behavior* 12: 59-92.
- Krosnick, Jon A. 2002. "The Challenges of Political Psychology: Lessons to be Learned from Research on the Projection Hypothesis." Pp. 115-152 in *Thinking about Political Psychology*, ed. James H. Kuklinski. New York: Cambridge University Press.
- Krosnick, Jon A., and Robert P. Abelson. 1992. "The Case for Measuring Attitude Strength in Surveys." Pp. 177-203 in *Questions About Questions: Inquiries into the Cognitive Bases of Surveys*, ed. Judith M. Tanur. New York: Russell Sage.
- Krosnick, Jon A., David S. Boninger, Yao C. Chuang, Matthew K. Berent, and Catherine G. Carnot. 1993. "Attitude Strength: One Construct or Many Related Constructs?" *Journal of Personality and Social Psychology* 65: 1132-1151.
- Krosnick, Jon A., and Richard E. Petty. 1995. "Attitude Strength: An Overview." Pp. 1-24 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Krosnick, Jon A., and Howard Schuman. 1988. "Attitude Intensity, Importance, and Certainty and Susceptibility to Response Effects." *Journal of Personality and Social Psychology* 54: 940-952.
- Larsen, Jeff T., A. Peter McGraw, and John T. Cacioppo. 2001. "Can People Feel Happy and Sad at the Same Time?" *Journal of Personality and Social Psychology* 81: 684-696.
- Lau, Richard R. 1982. "Negativity in Political Perception." *Political Behavior* 4: 353-377.
- Lau, Richard R. 1985. "Two Explanations for Negativity Effects in Political Behavior." *American Journal of Political Science* 29: 119-138.
- Lavine, Howard. 2001. "The Electoral Consequences of Ambivalence toward Presidential Candidates." *American Journal of Political Science* 45: 915-929.
- Lavine, Howard, Eugene Borgida, and John L. Sullivan. 2000. "On the Relationship Between Attitude Involvement and Attitude Accessibility: Toward a Cognitive-Motivational Model of Political Information Processing." *Political Psychology* 21: 81-106.
- Lavine, Howard, Joseph W. Huff, Stephen H. Wagner, and Donna Sweeney. 1998a. "The Moderating Influence of Attitude Strength on the Susceptibility to Context Effects in Attitude Surveys." *Journal of Personality and Social Psychology* 75: 359-373.
- Lavine, Howard, Cynthia J. Thomsen, Mark P. Zanna, and Eugene Borgida. 1998b. "On the Primacy of Affect in the Determination of Attitudes and Behavior: The Moderating Influence of Affective-Cognitive Ambivalence." *Journal of Experimental Social Psychology* 34: 398-421.
- Lipkus, Isaac M., Jeffrey D. Green, John R. Feaganes, and Constanntine Sedikides. 2001. "The Relationship Between Attitudinal Ambivalence and Desire to Quit Smoking among College Smokers." *Journal of Applied Social Psychology* 31: 113-133.
- Little, Roderick J. A., and Donald B. Rubin. 2002. *Statistical Analysis with Missing Data*. 2nd ed. New York: Wiley.
- MacDonald, Tara K., and Mark P. Zanna. 1998. "Cross-Dimension Ambivalence Toward Social Groups: Can Ambivalence Affect Intentions to Hire Feminists?" *Personality and Social Psychology Bulletin* 24: 427-441.
- Maio, Gregory R., and Victoria M. Esses. 1996. "Ambivalence and Persuasion: The Processing of Messages About Immigrant Groups." *Journal of Experimental Social Psychology* 32: 513-536.
- Maio, Gregory R., Frank D. Fincham, and Emma J. Lyceet. 2000. "Attitudinal Ambivalence Toward Parents and Attachment Style." *Personality and Social Psychology Bulletin* 26: 1451-1464.
- Marcus, George E. 2003. "The Psychology of Emotions." Pp. 182-221 in *Oxford Handbook of Political Psychology*, eds. David O. Sears, Leonie Huddy, and Robert Jarvis. New York: Oxford University Press.
- Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.
- Marks, Gary, and Norman Miller. 1987. "Ten Years of Research on the False-Consensus Effect: An Empirical and Theoretical Review." *Psychological Bulletin* 102: 72-90.
- McCann, James A. 1997. "Electoral Choices and Core Value Change: The 1992 Presidential Campaign." *American Journal of Political Science* 41: 564-583.
- McCrae, Robert R., and Paul T. Costa. 2003. *Personality in Adulthood: A Five-Factor Theory Perspective*. New York: Guilford Press.

- McCullagh, Peter, and John A. Nelder. 1989. *Generalized Linear Models*, 2nd ed. New York: Chapman and Hall.
- McGraw, Kathleen M., Edward Hasecke, and Kimberly Conger. 2003. "Ambivalence, Uncertainty, and Processes of Candidate Evaluation." *Political Psychology* 24: 421-448.
- McGraw, Kathleen M., Milton Lodge, and Jeffrey M. Jones. 2002. "The Pandering Politicians of Suspicious Minds." *Journal of Politics* 64: 362-383.
- McGregor, Ian. 2004 (in press). "Zel, Identity, and Meaning: Going to Extremes to be One Self." In *Handbook of Experimental Existential Psychology*, eds. Jeff Greenberg, Sander L. Koole, and Tom Pyszczynski. New York: Guilford.
- McGregor, Ian, and Denise C. Marigold. 2003. "Defensive Zeal and the Uncertain Self: What Makes You So Sure?" *Journal of Personality and Social Psychology* 85: 838-852.
- McGregor, Ian, Ian R. Newby-Clark, and Mark P. Zanna. 1999. "'Remembering' Dissonance: Simultaneous Accessibility of Inconsistent Cognitive Elements Moderates Epistemic Discomfort." Pp. 325-353 in *Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology*, eds. Eddie Harmon-Jones and Judson Mills. Washington, DC: American Psychological Association.
- McKoon Gail, and Roger Ratcliff. 1992. "Spreading Activation Versus Compound Cue Accounts of Priming: Mediated Priming Revisited." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 18: 1155-1172.
- McNamara, Timothy P. 1992. "Theories of Priming: I. Associative Distance and Lag." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 18: 1173-1190.
- McNamara, Timothy P. 1994. "Theories of Priming: II. Types of Primes." *Journal of Experimental Psychology: Learning, Memory, and Cognition* 20: 507-520.
- Meffert, Michael F., Michael Gage, and Milton Lodge. 2000. "Good, Bad, Indifferent and Ambivalent: The Consequences of Multidimensional Political Attitudes." Pp. 60-100 in *The Issue of Belief: Essays in the Intersection of Non-Attitudes and Attitude Change* eds. Willem E. Saris and Paul M. Sniderman. Amsterdam: The Amsterdam School of Communication Research, Universiteit van Amsterdam, The Netherlands.
- Meyer, David E., and Roger W. Schvaneveldt. 1971. "Facilitation in Recognizing Pairs of Words: Evidence of a Dependence Between Retrieval Operations." *Journal of Experimental Psychology* 90: 227-234.
- Mokken, R. J. 1971. *A Theory and Procedure of Scale Analysis with Applications in Political Research*. The Hague: Mouton.
- Mokken, Robert J., and Charles Lewis. 1982. "A Nonparametric Approach to the Analysis of Dichotomous Item Responses." *Applied Psychological Measurement* 7: 45-55.
- Moore, Michael. 1973. "Ambivalence in Attitude Measurement." *Educational and Psychological Measurement* 33: 481-483.
- Moore, Michael. 1980. "Validation of Attitude toward any Practice Scale Through the Use of Ambivalence as a Moderator Variable." *Educational and Psychological Measurement* 40: 205-208.
- Mowrer, Orval Hobart. 1960. *Learning Theory and Behavior*. New York: Wiley.
- Mulligan, Kenneth, and Kathleen M. McGraw. 2002. "Value Conflict: The Effects of Competing Principles on Political Judgment." Paper presented at the 2002 Annual Meetings of the American Political Science Association, Boston, MA.
- Muraven, Marl, and Roy F. Baumeister. 2000. "Self-Regulation and Depletion of Limited Resources: Does Self-Control Resemble a Muscle?" *Psychological Bulletin* 126: 247-259.
- Muraven, Mark, Roy F. Baumeister, and Dianne M. Tice. 1999. "Longitudinal Improvement of Self-Regulation through Practice: Building Self-Control Strength through Repeated Exercise." *Journal of Social Psychology* 139: 446-457.
- Muraven, Mark, Dianne M. Tice, and Roy F. Baumeister. 1998. "Self-Control as a Limited Resource: Regulatory Depletion Patterns." *Journal of Personality and Social Psychology* 74: 774-789.
- Mutz, Diana C., Paul M. Sniderman, and Richard A. Brody, eds. 1996. *Political Persuasion and Attitude Change*. Ann Arbor: University of Michigan Press.
- Myrdal, Gunnar. 1944. *An American Dilemma: The Negro Problem and Modern Democracy*, reprint (1997). New Brunswick, NJ: Transaction.
- Nelson, Thomas. 1999. "Group Affect and Attribution in Social Policy Opinion." *Journal of Politics* 61: 331-362.
- Newby-Clark, Ian R., Ian McGregor, and Mark P. Zanna. 2002. "Thinking and Caring about Cognitive Inconsistency: When and for Whom does Attitudinal Ambivalence Feel Uncomfortable?" *Journal of Personality and Social Psychology* 82: 157-166.
- Norris, Catherine J., Jeff T. Larsen, and John T. Cacioppo. 2003. "The Affect Matrix: Indexing Positive and Negative Affect Processes." Poster presented at the 2003 Annual Meetings of the Society for Personality and Social Psychology, Los Angeles, CA.
- Nye, Joseph S., Jr., Philip D. Zelikow, and David C. King, eds. 1997. *Why People Don't Trust Government*. Cambridge, MA: Harvard University Press.
- Osgood, Charles E., George J. Suci, and Percy H. Tannenbaum. 1957. *The Measurement of Meaning*. Urbana: University of Illinois Press.
- Page, Benjamin I. 1978. *Choices and Echoes in Presidential Elections*. Chicago: University of Chicago Press.
- Page, Benjamin I., and Richard A. Brody. 1972. "Policy Voting and the Electoral Process: The Vietnam War Issue." *American Political Science Review* 66: 389-400.
- Page, Benjamin I., and Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*. Chicago: University of Chicago Press.
- Patterson, Thomas E. 1980. *The Mass Media Election*. New York: Praeger.
- Patterson, Thomas E., and Robert D. McClure. 1976. *The Unsettling Eye: The Myth of Television Power in National Elections*. New York: Putnam.
- Paulhus, Delroy L. 1984. "Two-Component Models of Socially Desirable Responding." *Journal of Personality and Social Psychology* 46: 598-609.
- Pedersen, Daniel. 1998. "Praying for Time." *Newsweek*, February 2: 66-67.
- Peffley, Mark A., and Jon Hurwitz. 1993. "Models of Attitude Constraint in Foreign Affairs." *Political Behavior* 15: 61-90.

- Petffey, Mark A., Pia Knigge, and Jon Hurwitz. 2001. "A Multiple Values Model of Political Tolerance." *Political Research Quarterly* 54: 379-406.
- Pelham, Brett W. 1991. "On Confidence and Consequences: The Certainty and Importance of Self-Knowledge." *Journal of Personality and Social Psychology* 60: 518-530.
- Petry, Richard E., and John T. Cacioppo. 1986a. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer-Verlag.
- Petry, Richard E., and John T. Cacioppo. 1986b. "The Elaboration Likelihood Model of Persuasion." Pp. 123-205 in *Advances in Experimental Social Psychology*, vol. 19, ed. Leonard Berkowitz. New York: Academic Press.
- Petry, Richard E., Curtis P. Haugwadt, and Stephen M. Smith. 1995. "Elaboration as a Determinant of Attitude Strength: Creating Attitudes That are Persistent, Resistant, and Predictive of Behavior." Pp. 93-130 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petry and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Petry, Richard E., and Duane T. Wegener. 1993. "Flexible Correction Processes in Social Judgment: Correcting for Context-Induced Contrast." *Journal of Experimental Social Psychology* 29: 137-165.
- Pratto, Felicia, and Oliver P. John. 1991. "Automatic Vigilance: The Attention-Grabbing Power of Negative Social Information." *Journal of Personality and Social Psychology* 61: 380-391.
- Priester, Joseph R. 2002. "Sex, Drugs, and Attitudinal Ambivalence: How Feelings of Evaluative Tension Influence Alcohol Use and Safe Sex Behaviors." Pp. 145-162 in *Mass Media and Drug Prevention: Classic and Contemporary Theories and Research*, eds. William D. Crano and Michael Burgoon. Mahwah, NJ: Lawrence Erlbaum.
- Priester, Joseph R., and Richard E. Petry. 1996. "The Gradual Threshold Model of Ambivalence: Relating the Positive and Negative Bases of Attitudes to Subjective Ambivalence." *Journal of Personality and Social Psychology* 71: 431-449.
- Priester, Joseph R., and Richard E. Petry. 2001. "Extending the Bases of Subjective Attitudinal Ambivalence: Interpersonal and Intrapersonal Antecedents of Evaluative Tension." *Journal of Personality and Social Psychology* 80: 19-34.
- Reicher, Stephen, and Nick Hopkins. 2001. *Self and Nation: Categorization, Contestation, and Mobilization*. London: Sage.
- Rieder, Jonathan. 1985. *Canarist: The Jews and Italians of Brooklyn against Liberalism*. Cambridge, MA: Harvard University Press.
- Riketta, Michael. 2000. "Discriminative Validation of Numerical Indices of Attitude Ambivalence." *Current Research in Social Psychology* 5: 63-83.
- Rokkach, Milton. 1973. *The Nature of Human Values*. New York: Free Press.
- Rokkach, Milton. 1979. *Understanding Human Values: Individual and Societal*. New York: Free Press.
- Rosenberg, Milton J. 1968. "Hedonism, Inauthenticity, and Other Goats Toward Expansion of a Consistency Theory." Pp. 73-111 in *Theories of Cognitive Consistency: A Sourcebook*, eds. Robert P. Abelson, Elliot Aronson, William J. McGuire, Theodore M. Newcomb, Milton J. Rosenberg, and Percy H. Tannenbaum. Chicago: Rand McNally.
- Roskos-Ewoldson, David R., and Russell H. Fazio. 1992. "On the Orienting Value of Attitudes: Attitude Accessibility as a Determinant of an Object's Attraction of Visual Attention." *Journal of Personality and Social Psychology* 63: 198-211.
- Ross, Lee, David Greene, and Pamela House. 1977. "The False Consensus Effect: An Egocentric Bias in Social Perception and Attribution Processes." *Journal of Experimental Social Psychology* 13: 279-301.
- Sanders, Arthur. 1988. "Rationality, Self-Interest, and Public Attitudes on Public Spending." *Social Science Quarterly* 69: 311-324.
- Saroglou, Vassilis. 2002. "Religion and the Five Factors of Personality: A Meta-Analytic Review." *Personality and Individual Differences* 32: 15-25.
- Schatz, Robert T., and Ervin Staub. 1997. "Manifestations of Blind and Constructive Patriotism: Personality Correlates and Individual-Group Relations." Pp. 229-245 in *Patriotism in the Lives of Individuals and Nations*, eds. Daniel Bar-Tal and Ervin Staub. Chicago: Nelson-Hall.
- Schneider, Anne, and Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87: 334-347.
- Schnell, Frauke. 1993. "The Foundations of Abortion Attitudes: The Role of Values and Value Conflict." Pp. 23-43 in *Understanding the New Politics of Abortion*, ed. Malcolm L. Goggin. Newbury Park, CA: Sage.
- Schuman, Howard, and Stanley Presser. 1981. *Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording and Context*. New York: Academic Press.
- Schuman, Howard, Stanley Presser, and Jacob Ludwig. 1981. "Context Effects on Survey Responses to Questions About Abortion." *Public Opinion Quarterly* 45: 216-223.
- Schuman, Howard, Charlotte Steeh, and Lawrence Bobo. 1985. *Racial Attitudes in America: Trends and Interpretations*. Cambridge, MA: Harvard University Press.
- Schwartz, Norbert, and Herbert Bless. 1992. "Constructing Reality and Its Alternatives: An Inclusion/Exclusion Model of Assimilation and Contrast Effects in Social Judgments." Pp. 217-245 in *The Construction of Social Judgments*, eds. Leonard L. Martin and Abraham Tesser. Hillsdale, NJ: Lawrence Erlbaum.
- Schwartz, Shalom H. 1996. "Value Priorities and Behavior: Applying a Theory of Integrated Value Systems." Pp. 1-24 in *The Psychology of Values: The Ontario Symposium (Volume 8)*, eds. Clive Seligman, James M. Olson, and Mark P. Zanna. Mahwah, NJ: Lawrence Erlbaum.
- Scott, William A. 1966. "Measures of Cognitive Structure." *Multivariate Behavior Research* 1: 391-395.
- Scott, William A. 1968. "Attitude Measurement." Pp. 204-273 in *The Handbook of Social Psychology* (eds.) Gardner Lindzey and Elliot Aronson. Reading, MA: Addison-Wesley.
- Scott, William A. 1969. "Structure of Natural Cognitions." *Journal of Personality and Social Psychology* 12: 261-278.

- Sears, David O. 1993. "Symbolic Politics: A Socio-Psychological Theory." Pp. 113-149 in *Explorations in Political Psychology*, eds. Shanto Iyengar and William J. McGuire. Durham, NC: Duke University Press.
- Sears, David O., and Jack Citrin. 1985. *Tax Revolt: Something for Nothing in California* enlarged ed. Cambridge, MA: Harvard University Press.
- Sears, David O., and Sheri Levy. 2003. "Childhood and Adult Political Development." Pp. 60-109 in *Oxford Handbook of Political Psychology*, eds. David O. Sears, Leonie Huddy, and Robert Jervis. New York: Oxford University Press.
- Sherif, Muzafer, and Carl I. Hovland. 1961. *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. New Haven: Yale University Press.
- Sigall, Harold, and Richard Page. 1971. "Current Stereotypes: A Little Fading, a Little Faking." *Journal of Personality and Social Psychology* 18: 247-255.
- Sisima, Klaas, and Ivo W. Molenaar. 2002. *Introduction to Nonparametric Item Response Theory*. Thousand Oaks, CA: Sage.
- Sisima, Klaas, P. Debeets, and Ivo W. Molenaar. 1990. "Mokken Scale Analysis for Polychotomous Items: Theory, A Computer Program, and an Empirical Application." *Quality and Quantity* 21: 393-408.
- Simon, Linda, Jeff Greenberg, and Jack Brethm. 1995. "Trivialization: The Forgotten Mode of Dissonance Reduction." *Journal of Personality and Social Psychology* 68: 247-260.
- Singer, Jerome L. (ed.) 1990. *Repression and Dissociation: Implications for Personality Theory, Psychopathology and Health*. Chicago: University of Chicago Press.
- Smith, Kevin B. 1994. "Abortion Attitudes and Vote Choice in the 1984 and 1988 Presidential Elections." *American Politics Quarterly* 22: 354-369.
- Snyderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York: Cambridge University Press.
- Snyderman, Paul M., and Thomas Piazza. 1993. *The Scar of Race*. Cambridge, MA: Harvard University Press.
- Son Hing, Leanne, Winnie Li, and Mark P. Zanna. 2002. "Inducing Hypocrisy to Reduce Prejudicial Responses among Aversive Racists." *Journal of Experimental Social Psychology* 38: 71-78.
- Sparks, Paul, Duncan Hedderley, and Richard Shepherd. 1991. "An Investigation into the Relation Between Perceived Control, Attitude Variability, and the Consumption of Two Common Foods." *European Journal of Social Psychology* 22: 55-71.
- Spinner-Haley, Jeff, and Elizabeth Theiss-Morse. 2003. "National Identity and Self-Esteem." *Perspectives on Politics* 1: 515-532.
- Steenbergen, Marco R., and Paul R. Brewer. 2000. "The Not-So-Ambivalent Public: Policy Attitudes in the Political Culture of Ambivalence." Pp. 101-142 in *The Issue of Belief: Essays in the Intersection of Non-Attitudes and Attitude Changes*, eds. Willem E. Saris and Paul M. Sniderman. Amsterdam: The Amsterdam School of Communication Research, Universiteit van Amsterdam, The Netherlands.
- Steenbergen, Marco R., and Christopher R. Ellis. 2003. "Affective Ambivalence in Electoral Behavior." Paper presented at the Shambaugh Conference on Affect and Cognition in Political Action, University of Iowa, Iowa City, IA.
- Stone, Jeff, Elliot Aronson, A. Lauren Crain, Matthew P. Winslow, and Carrie B. Fried. 1994. "Inducing Hypocrisy as a Means of Encouraging Young Adults to Use Condoms." *Personality and Social Psychology Bulletin* 20: 116-128.
- Sullivan, John L., Amy Fried, and Mary G. Dietz. 1992. "Patriotism, Politics, and the Presidential Election of 1988." *American Journal of Political Science* 36: 200-234.
- Tajfel, Henri. 1981. *Human Groups and Social Categories: Studies in Social Psychology*. New York: Cambridge University Press.
- Tajfel, Henri, and John C. Turner. 1986. "The Social Identity Theory of Intergroup Behavior." Pp. 7-24 in *Psychology of Intergroup Relations*, 2nd ed., eds. Stephen Worchel and William G. Austin. Chicago: Nelson-Hall.
- Taylor, Shelley E. 1991. "Asymmetrical Effects of Positive and Negative Events: The Mobilization-Minimization Hypothesis." *Psychological Bulletin* 110: 67-85.
- Tedeschi, James T., Barry R. Schlenker, and Thomas V. Bonoma. 1971. "Cognitive Dissonance: Private Rationalization or Public Spectacle?" *American Psychologist* 26: 685-695.
- Tesser, Abraham. 1978. "Self-Generated Attitude Change." Pp. 290-338 in *Advances in Experimental Social Psychology*, ed. Leonard Berkowitz. New York: Academic Press.
- Tetlock, Philip E. 1986. "A Value Pluralism Model of Ideological Reasoning." *Journal of Personality and Social Psychology* 50: 819-827.
- Tetlock, Philip E., Ori V. Krisel, S. Beth Elison, Melanie C. Green, and Jennifer S. Lerner. 2000. "The Psychology of the Unthinkable: Taboo Trade-Offs, Forbidden Base Rates, and Heretical Counterfactuals." *Journal of Personality and Social Psychology* 78: 853-870.
- Tetlock, Phillip, E., Randall S. Peterson, and Jennifer S. Lerner. 1996. "Revising the Value Pluralism Model: Incorporating Social Content and Context Postulates." Pp. 25-51 in *The Psychology of Values: The Ontario Symposium*, Vol. 8, eds. Clive Seligman, James M. Olson, and Mark P. Zanna. Hillsdale, NJ: Lawrence Erlbaum.
- Thompson, Megan M., and Mark P. Zanna. 1995. "The Conflicted Individual: Personality-Based and Domain-Specific Antecedents of Ambivalent Social Attitudes." *Journal of Personality* 63: 259-288.
- Thompson, Megan, Mark P. Zanna, and Dale W. Griffin. 1995. "Let's Not Be Indifferent About (Attitudinal) Ambivalence." Pp. 361-386 in *Attitude Strength: Antecedents and Consequences*, eds. Richard E. Petty and Jon A. Krosnick. Mahwah, NJ: Lawrence Erlbaum.
- Thurstone, Louis L. 1928. "Attitudes Can Be Measured." *American Journal of Sociology* 33: 529-554.
- Thurstone, Louis L., and Edward J. Chave. 1929. *The Measurement of Attitude*. Chicago: University of Chicago Press.

- Tourangeau, Roger, and Kenneth A. Rasinski. 1988. "Cognitive Processes Underlying Context Effects in Attitude Measurement." *Psychological Bulletin* 103: 299-314.
- Tourangeau, Roger, Kenneth A. Rasinski, Norman Bradburn, and Roy D'Andrade. 1989a. "Belief Accessibility and Context Effects in Attitude Measurement." *Journal of Experimental Social Psychology* 25: 401-421.
- Tourangeau, Roger, Kenneth A. Rasinski, Norman Bradburn, and Roy D'Andrade. 1989b. "Carryover Effects in Attitude Surveys." *Public Opinion Quarterly* 53: 495-524.
- Tschirgi, Judith E. 1980. "Sensible Reasoning: A Hypothesis About Children." *Child Development* 51: 1-10.
- Vallone, Robert P., Lee Ross, and Mark R. Lepper. 1985. "The Hostile Media Phenomenon: Biased Perception and Perceptions of Media Bias in Coverage of the Beirut Massacre." *Journal of Personality and Social Psychology* 49: 577-585.
- Verplanken, Bas, and Rob W. Holland. 2002. "Motivated Decision Making: Effects of Activation and Self-Centrality of Values on Choices and Behavior." *Journal of Personality and Social Psychology* 82: 434-447.
- Wald, Kenneth D. 1992. *Religion and Politics in the United States*, 2nd ed. Washington, DC: CQ Press.
- Walt, Kathy. 1998. "Death Penalty's Support Plunges to 30-Year Low." *Houston Chronicle*, March 5. Retrieved July 14, 2003 from <http://www.chron.com/cgi-bin/auth/story.mpl/content/chronicle/page/198/03/15/death.html>.
- Warner, Stanley L. 1965. "Randomized Response: A Survey Technique for Eliminating Evasive Answer Bias." *Journal of the American Statistical Association* 60: 63-69.
- Wason, Peter C., and Philip N. Johnson-Laird. 1972. *Psychology of Reasoning: Structure and Content*. Cambridge, MA: Harvard University Press.
- Wegener, Duane T., Norbert L. Kerr, Monique A. Fleming, and Richard E. Petty. 2000. "Flexible Corrections of Juror Judgments: Implications for Jury Instructions." *Psychology, Public Policy, and Law* 6: 629-654.
- Wegener, Duane T., and Richard E. Petty. 1995. "Flexible Correction Processes in Social Judgment: The Role of Naïve Theories in Corrections of Perceived Bias." *Journal of Personality and Social Psychology* 68: 36-51.
- Wegener, Daniel M. 1994. "Ironic Processes of Mental Control." *Psychological Review* 101: 34-52.
- Wilcox, Clyde, Lee Sigelman, and Elizabeth Cook. 1989. "Some Like it Hot: Individual Differences in Responses to Group Feeling Thermometers." *Public Opinion Quarterly* 53: 246-257.
- Wilson, Timothy D., and Sara D. Hodges. 1992. "Attitudes as Temporary Constructions." Pp. 37-65 in *The Construction of Social Judgments*, eds. Leonard L. Martin and Abraham Tesser. Hillsdale, NJ: Lawrence Erlbaum.
- Yzerbyt, Vincent Y., and Jacques-Phillipe Leyens. 1991. "Requesting Information to Form an Impression: The Influence of Valence and Confirmatory Status." *Journal of Experimental Social Psychology* 27: 337-356.
- Zajonc, Robert B. 1968. "Cognitive Theories in Social Psychology." Pp. 320-411 in *The Handbook of Social Psychology*, vol. 1, eds. Gardner Lindzey and Elliot Aronson. Reading, MA: Addison-Wesley.
- Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge: Cambridge University Press.
- Zaller, John, and Stanley Feldman. 1992. "A Simple Theory of the Survey Response: Answering Questions Versus Revealing Preferences." *American Journal of Political Science* 36: 579-616.
- Zanna, Mark P., and Colette Aziza. 1976. "On the Interaction of Repression-Sensitization and Attention in Resolving Cognitive Dissonance." *Journal of Personality* 44: 577-593.
- Zanna, Mark P., and Joel Cooper. 1974. "Dissonance and the Pill: An Attribution Approach to Studying the Arousal Properties of Dissonance." *Journal of Personality and Social Psychology* 29: 703-709.
- Zanna, Mark P., Mark R. Lepper, and Robert P. Abelson. 1973. "Attentional Mechanisms in Children's Devaluation of a Forbidden Activity in a Forced Compliance Situation." *Journal of Personality and Social Psychology* 28: 355-359.