Attitudes toward Groups and Behavioral Intentions toward Individual Group Members: The Impact of Nondiagnostic Information

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The current research examined the impact that nondiagnostic individuating information has on the consistency between subjects' attitudes toward a group and their behavioral intentions toward individual group members. Consistent with predictions, nondiagnostic individuating information reduced the consistency between subjects' intentions to vote for a political candidate and their attitudes toward the candidate's political party to a greater degree if the information was relatively high in typical diagnosticity (i.e., useful across many social judgment and behavioral tasks) than if it was relatively low in typical diagnosticity (i.e., useful across few social judgment and behavioral tasks). In addition, the information that was relatively high in typical diagnosticity reduced the perceived representativeness of the party member more than did the information that was low in typical diagnosticity. Moreover, the effect that individuating information had on the representativeness of the party member was correlated significantly with the impact that the information had on the consistency between subjects' attitudes toward the party and their voting intentions regarding the party member. The implications of these findings are discussed. © 1992 Academic Press, Inc.

INTRODUCTION

Attitudes toward a particular group do not always predict attitudes and behaviors toward individual members of that group. Someone who is favorably disposed toward Democrats may fail to vote for a particular Democrat in a given election; someone who has a generally negative

opinion of lawyers may become good friends with a particular attorney; someone who usually respects and enjoys his or her students may dodge appointments with particular students. In explaining inconsistencies of this sort, Lord and his colleagues (Fein & Lord, 1987; Lord, Lepper, & Mackie, 1984) have suggested that when people are asked about their attitudes toward a group they base their attitudes on the prototype they hold of the group. In reacting to an individual member of the group, however, they take into account information that is available about the person and then respond to the match between the individual and their prototype of the typical group member. A strong match results in high consistency between their attitudes toward the group and their reactions to the individual group member, whereas a poor match results in low consistency.

In line with this logic, Lord and colleagues have repeatedly found that subjects exhibit greater consistency between their attitudes toward the target's group and their behavioral intentions toward the individual members of the group when the group members match the subjects' images of the typical group member than when the group members are inconsistent with their images of the typical group member. Similarly, Ellsworth and her colleagues (e.g., Ellsworth, 1978; Ellsworth & Ross, 1983) found that when proponents of capital punishment were confronted with a mass murderer who was inconsistent with their image of the typical murderer, they were quite hesitant to recommend the death penalty.

But why do variations in the typicality of a group member affect the degree to which people's responses toward the group member reflect their attitudes toward the group? A goal of the present paper is to make a distinction, both theoretically and empirically, between two explanations of these findings that frequently have been confused in the literature. One explanation focuses on the diagnostic implications of the information that is available about the individual group members, while the other focuses on the effects of the individuating information on the perceived representativeness of the individual group members.

Diagnosticity and Representativeness

One possibility is that people simply respond to whatever information is available about the group and the individual group member that is diagnostic for their attitudes and behavioral intentions. According to this account, when people are asked about their attitudes toward a particular group, they may construct an image of the group and respond to the features contained in the image that are diagnostic for their attitudes. When they are confronted with an individual member of the group, however, they may respond to whatever diagnostic information is available about the individual. For example, when people are asked about their attitudes toward a particular group, they may base their attitudes on the

image of the group that they construct. If the features of the image include intelligent, attractive, and witty, their attitudes toward the group will presumably be quite favorable. If, on the other hand, the features of the image include dull, unattractive, and boring, their attitudes will presumably be unfavorable. When confronted with an individual member of the group, however, people may respond primarily on the basis of the diagnostic information that is available about the individual rather than on his or her group membership. If the individual is described as intelligent, attractive, and witty, for example, they will respond favorably. On the other hand, if the individual is described as dull, unattractive, and boring, they will respond unfavorably. And, if the individual is described as intelligent, unattractive, and moderately witty, they will respond somewhere in between. According to this account, then, inconsistency emerges whenever information that is diagnostic for attitudes and behavioral intent varies between the group and the individual.

A second possibility, however, is that people may also respond to the representativeness (Kahneman & Tversky, 1973) of the individual group member, independent of the diagnostic value that any information might have for attitudes or behavioral intentions. According to this account, when people perceive a group member to be very representative of his or her group, their attitudes toward the group will strongly influence their behavioral intentions toward the group member. When, on the other hand, they perceive the individual to be unrepresentative of the group, their attitudes toward the group will exert less influence on their behavioral intentions because the individual is not perceived as providing a good fit with the category. Thus, according to this account, inconsistency should emerge whenever information is available that reduces the representativeness of the individual group member.

In most situations, the diagnosticity account and the representativeness account go hand in hand because information that is diagnostic with regard to attitudes and behavioral intentions is also information that is likely to affect the representativeness of the individual group member. For example, consider the Lord et al. (1984) studies. In their studies, Lord et al. measured subjects' attitudes toward particular groups and their representations of the typical member of these groups before presenting them with information about a particular group member. The information that some of the subjects received was designed to *match* their images of the typical member of the group on several dimensions, whereas the information that other subjects received was designed to match their images of the typical group member on some dimensions but also to *contradict* their images on several other dimensions. What is critical about this manipulation with regard to the representativeness and diagnosticity accounts is that reductions in typicality were accomplished by contradicting features of the prototype that were also likely to be highly diagnostic for attitude

and behavioral intent. More generally, in most situations the represent-
ativeness argument and the diagnosticity argument make similar predic-
tions regarding consistency between attitudes toward a group and behav-
ioral intentions toward individual group members because information
that is diagnostic with regard to behavioral intent is also information that
is likely to affect the representativeness of the group member. Neverthe-
less, the two accounts implicate distinct, though not mutually exclusive,
processes. According to the representativeness account, people use the
perceived representativeness of the individual member of the group as a
guide to whether information about the group applies to the individual
group member. Thus, anything that reduces the representativeness of an
individual should reduce the consistency between people's attitudes toward
the individual's group and their behavioral intentions toward the individual
because it suggests that attitudes toward the group may not be good
predictors for this individual. In contrast, the diagnosticity account simply
maintains that people base both their attitudes and their behavioral in-
tentions on whatever diagnostic information is available at the time that
their attitudes or their behavioral intentions are assessed.

   Although the diagnosticity and the representativeness accounts often
have indistinguishable implications, under certain conditions they make
importantly different predictions regarding the consistency between atti-
tudes toward groups and responses to specific group members. Imagine,
for example, that an individual is attempting to decide whether or not to
make an appointment with a particular doctor. When this person thinks
of the typical doctor, he envisions someone who is very intelligent and
caring, is well educated, wears eye glasses, has white hair, and is of average
height. Moreover, in responding to this image, the person forms a gen-
erally positive attitude toward doctors and believes that most of them will
help him when he is sick. Imagine further that he happens to observe the
doctor in question, and he notices that the doctor obtained his medical
degree from a second-rate medical school located in the Caribbean. In
this case, both the diagnosticity argument and the representativeness ar-
gument would predict little consistency between the individual's attitude
toward physicians and his intention to see this particular physician. After
all, the information about the doctor's medical training is diagnostic with
regard to behavioral intent and it also renders the physician less repre-
sentative of physicians in general.

   But now imagine that instead of learning about the doctor's medical
training, the individual simply notices that the doctor is unusually tall and
completely bald. In other words, he notices that the doctor's height and
hair do not fit his image of the typical doctor. Because this information
has little to do with diagnosing the doctor's competence, the diagnosticity
account would predict that it would have little effect on the consistency
between the individual's attitude toward doctors and his decision about

visiting this doctor. In contrast, the representativeness account would predict that this information should lead to greater inconsistency between the patient's generally positive attitude toward doctors and his decision to visit this doctor because it reduces the representativeness of the doctor.

The problem, of course, is finding a way to manipulate independently the representativeness of the individual and the diagnosticity of the individuating information. Recent research on the dilution effect (Hilton & Fein, 1989) suggests one such manipulation.

The Dilution Effect and Typical Diagnosticity

Research on the dilution effect has consistently demonstrated that the presence of individuating information about a group member that is non-diagnostic for the judgment task at hand can significantly dilute the impact that perceivers' stereotypes have on their judgments of the group member (Hilton & Fein, 1989; Nisbett, Zukier, & Lemley, 1981; Zukier, 1982; Zukier & Jennings, 1984; but see also Heilman, 1984). Nisbett et al. (1981), for example, found that in the absence of individuating information, subjects expected an engineering student to withstand higher intensities of electrical shock than a music major. When, however, the subjects learned individuating information that was nondiagnostic for the judgment of shock tolerance (e.g., that the target was Catholic), the difference in predicted shock tolerance was attenuated significantly.

Recently, Hilton and Fein (1989) extended these results and argued that not all information that is nondiagnostic for a particular judgment should have a diluting effect. They maintained that individuating information varies on two dimensions: the dimension of judgment-specific diagnosticity and the dimension of typical diagnosticity. Judgment-specific diagnosticity refers to the extent to which the information is perceived to be diagnostic for the judgment task at hand. Typical diagnosticity, on the other hand, refers to the extent to which the information is perceived to be generally useful across social judgment tasks. For example, if one is trying to decide how health-conscious some target is, information about the target's relationship with his or her parents will be rather low in judgment-specific diagnosticity, but, because it is perceived to be useful for many other social judgment tasks, the information will be high in typical diagnosticity. Information about what the target just ate for lunch, on the other hand, will be high in judgment-specific diagnosticity, but it will be rather low in typical diagnosticity. After all, finding out information about one's lunch menu will be perceived to be useful in relatively few judgment tasks. Information that the target bought a notebook before going to his or her first class will be low in both judgment-specific diagnosticity and in typical diagnosticity. Hilton and Fein (1989) referred to individuating information that is perceived to be low in judgment-specific diagnosticity and relatively high in typical diagnosticity as *pseudo-*

relevant information, and referred to individuating information that is perceived to be low in judgment-specific diagnosticity and low in typical diagnosticity as *clearly irrelevant* information. (For a more complete discussion of the differences between pseudorelevant and clearly irrelevant information and of factors that contribute to perceived typical diagnosticity, see Hilton and Fein, 1989.)

In three separate studies, Hilton and Fein (1989) found that although clearly irrelevant information had very little power to dilute the impact that perceivers' stereotypes about the group had on their judgments of individual group members, pseudorelevant information consistently diluted the impact of the perceivers' stereotypes about the group. In explaining this result, Hilton and Fein proposed that pseudorelevant information has its stronger diluting power because it reduces the perceived representativeness of the target for his or her group more than does clearly irrelevant information. Specifically, we argued that because pseudorelevant information is relatively high in typical diagnosticity, it suggests meaningful features about the target that are not represented in perceivers' cognitive representations of the typical group member, and thus the match between the target and the target's group should be reduced. To the extent that the fit between the target and the target's group is poor, perceivers rely more on the information that they have about the individual and less on the information they have about the group when making inferences about the group member.

Manipulating Typical Diagnosticity to Test the Representativeness Account

Although Nisbett et al. (1981), Zukier (1982), and Hilton and Fein (1989) all have offered representativeness as an account for their results, they did not examine directly the effects that nondiagnostic information has on representativeness. Nevertheless, if pseudorelevant information reduces the representativeness of the group member more than does clearly irrelevant information, the presence of pseudorelevant information should cause subjects to rely significantly less on their attitudes toward the group in deciding how to behave toward the group member than should the presence of clearly irrelevant information.

The present study was designed to investigate these issues. In contrast to the studies of Lord and his colleagues (e.g., Lord et al., 1984), the individuating information used in the present study (1) was perceived to be nondiagnostic for the behavioral intent in question and (2) did not match nor contradict the features typically associated with the individual's group. By satisfying these criteria we hoped to offer the most stringent test of the representativeness argument and also to demonstrate the impact that nondiagnostic individuating information about a group member has

on the consistency between subjects' attitudes toward the group and their behavioral intentions toward the group member.

To these ends, subjects who were either Democrats or Republicans learned either pseudorelevant or clearly irrelevant information about either a Democratic or a Republican candidate. We chose to focus on subjects' voting intentions for particular political candidates for two reasons. First, voting intentions can be predicted quite well from people's attitudes, and voting behavior can be predicted quite well from voting intentions (Ajzen & Fishbein, 1977; Fishbein, Middlestadt, & Chung, 1986). Second, because we asked some subjects about candidates who were members of the political party they favored and other subjects about candidates who were members of the political party they were against, it was possible to examine the impact that nondiagnostic information has when the initial attitude toward the group is positive and when it is negative.

We predicted that the presence of pseudorelevant information would reduce the representativeness of the candidate more than would the presence of clearly irrelevant information, and that subjects who received the former information would be likely to rely less on their attitudes toward the candidate's political party and more on the individuating information when deciding whether or not to vote for him. This greater reliance on the nondiagnostic individuating information should result in two processes. Some subjects may simply determine that, because the individuated candidate seems unrepresentative of his party and because the individuating information is low in judgment-specific diagnosticity, neither their attitude toward the candidate's party nor the individuating information seems relevant for their decision about voting for the candidate in question. To the extent that this is true, the voting intentions of these subjects should move toward the neutral point (i.e., 50–50 preference).

Other subjects, however, may invest the individuating information with diagnostic meaning. To the extent that the information is truly low in diagnosticity for the behavioral intention in question, however, any diagnostic meaning that the subjects may infer should vary idiosyncratically and not systematically. For some it should make the candidate seem more positive and for others it should make him seem more negative. In other words, the individuating information should add noise to their behavioral intentions. At the individual level, this noise should manifest itself as inconsistency between subjects' behavioral intentions toward the candidate and their initial attitudes toward the candidate's party in both positive and negative ways (i.e., some subjects should become more favorable, and others less favorable, toward the individuated candidate). At a group level, however, given that the subjects were selected because they held polarized attitudes toward the political parties, the addition of this noise should lead to a process that is analogous to the process involved in

regression to the mean. To the extent that this is true, two effects should emerge. First, subjects' voting intentions toward the candidate described by pseudorelevant information should, on average, tend to move toward the general population mean (i.e., the mean collapsing across political parties) and away from their initially extreme attitudes. Second, the correlations between subjects' attitudes toward the party and voting intentions for the specific candidate should be reduced when the candidate is described by pseudorelevant information.

In either case, by causing subjects to rely more on the individuating information, the presence of pseudorelevant information about a candidate should dilute the impact of the subjects' attitudes toward the candidate's group more than should the presence of clearly irrelevant information. Thus, subjects who have favorable attitudes toward the candidate's party should tend to be *less* willing to vote for him in the presence of pseudorelevant information than in the presence of clearly irrelevant information, whereas subjects who have unfavorable attitudes toward the candidate's party should tend to be *more* willing to vote for him in the presence of pseudorelevant rather than clearly irrelevant information.

In addition to allowing us to test these predictions, the present design also allows us to collapse across political parties in order to examine the impact that the individuating information had when it described a member of the subjects' ingroup (i.e., a member of their own party) and when it described a member of the subjects' outgroup (i.e., a member of the other major party). Previous research suggests that perceivers tend to have more complex and sophisticated cognitive representations of ingroups than of outgroups (e.g., Linville, Fischer, & Salovey, 1989; Linville & Jones, 1980; Mullen & Hu, 1989; Quattrone, 1986). To the extent that this is true, and to the extent that individuating information affects the representativeness of the individual group member, individuating information should reduce the representativeness of an outgroup member more than it should an ingroup member. Subjects confronted with information about a candidate from their outgroup, therefore, should exhibit greater inconsistency between their attitudes toward the candidate's group and their voting intentions regarding this candidate than should subjects confronted with information about an ingroup candidate.

METHOD

Subjects

Subjects were 126 undergraduates enrolled in an introductory psychology course at the University of Michigan who participated in order to fulfill a research requirement. Because we wanted subjects who clearly favored either the Democratic or the Republican party, we analyzed the data only from subjects who indicated that they considered themselves to be either a Democrat or a Republican, and who indicated that they would be more than 50%

likely to vote for a candidate of their party for a City Council election if they had to vote and if they knew nothing about the candidates other than that one was the Democratic candidate and the other was the Republican candidate. On the basis of these criteria, the data from 50 Democratic subjects and 50 Republican subjects were included in the analyses reported below.

Design Overview

Subjects who indicated that they were favorably disposed toward either the Democratic or the Republican parties read individuating information about a particular candidate who was ostensibly running for political office in some city. For half the subjects, the candidate was described as a Democrat, whereas for the other half the candidate was described as a Republican. Orthogonal to this manipulation, for half the subjects the individuating information was presented in one of two vignettes containing information that was clearly irrelevant, whereas for the other half the information was presented in one of two vignettes containing information that was pseudorelevant. Thus, the present experiment used a 2 (Democrat vs Republican subject) × 2 (Democrat vs Republican candidate) × 2 (clearly irrelevant vs pseudorelevant information) × 2 (vignette 1 vs vignette 2) between-subjects factorial design.

Pretests

Because the difference between pseudorelevant and clearly irrelevant information is a subtle one—representing different points on the continuum of perceived typical diagnosticity—it was necessary to conduct a series of controls that would ensure that the individuating information varied in typical diagnosticity but not in judgment-specific diagnosticity. The pseudorelevant and clearly irrelevant vignettes used in the present study, therefore, were selected on the basis of a series of pretests that were modeled after, but extended beyond, those used by Hilton and Fein (1989) and Nisbett et al. (1981). The pretest subjects were 84 undergraduate students enrolled at the University of Michigan who were paid three dollars for their participation. The first pretest was designed to ensure that the information contained in the pseudorelevant vignettes and clearly irrelevant vignettes were both nondiagnostic for the task at hand, which, in the present study, was a decision concerning the probability of voting for a particular candidate. In this pretest, 24 subjects read vignettes about a series of individuals. The subjects were asked to imagine that each of the individuals described was running for some local political office, and that in each case the candidates were running against one other candidate, about whom the subjects would have no information. For each candidate, the subjects were asked to indicate if the information contained in each vignette increased or decreased the probability that they would vote for the candidate, or if the information was not helpful at all in making any decisions about voting. Based on the criteria used by Nisbett et al. (1981) and Hilton and Fein (1989), we selected for use in this study clearly irrelevant and pseudorelevant vignettes only if at least 85% of the pretest subjects judged them to be not helpful in making a voting decision, no more than 10% of the pretest subjects indicated that the vignettes would make them either more or less likely to vote for the candidate, and there were no significant differences in the number of subjects indicating that the information was not helpful (for the vignettes that were eventually used in the experiment, all p's $> .3$).

Most investigators who have incorporated nondiagnostic information in their experimental manipulations have controlled for diagnosticity by asking pretest subjects to categorize the information according to its diagnostic value (e.g., Krueger & Rothbart, 1988; Locksley, Hepburn, & Ortiz, 1982; Nisbett et al., 1981). Because it is critical, however, that pseudorelevant and clearly irrelevant information are both low in perceived judgment-specific diagnosticity, we submitted the vignettes to a second, more conservative, test of judgment-specific diagnosticity. In this pretest 18 subjects were given the same information that subjects

in the first pretest received, but these subjects were asked to indicate how likely they would be to vote for the candidates described by the pseudorelevant and clearly irrelevant vignettes, using the same 101-point scale that subjects in the actual experiment would later use. As such, this pretest was used to determine if the information contained in the vignettes would, in the absence of information about the person's group membership, affect the responses given by subjects who were faced with a task that resembled quite closely the task that the subjects in the actual experiment would face. Clearly irrelevant and pseudorelevant vignettes were selected for use in the experiment only if the vignettes led to estimates that were at, or very near, the midpoint, and if these estimates did not differ significantly from each other. The two clearly irrelevant vignettes that were used in this study yielded means of 52.93 and 50.36, and the two pseudorelevant vignettes yielded means of 51.79 and 51.07 (all p's > .3).

The third pretest was designed to ensure that the pseudorelevant and clearly irrelevant vignettes were both perceived to be nondiagnostic for a judgment concerning whether or not a particular candidate was likely to be a Republican or Democrat. Eighteen subjects read vignettes about a number of candidates, and they were asked to indicate whether they thought the vignettes suggested that the individuals described were more likely to be Republicans, Democrats, or if the vignettes were not at all helpful in deciding the candidates' parties. Pseudorelevant and clearly irrelevant vignettes were selected for use in this experiment only if at least 85% of the pretest subjects indicated that they felt that the vignettes were not helpful for this judgment, no more than 10% felt that the vignettes suggested that the people described were either more or less likely to be a member of one of the parties, and there were no significant differences in the number of subjects indicating that the information was not helpful (all p's > .5).

The final pretest was designed to allow us to categorize the vignettes as either pseudorelevant or clearly irrelevant on the basis of the degree to which the information contained in the vignettes was perceived to be typically diagnostic. Twenty-four subjects participated in this pretest. These subjects were asked to read the vignettes and use a nine-point scale to indicate how useful the information contained in each vignette was for most social judgments. Any vignette that we had intended to be pseudorelevant but that was not rated as significantly more useful than the clearly irrelevant vignettes, and any vignette that we had intended to be clearly irrelevant but that was not rated as significantly less useful than the pseudorelevant vignettes, were not used in this experiment. The two clearly irrelevant vignettes that were used in this study yielded means of 2.96 and 2.85, and the two pseudorelevant vignettes yielded means of 4.00 and 3.86 (all p's < .03).

Procedure

Subjects were run in small groups. They were told that the current study was concerned with issues about politics and political campaigns and that they would be asked to play the role of voters in some city. The subjects were each given a booklet that contained all the instructions and experimental materials. The subjects' first task was to read two identical lists of 50 traits and to select from one of the lists those traits that they felt characterized the typical Democratic politician and to select from the other list those traits that they felt characterized the typical Republican politician. The order in which the politicians were characterized was counterbalanced across subjects. The traits that were included on the lists were chosen because they varied in terms of how evaluatively positive or negative they were (Anderson, 1968) and because they varied in terms of how consistent they seemed to be with stereotypes of American liberals and conservatives.

After completing these checklists, subjects indicated whether they considered themselves to be a "Democrat," "Republican," "Independent," or "Other." They then read information which asked them to imagine that they were about to vote in an election for their City Council, and that they knew absolutely nothing about either of the two candidates except

that one of them was the Democratic candidate and that the other was the Republican candidate. The subjects were then asked what the probability was, assuming that they had to vote for someone, that they would vote for the Democratic candidate, and what the probability was that they would vote for the Republican candidate.

The subjects next read the cover story and instructions for the rest of the experiment. The cover story indicated that the primary concern of the study was to investigate how people's attitudes about political candidates change or stay the same over the course of a political campaign. The cover story also indicated that while some of the information that people learn about candidates is important and meaningful, other information is irrelevant and extraneous. Moreover, it indicated that the goal of the study was to track the process of learning bits and pieces of information and to see how voting intentions may or may not change as a function of this increased knowledge. To this end, the cover story asked the subjects to imagine that they were voters in several cities and that they would learn information about several candidates in several cities who were running for seats on the City Council. The subjects read further that none of the candidates they would be reading about were actually competing against each other. They also read that in each of these races there were only two candidates—a Democrat and a Republican.

The subjects then read about how the information that they would be receiving about the candidates was ostensibly collected. Specifically, they read that observers were given the job of following the candidates and writing down *everything* they saw or learned about the candidates in a diary. The diary was to include minor details as well as major events. The subjects read further that the information they would be reading had been selected from the diaries the observers kept, and that the particular passages they would be reading had been picked at random. The purpose in emphasizing both the instructions to the observers to write down even trivial information about the candidates and the randomness of the selection process was to encourage subjects to feel free to consider, or ignore, any single piece of information they received about a particular candidate.

After reading the cover story, subjects were given information about the first candidate, referred to as "Bill H." Half the subjects read that Bill H. was a Democrat, and half read that he was a Republican. Orthogonally, half the subjects read one of the vignettes containing clearly irrelevant information, and half read one of the vignettes containing pseudorelevant information. Of the subjects who read clearly irrelevant information, half read a vignette that described the details of the candidate's schedule for a particular day, which included making a speech at a fund raiser. The other half read a vignette that described the candidate as having come from a family that included a brother named Jeff, a sister named Linda, and a dog named Boomer. Of the subjects who read pseudorelevant information, half read a vignette that described the candidate's response to a reporter's question concerning whether the candidate kept in touch with his old friends as one in which he indicated that he was still close with only a few of his old friends, and that whenever he thought about his high school friends he remembered one of his best friends, who was killed in an automobile accident. The other half read a vignette that described a 50th wedding anniversary party that the candidate, his two sisters, and his brother, threw for their parents, and the six-day Caribbean cruise that the four children gave to their parents as an anniversary present.

Dependent Measures

After reading the individuating information about the candidate, subjects were asked how likely they would be to vote for him, rather than the Republican (Democratic) candidate who was running against him. Subjects wrote in a percentage that ranged from 0 to 100%. The subjects next received a list of 50 traits that was identical to the two lists that they had completed earlier. This time, however, they were instructed to select all those traits that they felt characterized the candidate. After completing this task, subjects were asked the degree to which they thought the candidate was like the typical, or average, Democrat

(Republican). Their responses were measured on a nine-point scale ranging from "not at all like the typical Democrat (Republican)" to "very much like the typical Democrat (Republican)."

RESULTS AND DISCUSSION

Initial Attitudes toward the Two Political Parties

In response to the question asking them how likely they would be to vote for either the Democratic candidate or the Republican candidate, if that were the only information they had at the time, Democratic subjects, on average, indicated that there would be a 79.58% probability that they would vote for the Democratic candidate, and Republican subjects, on average, indicated that there would be an 83.89% chance that they would vote for the Republican candidate.

Intentions to Vote for the Candidate

An analysis of the effects of the particular pseudorelevant and clearly irrelevant vignettes that subjects received did not reveal any significant differences. Accordingly, the data were collapsed separately across the two vignettes containing clearly irrelevant information and the two vignettes containing pseudorelevant information.

The primary hypothesis of the study was that pseudorelevant information would lead to greater inconsistency than would clearly irrelevant information. To test this hypothesis, subjects' responses to the question concerning their likelihood of voting for the candidate were subjected to a 2 (Democrat vs Republican subject) $\times$ 2 (Democrat vs Republican candidate) $\times$ 2 (clearly irrelevant vs pseudorelevant individuating information) analysis of variance (ANOVA). As expected, a significant interaction between the subjects' party and the candidate's party emerged, indicating that Democrats were more likely to vote for the candidate if he was a Democrat, whereas Republicans were more likely to vote for the candidate if he was a Republican, $F(1, 92) = 109.10, p < .001$. More importantly, a three-way interaction emerged, indicating that this effect was attenuated by the presence of pseudorelevant information, $F(1, 92) = 5.06, p < .03$. As can be seen in Fig. 1, this interaction suggests that in the presence of pseudorelevant information, relative to clearly irrelevant information, Democratic subjects tended to become more favorable toward a Republican candidate and less favorable toward a Democratic candidate, while the opposite was true of Republican subjects.

No other main or interactive effects emerged, although there was a marginally significant main effect for the candidate's party, $F(1, 92) = 3.00, p < .09$, indicating that subjects tended to be more likely to vote for the candidate if he was the Republican candidate ($M = 56.70$) than if he was the Democratic candidate ($M = 50.58$).

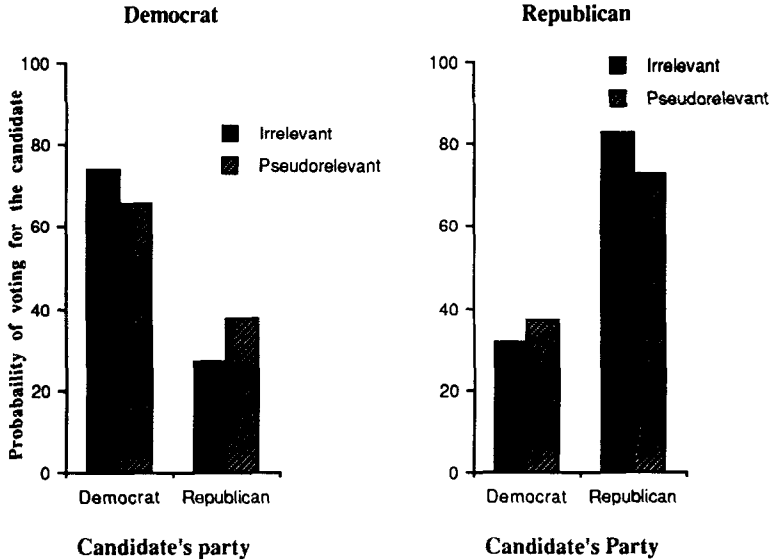A second way to examine consistency is to look at the correlation

FIG. 1. Probability of voting for the candidate as a function of the subject's political party identification, the candidate's political party identification, and whether the candidate was described by clearly irrelevant or pseudorelevant information.

between subjects' attitudes toward voting for members of the candidate's party and their intentions to vote for a candidate described by pseudorelevant versus clearly irrelevant information. Consistent with predictions, the correlation between the subjects' attitudes toward the candidate's party and their intentions to vote for the candidate was significantly higher for subjects who received clearly irrelevant information about the candidate ($r = .90$) than it was for subjects who received pseudorelevant information ($r = .80$), $z = 1.87$, $p < .03$, one-tailed.

Although the results from the previous analyses support the hypothesis that pseudorelevant information will lead to greater inconsistency than will clearly irrelevant information, we have yet to examine the effects that individuating information has as a function of the ingroup versus outgroup status of the candidate. Recall that we predicted that, due to the relatively impoverished representations of outgroups, the presence of any individuating information would have greater impact on consistency when the individuating information described an outgroup member than when it described an ingroup member. In order to examine this issue, the candidate's party affiliation was recoded as identical to the subjects' party affiliation (i.e., ingroup) or opposite to the subjects' party affiliation (i.e., outgroup). Moreover, in order to obtain a more precise measure of the degree to which subjects' voting intentions toward the candidate were inconsistent with their attitudes toward the candidate's party, we calcu-
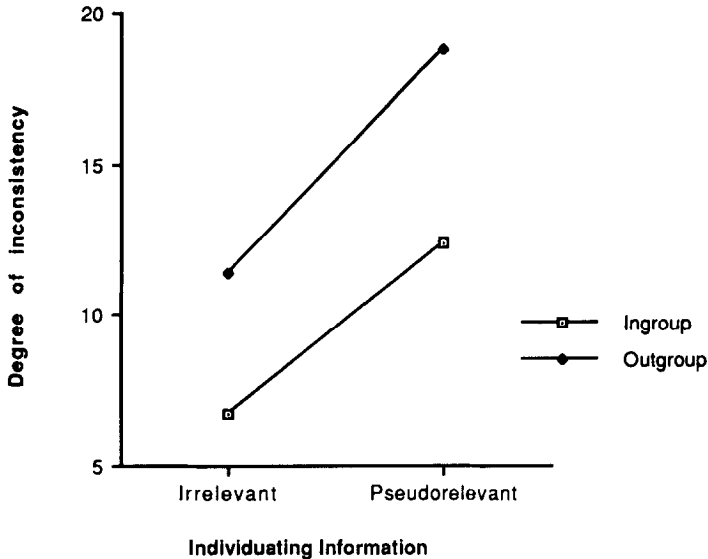
FIG. 2. Magnitude of inconsistency as a function of whether clearly irrelevant or pseudorelevant information described the candidate and whether the candidate was a member of the subject's ingroup or outgroup. (Higher numbers indicate greater inconsistency between intention to vote for individuated candidate and attitude about voting for candidate's party.)

lated a difference score for each subject by taking the difference between each subject's stated likelihood of voting for the individuated candidate and his or her stated likelihood of voting for a member of the candidate's party in the abstract (i.e., before learning any individuating information). Then, because subjects could manifest inconsistency either by becoming more extreme in the direction of their original attitudes or by becoming more extreme in the direction opposite of their original attitudes we took the absolute value of the difference score. Thus, higher numbers on the difference score indicate greater inconsistency. The difference scores were then subjected to a 2 (ingroup vs outgroup candidate) × 2 (clearly irrelevant vs pseudorelevant) ANOVA.

Consistent with the prediction that pseudorelevant information leads to greater inconsistency than does clearly irrelevant information, a significant effect for the nature of the individuating information emerged, $F(1, 96) = 5.92$, $p < .02$. As can be seen in Fig. 2, subjects' voting intentions concerning the candidate differed from their attitudes toward the candidate's party to a significantly greater degree if they learned pseudorelevant information about the candidate ($M = 15.18$) than if they learned clearly irrelevant information ($M = 9.33$). A significant effect for the group manipulation also emerged, $F(1, 96) = 4.37, p < .04$. Consistent with the prediction that individuating information leads to greater incon-

sistency when the individuating information describes an outgroup member than when it describes an ingroup member, greater inconsistency emerged when the individuating information described a member of the other political party (M = 15.00) than when it described a member of the subjects' own parties (M = 10.20). The interaction between the type of information and the group status of the candidate was not significant, $F(1, 96) < 1$.

Typical Diagnosticity and Representativeness

The results reported thus far demonstrate that individuating information has a greater effect when it applies to members of the outgroup than when it applies to members of the ingroup, and that pseudorelevant information leads to greater inconsistency between subjects' attitudes toward a political party and their voting intentions regarding a party member than does clearly irrelevant information. The results do not, however, address the issue of how these effects are mediated. Recall that both effects are thought to emerge because individuating information, particularly individuating information high in typical diagnosticity (i.e., pseudorelevant information), affects the representativeness of the individual to whom it applies. The next two analyses were designed to examine this issue.

Two measures of the degree to which the candidate seemed representative of his group were included in the study. The more direct measure consisted of the subjects' responses to the question of how similar the candidate seemed to be to the typical member of his party. Their responses to this question were subjected to the 2 (ingroup vs outgroup) × 2 (clearly irrelevant vs pseudorelevant information) ANOVA. Consistent with predictions, a main effect for the type of individuating information emerged, indicating that when the candidate was described by pseudorelevant information he was seen as less similar to the typical party member (M = 5.55) than when he was described by clearly irrelevant information (M = 6.09), $F(1, 96)$ = 7.23, $p < .01$. In addition, the predicted main effect for group status emerged, indicating that, when the individuated candidate was described as a member of the subjects' outgroup, he was seen as less similar to the typical party member (M = 5.22) than when he was described as a member of the subjects' ingroup (M = 6.33), $F(1, 96)$ = 21.99, $p < .001$. The interaction between group status and typical diagnosticity did not approach significance, $F(1, 96) < 1$.

A second measure of the representativeness of the candidate consists of the comparison between the traits subjects endorsed as characteristic of the candidate and the traits they endorsed as characteristic of the typical member of the candidate's party. A change score was calculated for each subject by adding a point for every trait that he or she endorsed on one list but not the other. These scores were then subjected to the 2 × 2

ANOVA. Consistent with predictions, a main effect for the type of information again emerged, $F(1, 96) = 5.81, p < .02$. Subjects made more changes between their lists when they learned pseudorelevant information about the candidate $(M = 12.49)$ than when they learned clearly irrelevant information $(M = 9.82)$. The main effect for group status, however, did not emerge, $F(1, 96) = 2.51, p > .11$, although the means were in the predicted direction $(M_{outgroup} = 12.08$ vs $M_{ingroup} = 10.53)$. Once again, there was no interaction between group status and information type, $F < 1$.

Relationship between Representativeness and Inconsistency

Although the previous analyses indicate that the presence of pseudorelevant information reduces the perceived representativeness of the individuated group member, they do not address the issue concerning the relationship between representativeness and the inconsistency between subjects' attitudes toward the political party and their voting intentions regarding the specific party member. To address this issue, the correlation between the subjects' ratings of how similar the candidate seemed to the typical member of the candidate's party and the degree of observed inconsistency, as measured by the difference score, was calculated. Consistent with predictions, the correlation between the two measures was negative, $r(98) = -.32, p < .001$, indicating that greater similarity was associated with less inconsistency.

Conceptually similar results emerged when the trait change scores were correlated with the degree of observed inconsistency. Here, the correlation was positive, $r(98) = .27, p < .01$, indicating that greater discrepancy between the subjects' trait checklists for the candidate and for the typical member of the candidate's party was associated with greater inconsistency between subjects' attitudes toward the political party and their intentions to vote for the party member.

General Impressions of the Candidate and the Typical Members of the Parties

Although we included the trait checklist primarily to provide us with a second measure of representativeness, we were also able to use this checklist to begin exploring the effects of individuating information on the impressions subjects formed of the candidate. To investigate this issue we weighted each trait on the checklist by the favorability scores reported in Anderson (1968). For each subject we recorded the average favorability of each trait that they endorsed for the typical member of their own party, for the typical member of the other party, and for the specific candidate. Not surprisingly, subjects' impressions of the typical member of their own party were much more favorable $(M = 403.05)$ than were their impressions

of the typical member of the other party $(M = 342.80)$, $F(1, 93) = 18.67$, $p < .001$.

To assess the effect of the individuating information on subjects' impressions of the specific candidate, we calculated a difference score by subtracting the average favorability of the set of traits endorsed by each subject in regard to the typical member of the candidate's party from the average favorability of the set of traits he or she endorsed in regard to the candidate. Positive numbers for this score indicate that the set of traits endorsed by the subject to describe the individuated candidate was more favorable than was the set of traits the subjects endorsed to describe the typical member of the candidate's party. These difference scores were subjected to the 2 × 2 ANOVA. The ANOVA revealed a marginally significant main effect for the group status, $F(1, 93) = 3.22$, $p < .08$, indicating that individuating information tended to have more of a positive effect on the outgroup candidate $(M = 85.97)$ than it did on the ingroup candidate $(M = 61.51)$. The ANOVA also revealed a significant main effect for the type of information, indicating that pseudorelevant information tended to have more of a positive effect on the impressions of the candidate $(M = 88.08)$ than did clearly irrelevant information $(M = 56.02)$, $F(1, 93) = 18.67$, $p < .001$. The interaction between these two independent variables was not significant, $F < 1$.

These results are quite consistent with research on the person positivity bias. Sears (1983), for example, argues that people tend to be more willing to take a harsh stand toward abstract institutions than toward an individual. Consistent with this account, the favorability scores of the endorsed traits in the present study tended to be much higher, independent of the particular type of individuating information present, for the individuated candidate than for the abstract "typical" member of either party. Second, both the main effect for group status and the main effect for the type of individuating information suggest that the more the information individuated the candidate, the more favorable were the sets of traits that subjects selected to describe him. That is, the presence of individuating information should have more of an individuating effect on outgroup members than on ingroup members, and the presence of pseudorelevant information should have more of an individuating effect on group members than should clearly irrelevant information.

GENERAL DISCUSSION

The results from the current research suggest that representativeness is an important factor in determining the degree to which people's behavioral intentions toward a group member will be consistent with their attitudes toward the group. The presence of pseudorelevant information about a political candidate reduced the correspondence between the subjects' attitudes toward the candidate's political party and their voting

intentions regarding the candidate more than did the presence of clearly
irrelevant information. Moreover, pseudorelevant information reduced
the perceived representativeness of the candidate significantly more than
did clearly irrelevant information, and representativeness was, in turn,
correlated with the degree to which subjects' voting intentions toward the
candidates diverged from their attitudes toward the candidates' parties.
As such, the results suggest that as the representativeness of the individual
group member increases, so too does the consistency between attitudes
toward a group and behavioral intentions toward specific group members.

At a broader level, the results of the current research support the
emphasis that Lord and his colleagues (Fein & Lord, 1987; Lord et al.,
1984) and Ellsworth (1978) have placed on the typicality of the attitude
object. Recall that they have found that when individuating information
contradicts the image that perceivers have of the typical group member,
the consistency between their attitudes toward the group and their be-
havioral intentions toward individual group members is reduced. The
present results also support recent work by Glick, Zion, and Nelson
(1988). Glick et al. found that manipulations of the representativeness of
individual group members affected subjects' trait inferences and behav-
ioral intentions concerning the individuals. The present research extends
the work of these investigators to include situations in which the indivi-
duating information neither confirms nor contradicts the perceivers' im-
ages of the typical group member but instead suggests features about the
individual that are not contained in their images of the group. In other
words, the present research demonstrates that even subtle changes in
representativeness can affect the consistency subjects exhibit between their
responses to a specific group member and their attitudes toward the group.

Moreover, by manipulating representativeness while holding constant
the diagnosticity of the information for behavioral intent, the present
research is the first to distinguish between arguments that focus on the
role of representativeness in determining the degree of consistency be-
tween attitudes toward groups and behavioral intentions toward individual
group members, and arguments that focus on the role of perceived di-
agnosticity in determining the degree of consistency. The presence of
pseudorelevant information reduced the representativeness of a group
member more than did the presence of clearly irrelevant information.
Consistent with the representativeness account, but not with the diag-
nosticity account, the presence of the former information led to greater
inconsistency between subjects' behavioral intentions toward the group
member and their attitudes toward the group, despite the fact that the
pseudorelevant and clearly irrelevant information were both nondiagnostic
for the behavioral intention in question. These results demonstrate that
the representativeness of a group member can affect consistency inde-
pendently of diagnosticity.

In addition to demonstrating that pseudorelevant information leads to less consistency than does clearly irrelevant information, the results from this study also suggest that *any* individuating information will have greater impact when the individual described by the information is a member of a person's outgroup than when she or he is a member of a person's ingroup. Recall that individuating information reduced both the perceived representativeness of the candidate and the consistency between subjects' attitudes toward the candidate's group and their behavioral intentions toward the candidate more when the candidate was a member of the subject's outgroup than when he was a member of the subject's ingroup. Taken together, these findings are consistent with research that has shown that individuals tend to have more complex representations of ingroups than they do of outgroups, and that these differences mediate their reactions to group members. It is worth noting, however, that another process may also be at work. Specifically, because subjects favor their ingroup relative to their outgroup, their behavioral intentions regarding outgroup members may be more affected by individuating information because people prefer to deviate from initially negative attitudes than from initially positive attitudes (cf. Newcomb, 1961). Because our manipulation of ingroup/outgroup status confounds group status with initial favorability, it is not possible to determine how much each of these processes contributed to the ingroup/outgroup differences we observed. At a deeper level, however, to the extent that differences between the ingroup and the outgroup always involve differences between both representational complexity and initial favorability, both processes are likely to be at work whenever perceivers learn individuating information about ingroup and outgroup members.

The Paradoxical Effects of Nondiagnostic Information

In addition to its implications for issues concerning attitudes and behavioral intentions, the current research is also relevant to work on the dilution effect (e.g., Hilton & Fein, 1989; Nisbett et al., 1981; Zukier, 1982). The results of this study provide strong support for the hypotheses offered by these researchers concerning the role of representativeness in mediating the dilution effect. Specifically, the current research demonstrates that the presence of nondiagnostic individuating information about a group member can reduce the representativeness of the group member, particularly if the information is relatively high on the dimension of typical diagnosticity.

It is important to address the fact that the results of the present study, like the results of the studies that have demonstrated the dilution effect, may seem paradoxical. The paradox is that information that is perceived by most pretest subjects as irrelevant is in fact used by most subjects (cf. Zukier, 1982). How can this be explained? Consistent with the arguments

put forth in previous research on the dilution effect cited above, we argue
that nondiagnostic information can have a significant impact because peo-
ple often rely on similarity judgments (i.e., representativeness) to make
their inferences and decisions. By suggesting features about a specific
group member that are not contained in people's representations of the
typical group member, nondiagnostic information—particularly pseudorel-
evant information—reduces the perceived representativeness of the spe-
cific group member for his or her group. The more this information reduces
this representativeness, the less will people rely on their attitudes toward
the group to determine their behavioral intention toward the group mem-
ber. Thus, although the individuating information is considered by most
to be irrelevant, it will have an effect on people's judgments or behaviors
to the extent that it affects representativeness. When the information has
no implications for the issue of representativeness, such as when the group
memberships of the individual are not known, the information will not
have any significant effects.

Typical Diagnosticity and Person Perception

In addition to its implications for the issues outlined above, the results
of the present study are also relevant to recent developments in the person
perception literature. For example, Fiske and her colleagues (Fiske &
Neuberg, 1990; Fiske & Pavelchak, 1986) have proposed that person
perception begins with perceivers assigning individuals to particular cat-
egories. If the individuals' features match the features that are present in
the perceivers' schemata concerning the particular categories to which
they have been assigned, then the perceivers' responses, both cognitive
and affective, will be based largely on the perceivers' knowledge of the
categories. If the features do not match, however, then the categorizations
will be unsuccessful and the perceivers' responses will be based more on
the individuating information than on their knowledge of the categories.
The results of the current research suggest that typical diagnosticity may
play an important role in determining the degree to which the initial
categorizations are successful. Specifically, if individuating information
that is high in typical diagnosticity reduces the representativeness of the
individual, then it should interfere with categorization and lead to cog-
nitive and affective responses that are based more on the individuating
information than on the perceivers' knowledge of the category. If this
information is high in judgment-specific diagnosticity, perceivers' re-
sponses should reflect its diagnostic implications. If, however, this infor-
mation is low in judgment-specific diagnosticity, its presence should add
noise and result in regression toward the population mean.

In addition, the current results are also relevant to recent research by
Krueger and Rothbart (1988). Krueger and Rothbart found that indivi-
duating information that was diagnostic of some trait had strong effects

on subjects' judgments of the target's disposition concerning the trait, particularly when the individuating information reflected relatively high temporal stability regarding the trait. In light of the distinctions that we have drawn, one question that their research raises is what the relationships are among the dimensions of judgment-specific diagnosticity, typical diagnosticity, and temporal stability. Because Krueger and Rothbart found that nondiagnostic information had little impact on subjects' judgments of a group member, even when the information was high in temporal stability, whereas in the current study and in the study by Hilton and Fein (1989) we have found that nondiagnostic information that was relatively high in typical diagnosticity had a significant impact on subjects' judgments or behavioral intentions, it is likely that temporal stability and typical diagnosticity are independent dimensions. However, because Krueger and Rothbart (1988) did not manipulate temporal stability in a single study, and because we did not measure the temporal stability of the individuating information used in the current research, strong conclusions about the relationship between typical diagnosticity and temporal stability cannot yet be drawn. It remains for future research, then, to examine the independent effects that variations in temporal stability, judgment-specific diagnosticity, and typical diagnosticity have on person perception and attitude–behavior consistency.

Some Final Implications

Finally, the results of the present research may have broader implications for work on attitudes and attitude–behavior consistency. For example, the representativeness account discussed in the present paper suggests another reason why attitudes that are formed on the basis of direct behavioral experience are more likely to have a stronger impact on behavior than are attitudes that are formed in the absence of direct behavioral experience (Fazio & Zanna, 1981). Specifically, individuals who have had direct experience with a group are likely to have developed more sophisticated representations of the group than are individuals who have not had direct experience with the group. When these individuals subsequently encounter individuating information about a particular group member, it should be more difficult for this information to affect the representativeness of the individuated group member. In other words, the more complicated representations formed from direct experience should help buffer against the impact that nondiagnostic individuating information may have on attitude–behavior consistency.

In addition, the current research, in conjunction with the work of Lord and his colleagues (e.g., Fein & Lord, 1987; Lord et al., 1984), suggests that an important factor in determining the degree to which various kinds of individuating information should affect attitude–behavior consistency is the extent to which a representation of a group or groups is implicated

in the relevant attitude. For example, although the current research sug-
gests that pseudorelevant information may tend to weaken the relationship
between attitudes and behaviors, it is important to note that this should
hold true only to the extent that a representation of the group is implicated
in people's attitudes. Moreover, the extent to which representation will
be implicated should depend both on the nature of the attitude issue and
on the nature of the individual holding the attitude. Some attitudes are
more likely to implicate specific groups than are others, and some people's
attitudes toward a particular issue may be more closely tied to their images
of a group than are other people's attitudes toward the issue. Differences
such as these are likely to play important roles in determining the degree
to which factors that affect representativeness are likely to affect attitude–
behavior consistency.

The present research would also seem to have important implications
for issues outside the laboratory. For example, by demonstrating that the
presence of nondiagnostic information can reduce the consistency between
people's expressed attitudes and their behavioral intentions toward specific
group members, this study adds support to other work that has illustrated
the potential danger of relying too heavily on abstract questionnaires when
trying to assess attitudes and predict behavior (cf. LaPiere, 1934). For
example, Ellsworth (1978) and Fein and Lord (1987) found that subjects
who were quite willing to recommend the death penalty for mass mur-
derers in the abstract were much less likely to recommend the death
penalty for mass murderers when some nondiagnostic individuating in-
formation was available. In an extension of this work, Fein and Hilton
(1990) found that proponents of capital punishment were significantly less
likely to recommend the death penalty when pseudorelevant information
was available about the mass murderer than when clearly irrelevant in-
formation was available. Findings such as these call into question the
predictive validity of many kinds of opinion polls and questionnaires:
when people respond to simple questionnaires they may often respond
to overly simplistic and abstract representations or symbols.

At a more general level, the results from the current research may have
implications for any group member who is trying to reduce the influence
that people's negative attitudes toward the group have on their behaviors.
Because nondiagnostic individuating information reduces the represent-
ativeness of a group member more when it describes an outgroup member
than when it describes an ingroup member, the results suggest that re-
vealing nondiagnostic information about members of an outgroup should
elicit more favorable behavior toward these members, particularly if the
nondiagnostic information is high in typical diagnosticity. Candidates who
are campaigning in front of fellow party members, for example, may be
better off if they reveal little individuating information about themselves
and instead emphasize their party identification, but they should want to

reveal as much pseudorelevant information as possible about themselves when trying to win votes from the opposing party. The seemingly irrelevant "sound bites" that have become so prevalent in political campaigns during the past several years may, therefore, have significant effects on campaign results to the extent that they affect the representativeness of the candidates, thus reducing the impact that more diagnostic information has on voting decisions.

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