

The Role of Bolstering and Counterarguing Mindsets in Persuasion

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Abstract

The effect of a persuasive communication on individuals' attitudes can be influenced by the cognitive behavior they have performed in an earlier, unrelated situation. Inducing participants to make supportive elaborations about a series of propositions activated a bolstering mindset that increased the effectiveness of an unrelated advertisement they encountered subsequently. However, inducing participants to refute the implications of a series of propositions activated a counterarguing mindset that decreased the ad's effectiveness. These mindsets had more impact when the cognitive behavior they activated differed from the behavior that would occur in the absence of these mindsets. When the implications of a persuasive message were difficult to refute, inducing a counterarguing mindset *increased* its effectiveness. Finally, watching a political speech or debate activated different mindsets, depending on participants' a priori attitude toward the politicians involved, and these mindsets influenced the impact of an unrelated commercial they considered later.

Key words: Mindset, Persuasion, Advertising, Information Processing, Judgment and Decision Making

Political debates are among the most popular shows on television. The first general presidential debate, between Richard Nixon and John F. Kennedy in 1960, drew more than 66 million viewers out of a population of 179 million, making it one of the most-watched broadcasts in U.S. television history (Wikipedia 2010). In 2008, 63.2 million viewers watched the second presidential debate between Barack Obama and John McCain and more than 69.9 million people watched the vice presidential debate between Sarah Palin and Joseph Biden (Nelson Media Research 2008). Because of their popularity, the competition for commercial advertising slots that follow political debates is intense. The fact that commercials are widely viewed, however, does not guarantee that they are effective. In fact, there is reason to believe that watching a political debate can sometimes *decrease* the effectiveness of the ad that follows it. The experiments we report in this article confirm this possibility.

The effect of watching a debate on reactions to the commercials that follow it could reflect a *behavioral mindset*—a tendency for individuals' cognitive behavior in one situation to generalize to subsequent, quite different situations (for a review, see Wyer and Xu 2010). For example, inducing participants to compare the physical attributes of wild animals can lead them to decide which of several products to buy in a subsequent purchasing situation without considering the option of buying nothing at all (Xu and Wyer 2008). Analogously, elaborating or counterarguing the views expressed in a communication could induce a mindset that influences individuals' responses to an unrelated advertisement they encounter subsequently and, therefore, could affect their acceptance of its implications.

Four experiments examined this possibility. In two experiments, either a bolstering or counterarguing mindset was induced by asking participants to list their thoughts about propositions with which they either agreed or disagreed. Inducing a bolstering mindset disposed participants to generate positive thoughts about an ad they encountered subsequently and, therefore, increased their evaluations of the advertised product. In contrast, activating a counterarguing mindset disposed participants to generate negative thoughts toward the ad and consequently decreased their evaluations of the product. These tendencies were particularly evident when the cognitive responses activated by the mindset differed from participants' normal responses to the communication.

A third experiment, in a different domain, showed that when a persuasive appeal is difficult to refute, inducing a counterarguing mindset can increase participants' sensitivity to this difficulty. Consequently, it can *increase* the effectiveness of the appeal rather than decrease it.

In a fourth experiment, some participants viewed a debate between two political candidates whereas others watched a single candidate's speech on a related topic. Political independents developed a mindset to counterargue while they watched the debate, whereas participants with an a priori preference for one candidate developed a counterarguing mindset while watching a speech by the candidate they opposed. This mindset decreased participants' evaluations of an advertised product that they considered subsequently.

THEORETICAL BACKGROUND

Cognitive Responses to Persuasive Messages

The effect of individuals' cognitive responses to a message on the influence of that message was established by Greenwald (1968) and was conceptualized more formally by Petty and Cacioppo (1981, 1986; see also Chaiken 1987). They assumed that when individuals are unable or unmotivated to think carefully about the issue conveyed in a message, they base their evaluations of the issue on heuristic criteria (e.g., characteristics of the message source) without thinking about the message's content. When they are motivated to think about the message, however, their cognitive responses to its content determine its influence. In some cases, they elaborate on the arguments made in the communication, bolstering their belief in the position advocated with knowledge they have previously acquired about the issue at hand. In other cases, they counterargue, or refute the validity of the arguments presented. These cognitive responses, rather than the content of the message itself, determine the message's impact (Petty and Cacioppo 1986).

Differences in recipients' cognitive responses to a message can potentially account for many of the phenomena identified in persuasion research (Briñol and Petty 2005). For example, Festinger and Maccoby (1964; see also Osterhouse and Brock 1970) found that when individuals were initially opposed to the position advocated in a message, distracting them from thinking about the message prevented them from counterarguing the implications of the message content and, therefore, increased the message's influence. The greater effectiveness of two-sided over one-sided communications could also result

from the fact that two-sided messages decrease participants' perceptions of bias and consequently reduce counterarguing (Kamin, Brand, Hoeks, and Moe 1989). Finally, although the source of a message can sometimes have a direct impact on the effectiveness of persuasion (Chaiken 1980), the effects of some source characteristics, such as prestige (Walster, Aronson, and Abrahams 1966) and expertise (Chaiken 1987; Cialdini 1993), could be mediated by their impact on the disposition to elaborate or counterargue the message content.

Effects of Past Experience

The research summarized above provides insight into how the content of a message, its source, and motivational factors combine to influence cognitive responses to a persuasive message and its effectiveness. However, relatively little research has investigated how recipients' responses to a communication are influenced by their experiences prior to this communication. McGuire's (1964) research on inoculation effects is an exception. He found that exposing participants to mild arguments against a proposition whose validity has never been questioned (e.g., truisms such as "Mental illness is not contagious") can stimulate people to counterargue, and that the practice they acquire in doing so increases their ability to refute attacks on the proposition's validity that they encounter later.

In a particularly provocative study, McGuire (1961a) exposed some participants to a proposition (i.e., a truism) followed by a mild attack on its validity. They then wrote a paragraph refuting the attack. After doing so, both these participants and control

participants were exposed to a strong attack on the same proposition. Participants who had written refutations of the mild attack (and thus who had practiced counterarguing) were less influenced by the strong attack than control participants were. Moreover, this was true even when the arguments contained in the strong attack differed from those to which participants had been exposed earlier. In this research, however, the mild attack that individuals refuted pertained to the same topic as the strong attack they encountered subsequently. Whether generating opposing arguments in one situation can influence people's cognitive reactions to a message on an *unrelated* topic was unexplored. In fact, this influence can occur.

The Role of Mindsets in Information Processing

The processes that underlie the influence of people's past cognitive behavior on their responses to subsequent persuasion can be conceptualized in terms of the impact of *behavioral mindsets* (Wyer and Xu 2010). A behavioral mindset is evidenced by the effect of performing a cognitive or motor activity on the likelihood of performing a similar behavior in a subsequent unrelated situation. In essence, it reflects the activation and use of a cognitive procedure.

A procedure is represented in memory by a goal concept and a series of subgoals that, in combination, constitute a plan for attaining it (Kruglanski et al. 2002). These plan-goal representations are stored as part of declarative knowledge and can be retrieved and used as guides in deciding how to attain the objectives to which they are relevant. Moreover, procedures can be represented at several levels of abstractness, and several

situation-specific procedures can exemplify the same, more general one. For example, deciding which of two animals is larger and deciding which of two products to buy may both exemplify the same general procedure of making a comparative judgment.

The operation of a mindset can be conceptualized in terms of an associative network model of knowledge accessibility (Collins and Loftus 1975; Higgins 1996). That is, performing a specific procedure in the course of attaining a goal activates a more general procedure that the specific one exemplifies. The activation of this general procedure increases the likelihood that other exemplars of the procedure will be called to mind and used in a later situation to which they are applicable. Thus, when more than one procedure can potentially be used to attain the same goal, the goal-directed behavior performed in an earlier situation can often influence which of these alternatives is selected and applied. Moreover, although individuals are normally conscious of the procedure they have selected, they may *not* be aware of the factors that gave rise to its selection.

This conceptualization is supported by several areas of research. For example, Gollwitzer and his colleagues (Gollwitzer and Bayer 1999; Gollwitzer, Heckhausen, and Steller 1990) suggested that a consideration of the sequence of actions necessary to attain a chosen goal can activate an “implemental” mindset that can persist to influence subsequent activities without considering whether or not to engage in them. Thus, inducing participants to purchase a product early in an experiment can increase their likelihood of making a second purchase later (Dhar, Huber, and Kahn 2007). Moreover, making comparative judgments in one domain (e.g., deciding which of two animals is larger) can activate a “which-to-choose” mindset that disposes consumers to decide

which of two products to buy in a later situation without considering the possibility of buying nothing at all (Xu and Wyer 2007, 2008). Generating different responses to a series of questions about animals can induce a “variety seeking” mindset that leads individuals to choose a greater variety of products in a multiple-choice decision they encounter later (Shen and Wyer 2010). Generating reasons why an event might not occur can induce a “counterfactual thinking” mindset that decreases confidence in predicting the occurrence of an unrelated event in a later situation (Hirt, Kardes, and Markman 2004). Finally, activating an “abstract thinking” mindset can lead participants to evaluate a brand extension on the basis of its fit to the parent brand (Meyvis, Goldsmith, and Dhar 2009) and also dispose participants to construe a situation in terms of abstract values and act under the guidance of these values (Torelli and Kaikati 2009).

The Present Conceptualization

People who receive a persuasive communication might either (a) generate thoughts that bolster its validity or (b) attempt to refute its implications. These dispositions are likely to depend on individuals’ expectations that they will agree or disagree with the view being expressed or, in the case of an advertisement, their expectations that the product being advertised is either appealing or unappealing. However, the dispositions could also be influenced by a mindset that is activated by the cognitive behavior that participants performed before encountering the persuasive communication.

Specifically, making supportive elaborations in an earlier situation could activate a general procedure of generating supporting arguments, giving rise to a *bolstering* mindset. In a similar vein, generating opposing arguments in an earlier situation could give rise to a *counterarguing* mindset. The activation of such a mindset is likely to influence people's cognitive responses to a message they receive later, and consequently, affect the message's impact.

Two qualifications on these predictions are important. First, the effect of a mindset is evident only if it leads to behavior that would not occur spontaneously in the absence of this mindset. Thus, for example, if individuals spontaneously accept the implications of a message in the course of comprehending it (Gilbert 1991), the processes induced by a bolstering mindset may have little additional effect. By the same token, if a message spontaneously leads recipients to refute its implications, inducing a counterarguing mindset may have little impact.

Second, if the behavior governed by a mindset is difficult to perform, inducing this mindset could have a boomerang effect. Advertisers have a vested interest in the success of their products, and ad appeals are often expected to exaggerate the positive features of these products (Campbell and Kirmani 2008). Thus, the credibility of these appeals is often relatively easy to refute. However, this is obviously not true of all types of communications. Charitable donations, for example, are normally solicited for a socially desirable purpose. Consequently, the validity of these solicitations is likely to be difficult to refute regardless of the specific arguments contained in them. A counterarguing mindset, which stimulates an attempt to refute the validity of such appeals, could make this difficulty particularly salient. In a relevant study, Rucker and Petty (2004)

found that instructing participants to refute very strong arguments for a position strengthened their attitudes in favor of the position rather than weakening them. In the present context, this suggests that when a persuasive communication is difficult to refute, a counterarguing mindset that increases participants' awareness of this difficulty could increase their perceptions of the communication's validity. Consequently, it could *increase* its effectiveness rather than decreasing it. The four experiments to be reported examined these possibilities.

EXPERIMENT 1

Participants in Experiment 1 performed two ostensibly unrelated tasks. In the first task, some participants listed their thoughts about a series of propositions with which they agreed, thus leading them to generate arguments in support of the propositions. Other participants listed their thoughts about propositions with which they disagreed, leading them to generate arguments against their validity. In the second task, participants were exposed to an advertisement for a vacation spot. We expected that generating opposing thoughts about the propositions in the first task would activate a counterarguing mindset that would dispose participants to refute the implications of the ad, thereby decreasing the ad's effectiveness. Because the advertised vacation spot is expected to be attractive, participants will elaborate the ad's content on a priori. Therefore, a bolstering mindset might have little effect. This was, in fact, the case.

Method

Subjects and Design. Eighty-eight North American undergraduate students participated to fulfill a course requirement. This experiment employed a 3 (mindset: bolstering vs. counterarguing vs. control) x 2 (favorableness of vacation spot: high vs. moderate) between-subjects design.

Procedure. Participants first took part in a survey that was ostensibly interested in understanding college students' ability to express their opinions on various topics. Three propositions were presented on separate pages of the survey booklet. Participants in the two experimental conditions were instructed to think about each proposition and to write a short essay indicating why they either agreed or disagreed with it. Participants in the *bolstering mindset* condition generated thoughts about propositions with which they typically agreed (e.g., "Reading enriches the mind," "_____ University should not increase tuition fees in the next academic year," etc.). In contrast, participants in the *counterarguing mindset* condition generated thoughts about the negations of these propositions (e.g., "Reading is bad for the mind," "_____ University should increase tuition fees in the next academic year," etc.). Thus, although the content of participants' thoughts in the two conditions had similar implications, the behavior of generating the thoughts constituted bolstering in the first case but counterarguing in the second. Finally, in *control* conditions, participants were asked to write three short essays to show their knowledge of the pyramids of Egypt, lunar eclipses, and the American War of Independence.

Participants were given 15 minutes to complete the first task. Then they took part in an ostensibly different experiment on the effectiveness of advertisements. Participants read an ad for one of two vacation spots. To evaluate the generalizability of our results, we varied the vacation's attractiveness. Specifically, one ad promoted Igloo hotels in Switzerland, describing various features such as accommodations, food, drinks, and entertainment facilities. The other highlighted the Milwaukee Art Museum, describing its history and collections as well as the musical activities offered in the city. In each case, two photographs accompanied the text. Participants then estimated the attractiveness of the vacation spot, the persuasiveness of the ad, and the appeal of the ad along scales from 0 (not at all) to 10 (very). In addition, they listed their thoughts about the vacation spot and the ad. Finally, participants reported their mood along a scale from -5 (sad) to 5 (happy). They also indicated how motivated they were to do well in the survey along a scale from 0 (not at all) to 10 (very).

Results

Mindset Manipulation Check. Participants' attitude toward each statement was coded as agreement or disagreement. In the bolstering mindset condition, 22 of 28 participants (79%) agreed with all three propositions, generating thoughts in support of their validity. In the counterarguing mindset condition, 22 of 29 participants (76%) disagreed with all three propositions, generating arguments against their validity. The mean number of propositions with which participants agreed was therefore much greater

in the bolstering mindset condition ($M = 2.79$) than in the counterarguing mindset condition ($M = 0.28$), $F(1, 55) = 394.62$, $p < .001$.

Mood and Motivation. Participants' reports of their mood and their motivation to do well in the survey were each analyzed as a function of the favorableness of the ad and mindset conditions. No effects were significant in either analysis ($F < 1$). Thus, the results to be reported cannot be attributed to differences in the use of affect as a basis for judgments (Schwarz and Clore 1983).

Attractiveness of Vacation Spot. Mean ratings of the vacation spot's attractiveness are summarized in table 1 as a function of the favorableness of the vacation spot and mindset conditions. Although participants rated the Igloo hotels in Switzerland to be more attractive than the Milwaukee Art Museum (6.57 vs. 5.40; $F(1, 82) = 6.82$, $p < .02$), neither vacation spot was unappealing (greater than 5.0 on a 0–10 scale). Moreover, the effect of mindset was also significant ($F(2, 82) = 5.91$; $p < .005$) and did not depend on the nature of the vacation spot ($F < 1$). Specifically, vacation spots were perceived to be less attractive in the counterarguing mindset condition ($M = 4.94$) than in the control condition ($M = 6.22$; $F(1, 82) = 5.41$, $p < .03$) and to be nonsignificantly more attractive in the bolstering mindset condition ($M = 6.80$) than in the control condition ($M = 6.22$; $p > .10$).

<Insert table 1 about here>

Ad Evaluations. Participants' ratings of the ad's persuasiveness and appeal were averaged ($r = .77$, $p < .001$) to provide a single index of ad evaluation, which is shown in

the second section of table 1. The ad was evaluated more favorably when the vacation spot was highly attractive ($M = 6.45$) than when it was moderately attractive ($M = 5.24$; $F(1, 82) = 8.85, p < .005$). Moreover, the main effect of mindset was significant, $F(2, 82) = 5.57, p < .005$, and did not depend on the favorableness of the vacation spot ($F < 1$). Specifically, the ad was evaluated less favorably in the counterarguing mindset condition ($M = 4.87$) than in the control condition ($M = 6.31$; $F(1, 82) = 8.12, p < .01$). However, evaluations of the ad in the bolstering mindset condition did not differ from the control condition (6.37 vs. 6.31; $F < 1$).

Thought Generation. Participants' total number of thoughts about the ad and the vacation spot was analyzed as a function of vacation type and mindset conditions. This analysis yielded no significant effects (2.31 vs. 2.54 vs. 2.28 for bolstering, counterarguing, and control conditions, respectively; $p > .10$). All thoughts were coded as positive, negative, or neutral. The difference in the number of positive vs. negative thoughts was computed for each participant and used as an index of thought favorableness. This index is summarized in the third section of table 1.

Participants' thoughts about the Igloo hotel were relatively more favorable than their thoughts about the museum (0.35 vs. -0.72; $F(1, 82) = 10.75, p < .005$). More important, the main effect of mindset was significant ($F(2, 82) = 6.81, p < .005$), indicating that the thoughts generated were significantly less favorable in counterargument mindset conditions than in control conditions (-1.04 vs. 0.09; $F(1, 82) = 7.71; p < .01$) but were nonsignificantly more favorable in the bolstering mindset conditions than in the control condition (0.39 vs. 0.09; $F < 1$).

Mediation. A mediation analysis involving only the counterarguing mindset and control conditions was conducted to determine whether thought favorableness mediated the effect of mindset manipulations on the attractiveness of the vacation spot. The first regression showed that the counterarguing mindset influenced the thought favorableness ($\beta = .32$; $t = 2.60$, $p < .02$). The second regression showed that mindset also predicted the attractiveness of the vacation spot ($\beta = .49$; $t = 5.24$, $p < .001$). Introducing thought favorableness into the second regression model reduced the effect of mindset to nonsignificance ($\beta = .14$, $t = 1.14$, $p > .10$), whereas the effect of thought favorableness remained significant ($\beta = .45$, $t = 3.74$, $p < .001$). A Sobel test also confirmed the mediating role of thought favorableness (Sobel statistic = 2.08, $p < .05$).

Discussion

Experiment 1 showed that generating counterarguments in one situation induced a mindset that disposed participants to generate relatively unfavorable thoughts about an unrelated advertisement they encountered later. Consequently, they formed less favorable attitudes toward the product in the ad than control participants did. The effects of a bolstering mindset were in the expected direction but were not significant. This confirms our expectation that when the product being advertised is relatively attractive, participants spontaneously elaborate the ad's content in the course of comprehending it and inducing a bolstering mindset has little additional effect.

Furthermore, our findings eliminated an alternative interpretation of the mindset effects. That is, one might speculate that participants who thought about propositions that supported their own position in the initial priming task experienced positive affect, whereas those who thought about propositions that opposed their own position experienced negative affect. If this were true, participants might use the affect they were experiencing as a basis for the judgments they reported later (Schwarz and Clore 1983), leading to the difference in product evaluations. In fact, however, inducing mindsets had no influence on the affect that participants reported.

EXPERIMENT 2

Inducing a bolstering mindset had little effect in experiment 1, in which the advertised product was relatively attractive and participants were likely to generate supportive arguments spontaneously in the course of comprehending the ad. According to our conceptualization, however, the influence of a bolstering mindset should be more evident when a communication advocates a position that individuals are inherently likely to oppose and attempt to refute its validity. In this case, inducing a counterarguing mindset should have relatively little effect, whereas inducing a bolstering mindset should have a greater influence. Experiment 2 confirmed these predictions.

Method

Subjects and Design. Seventy-two North American undergraduate students participated in this study as part of a larger experimental session in exchange for \$10.00

CAD. They were randomly assigned to one of the three mindset conditions (bolstering vs. counterarguing vs. control).

Procedure. Mindsets were induced using the same procedure we employed in experiment 1. That is, participants in the *bolstering* mindset condition generated arguments about propositions with which they agreed, and participants in the *counterarguing* mindset condition generated thoughts about the negations of these propositions. In the *control* condition, participants wrote three short essays to show their knowledge about neutral topics.

Participants then took part in an ostensibly different study on the effectiveness of advertisements. All participants read an ad promoting exotic cuisine in Beijing. The ad included photographs of exotic foods such as sea horses and scorpions and information about the benefits of eating them (e.g., “eating scorpions makes your blood hotter in cold weather and dispels toxins in your body”). After that, participants estimated the attractiveness of Beijing exotic foods, the persuasiveness of the ad, and the appeal of the ad along scales from 0 (not at all) to 10 (very). In addition, they listed their thoughts about exotic cuisine and the ad.

Results

Attractiveness of Exotic Foods. Ratings on perceived attractiveness of exotic foods to potential tourists were summarized in table 2 as a function of mindset conditions. The main effect of mindset was significant ($F(2, 69) = 3.42; p < .04$), indicating that

exotic foods were perceived to be more attractive in the bolstering mindset condition ($M = 5.77$) than in the control condition ($M = 3.97$; $F(1, 69) = 5.66, p < .02$). However, a counterarguing mindset did not influence the attractiveness of exotic foods (3.86 vs. 3.97, in counterarguing vs. control conditions, respectively).

<Insert table 2 about here>

Ad Evaluations. Participants' ratings of the ad's persuasiveness and appeal were averaged to form a single measure of the ad evaluations ($r = .80, p < .001$). The main effect of mindset was significant, $F(2, 69) = 3.25, p < .05$. Specifically, the ad was evaluated more favorably in the bolstering mindset condition ($M = 4.91$) than in the control condition ($M = 3.00$; $F(1, 69) = 6.44, p < .02$). However, evaluations of the ad in the counterarguing mindset condition did not differ from those in the control condition (3.79 vs. 3.00; $p > .10$).

Thought Generation. Participants' total number of thoughts about the exotic cuisine and the ad was analyzed as a function of three mindset conditions. This analysis yielded no significant effects (3.29 vs. 3.05 vs. 3.03 for bolstering, counterarguing, and control conditions, respectively; $F < 1$). All thoughts were coded as positive, negative, or neutral, and the difference in the number of positive vs. negative thoughts was used as an index of thought favorableness, which was analyzed as a function of three mindset conditions. The main effect of mindset was significant ($F(2, 69) = 8.07, p < .001$), indicating that participants generated less favorable thoughts in both counterarguing mindset ($M = -0.67$) and control conditions ($M = -1.06$) than in the bolstering mindset condition ($M = 1.59$; in each case, $F(1, 69) > 9.30, p < .005$).

Mediation. To determine whether thought favorableness mediated the effect of a bolstering mindset on attractiveness of exotic food, a mediation analysis was conducted involving only bolstering and control conditions. Inducing a bolstering mindset increased both the favorableness of thoughts that participants generated ($\beta = .50; t = 4.04, p < .001$) and the attractiveness of exotic foods ($\beta = .33; t = 2.47, p < .02$). However, introducing thought favorableness into the prediction of the foods' attractiveness reduced the effect of mindset to nonsignificance ($\beta = .08, t < 1$), whereas the effect of thought favorableness remained significant ($\beta = .50, t = 3.59, p < .001$). A Sobel test also confirmed the mediating role of thought favorableness (Sobel statistic= 3.02, $p < .005$).

Discussion

Experiment 2 showed that when participants were likely on a priori grounds to oppose the position advocated in a persuasive communication, inducing a counterarguing mindset had little additional effect. However, inducing a bolstering mindset increased the participants' generation of positive thoughts in response to the communication and, therefore, increased the ad's effectiveness. In combination, experiments 1 and 2 provide support for the general hypothesis that a mindset will have a greater impact when it induces participants to use an information-processing strategy that differs from the strategy they would normally employ in the absence of the mindset.

EXPERIMENT 3

As we have noted, inducing a counterarguing mindset should decrease the impact of a message only when the implications of the message are relatively easy to refute. If the validity of the message's arguments and their implications is incontrovertible, however, attempts to counterargue may increase participants' awareness of this difficulty and consequently increase the message's impact. In this case, activating a counterarguing mindset will have a boomerang effect.

To examine this possibility, participants in experiment 3 read an appeal for donations to a children's relief fund. A donation appeal usually urges individuals to engage in altruistic behaviors that have socially desirable implications. Furthermore, the communicator has little if any intrinsic self-interest in the success of the persuasion attempt. For both reasons, recipients should find it difficult to generate arguments against the validity of such an appeal. To this extent, inducing a counterarguing mindset might convince participants of the validity of the appeal and increase the appeal's effectiveness rather than decreasing it.

In this regard, it seemed possible that individuals would be more inclined to refute the implications of a donation appeal from an unfamiliar organization than an appeal from a well-known one. To determine whether this difference moderates the proposed mindset effects, the familiarity of the charity was also manipulated. In fact, however, this factor had no influence on the results.

Method

Subjects and Design. One hundred forty-three North American undergraduate students took part in the study to fulfill a course requirement. They were randomly assigned to one of the six conditions of a 3 (mindset: bolstering vs. counterarguing vs. control) x 2 (familiarity of charitable organization: familiar vs. unfamiliar) between-subjects design.

Procedure. Mindsets were manipulated using the procedures employed in experiments 1 and 2. Upon completing the mindset manipulation task, participants read an appeal to support either (a) the United Nations Children's Fund (UNICEF), a well-known charitable organization, or (b) Advocates for Children, which was fictional and unknown to participants. Both donation appeals (see Appendix A) emphasized the importance of helping children to get an education, explained the missions of each organization, set the goal of each donation campaign, and specified how the donated money could be used. After reading the appeal, participants reported their willingness to make a donation along a scale from 1 (definitely won't) to 5 (definitely will). They also indicated how much money they would be willing to give if they had \$100 in their pocket. Finally, they listed their thoughts about the donation appeal.

Results

Donation Intentions. Participants' ratings of their donation intentions are summarized in the first section of table 3 as a function of mindset conditions and the charitable organization. The main effect of mindset was significant, $F(2, 137) = 3.05, p$

= .05. Planned comparisons indicated that a counterarguing mindset *increased* participants' intentions to make a donation (3.28 vs. 2.74, under counterarguing mindset vs. control conditions, respectively), $F(1, 137) = 4.81, p < .05$. Thus, as we speculated, counterarguing the appeal had a boomerang effect. However, a bolstering mindset did not influence participants' donation intentions (2.81 vs. 2.74 under bolstering mindset vs. control conditions, respectively). These effects did not depend on whether the charitable organization was well-known (UNICEF) or not (AFC) ($F < 1$).

<Insert table 3 about here>

Donation Amount. Participants' estimates of the amount of money they would donate are summarized in the second section of Table 3. Participants estimated that they would donate more money when the charitable organization was well-known ($M = 16.94$) than when it was not ($M = 11.94$), $F(1, 137) = 3.89, p = .05$. More important, the main effect of mindset was significant, $F(2, 137) = 7.54, p < .001$, and was independent of the organization that solicited the donations. Participants who were induced to have a counterarguing mindset were willing to donate more money ($M = \$21.39$) than participants in control conditions ($M = \$11.95$), $F(1, 137) = 8.31, p < .005$. In contrast, a bolstering mindset did not influence the amount of money that participants decided to donate relative to control conditions ($\$9.99$ vs. $\$11.95, p > .10$).

Thought Generation. An analysis of participants' total number of thoughts generated as a function of organization familiarity and mindset conditions yielded no significant effects (2.06 vs. 2.27 vs. 2.19 for bolstering, counterarguing, and control conditions, respectively; $F < 1$). The favorableness of these thoughts, computed as in

earlier studies, is summarized in the third section of table 3. Participants were more likely to generate favorable thoughts than unfavorable ones when the charitable organization was well-known ($M = 0.47$) but were relatively less likely to generate favorable thoughts when the organization was unknown ($M = -0.73$). However, no effects involving mindset were significant. Thus, participants did not generate additional negative thoughts even when a counterarguing mindset was activated in the previous task.

Discussion

Experiment 3 showed that when the implications of a persuasive appeal are difficult to refute, a counterarguing mindset can actually increase the appeal's effectiveness. The fact that participants with this mindset did not generate any more negative thoughts about the donation appeal than control participants did is consistent with our prediction. That is, participants with a counterarguing mindset presumably attempted to refute the implications of the donation appeal but found it difficult to do so. Consequently, they were even more inclined to accept its implications than they might otherwise have been (Rucker and Petty 2004). In contrast, a bolstering mindset apparently did not dispose participants to elaborate the implications of the appeal to any greater degree than they normally would. As a result, it had minimal impact on the appeal's effectiveness.

Furthermore, the results of this experiment call into question another alternative interpretation of our findings. Supporting or refuting a communication in one situation could provide practice in engaging in this cognitive activity and, therefore, could increase

the ability to perform the activity in a later unrelated situation (McGuire 1964). However, if inducing participants to engage in counterarguing increases their *ability* to employ this strategy, it should decrease the effectiveness of a later communication regardless of the nature of this communication. Thus, practice effects could not account for the boomerang effect of a counterarguing mindset when the communication is difficult to refute.

To the extent that inducing a counterarguing mindset has a boomerang effect when a communication is difficult to refute, a bolstering mindset should have a boomerang effect when the validity of a communication is difficult to support. A demonstration of this effect would require the construction of a persuasive message that supports a position with which recipients disagree and contains arguments that are so flimsy that no one could possibly accept them. Because such a communication would be difficult to construct and is less likely to be encountered outside the laboratory, we did not attempt to investigate its effects.

EXPERIMENT 4

In previous experiments, mindsets were induced by stimulating participants to engage overtly in either bolstering or counterarguing. In many instances, however, people covertly generate arguments for or against a message without expressing them overtly. This cognitive activity may be sufficient to activate a general disposition to elaborate or counterargue.

Experiment 4 evaluated this possibility. Participants who described themselves as Republican, Democrat, or Independent were randomly assigned to one of four conditions. In two *speech* conditions, participants first watched either (a) a 10-minute video of Barack Obama's speech on his economic rescue plan in the 2008 presidential campaign or (b) a comparable segment of a speech on economic policy by John McCain. In *debate* conditions, participants watched a 10-minute video of the third presidential debate between Barack Obama and John McCain on their proposed economic plans. In *control* conditions, participants were not exposed to any video. All participants then watched a videotaped speech by the president of Toyota concerning automobile recall after the Toyota car accident in San Diego on August 28, 2009. This was followed by a Toyota TV advertisement intended to increase consumers' confidence in Toyota product safety. Finally, participants then reported their attitudes toward Toyota.

We expected that participants with a strong priori preference for one of the two candidates would be motivated to generate supportive elaborations of a speech by their preferred candidate but to counterargue the assertions made in a speech by the opposing candidate. These individuals' response to the debate was less clear a priori. However, we conjectured that participants with a strong preference for one of the candidates would focus their attention primarily on this candidate's assertions and defend the positions they share. To this extent, they should acquire a bolstering mindset in this condition as well.

When participants were politically independent, different effects were expected. These participants were expected to be relatively indifferent to the two candidates and to take their assertions at face value. To this extent, they should elaborate the implications of the speech in the process of comprehending them (Gilbert 1991) and develop a

bolstering mindset. This would be true regardless of who delivers the speech. When these participants listened to the presidential debate, however, we expected them to follow the two candidates' attempts to refute each other's positions and, in doing so, to covertly counterargue themselves. Thus, we expected them to acquire a counterarguing mindset.

These assumptions are summarized in table 4. If the assumptions are correct and if the aforementioned mindsets influence participants' responses to the Toyota ad they encounter subsequently, participants with a strong preference for one candidate should evaluate Toyota more favorably after hearing a speech by their preferred candidate and also after watching the debate but should evaluate Toyota less favorably after hearing a speech by the opposing candidate. In contrast, politically independent participants should evaluate Toyota more favorably after hearing a speech regardless of who makes it but should evaluate Toyota less favorably after hearing the debate.

<Insert table 4 about here>

Method

Subjects and Design. Two hundred sixty-five participants were recruited from Amazon's Mechanical Turk (www.mturk.com), which is a reputed marketplace for online research (Buhrmester, Kwang, and Gosling 2010). All participants were residing in the United States at the time of participation, and 41.5% of them were males and 58.5% of them were females. Participants took part in the study for a remuneration of \$3.00 USD. They were randomly assigned to one of the four TV program conditions (Obama speech vs. McCain speech vs. debate vs. control) and were self-selected into one of the party affiliation conditions (Republican, Democrat, or Independent).

Procedure. Participants in the three experimental conditions were instructed to take part in an opinion survey that was ostensibly interested in people's opinions toward TV programs on political campaigns. In two *speech* conditions, participants watched a 10-minute TV clip of either a speech by Barack Obama on his economic rescue plan (<http://www.youtube.com/watch?v=bUcTDM5pUww&feature=related>) or a speech by John McCain on economic policy (<http://www.youtube.com/watch?v=ByB490uvOww&feature=related>). In the *debate* condition, participants viewed a segment of the third presidential debate, the topic of which was "Why is your economic plan better than your opponent's?" (<http://www.youtube.com/watch?v=uvqpTIKEjNQ&feature=related>). After watching the TV clip, participants were informed that it would take time for their impression of the TV program to "settle" and, on this pretense, were asked to respond to a survey on consumers' attitudes toward Toyota. In the control condition, participants did not watch any political TV programs.

All participants (including those in the control condition) watched a video clip of a speech made by Toyota's president, Akio Toyoda, (<http://www.youtube.com/watch?v=ZZeiD2-Rbg4&feature=related>) and a commercial (<http://www.youtube.com/watch?v=XZoBfpm1zHg>). In his speech, Mr. Toyoda apologized for the car accident in San Diego and explained Toyota's recall strategy and their plan to improve the quality of its products. The commercial featured Toyota's long history of producing safe cars and its effort to rebuild customers' confidence. Participants then rated how much they liked the brand Toyota along a scale from -3 (dislike very much) to 3 (like very much) and indicated how confident they were of Toyota's ability to

improve the safety of its cars along a scale from 0 (not at all confident) to 7 (very confident). Participants also listed their thoughts about the speech and the commercial.

Upon completion of the consumer survey, participants in the experimental conditions answered several filler questions about the political program they had watched earlier, whereas participants in the control condition expressed their opinions on political TV programs in general. Finally, all participants reported their party affiliation and responded to some demographic measures.

Results

Participants were self-selected into one of the three party affiliation conditions: Republican, Democrat, or Independent (which included those affiliated with other U.S. political parties or those not affiliated with any U.S. political party).

Evaluations of Toyota. Participants' evaluations of Toyota are summarized in table 5 as a function of the four TV program conditions (Obama speech vs. McCain speech vs. debate vs. control) and the three party affiliation conditions (Republican vs. Democrat vs. Independent). Analyses of these data revealed a significant interaction of program type and party affiliation ($F(6, 253) = 5.43, p < .001$).

<Insert table 5 about here>

The pattern of this interaction is consistent with expectations. We expected that participants who were affiliated with a particular party would acquire a bolstering mindset both when hearing a speech by their preferred candidate and when watching the debate. In fact, pooled over Republicans and Democrats, their evaluations of Toyota

under debate conditions ($M = 1.40$) and when they heard a speech by their preferred candidate ($M = 1.49$) did not differ from their evaluations in the control condition ($M = 1.49$). Because Toyota is a favorable brand, these results are consistent with experiment 1. That is, participants spontaneously elaborated the Toyota publicity, and a bolstering mindset did not appreciably increase this tendency. In contrast, hearing a speech by the candidate they opposed substantially *decreased* their evaluations of Toyota ($M = 0.59$) relative to the control condition ($M = 1.49$), $F(1, 253) = 11.83$, $p < .001$, indicating that this speech induced a counterarguing mindset that generalized to the ad they encountered later.

In contrast, we expected that independents would acquire a counterarguing mindset when watching the debate but would be more inclined to acquire a bolstering mindset when watching a speech by a single candidate. Between-cell comparisons shown in table 5 confirmed these expectations. These participants reported less favorable reactions to Toyota when they had watched a debate ($M = .06$) than under the control condition ($M = 1.08$), $F(1, 253) = 6.70$, $p < .01$. However, they reported more favorable reactions to Toyota after watching McCain's speech ($M = 1.75$) than under the control condition ($M = 1.08$), $F(1, 253) = 3.91$, $p < .05$. Although their evaluations of Toyota after watching the Obama speech ($M = 0.86$) were not significantly different from those in the control condition, these evaluations were more favorable than evaluations in the debate condition ($M = 0.06$), $F(1, 258) = 4.28$, $p < .05$.

Comparisons across participant groups are also worth noting. After hearing the Obama speech, Democrats evaluated Toyota more favorably ($M = 1.48$) than either Republicans ($M = 0.50$) or Independents ($M = 0.86$), $F(2, 253) = 2.65$, $p < .08$. After

hearing the McCain speech, however, they evaluated Toyota less favorably ($M = 0.67$) than either Republicans ($M = 1.50$) or Independents ($M = 1.75$), $F(2, 253) = 5.66$, $p < .005$. On the other hand, Independents evaluated Toyota less favorably after hearing the debate ($M = 0.06$) than did either Republicans ($M = 1.42$) or Democrats ($M = 1.37$), $F(2, 253) = 6.31$, $p < .002$.

Confidence in Toyota's Ability to Improve the Safety of Its Cars. Participants' confidence in Toyota's ability to improve the safety of its cars followed a similar pattern. The interaction of program conditions and party affiliation was significant, $F(6, 253) = 5.53$, $p < .001$. When participants were affiliated with a political party, their confidence in Toyota when they had watched the debate (pooled over two parties, $M = 5.53$) or the speech by their preferred candidate ($M = 5.49$) did not differ from the control condition ($M = 5.77$); in each case, $p > .10$. However, watching the speech by the candidate they opposed significantly decreased their confidence in Toyota ($M = 4.70$), relative to the control condition ($M = 5.77$), $F(1, 253) = 18.26$, $p < .001$.

In contrast, the effect of political TV programs on Independents' confidence in Toyota was significant, $F(3, 253) = 5.15$, $p < .002$. Planned comparisons indicated that these participants reported less confidence in Toyota after watching the debate ($M = 4.25$) than they did either after hearing the candidate's speech ($M = 5.57$, pooled over the two speech conditions) or in the control condition ($M = 5.32$), $F(1, 253) = 15.05$, $p < .001$ for the comparison between the debate condition and the other three conditions combined. And the confidence that participants reported either after hearing Obama's speech ($M = 5.43$) or after hearing McCain's speech ($M = 5.71$) did not differ from the control condition ($M = 5.32$); $p > .10$ in each case.

Thought Generation. The assumptions about participants' cognitive responses to political speeches and debates were confirmed indirectly by the types of thoughts that participants generated in response to the messages about Toyota. Neither watching different political TV programs nor party affiliations influenced the total number of thoughts listed ($p > .10$ for both main effects and interaction). However, the relative favorableness of these thoughts (inferred from the difference in the number of positive vs. negative thoughts generated) varied.

Specifically, the main effect of party affiliation was significant, $F(2, 253) = 3.00$, $p < .05$, but was qualified by an interaction of party affiliation and program conditions, $F(6, 253) = 3.36$, $p < .003$. When participants were affiliated with a political party, the favorableness of the thoughts they listed when they either had watched the debate (pooled over Republicans and Democrats, $M = 2.08$) or the speech by their preferred candidate ($M = 1.43$) did not differ from the control condition ($M = 2.01$); $F < 1$ in each case. However, their thoughts were less favorable after watching a speech by the candidate they opposed ($M = 0.25$) than were the thoughts of control participants ($M = 2.01$; $F(1, 253) = 6.19$, $p < .003$).

When participants were politically independent, the effect of program conditions on thought favorableness was marginally significant, $F(3, 253) = 2.52$, $p < .06$. Planned comparisons indicated that these participants generated relatively less favorable thoughts about Toyota after hearing the debate ($M = -1.25$) than after hearing the candidate's speech ($M = 1.27$, pooled over two speech conditions) or in the control condition ($M = 0.84$), $F(1, 253) = 8.68$, $p < .005$ for the comparison between the debate condition and

the other three conditions combined. However, the favorableness of participants' thoughts after hearing either Obama's speech ($M = 1.00$) or McCain's speech ($M = 1.54$) did not differ from control conditions ($M = 0.84$); $F < 1$ in each case.

Mediation. Analysis of the evaluations of Toyota as a function of program conditions and party affiliation revealed a significant interaction, $F(6, 253) = 5.43, p < .001$. However, including thought favorableness as a covariate yielded a significant effect of the covariate, $F(1, 252) = 48.09, p < .001$, and reduced the significance of this interaction, $F(6, 252) = 3.27, p < .005$. Therefore, thought favorableness partially mediated the interactive effect of program conditions and party affiliations on evaluations of Toyota.

GENERAL DISCUSSION

The effectiveness of a persuasive message is influenced by its source, its content, and recipients' characteristics such as motivation and ability to process the information. However, it can also be influenced by unrelated experiences that recipients have before encountering the persuasive communication.

The studies reported in this article demonstrate the nature of this influence. Experiment 1 found that generating counterarguments in one situation activated a counterarguing mindset that disposed people to generate more opposing thoughts (and fewer supportive thoughts) in response to an unrelated advertisement they encountered subsequently. Therefore, they were less likely to be persuaded. In this experiment, the

advertised product was attractive and participants were likely to elaborate the ad's content spontaneously in the course of comprehending it. Consequently, inducing a bolstering mindset had little additional effect. (This was also true in experiments 3 and 4.) In experiment 2, participants had an a priori disposition to refute the implications of the information. In this case, inducing a bolstering mindset increased the impact of the message, whereas inducing a counterarguing mindset had little effect. Moreover, experiment 3 showed that when a persuasive message has socially desirable implications that are difficult to refute, activating a counterarguing mindset can actually increase the effectiveness of the message. Finally, experiment 4 demonstrated that covert counterarguing in one situation was sufficient to activate a general disposition to counterargue, and consequently, decreased the effectiveness of a persuasive message that was encountered later.

Theoretical Contributions

The studies in this article provide the first demonstration of a behavioral mindset's effect on the impact of a persuasive communication. In doing so, they extend our general understanding of mindsets in three ways. First, the weak effect of a bolstering mindset in experiments 1, 3, and 4 and the weak effect of a counterarguing mindset in Experiment 2 highlight an important qualification on the influence of mindsets. That is, activating a mindset will only have an impact when it leads to cognitive behaviors that would not spontaneously occur in the absence of this mindset.

Second, when the behavior induced by a mindset is unsuccessful in attaining the goal to which it is relevant, it can have a boomerang effect. This effect parallels those observed in other situations in which individuals find it difficult to generate arguments in support or against a position they are considering. For example, Sanna and Schwarz (2003) found that increasing participants' perception of the difficulty of generating reasons why an event might not have occurred increased their belief that the event was inevitable. This suggests that inducing a "counterfactual mindset" (Hirt et al. 2004) could also have a boomerang effect if individuals find the generation of counterfactuals to be difficult.

Finally, the effects observed in experiment 4 suggest that a mindset can be activated not only by overt behavior but also by the unobserved cognitive activity. This raises the possibility that the cognitive activity in which individuals spontaneously engage when thinking about an object or situation could influence their responses to stimuli they encounter in a later, unrelated situation.

More generally, our results and the conceptualization underlying them broaden existing formulations of the effects of knowledge accessibility on overt behavior. The extensive research on these effects (Förster and Liberman 2007; Wyer 2008) documents the effect of past experience on the semantic concepts and knowledge that are activated and used to interpret new information and make inferences on the basis of it. Other research has investigated the effects of activating a goal concept on behavior to which the goal is relevant (Chartrand and Bargh 1996; 2002). However, the possibility that leading individuals to engage spontaneously in goal-directed cognitive activity can influence the *procedure* they later apply in pursuit of a different goal has rarely been considered. The

potentially different consequences of activating a goal and activating a procedure that is used to attain this goal deserve further consideration.

Practical Implications

Experiment 4 showed that watching political TV programs such as debates or speeches could activate different mindsets, depending on audiences' prior attitudes toward the candidates. Once activated, these mindsets influenced participants' attitudes toward a brand featured in a subsequent ad. These findings highlight the importance of monitoring the context in which advertisements appear. Even though the quality of the ad per se plays an important role in determining its impact, the context in which it appears can sometimes decrease its effectiveness. When advertisements are shown sequentially, for example, an ad for a product that recipients are likely to consider undesirable could spontaneously activate a counterarguing that could lead consumers to question the validity of an ad that follows it. Presenting an ad in the context of controversial documentaries, or newscasts that convey unpopular opinions, could have similar effects. The implications of these findings for television advertising strategy are worth considering.

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APPENDIX A: SAMPLE STIMULUS MATERIALS USED IN EXPERIMENT 3



Education is a fundamental human right. Every child is entitled to it. It is critical to our development as individuals and as societies, and it helps pave the way to a successful and productive future. When we ensure that children have access to a rights-based, quality education that is rooted in gender equality, we create a ripple effect of opportunity that impacts generations to come.

UNICEF works tirelessly to ensure that every child – regardless of gender, ethnicity, socioeconomic background or circumstances – has access to a quality education. We focus on gender equality and work towards eliminating disparities of all kinds. Our innovative programs and initiatives target the world’s most disadvantaged children: the excluded, the vulnerable and the invisible.

A Call from UNICEF

With its strong presence in 155 countries, UNICEF is the world's leading advocate for children. UNICEF promotes children education - ensuring that they complete primary education as a minimum. To achieve our goal we need to raise an additional US\$10 million.

UNICEF needs your help to ensure that millions of children in Africa have an education and a better future. Your donation makes a huge difference, because we keep our costs low by leveraging local community partnerships and, wherever possible, other national and international development efforts.

These are examples of what your money can do:

- \$10 - School supplies for 1 student in Mozambique and Rwanda
- \$35 - Desk and chair for 1 student in Malawi
- \$45 – Learning materials for 10 children in Zimbabwe
- \$135 – 5 days training of a teacher in Rwanda

Your gift of education is the chance of a better life. With your help, we can give new hope to children like eight-year-old Mukandayisenga, who lost both parents in the aftermath of Rwanda's civil war. Your donation will make their future a world of difference.

TABLE 1
ATTRACTIVENESS OF VACATION SPOT, AD EVALUATIONS AND THOUGHT
FAVORABLENESS AS A FUNCTION OF VACATION SPOT TYPE AND MINDSET
CONDITIONS—EXPERIMENT 1

	Mindset Condition		
	Counterarguing	Control	Bolstering
Attractiveness of Vacation Spot			
Igloo hotel	5.30	6.73	7.67
Museum	4.58	5.70	5.92
<i>M</i>	4.94	6.22	6.80
Ad Evaluations			
Igloo hotel	5.45	6.68	7.23
Museum	4.29	5.93	5.50
<i>M</i>	4.87	6.31	6.37
Thought Favorableness			
Igloo hotel	-0.70	0.82	0.93
Museum	-1.37	-0.65	-0.15
<i>M</i>	-1.04	0.09	0.39

TABLE 2
 ATTRACTIVENESS OF EXOTIC FOODS, AD EVALUATIONS AND THOUGHT
 FAVORABLENESS AS A FUNCTION OF MINDSET CONDITIONS—
 EXPERIMENT 2

	Mindset Condition		
	Counterarguing	Control	Bolstering
Attractiveness of Exotic Foods	3.86	3.97	5.77
Ad Evaluations	3.79	3.00	4.91
Thought Favorableness	-0.67	-1.06	1.59

TABLE 3
 DONATION INTENTIONS, DONATION AMOUNT AND THOUGHT
 FAVORABLENESS AS A FUNCTION OF MINDSET CONDITIONS AND
 ORGANIZATION FAMILIARITY—EXPERIMENT 3

	Mindset Condition		
	Counterarguing	Control	Bolstering
Donation Intentions			
UNICEF	3.43	2.92	2.65
AFC	3.12	2.56	2.96
<i>M</i>	3.28	2.74	2.81
Donation Amount			
UNICEF	\$27.14	\$12.28	\$11.39
AFC	\$15.63	\$11.61	\$8.58
<i>M</i>	\$21.39	\$11.95	\$9.99
Thoughts Favorableness			
UNICEF	0.27	0.53	0.60
AFC	-0.42	-0.80	-0.96
<i>M</i>	-0.08	-0.14	-0.18

TABLE 4

PREDICTED EFFECTS OF PARTY AFFILIATION AND TYPE OF POLITICAL TV
PROGRAM ON MINDSET ACTIVATION—EXPERIMENT 4

	Obama Speech	McCain Speech	Debate
Independents	Bolstering	Bolstering	Counterarguing
Republicans	Counterarguing	Bolstering	Bolstering
Democrats	Bolstering	Counterarguing	Bolstering

TABLE 5
EFFECTS OF PARTY AFFILIATION AND POLITICAL TV PROGRAM ON
CONSUMERS' REACTIONS TO TOYOTA AND THOUGHT FAVORABLENESS—
EXPERIMENT 4

		Debate	Obama Speech	McCain Speech	Control
Evaluations	Independents	0.06 ^c (n=16)	0.86 ^b (n=28)	1.75 ^a (n=28)	1.08 ^b (n=25)
	Democrats	1.37 ^a (n=30)	1.48 ^a (n=21)	0.67 ^b (n=27)	1.72 ^a (n=25)
	Republicans	1.42 ^a (n=19)	0.50 ^b (n=14)	1.50 ^a (n=20)	1.25 ^a (n=12)
Confidence	Independents	4.25 ^b	5.43 ^a	5.71 ^a	5.32 ^a
	Democrats	5.43 ^a	5.48 ^a	4.70 ^b	5.96 ^a
	Republicans	5.63 ^a	4.71 ^b	5.50 ^a	5.58 ^a
Thought Favorableness	Independents	-1.25 ^b	1.00 ^a	1.54 ^a	0.84 ^a
	Democrats	1.57 ^a	1.81 ^a	-0.07 ^b	1.44 ^a
	Republicans	2.58 ^a	0.57 ^b	1.05 ^{ab}	2.58 ^a

Note: cells within each row with unlike superscripts are significant at $p < .05$.

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- 2) Effects of Past Experience
- 2) The Role of Mindsets in Information Processing
- 2) The Present Conceptualization

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- 3) *Mindset Manipulation Check*
- 3) *Mood and Motivation*
- 3) *Attractiveness of Vacation Spot*
- 3) *Ad Evaluations*
- 3) *Thought Generation*
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- 3) *Mediation*
- 2) Discussion

1) **EXPERIMENT 3**

- 2) Method
- 3) *Subjects and Design*
- 3) *Procedure*
- 2) Results
- 3) *Donation Intentions*
- 3) *Donation Amount*
- 3) *Thought Generation*

2) Discussion

1) EXPERIMENT 4

2) Method

3) *Subjects and Design*

3) *Procedure*

2) Results

3) *Evaluations of Toyota*

3) *Confidence in Toyota's Ability to Improve the Safety of Its Cars*

3) *Thought Generation*

3) *Mediation*

1) **GENERAL DISCUSSION**

2) Theoretical Contributions

2) Practical Implications