

## **How We Conceptualize Our Attitudes Matters: The Effects of Valence Framing on the Resistance of Political Attitudes**

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*Three studies tested the valence-framing effect: that merely conceptualizing one's preferences as opposing something will make that preference more resistant to persuasion than will thinking about the same preference in terms of supporting something. In Study 1, participants who were led to conceptualize their political preferences as being against a candidate were more resistant to a counterattitudinal message than were participants who were led to conceptualize the same preference as being in favor of the other candidate. Study 2 showed that this effect was not due to a priming process, while Study 3 provided evidence for the effect's generalizability.*

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A wealth of research has examined the differences between strong and weak attitudes. Krosnick and Petty (1995) defined strong attitudes as those that are durable and impactful. Whereas durable attitudes tend to last over time and resist attempts at change, impactful attitudes influence cognition and behavior. Research has shown that attitudes that are highly accessible, on important issues, or formed with much thought are more likely to be durable and impactful than are attitudes that are inaccessible, on unimportant issues, or formed with relatively little thought (e.g., Cacioppo, Petty, Kao, & Rodriguez, 1986; Krosnick, 1988).

Because strong attitudes play such an important role in thinking and behavior, much research has examined how attitudes can be made stronger. For example, increasing thinking about an attitude (Petty, Haugtvedt, & Smith, 1995), having

people rehearse or repeat an attitude (Judd & Brauer, 1995), and providing additional knowledge about an attitude object (Wood, Rhodes, & Biek, 1995) all can contribute to the strength of an attitude. Certainly, if one is interested in creating stronger attitudes, additional elaboration, repetition, or knowledge may be avenues to pursue. However, in this paper, we will demonstrate how *attitude framing*, a much simpler process, can also lead to stronger attitudes.

As an example of how attitudes can be framed differently, consider political preferences in the 2004 U.S. Presidential election. In this election, voters could have preferred George W. Bush or John Kerry. Though this preference may seem relatively simple, the way in which people think about their relative preference for one voting option over another may be more complicated and consequential than it initially appears. That is, while some people who preferred Bush could have had this preference because they *supported* Bush, others who preferred Bush may have had this same relative preference because they *opposed* Kerry. Conversely, people who preferred Kerry may have felt this way either because they *supported* Kerry or *opposed* Bush. Could this difference in framing matter? Were people who preferred Bush because of support for Bush as likely to vote, donate money, or be resistant to change as those who preferred Bush because of opposition to Kerry? This research tests the idea that simply framing an attitude negatively will lead to greater *resistance to persuasion* than will framing the same relative preference positively.

### Negativity is Stronger

Why might preferences framed as opposition be more resistant to persuasion? One body of literature that supports this idea is the *negativity effect*. This research has demonstrated that negative information is often more powerful in creating attitudes (i.e., it is weighted more heavily) than is positive information of equal extremity. For example, negative traits are often more powerful in influencing impressions than are positive traits (e.g., Kanouse & Hanson, 1971; Peeters, 1991; Skowronski & Carlston, 1989). This effect has also been shown in the political world. For example, Lau (1985) demonstrated that negative information had a stronger impact on candidate evaluations than did positive information.

Not only is *negative information* more impactful on attitudes than is positive information, but *negative attitudes* have been shown to be more impactful on cognition and behavior than are positive attitudes. For example, Kernell (1977) examined the effect that midterm voting is often to a large degree determined by attitudes toward the current President: People who are satisfied with the current president tend to vote for members of his party, whereas people who are dissatisfied with the current president tend to vote against members of his party. However, for the midterm elections between 1946 and 1966, Kernell (1977) found that positive and negative opinions of the President did not have equal impacts on behavior: Disapproval had a stronger effect on turnout, party defection, and vote choice than did approval.

*The Current Research*

Whereas research has shown that negative information is more impactful on attitudes and that negative attitudes are more impactful on behavior, the current research will take this line of reasoning one step further. It may be that simply *framing* an attitude in the negative may be sufficient to enhance the resistance of that attitude. Indeed, the current research examines whether simply *thinking of an attitude in terms of opposition rather than in terms of support* may be sufficient to enhance the resistance of that attitude. All prior work on the power of negative information and attitudes compared people who presumably had different substantive bases for their preferences. That is, people who opposed something could have different factors influencing their judgments than people who supported something. In contrast, the current research holds the actual informational bases of individuals' preferences constant while only the "framing" of the preference is varied. Three studies will test this "valence-framing" effect by first manipulating whether people think of their relative preferences for candidates as favoring one candidate or opposing the other candidate, and then testing whether this makes the preference more resistant to change. Study 1 reports an initial experiment to determine if framing attitudes negatively can enhance their resistance, while Studies 2 and 3 assess alternative explanations for and the generalizability of the effect.

**Study 1**

Study 1 tested whether leading people to frame attitudes in terms of opposition to one candidate versus support for the other candidate would enhance resistance to persuasion. Participants were presented with two fictitious candidates for a local political office and were free to develop a preference for one or the other based on the information provided about each. A manipulation of question wording led people to think of themselves as either supporters or opposers, after which participants were exposed to a counterattitudinal message. In this design, people who were led to think of themselves as supporters or opposers had the *same exact informational basis* for their electoral preference. However, if simply thinking of one's position in opposition terms can elicit more resistance, then people who think of themselves as opposers of one candidate versus supporters of the other—*no matter which candidate they prefer*—should show more resistance to a counterattitudinal message.

As an analogy, consider individuals who favored George W. Bush in the 2004 election. One could divide this group by random assignment. That is, by experimental manipulation of the kind of attitude question individuals received, a researcher could lead one group of pro-Bush individuals to think of themselves as "Bush-supporters" and another group of *equally* pro-Bush individuals to think of themselves as "Kerry-opposers." Then, each group would receive anti-Bush information. Our hypothesis is that the individuals who were made to think of

themselves as *pro-Bush* would be more susceptible to the counterattitudinal message than individuals who were made to think of themselves as *anti-Kerry*. For balance, one could do the same with individuals who initially preferred Kerry. That is, half could be led to think of themselves as Kerry-supporters and half as Bush-opposers. Then they would receive the same message derogating Kerry. In order to obtain strict control over the informational bases of candidate preferences, instead of using actual candidates, we presented college students with unfamiliar—but supposedly real—candidates for a countywide office.

### *Method*

Sixty-nine undergraduates at Ohio State University took part in a study for credit in their introductory psychology courses. Participants were told that they would be learning about and reporting their attitudes toward several people ostensibly running for the public office of Franklin County Commissioner. This issue was used because although most participants had heard of the public office, few if any knew precisely what a Commissioner was responsible for or who the candidates running for the office were.

*Procedure.* Participants were each seated at a computer. All materials and measures were presented using the MediaLab computer program (Jarvis, 2000). Participants first read two brief “news articles” ostensibly from the *Columbus Dispatch* (the city’s daily newspaper) about each of the two candidates ostensibly running for the position in upcoming elections. Whereas Rick Smith was presented as a political conservative (e.g., he “believes in fewer environmental and safety restrictions on businesses”), Chris Bredesen was presented as a political liberal (e.g., he “feels that industry should be restricted somewhat to help preserve the environment”). Each article presented one of the candidates in a moderately favorable manner, discussing the candidate’s political history and political stances. After participants read the two newspaper articles and learned about both candidates, they reported their attitudes toward just one of the candidates. They indicated if they “supported” or “opposed” the candidate, then indicated where they stood on an 11-point measure anchored by “strongly support” and “strongly oppose.”

Immediately after the continuous attitude measure, participants were presented with the second half of one of the two “newspaper articles” about a candidate. This additional information always argued against the participants’ initially preferred candidate. For example, if a participant reported that he or she preferred Bredesen, the second article derogated Bredesen, providing information that his public service has often been tainted with scandal: Participants learned that “several thousand dollars disappeared” under Bredesen’s watch and that he was investigated for but acquitted of bribery. Those who expressed a preference for Smith learned the same derogatory information about Smith. After reading this information, participants rereported attitudes on the same dichotomous and continuous measures as before.

*Framing manipulation.* The valence framing of attitudes (“supporting” or “opposing”) was manipulated by forcing participants to think about their attitudes in terms of one candidate or another. Specifically, by random assignment, half the participants were asked whether they supported or opposed Rick Smith being elected to the position, whereas the other half were asked whether they supported or opposed Chris Bredesen being elected to the position. In such a two-person race, opposition to one person being elected suggests support for the other person being elected. Of course, participants could hold positive (or negative) attitudes toward both candidates, but given the highly divergent policy stances presented, this seemed unlikely. Thus, people were allowed to freely choose whichever candidate they preferred—liberal-leaning participants would presumably prefer Bredesen, whereas conservative-leaning participants would presumably prefer Smith. Of importance, however, the manipulation required some people to think of their overall electoral preference in terms of someone they “supported,” whereas it required others to think of their electoral preference in terms of someone they “opposed.”

For example, those people who would want to see Chris Bredesen elected to the commission would report their attitudes in one of two ways. If asked what they thought of Chris Bredesen being elected, these participants would indicate “support,” but if asked about Rick Smith being elected, they would indicate “oppose.” Thus, participants were led to think of their electoral preferences in terms of either support for or opposition to a candidate. Figure 1 presents a diagram further explaining the overall procedure for Study 1.

*Data.* Attitude-change scores were computed for each participant as the difference between continuous attitudes reported before and after receiving the

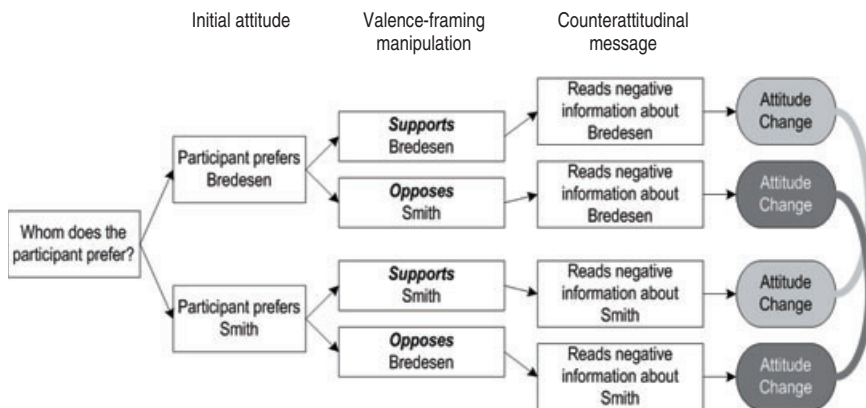


Figure 1. Schematic illustrating the method for Study 1.

persuasive message against their preferred candidate. With this calculation, higher scores indicate more attitude change in the direction of the counterattitudinal message.

Participants were removed from analyses (total  $N = 10$ ) if either of the following conditions were met: (1) A participant's initial attitude on the dichotomous measure was inconsistent with the initial attitude on the continuous measure (e.g., a participant reported that he or she "supported" Bredesen, then immediately thereafter reported that he or she "strongly opposed" Bredesen ( $N = 3$ )); or (2) A participant reported his or her attitude on the continuous measure at the midpoint (i.e., "neither support nor oppose;"  $N = 7$ ). Including these participants in the analyses did not meaningfully change the results.<sup>1</sup>

### Results

An ANOVA was computed with valence framing (support or opposition) predicting attitude change. Those participants who were led to report "opposition" to a candidate showed less attitude change ( $M = 2.42$ ) than did those participants who were led to report "support" of a candidate ( $M = 3.69$ ),  $F(1, 59) = 3.99$ ,  $p = .05$ .<sup>2</sup>

### Discussion

Study 1 demonstrated that leading people to think of their attitudes in terms of opposition versus support (a manipulation of valence framing) was enough to manifest greater resistance to a persuasive message. In this study, if a person initially preferred Chris Bredesen, he or she was equally likely to report supporting Chris Bredesen or opposing Rick Smith depending on the condition to which he or she was assigned. Indeed, although initial attitudes did not vary as a function of the manipulation, resistance to persuasion did: opposers showed more resistance to the counterattitudinal message than did supporters. Thus, individuals who think of their electoral preferences in terms of opposition to one candidate versus

<sup>1</sup> A chi-square test showed that initial support/oppose dichotomous attitudes were no different as a function of the manipulation,  $\chi^2(59) = 1.8$ , *ns*, and additional ANOVAs showed that the effect of the manipulation on the initial continuous measure was also nonsignificant,  $F(1, 57) < 1$ , *ns*, nor did supporters and opposers exhibit different levels of initial attitude extremity,  $F(1, 57) < 1$ , *ns*. These analyses demonstrate that the condition to which a person was assigned (reporting attitudes toward "Bredesen" or "Smith") had no effect on participants' initial attitude reports. Relevant analyses held true for Studies 2 and 3 as well.

<sup>2</sup> An alternate means for testing the effect of condition on attitude change is to conduct an analysis of covariance (ANCOVA) in which condition serves as the predictor, the final continuous attitude measure serves as the dependent measure, and the initial continuous attitude measure serves as a covariate. This analysis provided statistically significant effects for all three studies in a manner consistent with the change-score analyses we present in the text.

support for the favored candidate are less likely to change their attitudes toward the favored candidate should the attitude be attacked. Now that the valence-framing effect has been demonstrated in Study 1, Studies 2 and 3 will each address alternatives to the hypothesis that attitudes framed in terms of opposition are stronger than are attitudes framed in terms of support, as well as the effect's generalizability.

## Study 2

An important possibility not addressed by Study 1 is whether the effects of the framing manipulation affect resistance by enhancing the strength of a particular preference or simply by priming participants with the concept of negativity or resistance. Much research has shown how priming of one construct can impact perceptions of (or behaviors toward) completely unrelated objects. In a classic study, Higgins, Rholes, and Jones (1977) showed that people rated an ambiguous target person as being more negative or positive when they had just taken part in a word task involving negative or positive terms. And Srull and Wyer (1979) showed that participants who unscrambled sentences that connoted hostility rated an unrelated target character as being more hostile than did participants who unscrambled sentences that did not connote hostility. In much the same way, it may be that participants were primed with the concept of "rejection" by indicating "oppose" in Study 1. This opposition priming could have led them to treat *any* subsequent stimulus negatively or to be less *receptive* to any subsequent persuasive message. Thus, just as priming people with aggression or negativity has been shown to impact subsequent judgments and behaviors in prior research (see Higgins, 1996, for a review), the act of indicating "oppose" may have influenced how participants responded to the persuasive messages in Study 1. This raises the possibility that the opposers' resistance shown in Study 1 may be due to the priming of general negativity or resistance rather than the attitude-specific resistance we have suggested to be the case.

Study 2 addresses this possibility. Half the participants took part in a study that closely resembled Study 1: They read about two people, reported their attitude toward one, were presented with an attitude-relevant persuasive message, and then reported their attitude a second time. However, the other participants read about two people, reported their attitude toward one, and then were presented with a persuasive message *about a third, unrelated person*. Participants then reported their attitude toward this unrelated person. If the effect of framing on resistance is simply due to priming or being placed in a "negative mind-set," we would find the valence-framing effect regardless of whether the second message is related to the initial attitude report or not. However, if the effect is due to opposition attitudes being stronger in some way, we would not find the valence-framing effect when the second attitude object is unrelated to the first.

### *Method*

*Procedure.* One hundred students at Eastern Illinois University took part in the study in exchange for credit in their introductory psychology classes or for a coupon good for a free drink at a campus store. Participants were told that they would be learning about and providing their opinions about various people. Participants then learned about two people and reported their attitude toward one person on both dichotomous and continuous measures. After this first attitude report, participants read information about one of the two original people or a third unrelated person. Participants then reported their attitudes toward this person (either one of the first two people or the third, unrelated person, depending on condition).

*Manipulations.* The initial manipulation involved which pair of people participants first read about. Half of the participants were randomly assigned to read the same newspaper articles about the same people running for office as used in Study 1, Chris Bredesen and Rick Smith. This time, however, the two candidates were running for commissioner of Coles County, Illinois, to reflect the new pool of participants. The other participants were randomly assigned to read application essays from two Eastern Illinois University students who had ostensibly applied to be a student worker at the campus library. “Tabitha Marten” presented herself as a senior who, although very familiar with the EIU campus, had no experience whatsoever in working in libraries. “Anna Bernard,” on the other hand, presented herself as having a great deal of experience in working in libraries, but just transferred from another school and had very little knowledge (or desire to learn) about the EIU community. Thus, although the two pairs of targets were different, participants were still free to choose which candidate they preferred for the job, either Smith or Bredesen for the commissioner seat, or Marten or Bernard for the library position, depending upon the condition to which they had been assigned.

The second manipulation, like before, involved question wording. Participants assigned to the commissioner condition were asked either to report their attitude toward Bredesen or toward Smith in an attempt to require attitudes to be framed as either supportive or in opposition (as in Study 1). Similarly, participants assigned to the library-worker condition were asked either to report their attitude toward Marten or toward Bernard.

The third manipulation involved the message that appeared after initial attitude reports. Half of the participants—those assigned to the “match” condition—were randomly assigned to read a persuasive message that ran counter to their initial attitude reports. People who preferred Bredesen read a newspaper editorial that stood firmly against his election, whereas people who preferred Smith read a newspaper editorial with the same content against Smith. Similarly, people who preferred Marten read a negative letter of recommendation from her academic advisor, whereas people who preferred Bernard read a negative letter with the same content about Bernard. The other half of the participants instead read the



persuasive message about one of the *other* two people about whom the participant had not yet read. Thus, people assigned to this “mismatch” condition who initially reported attitudes toward Bredesen or Smith subsequently read Bernard’s poor letter of recommendation. Those participants who initially reported attitudes toward Marten or Bernard subsequently read the negative editorial about Bredesen. Thus, this manipulation was responsible for what happened after initial attitude reports: whereas the “match” participants read a message against their preferred person then rereported attitudes (as in Study 1), the “mismatch” participants instead read a persuasive message that stood against a completely new person and then reported attitudes toward this new person.

*Data.* Consistent with Study 1, participants were removed from analysis (total  $N = 10$ ) if either of the following conditions were met: (1) A participant’s initial attitude on the dichotomous measure was inconsistent with the initial attitude on the continuous measure,  $N = 3$ ; or (2) A participant reported his or her attitude on the continuous measure at the midpoint,  $N = 7$ . Including these participants in the analyses did not meaningfully change the results.

### Results

First, an ANOVA was conducted with initial attitude report (support or oppose) and condition (match or mismatch) as predictors, with the second continuous attitude report as the dependent variable. The Valence-Framing  $\times$  Matching interaction was significant,  $F(1, 86) = 15.45, p < .001$ , indicating that the effect of supporting or opposing on participants’ final attitude reports differed as a function of attitude-object match or mismatch. Follow-up analyses showed that the effect of support/opposition on the second continuous report was significant in the match condition,  $F(1, 43) = 16.10, p < .001$  (replicating Study 1), but not in the mismatch condition,  $F(1, 43) = 1.37, ns$ . Thus, participants’ initial support or opposition only had an effect on persuasion when the persuasive message was relevant to the initial attitude report.

Finally, we conducted the same attitude-change analysis that we did in Study 1 to see if the replication cells of this study (i.e., the match conditions) replicated those of Study 1. An ANOVA showed that among the participants assigned to the “match” condition, opposers demonstrated less attitude change ( $M = 1.40$  change units) than did supporters ( $M = 2.92$ ),  $F(1, 43) = 12.45, p = .001$ . Thus, the primary finding that opposers showed more resistance to a relevant persuasive message was replicated.

### Discussion

When participants initially read about the two political candidates, they resisted a counterattitudinal message more when their initial attitudes were framed as opposing rather than supporting. The same effect occurred when people first read

about the two library candidates and read a message opposed to their favored person. These results replicate the valence-framing effect observed in Study 1 with both the original and with new attitude objects. However, Study 2 also showed that initial opposition to or support for the political candidates had no effect on attitudes toward the subsequent library candidate and vice versa. Thus, the results of Study 2 suggest that the valence-framing effect is *not* due to a process of negativity priming. If this were the case, then when a person was led to oppose an initial issue, *any* subsequent message should be resisted to a greater extent. This was not the case: Even though participants in the “match” condition responded as participants did in Study 1, participants in the “mismatch” condition showed no effect of initial attitude framing on subsequent attitudes.

### Study 3

Study 3 was conducted to address two issues not yet addressed. First, Study 3 was conducted to further assess the generalizability of the effect. In a typical election, voters' attitudes toward each individual candidate are not necessarily as important as are voters' *relative preferences of one candidate over the other*. As such, because Studies 1 and 2 simply measured attitudes toward one candidate, it is unclear whether their *relative preferences* changed or not. If attitudes toward one candidate in the race changed but the other did not, then the relative or comparative preference would be modified. But, if attitudes toward both candidates changed as a result of the attacking message (i.e., a participant became less favorable toward both candidates), the relative preference might have remained exactly the same. Second, recall that in Studies 1 and 2, participants assigned to the “support” conditions reported their attitudes toward a candidate, learned additional information about that candidate, then rereported their attitudes toward the candidate. Participants assigned to the “oppose” conditions, however, reported their attitudes toward a candidate, learned information about the *other* candidate, then rereported their attitudes toward the first candidate (see Figure 1). It is therefore possible that the effects are due to participants reporting attitudes toward and reading about *the same candidate* in the “support” conditions, but about *different candidates* in the “oppose” conditions.

Study 3 was conducted to address these two issues. Thus, in Study 3, the critical dependent measure was *not* framed in terms of one candidate or the other. Instead, attitudes were reported on *bipolar* scales. This allowed us to understand if opposers demonstrated less change in *relative candidate preference*, something that the prior studies did not assess. That is, if relative candidate preference did not change, people could report the same relative preference on the bipolar scale following the persuasive message as before. In addition, because all participants in all conditions responded to exactly the same measures both initially and after the persuasive message, we could learn if the effects previously described were a result of attitude strength rather than measure-message match or mismatch.

*Procedure.* Twenty-two students enrolled in psychology classes at Eastern Illinois University took part in the study in exchange for a small box of candy. Participants were told that they would be reading about and providing their opinions about two people ostensibly running for the Coles County Commission. To simplify the method, Bredesen was at the outset presented as a more qualified and likable candidate than was Smith. For example, participants were told that Bredesen earned degrees at two prestigious universities, whereas Smith attended several universities but never earned a degree. Participants reported attitudes on dichotomous and continuous measures that varied across conditions (i.e., the framing manipulation), then on a new 9-point bipolar measure anchored with “intensely prefer Smith” and “intensely prefer Bredesen” that was the same for all participants in all conditions. To enhance the support/oppose framing, participants were then asked to list as many reasons as they wished why they either supported Bredesen or opposed Smith (depending on the manipulation).

Because all participants were presumed to prefer Bredesen initially (based on the information we provided), participants then read a counterattitudinal article detailing Bredesen’s former transgressions. Participants were told that Bredesen had been under suspicion for having stolen several thousand dollars and that both the local Democratic and Republican parties have condemned him. After reading this information, participants again reported their attitudes, but only on the new 9-point bipolar scale.

*Framing manipulation.* As with the prior studies, some participants were asked what they thought about Bredesen being elected, whereas other participants were asked what they thought about Smith being elected. With the simpler design of this study, the manipulation led participants to think of their attitudes in terms of “supporting Bredesen” or “opposing Smith.”

*Data.* Attitude-change scores were computed for each participant as the difference between continuous attitudes reported before and after receiving the persuasive message against their preferred candidate. Unlike Studies 1 and 2, all participants (regardless of whether attitudes were framed as opposition or support) reported their relative preferences on the same bipolar scale. With this calculation, higher scores indicate more attitude change in the direction of the counterattitudinal message.

### Results

The data were subjected to an ANOVA with the attitude-framing manipulation serving as the independent variable and the attitude-change score serving as the dependent variable. The message framing effect was significant,  $F(1, 20) = 5.40$ ,  $p = .03$ , with participants in the “oppose” condition showing less change in relative preference ( $M = 2.36$ ) than participants in the “support” condition ( $M = 4.00$ ).

## General Discussion

The negativity effect is a well-known phenomenon within the areas of psychology and political science. Indeed, much research has shown that negative information is often more powerful than positive information in creating attitudes. The current research provides evidence for an additional effect of negativity or opposition not previously identified. We have shown that just as negative information is more powerful in creating attitudes, *negatively framed attitudes* are more powerful in resisting persuasive attempts even when the negatively and positively framed attitudes are based on the same underlying information.

Together, three studies provided evidence to support the valence-framing effect within the context of candidate preference. Study 1 showed initial support for the effect: leading participants to think of their electoral preference in terms of the candidate that they opposed led to more resistant attitudes than did leading participants to think in terms of the candidate that they supported. The two subsequent studies further enhanced our understanding of the effect. Study 2 suggested that the effect is not simply due to an effect of priming the concept of “negativity” or “opposition.” Study 3 showed that opposers showed less change in relative candidate preference and that the effect did not depend on whether the attitude measure was uniquely matched or mismatched to the persuasive message.

### *Ramifications*

Together, these studies suggest that simply leading people to *conceptualize their attitudes in a negative versus a positive way* leads to enhanced resistance to persuasion. That is, people are less likely to change their relative preferences in the face of an attack when these preferences are framed as opposing one option rather than as supporting the other. These findings are of potential importance because, for the first time, they indicate that the manner in which people conceptualize their own attitudes is consequential. That is, not only is it important to consider how people frame *issues* (e.g., Nelson & Kinder, 1996) or *outcomes* (e.g., Tversky & Kahneman, 1981) that are relevant to attitudes, but it is also important to understand how people frame *the attitudes themselves*. The fact that the framing of attitudes can impact the resistance of people’s preferences has important implications for many areas within political psychology and related fields, including attitude and attitude-strength theory, survey design, and health behaviors.

The research is also important because it demonstrates a relatively low-effort way in which attitudes can be strengthened without any increase in knowledge, elaboration, or rehearsal. Whereas most research on strengthening attitudes has relied on these high-effort processes that take considerable time and mental resources, valence framing may be a way to enhance attitude strength through a

much simpler process. This suggests that fundamental changes to the strength of attitudes may be easier to accomplish than previously thought.

### *Future Research*

*Mediation.* Although the present studies indicate that opposition attitudes are more resistant to persuasion than are supporting attitudes, the mediational process underlying this effect remains unknown. One possibility is a two-step process in which people first perceive negative attitudes differently in some meaningful way. For example, people might feel more certain or sure about the attitude. Research has supported the idea that attitudes held with high certainty are more resistant to change than are attitudes held with doubt (e.g., Tormala & Petty, 2002). Thus, once people feel more confident in their attitudes, this can lead to enhanced resistance to persuasion.

There are several reasons why people might feel more confident in negatively than positively framed attitudes. One possibility stems from research on the bivariate model of attitudes (Cacioppo, Gardner, & Berntson, 1997). This model suggests that, among other things, there is a “positivity offset” such that people tend to hold positive attitudes toward objects about which they have little or no information. Negative attitudes, however, must instead be based on information or facts. It may be that, over time, people begin to realize this, and as such, perceive that their negative attitudes have more information to back them up and therefore feel more certain about them. People may therefore hold *negatively framed* attitudes with more certainty as well. It may also be that negative attitudes lead to greater cognitive activity than positive attitudes (cf. Robinson-Riegler & Winton, 1996; Ohira, Winton, & Oyama, 1998). This additional elaboration of negative attitudes may also lead to heightened attitude certainty. As people realize this, the effect may generalize to negatively framed attitudes.

Once people hold their attitudes with greater certainty for whichever reason, how might they better resist persuasion in the second step? The Elaboration Likelihood Model of persuasion (Petty & Cacioppo, 1986) suggests at least three potential mechanisms that may underlie the resistance effect. One possible mechanism can be referred to as a “rejection cue” process. It is possible that when people frame attitudes negatively, they reject any subsequent attitude-relevant message out-of-hand (e.g., Petty, Cacioppo, & Goldman, 1981).<sup>3</sup> That is, one’s attitude certainty serves as cue for rejection. A second possibility is that when people frame their attitudes negatively, they process counterattitudinal messages less carefully. This hypothesis suggests that opposition attitudes would lead to

<sup>3</sup> This is different from the “priming effect” that Study 2 argued against. Whereas priming takes place when a process impacts *all* subsequent cognitions and/or behaviors (whether relevant or not), a rejection-cue process takes place when a person rejects an attitude-*relevant* message out-of-hand without a great deal of cognitive processing.

more resistance primarily when the opposition arguments are strong (as they were in the current research) because the lack of processing would not allow them to realize the merits of the arguments as much as a person who was processing more carefully (e.g., Petty, Wells, & Brock, 1976). Third, people may counterargue more when messages run counter to their opposition attitudes—a biased-processing mechanism. Future research might examine which of these or other mechanisms might underlie the effect.

*Generalizability and moderation.* In the current research, we focused on attitude resistance. But attitude strength is also defined in terms of the extent to which an attitude remains constant over time, the extent to which an attitude predicts behavior, and the extent to which an attitude influences cognitive processes (Krosnick & Petty, 1995). Should future research find that valence-framing also impacts other features associated with attitude strength, we can be more confident that valence-framing enhances the underlying strength of attitudes rather than resistance alone. It would be interesting to test whether *positive* information toward the candidate the participant does not prefer would yield similar results. Also, future research may test moderators of the effect: As we have argued that a cognitive process underlies the effect of framing on resistance, any variable that attenuates or enhances thought (e.g., distraction, personal relevance, etc.) should serve to moderate the effect. In short, whereas the current research provides a first look at the valence-framing effect, future research might test to what extent the effect is generalizable to other outcomes or conditions.

## Conclusion

Within the context of a typical two-candidate election, people can prefer Candidate “A” either because they support Candidate “A” or oppose Candidate “B.” Both of these attitudes seemingly have the same impact—a vote for Candidate “A”—and thus the distinction may not seem meaningful. But a more detailed examination suggests that the latter frame—opposition to Candidate “B”—may lead relative electoral preferences to be more resistant than the former frame. Because attitude strength is such an important concept, a thorough understanding of attitude framing is worthwhile for psychologists and political scientists alike.

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## REFERENCES

- Cacioppo, J. T., Petty, R. E., Kao, C., & Rodriguez, R. (1986). Central and peripheral routes to persuasion: An individual difference perspective. *Journal of Personality and Social Psychology, 51*, 1032–1043.
- Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1997). Beyond bipolar conceptualizations and measures: The case of attitudes and evaluative space. *Personality and Social Psychology Review, 1*, 3–25.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social Psychology: Handbook of basic principles* (pp. 133–168). New York: Guilford.
- Higgins, E. T., Rholes, W. S., & Jones, C. R. (1977). Category accessibility and impression formation. *Journal of Experimental Social Psychology, 13*, 141–154.
- Jarvis, W. G. B. (2000). MediaLab [Computer software]. New York: Empirisoft Software.
- Judd, C. M., & Brauer, M. (1995). Repetition and evaluative extremity. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 43–71). Mahwah, NJ: Erlbaum.
- Kanouse, D. E., & Hanson, L. R., Jr. (1971). Negativity in evaluations. In E. E. Jones et al., *Attribution: perceiving the causes of behavior* (pp. 47–62). Morristown, NJ: General Learning Press.
- Kernell, S. (1977). Presidential popularity and negative voting. *American Political Science Review, 71*, 44–66.
- Krosnick, J. A. (1988). The role of attitude importance in social evaluation: A study of policy preferences, presidential candidate evaluations, and voting behavior. *Journal of Personality and Social Psychology, 55*, 196–210.
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1–24). Mahwah, NJ: Erlbaum.
- Lau, R. R. (1985). Two explanations for negativity effects in political behavior. *American Journal of Political Science, 29*, 119–138.
- Nelson, T. E., & Kinder, D. R. (1996). Issue framing and group-centrism in American public opinion. *Journal of Politics, 58*, 1055–1078.
- Ohira, H., Winton, W. M., & Oyama, M. (1998). Effects of stimulus valence on recognition memory and endogenous eyeblinks: Further evidence for positive-negative asymmetry. *Personality and Social Psychology Bulletin, 24*, 986–993.
- Peeters, G. (1991). Evaluative inference in social cognition: The roles of direct versus evaluation and positive-negative asymmetry. *European Journal of Social Psychology, 21*, 131–146.
- Petty, R. E. & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology, 19*, 123–205.
- Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology, 41*, 847–855.

- Petty, R. E., Haugtvedt, C. P., & Smith, S. M. (1995). Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behavior. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 93–130). Mahwah, NJ: Lawrence Erlbaum Associates.
- Petty, R. E., Wells, G. L., & Brock, T. C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus effort justification. *Journal of Personality and Social Psychology, 34*, 874–884.
- Robinson-Riegler, G. L., & Winton, W. M. (1996). The role of conscious recollection in recognition of affective material: Evidence for positive-negative asymmetry. *Journal of General Psychology, 123*, 93–104.
- Skowronski, J. J., & Carlson, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin, 105*, 131–142.
- Srull, T. K., & Wyer, R. S. (1979). The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology, 37*, 1660–1672.
- Tormala, Z. L., & Petty, R. E. (2002). What doesn't kill me makes me stronger: The effects of resisting persuasion on attitude certainty. *Journal of Personality and Social Psychology, 83*, 1298–1313.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science, 211*, 453–458.
- Wood, W., Rhodes, N., & Biek M. (1995). Working knowledge and attitude strength: An information-processing analysis. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 283–314). Mahwah, NJ: Erlbaum.