DHAVAN V. SHAH¹ DAVID DOMKE DANIEL B. WACKMAN

"To Thine Own Self Be True":

Values, Framing, and Voter Decision-Making Strategies

This article builds on multidisciplinary research on framing, motivation, and decision making to examine the relationships among media frames, individual interpretations of issues, and voter decision making. Chosen for an experimental study were two research populations, evangelical Christians and undergraduate students, who were expected to differ in their values and priorities. Subjects were presented simulated newspaper articles about an election contest and asked to make a candidate choice. Within issue environments containing candidate stands on four issues, the media frame of a single issue, health care, was altered: one experimental group in each population received an ethical textual frame and the other a material textual frame. Findings indicate that media frames and issue interpretations, in conjunction, substantially influence the type of decision-making strategy voters employ. Implications for future research on politics and media are discussed.

Over the past two decades, several studies have found that individuals concerned with the symbolic importance of social-moral issues—such as pornography, homosexuality, and school prayer—use these issues to assert their values within the broader community (Klein, 1984; Page & Clelland, 1978). In particular, religious groups that have become active in politics often engage in what sociologists call "the politics of lifestyle concern" (Lorentzen, 1980; Moen, 1984; Olson & Carroll, 1992; Warner, 1988). In the most obvious example, the debate over abortion epitomizes the effort of different groups to "establish the legitimacy of one definition of morality and/or competence over another" (Ball-Rokeach, Power, Guthrie, & Waring, 1990, p. 254; Fried, 1988; Luker, 1984). In considering these political changes, Wuthnow (1988,

COMMUNICATION RESEARCH, Vol. 23 No. 5, October 1996 509-560 © 1996 Sage Publications, Inc.

1989) argues that a number of contemporary issues grow out of differing moral or ethical viewpoints, and he speculates that many future political issues will become moral- or value-based.

Many issues in the present political environment, however, are not clearly moral in nature. For example, issues such as health care, affirmative action, and the environment are more ambiguous and open to differing interpretations. Emphasis upon different values in media coverage of such issues seems likely to influence how individuals evaluate the issues and use them in making candidate choices. This research, then, has two primary goals: first, to review and synthesize literature on framing, motivation and the self, and decision making into an explanation of how media texts influence voters' processing and use of issue information in judgment; second, to test the robustness of this theory with two subpopulations expected to differ in their core values and priorities. Specifically, this research manipulated the media frame of a single issue—as either ethical or material in emphasis—within controlled issue environments to examine how voters process, interpret, and use issue information in choosing among candidates.

To test the hypotheses of this study, two differing subpopulations were used, evangelical Christians and university undergraduate students. These groups were chosen for three reasons: (a) evangelical Christians have demonstrated increasing prominence and power in recent elections; (b) there has been little systematic study of evangelical Christians' political cognitions, although many have speculated about their beliefs and behavior in electoral contexts; (c) most important, tests of hypotheses across these two subpopulations provide a more thorough examination of our theory. Using the same experimental design with both subject populations, then, provides insight into information processing and decision making as subjects "vote" for candidates in a simulated election.

Literature Review

Insight into this process may be gained from three domains: (a) work on framing, which merges research from sociology, psychology, political science, and mass communication; (b) social psychological research on the role of motivation and the self in evaluation and judgment; and (c) consumer and behavioral scholarship on individual decision-making processes.

Framing and Priming

In general, the frames concept focuses on the manner in which the construction of communication texts influences individual cognitions by selectively focusing on particular parts of reality while ignoring or downplaying other aspects (Entman, 1993; Entman & Rojecki, 1993; Gamson, 1992; Kosicki, 1993; Pan & Kosicki, 1993). Some perceive framing as the sociological process of news construction (Edelman, 1993; Gamson, 1992; Gamson & Modigliani, 1989; Snow & Benford, 1988), whereas others understand framing as the psychological dynamics of audience consumption (Fiske & Taylor, 1991; Zaller, 1992).

Implicit to many of the sociological studies is the perspective that media frames order or organize the perception of audience members by including and excluding certain messages, turning "unrecognizable happenings or amorphous talk into a discernible event" (Tuchman, 1978, p. 192; see also Gitlin, 1980; Goffman, 1974; Graber, 1988; Hall, Critcher, Jefferson, Clarke, & Roberts, 1978; Rachlin, 1988). As Ball-Rokeach and Rokeach (1987) argue, media do not merely serve an agenda-setting role in public discourse but are crucial to establishing the range of criteria for constructing, debating, and resolving social issues. Such a perspective also recognizes, however, as Neuman, Just, and Crigler (1992) contend, that individuals "do not slavishly follow the framing of issues presented in the mass media"; rather, people "actively filter, sort, and reorganize information in personally meaningful ways in constructing an understanding of public issues" (pp. 76-77; see also Gamson, Croteau, Hoynes, & Sasson, 1992).

Similarly, several psychologists who define frames cognitively as a type of schema contend that the presence of textual frames does not guarantee their influence on audience cognitions (Rumelhart, 1984; for review, see Fiske & Taylor, 1991).2 Some cognitive psychologists argue that individuals, when confronted with information, first locate the relevant attitude structure, or schema, to guide processing (Tourangeau, 1987; Tourangeau & Rasinski, 1988; Tourangeau, Rasinski, Bradburn, & D'Andrade, 1989). Research suggests that two factors influence which schema is activated-frequency and recency of use. For well-formed attitudes, the relevant schema is highlyeven chronically—accessible (Bargh, 1988; Fazio, 1986, 1989; Fazio, Sanbonmatsu, Powell, & Kardes, 1986; Higgins & Bargh, 1987; Higgins & King, 1981; Krosnick, 1988; Lau, 1989); however, with less familiar issues, no schema is readily activated, forcing a search for relevant schema (see Chaiken, 1980; Petty & Cacioppo, 1984). Context suggested by textual materials may help identify relevant cognitive structures to guide information processing (Rumelhart & Ortony, 1977; Tourangeau & Rasinski, 1988).

Using somewhat different terminology, Zaller and Feldman (1992) offer a similar framework for linking textual information to individual cognitions. They assert that most people are internally conflicted with multiple, often opposing "considerations" on most political issues, and they do not system-

atically or exhaustively search available considerations; instead, individuals sample from their available cognitions, oversampling those that are highly accessible or have been used recently. According to this perspective, the ordering or framing of textual materials activates certain considerations, which interact with a person's political predispositions to guide the construction of attitudes (Bishop, Oldendick, & Tuchfarber, 1984; Krosnick, 1991; Krosnick & Schuman, 1988; Sniderman, Brody, & Tetlock, 1991; Zaller, 1992).

Furthermore, some theorists argue that recently used attitude structures may be used to process additional information encountered or to serve as the criteria for comparison (Fazio, 1986; Higgins & King, 1981; Taylor & Fiske, 1978; Wyer, Bodenhausen, & Gorman, 1985). This "priming" effect is consistent with the findings of Iyengar and colleagues (Iyengar, 1991; Iyengar & Kinder, 1987; Iyengar, Kinder, Peters, & Krosnick, 1984; Iyengar, Peters, & Kinder, 1982; Iyengar & Simon, 1994), who argue that mass media emphasis on particular issues primes certain ideas for individuals, ideas that are then more broadly accessible for evaluating and defining social issues, candidates, and politicians. Although most priming research has focused on evaluations of the president (Krosnick & Brannon, 1993; Krosnick & Kinder, 1990), Price and Tewksbury (1995) argue that research should examine potential media priming effects for "other kinds of politically relevant evaluations" (p. 42).

A few scholars have examined the relationship between textual frames and individual cognitions within the context of decision making (Green & Blair, 1995; Lau, Smith, & Fiske, 1991; Shah & Domke, 1995). For example, Kahneman and Tversky (1984) examined the influence of cognitive decision frames—an individual's interpretation of the acts, consequences, and contingencies associated with a particular choice—on judgment and inference making. In experiments in which available choices were numerically equivalent but the explanatory rationale was formulated differently, they found that although frames have common effects on large portions of the audience, the effects are mediated by individual norms and characteristics (see also Tversky & Kahneman, 1981). Shah and Domke (1995), who approach framing from a motivational perspective, assert that the influence of textual frames is mediated by which aspect of an individual's self-concept is activated during information processing; similarly, Price and Tewksbury (1995) argue that "particularly important, but rarely examined, is the prospect that people have chronically accessible goals, values, and motivations that help structure their thinking and inform their evaluations across numerous topical domains and situations" (p. 31).

These sentiments are echoed by research on *value-choice* frames and media system dependency theory by Ball-Rokeach and colleagues, who argue that media emphasis on particular values shapes policy debates about social

issues (Ball-Rokeach et al., 1990; Ball-Rokeach & Rokeach, 1987; Ball-Rokeach, Rokeach, & Grube, 1984). Ball-Rokeach & Loges (in press) contend that, in contests about resource allocations, political groups struggle over the construction of "value-choice frames to legitimate to themselves and to communicate to others why their choice is more moral or competent than their opponents" (p. 4); in turn, political elites and journalists construct issues in value terms as a heuristic for the broader public, which often understands social issues not "in their massive detail, but in terms of the values—the value-choices—they present" (p. 14). These perspectives, then, suggest that values, motivation, and the self should receive greater consideration when examining the linkages between textual frames and individual cognitions.

Motivation and the Self

In recent years, informed by a more sophisticated understanding of cognitive processes, many scholars have begun to reemphasize a motivational or functional perspective of attitudes, originally articulated by Katz (1960) and Smith, Bruner, and White (1956), which posits that core attitudes "fulfill certain individualistic needs" and "allow individuals to successfully execute specific plans and achieve particular goals" (Snyder & DeBono, 1987, p. 108; see also Herek, 1986; Pratkanis & Greenwald, 1989). In considering this emerging view, Fiske and Taylor (1991) describe individuals as "motivated tacticians" with "multiple cognitive strategies available" (p. 13); for example, individuals may choose strategies in the interests of adaptability, accuracy, speed, to defend their ego, or to express their values.

Contemporary debate about the functionality of attitudes has focused on clarifying, elaborating, and integrating the functions originally proposed several decades ago. Consistent across most conceptualizations is that attitudes serve both a *schematic* function (i.e., providing individuals with a frame of reference for understanding and ordering attitude objects; Fazio, 1986, 1989) and a *value-expressive* function, affirming core values and defending self-image (see Eagly & Chaiken, 1993; Snyder & DeBono, 1989).

Particularly relevant, then, may be perspectives exploring psychological phenomena that function to demonstrate and maintain the importance of individuals' underlying values (Johnson & Eagly, 1989; Rokeach, 1968, 1973; Tetlock, 1986). As Tetlock (1989) argues, individuals' understanding of political issues is "powerfully shaped by the fundamental values they are trying to advance in particular policy domains" (p. 130; see also Boninger, Krosnick, & Berent, 1995). Similarly, several scholars posit that expressing core values allows individuals to verify and affirm their self-concepts (Greenwald, 1989;

Greenwald & Breckler, 1985), a view that links the value-expressive function to core aspects of an individual's sense of self.

Contemporary views of the self, in relying on familiar psychological constructs of attitudes and schema, simultaneously recognize the self's complexity and the quantity of information it processes; thus, according to Greenwald and Banaji (1989), the self is a "powerful, but ordinary" cognitive system (see also Greenwald & Pratkanis, 1984; Markus, 1977). Because the self is complex and multidimensional, only the particular aspect of the self that is active will regulate and guide cognitions and behaviors at that moment (Markus & Ruvolo, 1989; Markus & Wurf, 1987). Research suggests that situational cues can activate specific components of the self, particularly aspects consistent with desirable self-conceptions (Kunda, Fong, Sanitioso, & Reber, 1993; Kunda & Sanitioso, 1989). Brown and Smart (1991) argue, however, that external factors alone do not determine one's self-conception; rather, situational factors interact with individual predispositions to influence self-conceptions and subsequent behavior (see also Baldwin, Carrell, & Lopez, 1990).

These insights, then, suggest that voting may be a means for individuals to verify core aspects of their self-conception, or more specifically, the sense of values that individuals wish to express in a given political context (see Abelson, 1988; Steele, 1988; Swann & Read, 1981), especially when individuals are faced with a choice that has implications for how they perceive themselves (Swann, 1984). As Tetlock (1986) asserts, "People find it dissonant and threatening to their self-esteem to acknowledge that they are capable of cold-blooded trade-off decisions that require compromising basic values" (p. 819). Due to their accessibility to most if not all members of society, values often serve as evaluative heuristics (Rokeach, 1973; Rokeach & Ball-Rokeach, 1989). Politicians and journalists, then, by emphasizing certain values over others as an explanation for issue positions, may activate certain self-relevant considerations among audience members.

Little research, however, examines the role of the self in political contexts, particularly the impact of core values in shaping the *process* by which voters make decisions. An exception is Domke and Shah (1995), who hypothesize that a voter's psychological linkage with political issues influences how much, as well as what, information is used in making an electoral choice. In focusing on *social-moral* issues, Domke and Shah conclude that "due to the strong linkage of ethics and morals to one's self-concept, an ethical interpretation of an issue is likely to shape an individual's decision-making strategy" (p. 59). Their research suggests that greater attention should be given to the decision-making process when individuals are confronted with more ambigu-

ous political issues, which may be framed by politicians or media to emphasize implications for individuals' values and self-conceptions.

Decision Making

A great deal of behavioral and consumer research examines how individuals decide between two or more alternatives, using their cognitive capacities to process information, reduce conflict, and reach a decision (e.g., Bettman, 1979; Hogarth, 1987, 1990; Huber, 1989; Sheth & Newman, 1985; Slovic, Lichtenstein, & Fischhoff, 1988; Tversky & Kahneman, 1986). Researchers commonly assume that decisions are based upon the willingness to "trade off more of one valued attribute against less of another valued attribute" to determine which alternative has the greatest overall worth (Payne, Bettman, & Johnson, 1992, p. 92). In this compensatory model, positive and negative evaluations on several criteria can balance or offset one another (Beattie & Baron, 1991; Bettman, 1979; Billings & Marcus, 1983). This multiple-criteria model—with its weighting and summing of attributes—shares some theoretical commonality with the spatial theory of voting, the central model of electoral choice for the past four decades (Herstein, 1981; Hinich & Pollard, 1981).³

Both the compensatory model and spatial theory, however, have been criticized, in part because of their assumptions of highly calculative decision makers (Onken, Hastie, & Revelle, 1985; Payne, Bettman, & Johnson, 1990; Rabinowitz, 1978; Rabinowitz & Macdonald, 1989; Stokes, 1963). Hence, noncompensatory strategies, in which positive evaluations on some attributes cannot offset a negative evaluation on another, have also been theorized. In these models, which focus on a decision maker's use of a dominant or overriding criterion, "trade-offs may not be made explicitly in many cases" as individuals place greater emphasis on a few salient attributes rather than an alternative's overall worth (Payne et al., 1992, p. 93; see also Tversky, Sattath, & Slovic, 1988; Wright & Barbour, 1975). Thus research has identified a number of decision-making strategies, most of which fall under the rubrics of compensatory or noncompensatory processing (Jarvenpaa, 1989; MacGregor & Slovic, 1986; Payne, 1982; Wright, 1975).

Hypotheses

This research explores two groups of hypotheses: the first set examines whether media frames influence individuals' issue interpretations and decision-making strategies; the second set addresses the robustness of the relationship between issue interpretations and decision making.

We posit, consistent with Zaller and Feldman (1992), Ball-Rokeach and colleagues (Ball-Rokeach et al., 1990; Ball-Rokeach & Loges, in press), and Shah and Domke (1995), that media frames, by selecting, emphasizing, excluding, and elaborating on certain characteristics of issues, are likely to influence the activation of particular aspects of the self in interpreting those issues. In particular, emphasis upon certain values in media frames seems likely to influence individual interpretations, because values function as a heuristic device for a wide variety of individuals—from the politically unsophisticated to the politically knowledgeable. Media texts, however, do not automatically foster specific interpretations; instead, frames interact with individuals' political predispositions to guide individual issue interpretations.

We contend that voters may have distinct interpretations of issues based on the activation of different aspects of the self. Individuals who assign an *ethical interpretation* to an issue consider the issue salient due to their sense of right and wrong, grounded in concerns for human rights, civil rights, religious morals, or personal ethics. Individuals who assign a *material interpretation* to an issue consider the issue salient due to tangible concerns—grounded in economics, expedience, and practicality—about society at large, relevant reference groups, or personal self-interest.⁵

As theorized by Snyder and DeBono (1987), Higgins and Bargh (1987), and Price and Tewksbury (1995), schema related to moral or ethical values are likely to be closely related to one's self-conception and thus to be both highly accessible and particularly functional. These factors increase the likelihood that an ethical media frame will foster an ethical interpretation of the issue, particularly among individuals interested in expressing or defending their personal sense of ethics or morals. Furthermore, as argued by Wyer et al. (1985), as well as Iyengar and colleagues (Iyengar, 1991; Iyengar et al., 1984; Iyengar & Kinder, 1987), a schema or attitude that has been recently activated in considering one aspect of the political environment may be used to process and evaluate additional information. Thus the ethical framing of one issue may produce a priming effect leading to an ethical interpretation of other issues within the political environment. Accordingly, research hypotheses 1-A and 1-B may now be stated:

- H1-A: Individuals receiving an issue with an ethical textual frame will be more likely to form an ethical interpretation of that issue than individuals receiving the issue with a material textual frame.
- H1-B: Individuals receiving an issue with an ethical textual frame will be more likely to form an ethical interpretation of other issues within the issue environment than individuals receiving the issue with a material textual frame.

Cognitive psychologists also contend that schema activated in interpreting information may influence decision making (Fazio, 1986; Higgins & King, 1981; Tourangeau & Rasinski, 1988). Consistent with this perspective, we posit that individuals' processing of a framed media message activates certain considerations; in turn, these activated considerations have a greater probability to serve as a basis for judgment. As Ball-Rokeach and Loges (in press) argue, media emphasis on certain values is important because "decisionmakers must choose to place one of those values over the others, and they must justify their choice to themselves" (p. 4). Thus, if an issue's frame emphasizes moral or ethical values, schema related to these concerns are likely to motivate the use of such a criterion in judgment. Candidate stands on the ethical issue will then serve as the basis for a noncompensatory decision. Therefore, by activating particular schema, an ethically framed issue may not only encourage an ethical interpretation but may also, in turn, influence the use of ethical comparisons as a primary method of judgment and decision making. Accordingly, the second research hypothesis may now be stated:

H2: Individuals receiving an issue with an ethical textual frame will be more likely to use a noncompensatory decision-making strategy than individuals receiving an issue with a material textual frame.

Work by Snyder and DeBono (1987) and Domke and Shah (1995), however, suggests that individual interpretations of issues, due to their varying ties to an individual's self-concept, may serve as a critical mediating factor between textual frames and decision making.

Individuals with an ethical interpretation of an issue are likely to place that issue in a central position as they assess an issue environment because their sense of ethics or morals is critical to maintaining their self-conception. In evaluating a set of candidates, then, individuals with an ethical interpretation of an issue will first consider each candidate's position on that issue. As a result, these individuals are motivated to focus on an overriding attribute, shaping the manner in which information is processed while they arrive at a candidate decision. Therefore, when evaluating candidates within an issue environment, voters with an ethical interpretation of at least one issue seem likely to use a noncompensatory decision-making process: that is, candidates who do not share their ethical position may be eliminated or, in a more simplified approach, the vote may be determined solely on that issue. As suggested by Swann (1984) and Tetlock (1986), this seems particularly likely when individuals face a choice that has implications for whether they

perceive themselves as moral and principled, or, conversely, as compromising basic values.

On the other hand, individuals with a material interpretation of an issue probably do not link the issue to their sense of self with the same intensity as issues tied to ethics or morals, even though there may be potential personal consequences. When candidates are evaluated on the basis of issues assigned material interpretations, individuals are likely to allow candidates' stands on various issues to balance, offset, or compensate for one another. Such compensatory processing seems less likely if individuals disagree with a candidate on an issue interpreted ethically. Thus, in the absence of an issue interpreted in ethical terms, individuals are likely to consider a number of issues that affect society and their position in it, resulting in more extensive, or compensatory, decision making.

For noncompensatory decision making to be maximized, we argue that two conditions are necessary: (a) the voter must interpret one or more issues in an ethical manner; (b) the ethical basis of the candidates' positions on the ethically interpreted issue must be known. These conditions seem especially important when an issue in a campaign is not typically conceived in ethical terms, as is the case in this study. In such instances, the availability of the ethical basis for candidates' positions enables individuals to determine whether they agree or disagree ethically with each candidate. Individuals can then use this comparison in arriving at a decision, most likely using a noncompensatory strategy.

This perspective does not mean that individuals receiving a material textual frame cannot assign an ethical interpretation to an issue or use a noncompensatory strategy, particularly those individuals motivated to express core values. However, without the ethical rationale for candidates' positions, voters who interpret an issue in ethical terms are not able to compare candidates' ethical positions with their own position on the issue because this information is not available; thus noncompensatory decision making, although possible, seems unlikely to occur with high frequency. Accordingly, the third research hypothesis may be stated:

H3: Individuals with an ethical interpretation of an issue environment will be more likely to use a noncompensatory decision-making strategy than individuals with a material interpretation of an issue environment.

The literature suggests a number of variables that may confound the relationship posited in the third hypothesis. First, decision theorists contend that when individuals consider a number of attributes (i.e., issues) important, they are likely to use a compensatory decision-making strategy (Beattie &

Baron, 1991; Billings & Marcus, 1983), which suggests that all issues have relatively equal potential to influence a decision. Second, researchers have long regarded issue salience as an integral factor in the voting process, particularly for issues with ethical dimensions (Luker, 1984; Wuthnow, 1989). The framing of an issue may not only influence its interpretation but also the importance assigned to it. Third, there also has been a great deal of speculation regarding individuals who make simplified political decisions. Many psychological researchers argue that noncompensatory strategies are used because individuals are "cognitive misers," unwilling to process a great deal of issue information (see Fiske & Taylor, 1991); accordingly, use of a noncompensatory strategy is thought to result from a limited processing of the available information. However, this perspective does not recognize the functionality of certain schema or attitudes; for example, individuals may process a great deal of information but focus only on one or two key issues in making the voting decision in an effort to verify or express their sense of self. Finally, the theoretical relationship may be explained by a variety of demographic and orientational variables, namely age, education, gender, political party identification, and political involvement.

Consistent with earlier arguments, we contend that issues, on the basis of their interpretation, have differential potential for shaping a decision due to their linkage to an individual's self. We posit that even after controlling for these potentially confounding variables, the relationship between individual interpretations of issues and the decision-making strategy will endure. Accordingly, the final hypothesis may be stated:

H4: Individuals with an ethical interpretation of an issue environment will be more likely to use a noncompensatory decision-making strategy than individuals with a material interpretation of an issue environment, even after controlling for the number of issues considered important, importance assigned to the manipulated issue, amount of information used, and several demographic and orientational variables.

Methodology

Because of the complexity of cognitive processes, which are not easily examined by traditional methodologies, researchers have generally given little consideration to message processing strategies and media effects (see Geiger & Newhagen, 1993). This study, part of a broader research program, attempts to identify and examine underlying issue interpretations and decision-making strategies by examining how voters in distinctly different populations evaluate political issues. We test the theoretical relationships proposed here by

exploring how two subpopulations, evangelical Christians and undergraduate students, process the same media messages about particular issues. Concurrent study of these two groups provides a strong test of the hypotheses linking media frames, issue interpretations, and voter decision making.

In the overall study, 172 members of five evangelical Christian churches and 201 undergraduate students in a large midwestern city were presented copies of newspaper articles and a questionnaire. Research presented here focuses on 83 of these Christian subjects and 101 of the undergraduate subjects, who received an experimental manipulation regarding the framing of one issue (discussed below). Of the evangelical Christians, 51% were men; ages ranged relatively evenly between 20 and 76; and 94% had attended at least some college. Of the undergraduate students, 53% were men, and 83% were between the ages of 18 and 25. Most respondents took 35 to 45 minutes to complete the materials.

Research Design

The core of this research strategy is the controlled presentation of issue environments. Each issue environment included newspaper articles that presented contending views of three candidates on four issues. In this study, all subjects received the same articles on three issues—economy, education, and government cuts. Two experimental conditions were created by differently framing a fourth issue, health care. In one condition, health care was framed in ethical terms; in the second condition, health care was framed in material terms. In carrying out the manipulation, candidate positions and policy implications were the same in both conditions, but the rationale underlying candidate positions was varied. Thus this design draws upon the definition of framing as "the presentation of an identical set of consequences of a policy proposal in different ways" (Lau et al., 1991, p. 645; see also Green & Blair, 1995; Kahneman & Tversky, 1984; Tversky & Kahneman, 1981).

As argued by Entman (1993), framing requires selecting and emphasizing in a text some aspects of a perceived reality so as to promote a particular definition or interpretation of that item. Furthermore, Ball-Rokeach et al. (1990) assert that media frames often implicitly and explicitly link particular values to social issues. To textually frame the issue of health care in terms of ethical values, its ethical dimensions were emphasized: the issue was presented in terms of morals and rights, and quotations expressed candidate positions in this manner. To textually frame the issue of health care in terms of material values, its material dimensions were stressed: the issue was presented in terms of economics, expedience, and practicality, and quotations expressed candidate positions in this manner. The other issues—economy,

education, and government cuts—were also framed to emphasize material values.

A former professional journalist wrote articles for the political campaign (see Appendix A). In the articles, a number of possible confounding variables (e.g., political party affiliation, gender, and subject familiarity with candidates) were controlled and several steps were taken to ensure that no candidate or issue received greater prominence.¹¹

Questionnaire

After reading the articles, subjects completed a questionnaire about their voting process (see Appendix B). Note that in discussing the questionnaire, particularly regarding reliability of coding and indexes, all Christian and student subjects will be used to provide a more complete understanding of the performance of the measures across a variety of issue environments.

Two basic decision-making strategies were identified. First is a compensatory strategy, a multiple-criteria approach in which individuals weigh candidates' stands on each relevant issue to calculate which candidate, overall, is the best choice. Second is a noncompensatory strategy, an overriding criterion approach in which individuals initially focus on one or two issues, which are used either to make the voting decision or to narrow the field of candidates; thereafter, additional information may be considered. Two very different approaches were used to measure the decision-making strategy used.

The first measure was a series of open-ended questions asking subjects to describe their decision-making process in choosing a candidate. Guided by previous research on compensatory and noncompensatory strategies, responses were content analyzed. Among evangelical Christians, 5 subjects did not answer these questions or provided responses that could not be coded; of the remaining 167 respondents, two coders agreed on 140 as compensatory or noncompensatory, yielding an intercoder reliability coefficient of .84, which was determined to be 79% greater than chance (Scott, 1955). The remaining 27 responses were discussed and then classified. Among undergraduate students, 8 subjects did not answer these questions or provided responses that could not be coded; of the remaining 193 respondents, two coders agreed on 166 as compensatory or noncompensatory, yielding an intercoder reliability coefficient of .86, which was determined to be 81% greater than chance. The remaining 27 responses were discussed and then classified.

The next part of the questionnaire contained 11 statements corresponding to compensatory and noncompensatory aspects of decision making and

information processing; these items were used to build the second measure of decision-making strategy, as well as an index of the amount of information subjects reported using. Subjects rated their agreement with the statements using a 5-point Likert scale, ranging from *strongly disagree* to *strongly agree*.

Following data collection, factor analysis was performed on these statements separately for the two subject populations. ¹³ Using a Varimax rotation, the factor analysis resulted in a two-factor solution within both subject populations. As expected, the two factors were indicative of (a) the decision-making strategy used and (b) the amount of information subjects reported using.

Among evangelical Christians, one item was eliminated due to low factor loadings. The remaining 10 items yielded readily interpretable results, accounting for 58.3% of the variance in the items. The six items loading on the *decision-making factor* described either strictly eliminative or two-stage decision-making processes. ¹⁴ All loadings fell in the range between .53 and .77. Responses to these items were used to build an additive *decision-making strategy index*, which had mean interitem correlations of .45 and a Cronbach's alpha of .83 among Christian subjects.

Among student subjects, four items were eliminated due to inconsistent factor loadings. The remaining eight items yielded readily interpretable results, accounting for 56.7% of the variance in the items. The four items loading on the decision-making factor, consistent with results among Christian subjects, described either strictly eliminative or two-stage decision-making processes. All loadings fell in the range between .65 and .80. Responses to these items were used to build an additive decision-making strategy index, which had mean interitem correlations of .43 and a Cronbach's alpha of .75 among student subjects. As stated earlier, for both subject populations, this decision-making strategy index served as the second dependent measure. ¹⁵

In both subject populations, the four items loading on the *information use* factor referred to the amount of information subjects reported processing while making the voting decision. ¹⁶ Among evangelical Christians, loadings fell in the range between .47 and .85; responses to these items were used to build an additive *information use index*, which had mean interitem correlations of .48 and a Cronbach's alpha of .79. Among students, loadings fell in the range between .66 and .84; the additive information use index had mean interitem correlations of .39 and a Cronbach's alpha of .72. For both subject populations, this index was used for control purposes in analysis.

The next measures in the questionnaire examined the personal importance of issues in making a candidate choice. Subjects were asked to rate the importance on their voting decision of four issues: health care, economy, education, and government cuts. For each, a 7-point scale was used, ranging from not at all important to extremely important. These scales were used to assess the number of issues considered personally important by subjects, as well as the importance assigned to the manipulated issue. These measures were used for control purposes in analysis.

Individual interpretations of issues were measured next with three openended questions asking subjects to explain which issues were important and the manner in which they were salient. Subjects were asked to engage in a thought-listing procedure that attempted to tap how the issues related to their personal sense of ethics, their more broadly construed concerns about society, and their personal life-situations. Each issue was coded as having received an ethical interpretation or material interpretation, or as not mentioned/stated as ignored. ¹⁷ Issues were coded as receiving an ethical interpretation if the individual explicitly discussed the issue within the framework of human rights, civil rights, religious morals, or personal ethics. Issues were coded as receiving a material interpretation if the individual discussed the tangible economic or practical implications of the issue for society, relevant reference groups, or his or her situation.

Among evangelical Christians, 7 subjects did not answer these questions or failed to provide enough information to code reliably; for the remaining 165 respondents, two coders agreed on 590 of 660 individual-issue codings, producing an intercoder reliability coefficient of .89, which was 85% greater than chance. The remaining 70 individual-issue codings were discussed and then classified. Among undergraduate students, only 1 subject did not answer these questions or failed to provide enough information to code reliably; for the remaining 200 respondents, two coders agreed on 719 of 800 individual-issue codings, producing an intercoder reliability coefficient of .90, which was 85% greater than chance. The remaining 81 individual-issue codings were discussed and then classified.

Individual-issue codings were combined to create a variable for each subjects' overall interpretation of the issue environment. As guided by our theory, individuals who ascribed an ethical interpretation to at least one issue were coded as having an ethical interpretation of the overall issue environment. Individuals who did not assign an ethical interpretation to at least one issue, but who did have at least one material interpretation, were coded as having a material interpretation of the overall issue environment.

The last portion of the questionnaire focused on several demographic and orientational variables that were used for control purposes, including age, gender, education, political involvement, and political party identification.

Results

The study's design allowed for the experimental testing of Hypotheses 1-A, 1-B, and 2, whereas Hypotheses 3 and 4, which posit relationships among variables within individuals, were tested separately within experimental conditions. ¹⁸ All tests of hypotheses were replicated across the two research populations.

Hypotheses 1-A and 1-B

Hypothesis 1-A predicted that individuals receiving an issue with an ethical textual frame would be more likely to form an ethical interpretation of that issue than individuals receiving the same issue with a material textual frame. To test Hypothesis 1-A, the interpretation of health care was coded as ethical or nonethical, ¹⁹ and for both research populations, crosstabs were run between the experimental conditions, using the measure of the interpretation of the health care issue (see Table 1).

As predicted, subjects receiving health care with an ethical frame were significantly more likely to interpret that issue in an ethical manner than subjects receiving health care with a material frame. These results were found in both research populations, confirming the impact of media frames on individual issue interpretations.

Among evangelical Christians, more than half of subjects (54%) receiving the ethical textual frame of health care ascribed an ethical interpretation to the issue, whereas only 14% of subjects receiving the material textual frame of health care interpreted it ethically. Parallel results, although not as statistically strong, were found among undergraduate students: a solid minority of subjects (37%) receiving the ethical textual frame of health care ascribed an ethical interpretation to the issue, whereas only 12% of subjects receiving the material textual frame of health care interpreted it ethically. It is worth noting that although framing the issue of health care in ethical terms did influence issue interpretations of many subjects, nevertheless nearly two thirds of students and nearly half of Christians did not adopt the ethical frame.

Hypothesis 1-B predicted that subjects receiving an issue with an ethical textual frame would be more likely to form an ethical interpretation of other issues within the issue environment than subjects receiving the same issue with a material textual frame. To test Hypothesis 1-B, the interpretations of the controlled issues (economy, government cuts, and education) were each treated as ethical or nonethical.²⁰ An overall scale of the interpretations of

Table 1
Textual Frame of Health Care by Interpretation of That Issue

	Experimental Group			
Interpretation	Ethical Textual Frame	Material Textual Frame		
Population 1: Evangelical Christians				
Ethical	53.8%	13.5%		
Nonethical	46.2%	<i>86.5%</i>		
Total	100%	100%		
	(n = 39)	(n = 39)		
	$\chi^2 = 13.7, df = 1, p < .001$			
Population 2: Undergraduate students				
Ethical	36.5%	12.2%		
Nonethical	63.5%	<i>87.8%</i>		
Total	100%	100%		
	(n = 52)	(n = 49)		
	$\chi^2 = 8.0, a$	f = 1, p < .01		

these issues was then constructed: the overall coding was determined to be ethical if any one of these three issues was interpreted in an ethical manner. Crosstabs were then run between the experimental conditions, using the measure of interpretations of the three unmanipulated issues (see Table 2).

As predicted, subjects receiving the ethical textual frame of health care were more likely than subjects receiving the material textual frame to interpret other issues in an ethical manner. Again, this relationship was found in both research populations, confirming the impact of media frames in priming individual interpretations of other issues.

However, it should be noted that a large majority of individuals interpreted these issues in a manner consistent with their material textual frames. Among evangelical Christians, 36% of subjects receiving the ethical textual frame of health care interpreted any of the other issues in an ethical manner, compared to only 14% of subjects receiving the material textual frame of health care. Among undergraduate students, 17% of subjects receiving the ethical textual frame of health care interpreted any of the other issues in an ethical manner, compared to only 4% of subjects receiving the material textual frame of health care.

The results of Hypotheses 1-A and 1-B, then, demonstrate the impact of media framing and priming on audience members' interpretations of issues while simultaneously supporting the contention that individual considerations mediate a message's ability to influence interpretation. Although evangelical Christians do appear more likely than undergraduate students to interpret issues ethically when ethical dimensions are included in the issue environment (this relationship was observed for both the manipulated issue

Table 2
Textual Frame of Health Care by Interpretation of the Other Issues

	Experimental Group			
Interpretation	Ethical Textual Frame	Material Textual Frame		
Population 1: Evangelical Christians				
Ethical	35.9%	13.5%		
Nonethical	64.1%	86.5%		
Total	100%	100%		
	(n = 39)	(n = 37)		
	$\chi^2 = 5.1$, $df = 1$, $p < .05$			
Population 2: Undergraduate students				
Ethical	17.3%	4.1%		
Nonethical	82.7%	95.9%		
Total	100%	100%		
	(n = 52)	(n = 49)		
	$\chi^2 = 4.5, dy$	f = 1, p < .05		

and those held constant), the relationship between textual frames and issue interpretations was statistically significant within both groups.

Hypothesis 2

Hypothesis 2 predicted that individuals receiving an issue with an ethical textual frame would be more likely to use a noncompensatory decision-making strategy than individuals receiving the issue with a material textual frame. It received some support.

As a first test of Hypothesis 2, crosstabs were run between the experimental conditions, using the open-ended decision-making measure (see Table 3).

As predicted, subjects receiving health care with an ethical frame were more likely to use a noncompensatory strategy than subjects receiving the same issue with a material frame. These results were found in both research populations.

Among evangelical Christians, a solid majority of subjects (58%) receiving the ethical textual frame of health care used a noncompensatory strategy, compared to less than one fourth of subjects (24%) receiving the material textual frame of health care. Among undergraduate students, although fewer than half of subjects in both groups used a noncompensatory strategy, many more did so in the group receiving the ethically framed issue (41%) than in the group receiving the materially framed issue (16%).

For a second test of Hypothesis 2, t tests were run between the experimental conditions, using the decision-making strategy index as the dependent variable (see Table 4).

Table 3
Textual Frame of Health Care by Open-Ended Coding of Decision-Making Strategy

	Experimental Group			
Strategy Used	Ethical Textual Frame	e Material Textual Frame		
Population 1: Evangelical Christians				
Compensatory	42.5%	76.3%		
Noncompensatory	<i>57.5%</i>	23.7%		
Total	100%	100%		
	(n = 40)	(n = 38)		
	$\chi^2 = 9.2, df = 1, p < .01$			
Population 2: Undergraduate students				
Compensatory	59.2%	84.1%		
Noncompensatory	40.8%	<i>15.9%</i>		
Total	100%	100%		
	(n = 49)	(n = 44)		
	$\chi^2 = 7.0, df$	= 1, p < .01		

Table 4
Textual Frame of Health Care by Mean Decision-Making Strategy Index Scores

	Experimental Group			
	Ethical Textual Frame	Material Textual Frame	t	p
Population 1: Evangelical Christians ^a				
Index Mean	18.5 $(n = 42)$	17.2 $(n = 40)$	1.04	n.s.
Population 2: Undergraduate students ^b				
Index Mean	13.1 $(n = 50)$	12.7 $(n = 47)$.49	n.s.

Note. Index: Low is compensatory, high is noncompensatory.

In both research populations, the difference between the two groups was not significant, although the decision-making strategy index mean score was somewhat higher, or more noncompensatory, for subjects receiving an ethical textual frame of health care than for subjects receiving a material textual frame of the same issue. The overall pattern of findings, then, across two differently measured dependent variables lends some support to Hypothesis 2.

Hypothesis 3

Hypothesis 3 predicted that individuals with an ethical interpretation of an issue environment would be more likely to use a noncompensatory strategy

a. Six-item index range: 6 to 30.

b. Four-item index range: 4 to 20.

Table 5
Interpretation of Issue Environment by Open-Ended Coding of Decision-Making Strategy

		Type of Int	erpretation
	Strategy Used	Ethical	Material
Environment 1: Ethical Textual Fra	ame of Health Care		
Population 1: Evangelical Christ	ians		
	Compensatory	16.7%	78.6%
	Noncompensatory	83.3%	21.4%
	Total	100% (n = 24)	100% (n = 14)
		$\chi^2 = 14.2, a$	f = 1, p < .001
Population 2: Undergraduate stu	dents		
	Compensatory	41.7%	76.0%
	Noncompensatory	58.3%	24.0%
	Total	100% (n = 24)	$100\% \ (n=25)$
		$\chi^2 = 6.0, df = 1, p < .05$	
Environment 2: Material Textual F	rame of Health Care		
Population 1: Evangelical Christ	ians		
•	Compensatory	50.0%	86.2%
	Noncompensatory	50.0%	13.8%
	Total	$100\% \ (n=8)$	100% (n = 29)
		$\chi^2 = 4.9, df$	= 1, p < .05
Population 2: Undergraduate stu	dents		
	Compensatory	62.5%	88.9%
	Noncompensatory	37.5%	11.1%
	Total	$100\% \ (n=8)$	$100\% \ (n=36)$
		$\chi^2 = 3.4, df$	r = 1, p < .10

than individuals with a material interpretation of an issue environment. It received strong support in both research populations among subjects receiving the issue environment with an ethical frame of health care, but it was supported among subjects receiving the issue environment with a material frame of health care only in the evangelical Christian population.

As a first test of Hypothesis 3, crosstabs for subjects in each issue environment were run between individual interpretations of the issue environment and the decision-making strategy described in the open-ended measure (see Table 5).

Among subjects in Environment 1, who received the ethically framed version of health care, those subjects who formed an ethical interpretation of the issue milieu were significantly more likely to use a noncompensatory strategy than subjects with a material interpretation of the issue milieu. The empirical relationship is substantially stronger for evangelical Christians than students. Among subjects in Environment 2, who received the materi-

Table 6
Interpretation of Issue Environment by Mean Decision-Making Strategy Index Scores

	Ethical Interpretation	Material Interpretation	t	р
Environment 1: Ethical Textual Frame of Heal	th Care			
Population 1: Evangelical Christians ^a				
Index Mean	20.0	16.7	1.80	< .05
	(n = 24)	(n = 14)		
Population 2: Undergraduate students ^b				
Index Mean	14.0	12.2	1.78	< .05
	(n = 25)	(n = 27)		
Environment 2: Material Textual Frame of He	alth Care			
Population 1: Evangelical Christians ^a				
Index Mean	16.6	16.7	.01	n.s.
	(n = 8)	(n = 29)		
Population 2: Undergraduate students ^b				
Index Mean	12.7	12.6	.08	n.s.
	(n = 8)	(n = 40)		

Note. Index: Low is compensatory, high is noncompensatory.

ally framed version of health care, a similar pattern of results was found, although the relationship was statistically significant only among evangelical Christians. However, because only eight subjects in each research population ascribed an ethical interpretation to this materially framed issue environment, analysis of the subjects in this condition should be treated with caution.

For a second test of Hypothesis 3, with the decision-making strategy index as the dependent variable, t tests were run to compare the means of subjects with an ethical interpretation of the issue milieu and subjects with a material interpretation of the issue milieu (see Table 6).

Among evangelical Christians and undergraduate students who received the ethically framed version of health care (Environment 1), subjects who formed an ethical interpretation of the issue milieu were significantly more likely to use a noncompensatory strategy than subjects with a material interpretation of the issue milieu. However, for each research population, differences were not statistically significant for subjects receiving the materially framed version (Environment 2).

In our discussion of the theoretical basis for Hypothesis 3, we asserted that two conditions are most conducive to the use of a noncompensatory

a. Six-item index range: 6 to 30

b. Four-item index range: 4 to 20.

Table 7
Interpretation of Issue Environment and Textual Frame of Health Care by Use of a Noncompensatory Decision-Making Strategy

Conditions	Population 1: Evangelical Christians	Population 2: Undergraduate Students
Ethical interpretation, ethical textual frame	83.3%	58.3%
	(n = 24)	(n = 24)
Ethical interpretation, material textual frame	50.0%	37.5%
-	(n = 8)	(n = 8)
Material interpretation, ethical textual frame	21.4%	24.0%
-	(n = 14)	(n = 25)
Material interpretation, material textual fram-	e 13.8%	11.1%
-	(n = 29)	(n = 36)

strategy: (a) interpretation of an issue environment in ethical terms by the individual voter; (b) availability to the voter of information about the candidates' ethical stands on some issues. In Table 7, we have rearranged data from Table 5 showing the percentage of subjects who used a noncompensatory strategy when both conditions were met, only one condition was met, or neither condition was met (see Table 7).

These results suggest that an ethical interpretation of an issue is almost necessary but is not sufficient to guide the decision-making strategy toward noncompensatory.

When both conditions were met—subjects formed an ethical interpretation of the issue environment and the textual frame emphasized ethical concerns—fully 83% of evangelical Christians and 58% of students used a noncompensatory decision-making strategy. When only the first condition was met (ethical interpretation, material textual frame), 50% of evangelical Christians and 38% of students used a noncompensatory strategy; however, because these percentages are based on only eight subjects in each population, these results should be regarded with caution. When only the second condition was met (material interpretation, ethical textual frame), 21% of evangelical Christians and 24% of students used a noncompensatory process. Finally, when neither condition was met (material interpretation, material textual frame), only 14% of evangelical Christians and 11% of students used a noncompensatory strategy.

The pattern of data, then, suggests that noncompensatory decision making is much more likely to occur when the voter interprets the issue in ethical terms and the ethically framed positions of the candidates are available for voters to consider. Individuals, upon seeing the candidates' ethical positions, can confidently use their ethical interpretation of the issue as the basis of comparison instead of having to speculate on the ethical foundation of the

candidates' materially framed stances. When the ethical rationale for candidate positions is not available, however, it becomes more difficult for voters who form ethical interpretations to compare candidates on this basis, even if they are motivated to do so. Therefore, the lack of relevant (i.e., ethical) information results in smaller percentages of voters using a noncompensatory strategy. Among voters who do not interpret an issue in ethical terms, there appears to be little tendency to use a noncompensatory process, even when the ethical basis for candidates' positions is available. These results, then, support the view that media frames work in conjunction with interpretations in decision making.

Hypothesis 4

Hypothesis 4 examines whether the relationship between issue interpretation and decision making persists after controlling for other variables that might influence the decision-making process: namely, number of issues considered important, importance assigned to the manipulated issues, amount of information subjects reported using, age, gender, education, political party identification, and political involvement. For both research populations, this hypothesis was tested only among subjects receiving the issue environment with an ethical textual frame of health care for two reasons: (a) it is important to test the robustness of this relationship within a setting in which noncompensatory decision making was maximized; (b) the relatively small number of subjects forming an ethical interpretation within the group receiving a material textual frame of health care limits the amount of variance on the variable of issue interpretation.

Prior to tests of Hypothesis 4, the variable "number of important issues" was constructed using the issue-importance scales, producing a possible range of 0 to 4 important issues for each subject. Then, to test Hypothesis 4, partial correlations were run between individual interpretations of the issue environment and the decision-making strategy measures by simultaneously controlling for the number of issues considered personally important, importance assigned to the manipulated issue, amount of information subjects reported using, age, gender, education, political party identification, and political involvement. The open-ended decision-making strategy measure and decision-making strategy index alternately served as the dependent variables (see Table 8).

Among evangelical Christians and undergraduate students who received the ethically framed version of health care, subjects with an ethical interpretation of the issue milieu were significantly more likely to use a noncompensatory strategy than subjects with a material interpretation of the issue

Table 8
Correlations Between Interpretation of Issue Environment With Ethical
Textual Frame of Health Care and Decision-Making Strategy Measures

	Open-ended ^a		Strategy Index ^a	
	Zero-order	Partial ^b	Zero-order	Partial ^b
Population 1: Evangelical Christians				
Issue interpretation ^c	.61**	.61**	.27*	.42*
Population 2: Undergraduate students				
Issue interpretation ^c	.35**	.35*	.24*	.36**

a. Low is compensatory, high is noncompensatory.

milieu, even when controlling for all of the variables listed above. These results were statistically significant for both measures of the decision-making strategy with both population subgroups, providing strong support for Hypothesis 4.

Discussion

These findings support the perspective that media frames influence the issue interpretations and subsequent decision-making strategies of voters. Experimental tests of hypotheses indicate that textual framing of issue information has a pronounced effect on interpretation of that issue (framing effect) and interpretations of other issues within the same issue environment (priming effect). These results suggest that the textual frame of a news story—by selecting, emphasizing, excluding, and elaborating certain aspects of an issue—influences an individual's processing and interpretation of the issue in question. Consistent with the view offered by Zaller and Feldman (1992), it appears that individuals have multiple considerations about many political issues, possess a variety of cognitions for processing information relevant to those issues, and draw from contextual cues in forming evaluations of the political environment.

If, as argued by Ball-Rokeach and colleagues (Ball-Rokeach et al., 1990; Ball-Rokeach & Loges, in press), elites, journalists, and advocacy groups present political information in terms of values as a heuristic for audience processing, framing an issue to emphasize ethical concerns seems likely to activate highly accessible and functional schema concerning morals or ethics, which may result in the individual interpreting such an issue on the basis of ethical concerns. Once ethical schema have been activated, they also appear

b. Controlling for number of important issues, importance of health care, amount of information subjects reported using, gender, education, age, political party identification, and political involvement.

c. Material = 0, ethical = 1.

^{*}p < .05. **p < .01.

to help foster an ethical interpretation of other issues within the political environment. Conversely, if a media frame emphasizes material concerns, individuals are more likely to interpret the issues on the basis of economic or practical criteria.

Within-groups analysis provides strong support for the contention of Domke and Shah (1995) that issue interpretations have a significant impact on individuals' decision-making strategies. Voters with an ethical interpretation of an issue, due to the strong linkage of ethics and morals to self-conception, appear likely to place that issue at the center of their evaluation of the issue environment, where their own stands on the issue function as a filter through which candidate information will first be processed. A candidate who does not share a voter's position on an issue receiving an ethical interpretation is found to be inconsistent with an individual's self-identity and therefore is removed from consideration via a noncompensatory decision-making process. These findings also indicate that, for individuals who do not ascribe an ethical interpretation to an issue, there is less of a filtering process; instead, materially interpreted issues are likely to compete in a relatively equal manner because none of these issues are linked to an individual's identity as centrally as are issues tied to ethics or morals.

The results suggest, however, that an ethical interpretation, alone, may not be enough to guide the decision-making strategy toward noncompensatory, at least for issues, such as health care in this study, that have considerable ambiguity. Two conditions, then, seem necessary to maximize noncompensatory decision making when individuals evaluate ambiguous campaign issues: individuals must form an ethical interpretation of at least one issue within the environment, and the ethical rationale for candidate positions must be clearly stated. Media frames that present the ethical basis for candidate positions enable voters to ground the judgment task in a knowledge of the candidates' ethical stances; when candidates' ethical positions are not clearly stated, individuals with an ethical interpretation of an issue must speculate as to the ethical foundation of the candidates' positions. Subjects receiving the ethical textual frame of health care were presented an environment with conditions expected to maximize noncompensatory decision making. Among these subjects, the relationship between issue interpretation and decision making remained strong, even after controlling for a variety of variables that might have provided an alternative explanation for the hypothesized relationship.

Therefore, these findings indicate that media frames and issue interpretations, in conjunction, influence voters' decision-making processes. Media framing of issues in ethical terms may lead to more noncompensatory decision making by (a) activating ethical schema or attitudes, which moti-

vates the voter to make judgments in ethical terms, and (b) providing specific information on ethically based candidate positions, which enables the voter actually to apply these ethical considerations in judgment. An individual with an ethical interpretation of an issue, then, becomes quite likely to use an ethical comparison as the means of deciding between candidates. The closely parallel and robust findings for both evangelical Christians and undergraduate students suggest compelling relationships among media framing, individual interpretations of issues, and the process of candidate choice.

Implications for Understanding Voting Processes

These findings suggest that the cognitive processes outlined above may occur among a variety of individuals. Functional perspectives regarding the self suggest that any individual who interprets political issues as linked to ethics or morals may be motivated to defend his or her self-conception by using ethical dimensions as the basis for evaluating issues and making judgments among candidates. These findings are particularly relevant for researchers in mass communication, because values often provide a frame for news coverage. Therefore, understanding the relations among values, media frames, issue interpretations, and decision making may shed light on how individual voters, more generally, process political information in making electoral choices. This study indicates that a voter's evaluation and use of information in decision making may be shaped by both the media framing and his or her interpretation of issues. On this basis, a number of research possibilities deserve exploration.

Future research should explore the relationship between frames, interpretations, and decision making across other subpopulations that seem particularly likely (or unlikely) to express their personal sense of ethical or moral values in political contexts. Understanding how the theorized linkages vary dependent on the values and interests of various societal groups would benefit politicians, researchers, and media professionals. For example, experimental research might examine the influence of altering the media frame of (a) affirmative action among specific minority populations, (b) gun control among firearm owners, or (c) environmental protection among environmental activists. Conversely, the limits of these theoretical relationships might be tested by presenting these same materials to groups not as likely to view such issues as opportunities to express their core values. Determining which issues are likely to be interpreted in ethical terms by certain population subgroups would be valuable for all those interested in the political process, because such an interpretation appears to affect the manner in

which all electoral information is considered by people in these groups as they make voting decisions. Research involving specific subpopulations would enable systematic testing of framing effects across varied issue environments, providing insight into the potential for differential framing of social-moral issues as well as more ambiguous issues.

Examination of these relationships in a survey setting would further test the generalizability of the relationship explored here. If a detailed content analysis and panel study were undertaken for an electoral race during an upcoming election season, many questions might be answered. An understanding of the possible media frames of issues within a natural environment, combined with information about media use, candidate evaluations, and issue interpretations gathered from a randomly selected panel of likely voters, would provide a rich understanding of the ties between media frames, issue interpretations, and voters' decision-making strategies. Clearly, the relationships among these phenomena deserve further attention.

Appendix A: Articles

At issue: Health care

Candidates agree changes are necessary, differ in approaches

By Helen Sims

Staff Writer

The public's dissatisfaction with health care has received much attention in the Seventh Congressional District, where all three candidates for the Democratic seat plan to either reform or replace a state system that has seen health care costs increase 150 percent over the past decade

The debate has focused on whether universal coverage should be "a fundamental right" for all Americans, as two of the candidates have argued.

The candidates' positions on health care reform:

Michael Garrett

Garrett suports a national health-care plan such as the "single-payer" plan, which would force employers to either provide health insurance for workers or pay a fee to enroll them in a government-

health checkups because they don't have insurance. sal coverage. It's immoral to deny someone health "People have a fundamental right to health care," Garrett said. "Too many people never get In this country, especially, we ought to have univerinsurance.

put a price tag on the health of an individual, or the peace of mind that goes with knowing you have coverage? I think we all deserve to have that security." "Sure, it's going to cost money, but how can you

Williamson, calling health care "a right of all Americans," has backed a national health insurance

David Williamson

Hancock vehemently disagrees with his opponents' views that health care is "a fundamental Richard (R.J.) Hancock

In a speech last week, Hancock said that, left alone, "the free-market system can solve the problems" of health care for U.S. residents.

"It is ethically irresponsible to not provide at least

minimal health care."

"We need to make changes," Williamson said.

plan for all individuals.

He calls for heavy government involvement in a "single-payer" proposal, which would compel all employers to either provide health insurance for workers or pay a fee to enroll them in a government-

Hancock says government's role should be only in assisting small companies to pool together to bargain for smaller insurance premiums for em-

ployees.
"In this country, we have always paid for our own health care, and that's why we have the best system in the world, despite its problems," Hancock said. "We earn our health care, we aren't handed it."

"People who don't have insurance often receive

backed plan.

"That's wrong. We all deserve at least minimum inadequate health care, at best," Williamson said.

coverage."

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At issue: Health care

Candidates agree changes are necessary, differ in approaches

By Helen Sims

Staff Writer

The public's dissatisfaction with health care has received much attention in the Seventh Congressional District, where all three candidates for the Democratic seat plan to either reform or replace a state system that has seen health costs increase 150 percent over the past decade.

The debate among candidates has focused on the approximately 37 million Americans who do not have health care, largely as a result of spiraling insurance fees or pre-existing health problems.

The candidates' positions on health care reform:

Michael Garrett

Garrett supports a national health-care plan such as the "single-payer" plan, which would force employers to either provide health insurance for workers or pay a fee to enroll them in a government certified plan.

will drop significantly for both consumers and ing preventive care among residents, insurance costs To fund the plan, Garrett said that by encouraghealth care providers.

Garrett said. "Regular checkups alone will save "Most of us do not practice preventive care," millions of dollars—and if we don't start making some changes now, we'll just have to foot the bill down the road."

sured will continue to affect all of our medical

costs," Williamson said. "We've already fallen be-

hind most countries."

"If we don't make changes, the bill of the unin-

lems" of health care for U.S. residents, but that he In a speech last week, Hancock said that, left favors finding a way to cut costs and increase effialone, "the free-market systen can solve the probciency-without touching other federal programs. Richard (R.J.) Hancock

> "We need to make some fundamental changes in our health care system," Williamson said. "It isn't

ance plan for all individuals

He calls for heavy government involvement in a

employers to either provide health insurance for

workers or pay a fee to enroll them in a government-

backed plar

"single-payer" proposal, which would compel all

Williamson has backed a national health insur-

David Williamson

ble for everyone to be insured without slashing programs," Hancock said. "All of us have to help "Government can help make it financially feasibear the burden."

Hancock says government's role should be to bargain for smaller insurance premiums for only in assisting small companies to pool together employees.

At issue: Economy

Candidates bring differing viewpoints to debate on tax policy

By Angela Elliott Staff Writer On the eve of Tuesday's primary election for the Democratic nomination in the Seventh Congressional District, economic growth proposals remain a hot issue for candidates David Williamson, Richard (R.J.) Hancock and Michael Garrett.

Largely due to a protracted slump in the auto industry, the state's economy has been sluggish since late 1989. The candidates' positions on the economy:

Michael Garrett

Garrett proposes to raise taxes on the wealthy and offer the lower and middle classes a tax cut.

Garrett, an owner of two small businesses in the Detroit area, supports raising taxes on the wealthiest taxpayers—individuals earning above \$150,000 and families earning above \$200,000—while at the same time cutting taxes on individuals earning less than \$40,000 and families earning below \$60,000.

"It's about time the middle class had a tax break," Garrett said. "Housing purchases have always brought this country out of recessions, but no one's buying houses because their taxes are too high."

David Williamson

Williamson advocates a "hands-off approach" to the economy by cutting the tax rate on long-term capital gains while offering tax incentives for research and development, designed to promote investment by individuals and corporations.

Williamson, a part-owner in a retail chain, said, "As tough as things are right now, this country simply can not afford to cut taxes on the middle class. That would be the wrong approach.

"Their (Hancock's and Garett's) tax hikes on the wealthy won't come close to financing the tax cuts they're promising," Williamson said. "And taxing the wealthy would be the worst thing we could do, since they're the only ones with money

Richard (R.J.) Hancock

Hancock calls the state's stagnant economy "a critical concern."

To help stimulate economic growth, Hancock, a businessman in southern Michigan, proposes to cut income taxes for individuals earning less than \$40,000 and families earning below \$60,000. To offset the tax cuts, Hancock wants to raise taxes on the wealthiest taxpayers—individuals earning above \$150,000 and families earning above \$200,000.

"I know what it's like to have to worry about next week's paycheck or last month's bills," Hancock said. "There's no way this economy will get turned around unless we give the middle class a tax break."

At issue: Education

Candidates disagree on federal government aid for children

By Beth Denham

Staff Writer

With more than one-fourth of the nation's population involved—69 million students and employees in a system that will cost \$475 billion this year—it is not surprising that education is an important issue in the three-candidate race for the Democratic nomination in the Seventh Congressional District.

Here are the candidates' positions on education:

cation," thinks parents should be able to select public government chipping in \$1,000 for tuition, for lower Garrett, an advocate for "government-aided eduor private schools-from grade school to high school levels—for their children, with the federal Michael Garrett or middle-income families.

"I think there should be competition in education just like there is in private sector work," said Garrett, a graduate of University of Michigan, a public insti-

income students have," Garrett said. "This program would force schools to do their job-educating "With the help of government, everyone should have the same opportunity in education as highyoung people-and do it well."

tition will still force all schools to improve their standards. But I do not think government should

nave to pay for it."

Richard (R.J.) Hancock

education," wants to provide parents with the ability to choose among public grade schools or high schools for their children, but he does not think Hancock, a "believer in equal opportunity for government should provide money for parents.

choose among public grade schools or high schools

for their children, but says government can not af-

"I agree that parents should be able to select whatever school, public or private, that their children

ford to provide financial assistance for parents.

Williamson thinks parents should be able to

David Williamson

"By creating the opportunity for students to go to any school, this program would force schools to meet the needs of their students while also educating them," said Hancock, who graduated from Indiana University, a public institution. "Competition in public schools will improve the education system.

> should attend," said Williamson, a graduate of Michigan State University, a public institution. "But

the government just does not have the money to give

parents to educate their children.

"My basic belief is that by giving parents the ability to choose among all public schools, compe-

"The quality of education in public schools is ment should have to provide money for parents to still quite high. There is no reason that the governenroll their children in private schools." 'Re-inventing government" a heated issue in 7th District race

By Jana Trager Staff Writer With their party's No. 2 person—vice president Al Gore—in the process of reviewing the costs and effects of more than 900 federal government programs, the three Democratic candidates in the Seventh Congressional District have engaged in lengthy public discussions over the validity of making substantial government cuts in spending.

The proposed federal budget for 1995 of \$1.5 trillion has recommended elimination of 115 federal programs, but two of the Seventh District candidates advocate further cuts. The candidates' stands on governmental reform:

Michael Garrett

The "time to re-invent government is now" Garrett said in a speech to autoworkers last week.

ernment cuts are "only a small step in the right Williamson has repeatedly said that recent gov-

David Williamson

essary government programs is astronomical," Williamson said. "I think it's possible to make government more friendly and to save money at the same Williamson proposes to enhance the jobs of most government workers at the expense of middle man-

"The amount of public dollars wasted on unnec-

lations that "bog down" government work. Garrett's Garrett advocates significant cuts in the number of middle-managers in the federal government, with accompanying reductions in the bureaucratic reguproposal is very similar to Williamson's.

"For the past two decades I have observed what works and what doesn't work in American industries," Garrett said, "and middle-management usu-

government does not work efficiently. Well, now it's "We have been told countless times that the

Richard (R.J.) Hancock

Hancock concedes that "government is not perfect," but says that a massive reformation is not

ple of government waste, but I believe that such "Everyone knows of at least one extreme examexamples are the exception rather than the rule, Hancock said.

government waste" actually pays for research and He has argued that the majority of "so-called development that examines potential new social

is just one example," Hancock said. "If we want a "The summer-jobs program for teenage youths government that has the courage to be innovative, entrepreneurial and willing to take risks, then we can't nake politicians afraid of trying out new programs."

> "My approach is one that American businesses have been using for 10 years," Williamson said. "It

agers and the myriad regulations they enforce. Fewer regulations may mean more mistakes, however, which could, ironically, produce more waste.

Appendix B: Questionnaire

Please complete this questionnaire after you finish reading the articles. Do not go back to a previous page to add to ananswer once you have turned the page—continue forward through the questions.

1)	Of the candidates presented, which one would you be most likely to vote for? [please
	mark small box]

- (1) Garrett
- (2) Hancock
- (3) Williamson
- 2) The next few questions will ask you to describe how you arrived at this candidate choice. Specifically, please be detailed when explaining the **information you used**, the **issues you considered**, and the **comparisons you made**.

Please describe, as completely as possible, how you arrived at your candidate choice.

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Please explain why you did not choose the other two candidates. What candidate or issue information was particularly important to you? What information did you ignore?

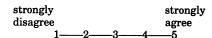
What specific comparisons did you make among the candidates?

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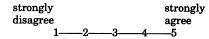
- 3) Based on your actions in this study, rate your level of agreement, from one (1) to five (5), with the following statements.
 - -One (1) means "I strongly disagree with the statement."
 - -Two (2) means "I mildly disagree with the statement."
 - -Three (3) means "I agree with some aspects of the statement, but disagree with others."
 - -Four (4) means "I mildly agree with the statement."
 - -Five (5) means "I strongly agree with the statement."

Circle a number (1-5); please do not mark between numbers.

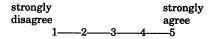
• How the candidates stood overall on the issues was more important to me than how they stood on a particular issue.



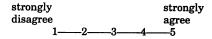
• I compared candidates only on the issues that were important to me.



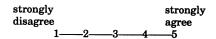
 I eliminated a candidate almost immediately because we disagreed on an issue that was important to me.



I used all the information provided to make my choice, looking at each candidate's stand on each issue.

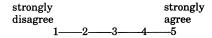


 I eliminated a candidate who did not meet certain set standards on an issue that was important to me.

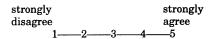


Appendix B Continued

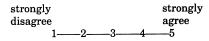
 I looked for a candidate who agreed with me on the issue I thought was most important. The candidate who was closest to my position on that issue is the one I voted for.



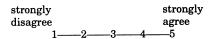
Using all the information, I weighed each candidate's stand on each issue before
making my final choice. The candidate who seemed the best overall is the one I
voted for.



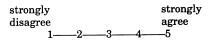
 On my most important issue, a candidate had to meet a certain minimum standard. Candidates that met my criteria on this issue were evaluated on all the remaining issues.



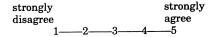
 Not all the issues factored into my candidate choice; the decision was based on one or two key issues.



I quickly eliminated a candidate due to his stand on an important issue; I then
compared the two remaining candidates on each of the other issues.



 All the issues played a role in my decision amongst the candidates; while some issues were given less consideration than others, all the issues affected my candidate choice.



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4) In determining your candidate choice, rate how **important**, from one (1) to seven (7), each of the following issues was to you. One (1) means not at all important, four (4) means moderately important, and seven (7) means extremely important.

Circle a number; do not mark between numbers.

	ot at all nportant						tremely portant	
Economy	1	-2	_3	4	-5	-6	<u></u> 7	
Education	1	-2	-3	-4	_5	-6	7	
Government Cuts	1	-2	_3	-4	_5	-6	 7	
Health Care	1	-2	_3	4	-5	-6	7	
Please consider again the importance of each of these issues. If you had to choose, which issue do you consider to be most important?								
Which issue do you c	onsider	to be se	cond mo	ost impo	rtant?			

Appendix B Continued

5) The next part of the questionnaire will examine the type of importance you placed on the issues.

Issues may be considered important in different ways:

- some may be linked to your ethical or moral values;
- some may be important to you due to their implications for society at large;
- some may be important due to their impact on your current situation in life;
- some may be important in numerous ways.

If you require additional space, please continue on the back side of the page.

A) Which of the issues discussed, if any, are important to you due to their connection to your ethical or moral values? For each issue you list, please explain how it is relevant to your ethical or moral values.

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B) Which of the issues discussed, if any, are important to you due to their impact on society? For each issue you list, please explain how you think it would impact society.

C) Which of the issues discussed, if any, are important to you due to their connection to your current situation in life? For each issue you list, please explain how it is relevant to your situation.

$Appendix\ B\ Continued$

6) Answer the followings questions about yourself:
A) Indicate your gender: (1) □ Male (2) □ Female
B) Indicate your age: years old
C) What is the highest level of schooling you have attained? (ex. high school sophomore = 10; high school graduate = 12; technical school degree = 14; college junior = 15; college degree = 16; masters degree = 18; etc.) level of schooling
 D) Choose the term that best describes the community in which you reside: (1) □ urban (2) □ suburban (3) □ rural
E) How important is your religion to you? (1) □ not at all important (2) □ minimally important (3) □ moderately important (4) □ substantially important (5) □ extremely important
F) Identify your political party affiliation: (1) □ none - unaffiliated (2) □ Democratic or DFL (3) □ Republican or IR (4) □ independent (5) □ other
G) How politically involved are you? (1) □ not at all involved (2) □ minimally involved (3) □ moderately involved (4) □ substantially involved (5) □ extremely involved

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	any school-aged children (4 - 17 years old) live in your household? children
	ny days within the last week did you watch the local evening or news for one-half hour or more? days
	ny days within the past week did you watch the national evening CNN/Headline News for one-half hour or more? days
	any days within the last week did you read an article concerning or public affairs in a daily newspaper? days
	ny magazine articles concerning politics or public affairs did you thin the last week? articles
	any days within the last week did you listen to Minnesota Public or one-half hour or more? days
	your household income:
	s than \$20,000 ween \$20,001 and \$30,000
	ween \$20,001 and \$50,000 ween \$30,001 and \$45,000
	ween \$45,001 and \$60,000
	ween \$60,001 and \$80,000
	ween \$80,001 and \$100,000
(7) 🗖 mo	re than \$100,000

Notes

- 1. This research was supported by a Kriss Fund grant from the School of Journalism and Mass Communication at the University of Minnesota. The authors thank Sandra Ball-Rokeach, Mark Snyder, John Sullivan, William Wells, and two anonymous reviewers for thoughtful comments and suggestions on earlier drafts of this article.
- 2. Schema theory posits that based on experience, people organize their perceptions of the environment into cognitive knowledge structures, actively constructing reality (Fiske & Kinder, 1981; Graber, 1988; Miller, Wattenberg, & Malanchuk, 1986). Once activated, schemata facilitate and continually structure the processing of information to provide individuals with meaning and understanding (Fiske & Taylor, 1991; Markus & Zajonc, 1985).
- 3. According to the spatial theory of voting, candidates are perceived as points in a multidimensional space. Along each issue dimension, voters must compute the distance between their position and each candidate's position. These issue "distances" are weighed and summed to produce an overall measure of distance between voter and candidate, and the candidate found to be closest to the voter is chosen.
- 4. Two primary types of noncompensatory decision-making strategies have been theorized: conjunctive and lexicographic. In the conjunctive strategy, individuals have certain minimum standards on issues considered important. To remain in consideration, candidates must meet these minimum standards; if they fail to do so, they are eliminated. The decision is based on which candidate remains, or is the best among

remaining choices. In the lexicographic strategy, individuals compare candidates on one issue considered most important. The candidate that is closest to the subject's belief on that issue is chosen. If candidates tie, they are compared on the next-most-important issue. Some theorists suggest that the decision-making process may not be purely compensatory or noncompensatory, but somewhere between these strategies (Bettman, 1979; Wright & Barbour, 1975).

- 5. Several scholars have distinguished between (a) different conceptions of issues or (b) different types of values. Although we draw upon this previous work, our distinction between ethical and material interpretations substantially differs from these earlier conceptualizations. Specifically, Sears and Funk (1991) distinguish between self-interest (material-oriented) and symbolic (affect-oriented) interpretations of issues, but they generally do not examine concerns for society at large (see also Sears & Funk, 1990; Sears, Lau, Tyler, & Allen, 1980). Inglehart (1971; see also Abramson & Inglehart, 1995) distinguishes between materialist (economic- or fiscal-oriented) and postmaterialist (freedom-, quality-of-life-, and self-expression-oriented) values, but these are conceived as traits tied to individuals rather than contextualized individual interpretations of issues. Finally, Rokeach (1973) distinguishes between instrumental (meansoriented) and terminal (ends-oriented) values, but ethical and material issue interpretations may be grounded in either of these types of values; for example, the instrumental value of courage (standing up for your beliefs) may be the basis for an ethical interpretation, whereas the instrumental value of capability (competent, effective) may be the basis for a material interpretation.
- 6. In the case of social-moral issues, such as abortion or pornography, an ethical interpretation alone may be enough to guide the decision-making strategy toward noncompensatory. When confronting an issue environment containing a social-moral issue, a significant portion of the citizenry is likely to interpret the issue in ethical terms (Domke & Shah, 1995). Because social-moral issues are largely discussed in an ethical manner, a well-developed ethical dialogue is in place concerning such issues. Explicitly knowing the ethical basis for the candidates' positions may not be necessary in order for an individual to use an ethical interpretation to guide decision making toward noncompensatory. Even when the candidates' issue positions are not framed in ethical terms, the stance alone would provide enough information for voters to safely speculate as to the candidates' ethical reasoning.
- 7. The examination of how particular groups react to specific political communications has been suggested by some scholars (for example, RePass, 1971). In this research program, we are testing varying issue environments with different subgroups, looking for consistency of results related to the basic hypotheses. Subpopulations in this research program include military reservists, ROTC members, evangelical Christians, college students, and members of labor unions.
- 8. Pastors or ministers at each church self-identified the churches as evangelical—that is, with a biblical foundation in faith and practice.
- 9. The combination of three candidates and four issues was chosen in an effort to balance concerns about information overload with the ability to distinguish decision-making strategies. Presentation of more information likely would have led to overload, and fewer candidates or issues would have made it more difficult to differentiate compensatory or noncompensatory strategies. To avoid presenting subjects with too much information, for each issue, two of the three candidates held the same position, with candidates taking turns in disagreement. Having candidates share issue positions increased the difficulty of decision making, because candidates often tied; in such cases, subjects would have to use at least one more issue to reach a decision (which worked against the hypotheses).
- 10. Among evangelical Christians, 43 subjects were in the ethical framing condition, and 40 subjects were in the material framing condition. Among undergraduate

students, 52 subjects were in the ethical framing condition and 49 subjects were in the material framing condition. In the overall study, additional groups of Christian and undergraduate subjects received packets of articles that contained an explicit social-moral issue—abortion or euthanasia—along with the issues of economy, education, and government cuts.

- 11. The candidates' positions were composites or variations of actual political stances, taken from several campaigns. The fictitious candidates were male and were competing for the Democratic nomination in a congressional district primary in a nearby state, a political sphere likely to be unknown among the subjects. All of the articles were given female bylines. To avoid confusion among subjects, candidates maintained the same relative physical positions in the packet of issue articles each subject received. However, to avoid possible order effects such as primacy and recency, two specific steps were taken. First, three articles containing the same information were created for each issue; candidates took turns being in the first, or right-most, position. This allowed candidates to maintain the same position across articles for each subject, while ensuring that no candidate received unequal prominence among the aggregate of subjects. Second, the order of issue articles was rotated; this ensured that candidate and issue preferences would not be based on the ordering of alternatives or attributes.
- 12. Responses were coded as compensatory if the subject seemed to weigh each relevant issue position without quickly eliminating a candidate due to his stand on an issue deemed salient; in other words, candidates were evaluated based on their overall worth. Initially, three different types of noncompensatory strategies were coded. In the lexicographic strategy, individuals compare candidates on one issue considered most important. The candidate who is closest to the subject's belief on that issue is chosen. If candidates tie, they are compared on the next-most-important issue. In the conjunctive strategy, individuals have certain minimum standards on issues considered important. To remain in consideration, candidates must meet these minimum standards; if they fail to do so, they are eliminated. The decision is based on which candidate remains after the necessary steps of elimination. This study also allowed for a "mixed" or "two-stage" strategy; in such a strategy individuals eliminate a candidate due to his position on the issue considered most important, after which the remaining candidates are evaluated in a compensatory fashion, or individuals initially try to consider all the issues but then abruptly shift to an eliminative strategy when confronted with a particular issue. Implicit to each noncompensatory strategy is the elimination of a candidate if he does not satisfy certain standards on which voters will not compromise. Due to small cell counts, for analysis these three types of noncompensatory strategies were collapsed into one overall noncompensatory category.
- 13. When the ratio of subjects to items is less than 10 to 1, the results of a factor analysis are prone to instability (see Carmines & Zeller, 1979). For this reason, all 172 evangelical Christian and 201 undergraduate student subjects from the broader research program were used for this procedure. This was considered appropriate because all subjects were presented with similar decision-making and information-processing tasks (only a single issue varied across the research groups). The inclusion of all subjects increased the subject-to-item ratio from 7.5:1 to 15.6:1 among evangelical Christians and from 9.2:1 to 18.3:1 among undergraduate students. These factor analyses, then, allowed for a better understanding of decision making and information processing across a variety of issue environments.
- 14. For example, decision-making strategy items included: "I eliminated a candidate who did not meet certain set standards on an issue that was important to me"; "I quickly eliminated a candidate due to his stand on an important issue; I then compared the two remaining candidates on each of the other issues"; and "I eliminated a candidate almost immediately because we disagreed on an issue that was important

- to me." These decision-making strategy items attempted to address the possibility of mixed models or use of different models at different stages in the decision-making process.
- 15. The two decision-making measures were significantly correlated in both subject populations. Among evangelical Christian subjects, the correlation between the open-ended decision-making strategy measure and the decision-making strategy index was .43. Among undergraduate students, the correlation between the open-ended decision-making strategy measure and the decision-making strategy index was .37. Although significant, these correlations were lower than expected; however, the general consistency of results using both measures increased confidence that the dependent variables tapped a similar construct; conversely, that the correlations were not stronger indicated that the dependent measures, in part, tapped different aspects of the construct.
- 16. For example, information processing items included: "I used all the information provided to make my choice, looking at each candidate's stand on each issue"; and "Using all the information, I weighed each candidate's stand on each issue before making my final choice. The candidate who seemed the best overall is the one I voted for."
- 17. Originally, a coding category allowed for individuals to have combinations of ethical and material interpretations of an issue. Only a limited number of responses fell into this category, however. Therefore, as guided by the theory of this study and in an effort to maintain reasonable cell sizes for hypothesis testing, these multiple codings were collapsed into the ethical category.
- 18. Within-groups analysis, used to examine the relationship between issue interpretations and decision making, is necessary to get inside what Geiger and Newhagen (1993) call the cognitive "black box" of information processing. Such analysis allows researchers to get "within the cognitive system of the individual" (Lavine, Sullivan, Borgida, & Thomsen, 1996, p. 298).
- 19. For individual interpretations of this issue, subjects with a material interpretation and subjects who ignored/did not mention health care were combined into the category of nonethical interpretation. This was done so that the relation between the frame of the issues and individual interpretations would be examined for all subjects in the sample population. Subjects' interpretations of the issue environment (the key independent variable in Hypotheses 3 and 4) are ethical and material, not ethical and nonethical, because no subject ignored/did not mention all issues.
- 20. This variable was collapsed in this manner so that the relation between the frame of the issues and individual interpretations would be examined for all subjects in the sample population. Collapsing the variable also maintained consistency with the test of Hypothesis 1-A.
- 21. The variable "number of important issues" was constructed in a three-step process. First, for each research population, frequencies were run for the personal importance of each issue. Next, as suggested by these frequencies, subjects reporting an issue as at least a 6 in importance were assigned a coding of 1; subjects reporting the issue as less than a 6 in personal importance were assigned a coding of 0. The split was made between 5 and 6 in personal importance for three reasons. First, an importance of 6 is only one scale point removed from 7, the scale point labeled extremely important; thus individuals reporting an issue as a 6 or 7 probably considered the issue as at least very important. Second, so as to maintain consistency across issues, only one cut point was used, and the split between 5 and 6 closely approximated the mean importance score of each issue more consistently than other possible splits. Third, for both evangelical Christians and undergraduate students the cut point between 5 and 6 yielded a normal distribution of the new variable, number of issues considered important. These new codings were then added together for each subject, producing a possible range of 0 to 4 important issues.
 - 22. The interest of this analysis was in examining the robustness of the relation-

ship between issue interpretation and decision making, not the relative contribution of the controlled variables to the decision-making strategy. Therefore, partial correlations were executed rather than regression analysis.

23. Prior to testing Hypothesis 4, for each research population, correlations were run between the potentially confounding variables and both measures of the decisionmaking strategy (high = noncompensatory). Among evangelical Christians, the importance assigned to the health care issue was significantly positively correlated with both the index (r = .28, p < .05) and the open-ended measure (r = .38, p < .01); political party identification (1 = Democrat, 2 = independent/unaffiliated, 3 = Republican) was significantly positively correlated with the index (r = .56, p < .01) and modestly positively correlated with the open-ended measure (r = .26, p < .10); education was modestly positively correlated with the open-ended measure (r = .27, p < .10); and the amount of information subjects reported using was significantly negatively correlated with both the index (r = -.59, p < .01) and the open-ended measure (r = -.50, p < .01). Among undergraduate students, the number of important issues was significantly positively correlated with the index (r = .37, p < .01); the importance assigned to the health care issue was significantly positively correlated with both the index (r = .36,p < .01) and the open-ended measure (r = .29, p < .05); gender (1 = male, 2 = female) was modestly positively correlated with the index (r = .22, p < .10); and the amount of information subjects reported using was significantly negatively correlated with both the index (r = -.30, p < .05) and the open-ended measure (r = -.34, p < .05). These results indicate that these variables are predictive of decision making at a zero-order level.

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