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Distrust Lowers Attitudinal Ambivalence: Why Watching Fox News Triggers More Extreme Product Attitudes

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# Distrust Lowers Attitudinal Ambivalence: Why Watching Fox News Triggers More Extreme Product Attitudes

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Distrust Lowers Attitudinal Ambivalence: Why Watching Fox News Triggers More

**Extreme Product Attitudes** 

**ABSTRACT** 

We propose that distrust of a target in one task prompts consumers to activate inconsistent

cognitions in a subsequent, different task. The resulting dissonance prompts an effortful

reconciliation process that reduces attitudinal ambivalence toward the target. In the special

circumstances of depleted cognitive resources, the reconciliatory elaboration process cannot

occur, resulting in higher attitudinal ambivalence.

Four studies show that the effects of distrust are robust over tactics for activating it and

methods for measuring attitudinal ambivalence. The last study replicates the main findings in the

more externally valid setting of distrust of a media source, i.e., Fox News. A commercial inserted

after an extract from Fox News successfully lessens consumers' attitudinal ambivalence toward

the advertised product, i.e., reinforced consumers' preexisting attitudes towards the brand.

Specifically, the commercial boosted the loyalty of actual buyers of the brand, but further

decreased the likelihood of non-buyers of the brand to try the product.

**KEYWORDS:** consistency, information processing, mindsets, attitudes, trust

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Phrases such as "a deal too good to be true" and "caveat emptor" signal consumers' distrust of marketplace actors and offers. The past work on distrust, especially in the persuasion literature, has examined responses almost exclusively related to the distrusted target. Instead, the present research focuses on distrust's downstream effect in a subsequent task domain. Consider a television news program with messages that evoke distrust. When it is interrupted by a commercial break, does any news-elicited distrust affect viewers' reaction to those commercials and, if so, how? As this setting indicates, our focus is the way that distrust evoked in a nonmarket domain affects the consumers' responses to product messages in a subsequent domain.

Revealing the effect of nonmarketplace distrust on subsequent consumer behavior requires answers to two theoretical questions. First, how does distrust affect information processing in a subsequent domain? Second, how does that alter processing change consumers' product attitudes?

To answer these two questions, we rely on prior research on mindsets. A "mindset" is a cognitive procedure that, once activated, influences behavior in a subsequent situation (Janiszewski and Wyer 2014; Wyer 2017). For instance, Xu and Wyer (2008) studied the comparison mindset. They showed that its activation induces consumers to start comparing products in a subsequent task which then increases the likelihood of buying one of those products. In the present research, we argue that once activated in a first task, a distrust mindset prompts consumers to access two-sided personal knowledge about the attitude object, thereby triggering an aversive state of dissonance that individuals are motivated to reduce (Gawronski and Strack 2012). The resulting reconciliatory elaboration process results in lower attitudinal ambivalence towards the object. In the special circumstances of depleted cognitive resources, the reconciliatory elaboration process cannot occur and consumers are left with inconsistent beliefs about the target, i.e., higher attitudinal ambivalence.

#### THEORETICAL DEVELOPMENT

## Distrust in the Persuasion Literature

Distrust is naturally evoked by a person, organization, political party, and so forth, such as the near automatic distrust of an automobile salesperson. In these cases, of a distrusted

"target", existing motivations trigger distrust (see Kramer 1999 for a review). This type of distrusted target has been examined in the persuasion literature (Darke and Ritchie 2007), notably within the persuasion knowledge model (Friestad and Wright 1994; Campbell and Kirmani 2000).

The persuasion knowledge model posits that both the persuasion agent and the target have knowledge about each other, about the topic of a message, and about how persuasion works (Friestad and Wright 1994). If the consumer notices a manipulative motive behind a persuasion attempt, suspicion is triggered. This, in turn, the results in mental processes and behaviors, such as counterarguments (Kardes 1988) and negative evaluations of the persuasive agent (Campbell and Kirmani 2000). Notably, in the persuasion knowledge model, both the message's source and the target always lie in the same domain. In contrast, our interest is whether distrust, however activated, can then influence the processing of subsequent information that is unrelated to the source of distrust.

# A Distrust Mindset Activates Inconsistent Cognitions

Our studies of distrust in a subsequent domain is embedded in the theoretical literature on mindsets. Specifically, we use the result that a mindset (or specific cognitive procedure) activated in one domain can transfer its activation to another domain (Janiszewski and Wyer 2014; Wyer 2017). For instance, Xu and Wyer (2008) have shown that comparing animals in a first task makes consumers more likely to complete a purchase in a subsequent task because they automatically start to compare the displayed products. Similarly, a distrust cue, such as meeting a suspicious individual, can influence how consumers encode subsequent information about products. Our studies all use a similar experimental paradigm. We first activate distrust in one task that is always unrelated to consumer behavior. Then, we examine how the resulting mindset alters consumer response in a subsequent task.

This two-stage paradigm for studying distrust has recently been employed by Mayer and Mussweiler (2011; see also Schul, Mayo, and Burnstein 2004; Mayo, Alfasi, and Schwarz 2014). These authors have shown that distrust resulting from a distrust cue or prime can fundamentally change the way that individuals process information. For instance, the threat of being deceived leads people to be skeptical of the validity of the next information they encounter. This skepticism then leads to a change in their "default" information processing strategies,

specifically to the activation of "associations that are incongruent with (or opposite to) the given message" (Schul et al. 2004, 669).

In this view of "unfocused" distrust (i.e., distrust not aimed at any particular target), "trust is the default state, so that... individuals feel the environment is normal and there is no need to worry" (Schul, Mayo, and Burnstein 2008, 1293). Therefore, in situations where trust dominates (i.e., in the equivalent of a control condition with no stimulus prompting distrust), congruent cognitions are usually accessible. The presence of a distrust cue changes this default state by activating incongruent cognitions, such as the pros and cons of the target.

In one demonstration, Schul et al. (2004) show that participants who were exposed to a distrust (vs. trust) cue were better at processing incongruent (vs. congruent) information. They interpreted this result as evidence that individuals tend to activate message-incongruent associations. Kleiman et al. (2015, 333) primes a construct and then demonstrates that "the distrust mindset... inherently entails the activation of alternatives to the original accessible construct". Finally, Mayo et al. (2014) reveal how distrust increases reliance on a negative-hypothesis testing strategy in Wason's (1960) rule discovery task. Initially, participants in the distrust (vs. trust condition) show similar types of hypothesis generation. However, participants in the distrust condition are more likely to propose incongruent tests of the validity of their initial hypothesis. In all of these studies, distrust changed the way participants respond in a subsequent task, leading them to spontaneously challenge new information, to generate new alternatives, and even (in the rule discovery task) to use disconfirming tests of their own self-generated beliefs.

## Distrust Triggers Reconciliatory Elaboration and Reduces Attitudinal Ambivalence

Prior research has illuminated the reactions to inconsistent information. Inconsistencies trigger dissonance, an aversive state that individuals are motivated to reduce (Festinger, 1957). Therefore, distrust, through the activation of inconsistent cognitions should trigger dissonance, and thereby higher elaboration with the ultimate goal to restore consistency within one's belief system (Gawronski and Strack 2012). Prior research has shown that such reconciliatory elaboration reduces attitudinal ambivalence (Rosenbach, Crockett, and Wapner 1973; Thompson, Mark, and Dale 1995; Sengupta and Johar, 2002; Johar and Sengupta 2002). For instance, Thompson et al. (1995) report that increased elaboration helped decision-makers better connect inconsistent elements within an attitudinal structure, thereby resulting in lower attitudinal

ambivalence. Similar results were found by Rosenbach et al. (1973), with studies demonstrating that greater elaboration helped resolve inconsistencies in impression formation. Most relevant to the current predictions, Sengupta and Johar (2002) showed that presenting participants with inconsistent information lowered attitudinal ambivalence, so long as participants had enough cognitive resources to make sense of the inconsistencies. In a similar fashion, Johar and Sengupta (2002) also showed that lying lowers attitudinal ambivalence through the simultaneous activation of one's true and false attitudes, prompting elaboration and contributing to strengthening one's existing, "true" attitude. Therefore, the activation of inconsistent cognitions prompted by distrust is expected to trigger "reconciliatory elaboration which reduces the degree of structural inconsistency by integrating conflicting evaluative implications and facilitates a strengthening effect because of the increased rehearsal that is needed to achieve reconciliation" (Sengupta and Johar 2002, 40-41).

These studies show that reconciliation requires elaboration. When adequate cognitive resources are denied (e.g., rushed decisions), the effect of increased attitudinal ambivalence may even be reversed (Sengupta and Johar 2002). That is, in the absence of elaboration, the structural inconsistencies should be maintained, resulting in greater attitudinal ambivalence. However, because the goal of reaching cognitive consistency is powerful and pervasive (Gawronski and Strack 2012), we predict that distrust may ultimately lower attitudinal ambivalence (always assuming sufficient cognitive resources).

## Consequences of Altered Attitudinal Ambivalence on Consumer Behavior

If distrust yields a net reduction in attitudinal ambivalence, what should be its effect on consumer behavior? Lower attitudinal ambivalence is positively associated with attitudinal strength (Krosnick and Petty 1995). Strong attitudes are more stable and resistant to change and are more predictive of actual behavior (Krosnick and Petty 1995; Armitage and Conner 2000; Conner and Armitage 2008). Therefore, distrust should prompt a higher likelihood of acting according to one's attitudes.

## Overview of the Studies

Study 1 demonstrates that distrust lowers attitudinal ambivalence. Study 2 shows that in the special case of depleted cognitive resources, distrust increases (vs. decreases) attitudinal

ambivalence. Study 3 demonstrates that distrust, via reduced attitudinal ambivalence, increases the correspondence between consumers' product attitude and behavior. Finally, Study 4 replicates prior studies with a more externally valid experimental setting.

## STUDY 1: DISTRUST DECREASES AMBIVALENCE

Study 1 tested the predicted effect of distrust on attitudinal ambivalence in (mostly) consumer topics. Individuals participated in one of three conditions: distrust, trust, and control. Because trust is a kind of default or baseline (Schul et al. 2008), we predicted little or no difference between it and the control condition with no trust manipulation.

## **Participants**

In exchange for 65 cents, 240 participants completed the study on Amazon Mechanical Turk.

#### Method

**Manipulation of Distrust.** Participants were randomly assigned to one of three conditions: trust, distrust, or control. In the trust and distrust conditions, participants were asked to form an impression of a person's face. One face cued trust, while a second one cued distrust (Schul et al. 2004). At the end of the study, participants were asked to report the impression that they had formed about the two faces by rating various descriptive adjectives ("smart," "warm," "deceptive," "happy," "shy," "trustworthy," "independent," "romantic," "competitive," "content," "sociable", or "young"). They reported their impression on a 100-point scale (0 = "not at all like him" to 100 = "very much like him"). The terms "deceptive" and "trustworthy" served to measure the success of the distrust manipulation. The control condition neither saw a face at the first stage of the study nor responded to the adjectives at the end. All participants reported their mood on the PANAS scale (Watson, Clark, and Tellegen 1988).

**Attitudinal Ambivalence.** To measure attitudinal ambivalence, we used the subjective ambivalence scale, which recorded for each topic the extent to which the participant felt

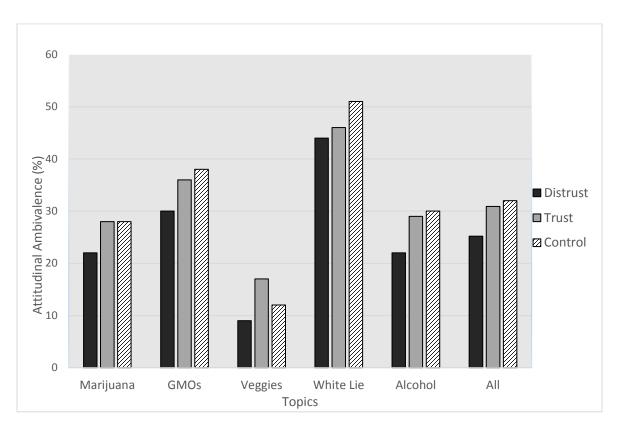
conflicted, felt indecisive, and saw both sides of the argument (Priester and Petty 2001). All participants reported their feelings of subjective ambivalence as elicited by five attitudinal objects (presented in a randomized order): eating vegetables, telling a white lie to your parents, drinking alcohol, legalizing marijuana, and GMOs. The scale was identical to that used by Priester and Petty (1996). Specifically, each topic was followed by a three-item scale that assessed how conflicted, indecisive and two-sided a participant's reaction was. The scales were anchored by 0 (no conflict at all, no indecision at all, completely one-sided reactions) and 100 (maximum conflict, maximum indecision, completely two-sided reactions). We obtained each participant's average ambivalence score by computing the mean response to the three items across attitudinal targets. These scores could range from 0 to 100, with higher scores indicating higher reported ambivalence.

#### Results

**Manipulation Check.** In the distrust condition, the participants evaluated the face observed as less trustworthy than did the participants in the trust condition ( $M_{\text{trust}} = 57.21$ ,  $SD_{\text{trust}} = 20.48$  vs.  $M_{\text{distrust}} = 27.93$ ,  $SD_{\text{distrust}} = 23.38$ ; t(163) = 8.56, p < .0001). They also rated the face as more deceptive than did the participants in the trust condition ( $M_{\text{trust}} = 29.01$ ,  $SD_{\text{trust}} = 24.09$  vs.  $M_{\text{distrust}} = 56.11$ ,  $SD_{\text{distrust}} = 26.45$ ; t(163) = -6.88, p < .0001). Both confirmed the success of the manipulation of distrust. In contrast, there was no impact of the distrust manipulation on the positive affect ( $M_{\text{trust}} = 3.96$ ,  $SD_{\text{trust}} = 1.46$  vs.  $M_{\text{distrust}} = 4.29$ ,  $SD_{\text{distrust}} = 1.36$  vs.  $M_{\text{control}} = 4.15$ ,  $SD_{\text{control}} = 1.36$ ; F(2, 237) = 1.18, p = .31) or on negative affect ( $M_{\text{trust}} = 1.45$ ,  $SD_{\text{trust}} = .85$  vs.  $M_{\text{distrust}} = 1.64$ ,  $SD_{\text{distrust}} = 1.01$  vs.  $M_{\text{control}} = 1.70$ ,  $SD_{\text{control}} = 1.16$ ; F(2, 237) = 1.32, p = .27).

Attitudinal Ambivalence. The reliability coefficient for the three items of the 0-to-100 attitudinal ambiguity scale was .93 across topics ( $\alpha_{\text{marijuana}} = .89$ ;  $\alpha_{\text{GMO}} = .89$ ;  $\alpha_{\text{vegetables}} = .93$ ;  $\alpha_{\text{whitelie}} = .90$ ;  $\alpha_{\text{drinking}} = .92$ ). In the distrust condition, the ambivalence score was 25.60 (SD = 13.68); in the trust condition, it was 30.78 (SD = 16.97). In the control condition, it was 32.02 (SD = 16.87). These three means appear in the rightmost grouping of Figure 1. An ANOVA yielded a significant difference across groups (F(2, 237) = 3.70, p = .03). Planned contrasts

showed that the attitudinal ambivalence of the distrust group was significantly different from that of the control condition (t(156) = -2.53, p = .01) and the trust condition (t(161) = -2.09, p = .04).



**Figure 1.** The effect of distrust on attitudinal ambivalence in Study 1.

To verify whether certain topics might have driven the overall result, we also ran a MANOVA, which verified the main effect of distrust (F(2,236) = 3.69, p = .03). The MANOVA also showed that the levels of felt ambivalence for each topic differed (F(4,233) = 93.24, p < .0001), with some topics triggering more ambivalence than others. For example, telling a white lie triggered more attitudinal ambivalence than legalizing marijuana. However, the MANOVA found no interactive effect between the topics and the distrust condition (F(8, 466) = .60, p = .78), which confirmed that the effect was reliable across topics (Figure 1).

#### Discussion

Our first study demonstrated that distrust lowers attitudinal ambivalence. A distrust cue triggered a consistency-seeking response that made participants less likely to feel indecisive, to feel conflicted or to have mixed reactions about attitudinal targets. Further, the absence of a significant difference between the trust and control conditions accords with past research claiming that trust is the default state (Schul et al. 2008).

## STUDY 2: DISTRUST DECREASES AMBIVALENCE THROUGH ELABORATION

Study 2 alters Study 1 in four ways. First and most important, we seek evidence that, in the absence of adequate cognitive resources for reconciliatory elaboration, distrust increases rather than decreases attitudinal ambivalence. To test the role of these resources, we impose a cognitive load. Second, for methodological generality, we vary the manipulation of distrust from personal perception (faces) to the recall of a personal experience. Third, and again for methodological generality, we change how attitudinal ambivalence is assessed from Study 1's subjective rating of felt conflict/indecisiveness to a measure of ambivalence based on separate analyses of positive and negative aspects of the attitudinal target. Fourth, we use the launch of new products as the attitudinal target instead of the array of topics in Study 1.

# Participants and Design

Three hundred participants completed the study on Amazon Mechanical Turk in exchange for 65 cents. They were randomly assigned to one of four conditions in a 2 (distrust manipulation: distrust vs. trust) x 2 (effort: high vs. low cognitive load) between-subject design.

### Method

**Manipulation of Distrust.** The trust manipulation was based on a recalled experience (Kleiman et al., 2015; Weiss, Burgmer, and Mussweiler, 2018). Participants in the distrust (trust) condition were asked to recall a person they distrust (trust) and to write an explanation of the circumstances that led them to distrust (trust) that individual. They were instructed to spend

approximately 5 minutes on this recall/explanation task. Immediately after, they reported their feelings of trust or deception while writing their explanation on a scale from 0 (not at all) to 100 (very much). At the end of the study, participants also completed the PANAS.

**Cognitive Load.** Following the trust manipulation, half of the participants were randomly assigned to a high cognitive load condition that required them to memorize a string of 8 letters. In the corresponding control condition, participants were asked to memorize a string of only 2 letters (Epley and Gilovich 2006; Chaxel 2014). They were asked to recall this string of letters at the end of the study (participants were not excluded based on their responses).

Attitudinal Ambivalence. The measure of attitudinal ambivalence was based on positive and negative reactions to new product ideas (Thompson et al. 1995; Sengupta and Johar 2002). Participants were first introduced to Company ABC through a few descriptive sentences: "ABC is the world's leading producer of consumers' convenience foods, from cereal bars to frozen meals. ABC places an emphasis on fresh, authentic ingredients to bring consumers the finest culinary experiences. ABC provides various gourmet food items that change as food trends evolve to offer consumers the best."

They were then presented with six potential new product ideas for Company ABC: cake mix, hand soap, multivitamin gummies, bite-sized cookies, frozen yogurt and sunblock. Each new product idea was accompanied by a few explanatory sentences. For cookies, the explanatory sentences were the following: "On top of our knowledge about hearty meals, ABC proudly introduces you to our exclusive cookies that are baked to perfection with only the finest ingredients. The bite-sized cookies come in a convenient resealable grab and go bag and contain all premium ingredients, including French-imported butter and demerara sugar. ABC cookies will guarantee your every bite with a perfect harmony".

After each product description, participants used a 4-point scale (not at all positive/slightly positive/quite positive/extremely positive) to state their positive evaluation of the idea, considering only the positive qualities of the product. Participants were then asked to repeat the task, but to consider only the negative qualities of the new product [on the 4-point scale] (not at all negative/slightly negative/quite negative/extremely negative).

# Measure of Attitudinal Ambivalence

To measure attitudinal ambivalence, the responses to the positive and negative scales were first transformed into numeric scores (from 1 to 4). Let P be the positivity score and N be the negativity score. The ambivalence score was calculated as  $(1+(P+N)-2 \times |P-N|)$ . The resulting values ranged from 0 (no ambivalence) to 9 (high ambivalence); see Zemborain and Johar (2006). This formula yielded the same ambiguity score whether the respondent had a positivity score of 6 and a negative score of 4 or the reverse. In other words, it only measured the extent of ambivalence, which would be idiosyncratic to each participant. It did not measure its more positive or more negative valence that represented the degree of liking of the product.

#### Results

**Manipulation Checks.** The participants in the distrust condition reported feeling more deception than did the participants in the trust condition ( $M_{\text{trust}} = 14.01$ ,  $SD_{\text{trust}} = 27.51$  vs.  $M_{\text{distrust}} = 74.29$ ,  $SD_{\text{distrust}} = 26.37$ ; t(298) = -19.37, p < .0001). The participants in the distrust condition also reported feeling less trust than did the participants in the trust condition ( $M_{\text{trust}} = 86.86$ ,  $SD_{\text{trust}} = 21.00$  vs.  $M_{\text{distrust}} = 32.19$ ,  $SD_{\text{distrust}} = 32.78$ ; t(298) = 17.20, p < .0001). There was no impact of the distrust manipulation on the positive affect ( $M_{\text{trust}} = 4.26$ ,  $SD_{\text{trust}} = 1.36$  vs.  $M_{\text{distrust}} = 4.10$ ,  $SD_{\text{distrust}} = 1.42$ ; t(298) = 1.04, p = .30) or on the negative affect ( $M_{\text{trust}} = 1.87$ ,  $SD_{\text{trust}} = 1.30$  vs.  $M_{\text{distrust}} = 1.99$ ,  $SD_{\text{distrust}} = 1.33$ ; t(298) = -.76, p = .45).

Attitudinal Ambivalence. A two-way ANOVA was calculated with attitudinal ambivalence as the dependent variable and distrust and effort (cognitive load) as the two factors. Neither main effect was significant, nor were they expected to be: for distrust, F(1, 296) = .14, p = .71; for effort, F(1, 296) = 1.95, p = .16. However, the result of interest was the distrust x effort interaction, which was statistically reliable, (F(1, 296) = 11.65, p = .0007). This interaction is depicted in Figure 2, where both planned comparisons were also statistically significant. For the low cognitive load (string of 2 letters), the attitudinal ambivalence score was lower (2.07, SD = 1.39) in the distrust condition than in the trust condition (2.66, SD = 1.52), t(148) = -2.68, p = .008. In contrast, for the high load (string of 8 letters), the attitudinal ambivalence score was higher in the distrust condition (2.38, SD = 1.22) than in the trust condition (1.91, SD = 1.27),

(t(148) = 2.15, p = .03). This pattern accords fully with an initial, automatic process of distrust-induced attitudinal ambivalence followed by a second, effortful process of ambivalence reduction.

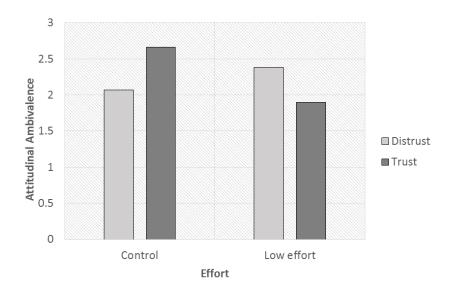


Figure 2. Distrust increases attitudinal ambivalence when cognitive resources are depleted

## Discussion

Study 2 replicates study 1's main finding: that the net effect of distrust is to reduce attitudinal ambivalence. However, this reduction requires cognitive effort. When a cognitive load prevents that effort, the effect of distrust is the increase in ambivalence without a counteracting decrease.

## STUDY 3: DISTRUST AND ATTITUDE-BEHAVIOR CORRESPONDENCE

Study 3 investigates the willingness to pay for the new product as the downstream consequence of attitudinal ambivalence. If distrust prompts lower attitudinal ambivalence, then distrust should increase the correspondence between consumers' attitudes and actual behavior, such as willingness-to-pay.

# Participants and Design

Two hundred participants completed the study on Amazon Mechanical Turk, in exchange for 65 cents. They were randomly assigned to one of two conditions, trust or distrust.

#### Method

**Manipulation of Distrust.** Again, for generality, we used a third manipulation of distrust (Posten and Mussweiler 2013). In the trust condition, participants were asked to write an essay using the following words: belief, certainty, conviction, credence, and trust. In the distrust condition, the corresponding words were disbelief, distrust, skepticism, suspicion, and wariness. Immediately following the essay, participants reported on two scales from 0 (not at all) to 100 (very much) how much they felt (i) trust and (ii) deception while writing their essay. At the end of the study, participants completed the PANAS.

Stimulus. Participants read the same information about company ABC as the participants did in Study 2. They also read that Company ABC intended to launch a new product, a cake mix, which was described as follows: "ABC's newly introduced baking mix proudly offers you our exclusive know-how, with nutrition-balanced ingredients and no trans fats. Packed with fiber, protein, calcium, and natural cane sugar, it provides wholesome goodness and irresistible flavor to you and your family. Thanks to a wonderful array of organic ingredients, it will provide you with an incredible way to relax during your day with a delicious and healthy dessert."

**Procedure.** Following the cover story, participants completed the same measure of attitudinal ambivalence used in Study 2. Specifically, using a 4-point scale (not at all positive/slightly positive/quite positive/extremely positive), they stated their positive evaluation of the new product idea, considering only its positive qualities. Participants then repeated the task considering only the negative qualities of the new product (not at all negative/slightly negative/quite negative/extremely negative).

Next, participants were asked to report their general attitude toward the new product introduction, using a scale from 1 (dislike very much/extremely bad) to 7 (like very much/very

good). To limit memory-based carryover from this attitude to the willingness-to-pay measurement, we inserted a filler task. Participants were required to count backward by 7 s, starting from 175 and finishing at 105. They typed each result, starting with 175 and continuing with the next number (168) until they reached 105. After this filler task, they were asked to report their willingness-to-pay for the product on a scale from 0 to 20 dollars.

## Results

**Manipulation Checks.** The participants in the distrust condition reported feeling more deception than did the participants in the trust condition ( $M_{\text{trust}} = 29.13$ ,  $SD_{\text{trust}} = 30.65$  vs.  $M_{\text{distrust}} = 61.66$ ,  $SD_{\text{distrust}} = 32.34$ ; t(198) = 7.33, p < .0001). They also reported feeling less trust than did the participants in the trust condition ( $M_{\text{trust}} = 71.01$ ,  $SD_{\text{trust}} = 27.51$  vs.  $M_{\text{distrust}} = 36.20$ ,  $SD_{\text{distrust}} = 31.88$ ; t(198) = 7.32, p < .0001). There was no impact of the distrust manipulation on the positive affect ( $M_{\text{trust}} = 3.95$ ,  $SD_{\text{trust}} = 1.33$  vs.  $M_{\text{distrust}} = 4.29$ ,  $SD_{\text{distrust}} = 1.48$ ; t(198) = -.98, p = .33) or on the negative affect ( $M_{\text{trust}} = 1.96$ ,  $SD_{\text{trust}} = 1.30$  vs.  $M_{\text{distrust}} = 1.92$ ,  $SD_{\text{distrust}} = 1.44$ ; t(198) = .22, p = .82).

**Attitudinal Ambivalence.** To verify the effect of distrust on attitudinal ambivalence, we created the same attitudinal ambivalence score as in Study 2. The values of this score were 2.81 (SD = 1.88) in the distrust condition and 3.54 (SD = 1.77) in the trust condition. This difference reached significance (t(198) = 2.83, p = .005), replicating the reduction of attitudinal ambivalence by activating the distrust mindset.

Direct Effect of Distrust on the Valence of Attitudes and Willingness-to-Pay. As expected, there was no effect of distrust on the mean valence of the participants' attitude toward the new cake mix. The mean was 4.91 in the distrust condition (SD = 1.14) and 5.12 in the trust condition (SD = .82; t(198) = 1.50, p = .14). Paralleling the result for the mean attitude, there was no direct impact of distrust on the mean willingness-to-pay ( $M_{\text{distrust}} = 6.49$ ,  $SD_{\text{distrust}} = 4.63$  vs.  $M_{\text{trust}} = 6.03$ ,  $SD_{\text{trust}} = 3.87$ ; t(198) = -.76, p = .45).

Correspondence between Attitudes and Willingness-to-Pay. Critically, we examined whether the correspondence between attitudes and a willingness-to-pay was higher in the distrust condition than in the trust condition. To do so, we ran a regression (distrust = 0, trust = 1) and looked at whether distrust would moderate the relationship between attitude (normally standardized) and the willingness-to-pay. First and obviously, the valence of the attitude toward the product predicted the willingness-to-pay for it (b = 2.28, t = 6.77, p < .0001). However, and more importantly, because distrust was coded as 0, this result indicated a significant relationship between attitude and the willingness-to-pay in the distrust condition. Second, the interaction between the trust condition (coded as 1) and attitudes reached significance. Focusing on the trust condition, the impact of attitudes on the willingness-to-pay was lower in the trust condition (b = -1.45, t = -2.52, p = .01), and the effect of trust on the willingness-to-pay was not significant (b = -.78, t = -1.44, p = .15). Therefore, the correspondence between the consumers' reported attitude toward the new product and their willingness to pay for the new product was stronger in the distrust condition than in the trust condition.

#### Discussion

Study 3 extends the previous finding that distrust reduces attitudinal ambivalence to demonstrate the downstream effect of distrust on the willingness-to-pay. This effect amounts to distrust causing the attitudes to be more predictive of behavior.

## STUDY 4: DISTRUST AND ADVERTISING EFFECTIVENESS

Study 4 replicates the main results of the prior studies in a more natural setting. The distrust cue emanated from a media source, Fox News. Because there is little trust in the media (Pew Research Center for the People and the Press 2017), watching Fox News should trigger more feelings of deception and fewer feelings of trust than watching a neutral/control video.

Our goal is to examine how media-sourced distrust influences consumers' product attitudes during an advertising break. We expect that the participants watching Fox News would make product choices that were closer to their prior (i.e., established) preferences than would the control participants. First, the clearer brand preference induced by distrust should boost brand

loyalty for a preferred brand. Second, and in contrast, advertising in the distrust condition should drive nonpreferrers of the brand further away from intent to purchase. Thus, after watching a Fox News segment, we expect that advertising will be more likely to fail to "convert" those who do not prefer the brand.

## Participants and Design

Two hundred and fourteen participants completed the study on Amazon Mechanical Turk, in exchange for 1 dollar. They were randomly assigned to one of two conditions, control or distrust.

#### Method

**Manipulation of Distrust.** In the distrust condition, participants watched a 3-minute extract of the news from the Fox News network. In the control condition, participants watched a 3-minute extract of a documentary about birds. Immediately following their video, all participants reported the extent to which they experienced feelings of both trust and deception while watching it, using two scales from 0 (not at all) to 100 (very much). At the end of the study, participants completed the PANAS.

Measurement of Attitudinal Ambivalence toward Advertising. After watching the Fox News/birds video, all participants observed three commercials in a randomized order. The advertised brands were Amazon, Pepsi, and Tide. After watching the commercials, the participants reported their feelings of attitudinal ambivalence toward the ads on the same only-positive and only negative 100-point scales used in study 3.

**Product Choice.** Following the commercials, all participants saw descriptions of two similar new athletic drinks launched and branded by Coke and Pepsi. They were asked to choose the one that they would buy. The products were described as follows:

"Coke sports drink is an isotonic sports drink containing the minerals your body loses during sweat, including sodium; when you drink Coke sports drink, its combination of

carbohydrates and sodium encourages your body to absorb fluid and maintain fluid balance. Your working muscles are supplied with fuel, and you're able to sustain your endurance when you exercise."

"Pepsi sports drink is a specialized sports drink designed to provide hydration during prolonged training and racing when fluid and electrolyte losses can be significant. It is formulated with a blend of carbs and vitamins that delivers energy when you need it most. Its onthe-go packaging lets you decide when and where the game begins."

**Filler Task.** After the product choice, participants completed demographic questions and the PANAS. They also completed a 5-minute filler task that required them to generate names of cities starting with 10 specific letters. Each letter appeared for exactly 30 s.

**Implicit Association Test.** After the filler task, we assessed the participants' implicit attitudes toward Coke and Pepsi using an IAT to obtain the "true" preference of the participant (Greenwald, McGhee, and Schwartz 1998). The measure of implicit attitudes toward Coca-Cola was a "D-score", which was computed following the recommendations of Greenwald, Nosek, and Banaji (2003). A greater D-score indicated a preference for Coke over Pepsi.

## Results

**Manipulation Checks.** The participants in the distrust condition reported feeling more deception than did the participants in the control condition ( $M_{\text{control}} = 10.62$ ,  $SD_{\text{control}} = 19.42$  vs.  $M_{\text{distrust}} = 49.55$ ,  $SD_{\text{distrust}} = 29.96$ ; t(212) = 11.36, p < .0001). They also reported feeling less trust than did participants in the control condition ( $M_{\text{control}} = 77.77$ ,  $SD_{\text{control}} = 24.76$  vs.  $M_{\text{distrust}} = 39.22$ ,  $SD_{\text{distrust}} = 28.15$ ; t(212) = -10.65, p < .0001). There was no impact of the distrust manipulation on the positive affect ( $M_{\text{control}} = 3.74$ ,  $SD_{\text{control}} = 1.51$  vs.  $M_{\text{distrust}} = 3.80$ ,  $SD_{\text{distrust}} = 1.49$ ; t(212) = .28, p = .77) or on the negative affect ( $M_{\text{control}} = 1.75$ ,  $SD_{\text{control}} = .97$  vs.  $M_{\text{distrust}} = 1.58$ ,  $SD_{\text{distrust}} = .85$ ; t(212) = -1.39, p = .17).

**Attitudinal Ambivalence.** We examined the effect of distrust on attitudinal ambivalence across the three commercials. The mean ambivalence score in the distrust condition (18.16; SD = 13.54)

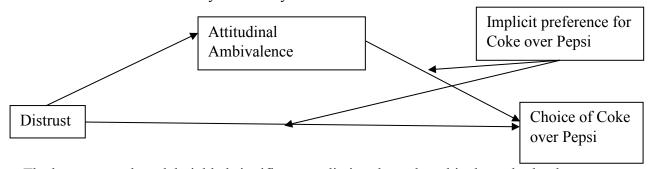
was significantly lower than that of the control condition (24.34; SD = 19.21), t(212) = -2.70, p = .008. For the focal Pepsi ad, the ambivalence scores in the distrust and trust conditions were 16.56 (SD = 16.02) and 24.40 (SD = 24.12), respectively. They were also significantly different (t(212) = -2.78, p = .006). As predicted, the participants in the Fox News condition tended to show lower ambivalence toward an advertised product.

Choice. We then examined whether watching Fox News would have an impact on how consumers made choices. We ran a LOGIT model with the likelihood of picking a new product from Pepsi over Coke as the dependent variable. The control condition was coded as 1, and the distrust condition was coded as 0. The D-score (implicit preference for Coke over Pepsi) was the moderator and was normally standardized. The LOGIT model yielded a significant effect of the D-score on the likelihood of picking a new Pepsi product over Coke (b = -1.03,  $X^2(1) = 16.76$ , p< .0001). Because distrust was coded as 0, this result equates to a significantly negative relationship between an implicit preference for Coke and the likelihood of picking a new product launched by Pepsi when consumers watched the extract from Fox News. The interaction effect between the condition and the D-score also reached significance (b = .65,  $X^2(1) = 4.05$ , p = .04). Therefore, when participants had an implicit preference for Coke (a high D-score), they were less likely to buy a new product launched by Pepsi after watching a Pepsi commercial on Fox News than they were after watching a documentary about birds. This amounts to a rebound effect from the presence of the commercial for consumers who disliked Pepsi. In other words, the presence of the commercial for Pepsi made Coke lovers even less likely to buy a new product launched by Pepsi.

When interpreting the data with a reversed D-score (in which a high D-score reflects an implicit preference for Pepsi), the opposite pattern holds. In the distrust condition (coded as 0), there is a significant positive relationship between an implicit preference for Pepsi and the likelihood of picking a new Pepsi product when consumers watched the extract from Fox News  $(b = -1.03, X^2(1) = 16.76, p < .0001)$ . The same interaction as above means that participants with an implicit preference for Pepsi were *more* likely to buy a new Pepsi product after watching a Pepsi commercial on Fox News than after watching birds – a boosting effect of the presence of the commercial for consumers who like Pepsi more than Coke  $(b = -.65, X^2(1) = 4.05, p = .04)$ .

**Mediation through Attitudinal Ambivalence.** We ran a bootstrapped mediation analysis to test whether attitudinal ambivalence mediated the relationship between the distrust condition and product choice (Model 15; Preacher and Hayes 2008). This model is displayed in Figure 3. The analysis yielded a significant effect of watching Fox News on attitudinal ambivalence: ads seen after watching Fox News prompted distrust and yielded more extreme product attitudes (b = 6.17, t = 2.73, p = .007). In addition, the interaction between ambivalence and the D-score predicted choice (b = .04,  $X^2(1) = 12.25$ , p < .0001). After controlling for attitudinal ambivalence, the effect of the interaction on choice disappeared (b = -1.09, Z = -1.07, p = .28), indicating full mediation.

Figure 3. Moderated mediation analysis in study 4.



The bootstrapped model yielded significant mediation through ambivalence both when the D-score was low (preference for Pepsi; effect = .20, 95% CI = [.02, .53]) and when the D-score was high (preference for Coke; effect = -.18, 95% CI = [-.49, -.02]). Overall, the moderated mediation confidence interval was [-1.31, -.12], which did not include zero and indicated significance. The model presented in Figure 3 was, therefore, fully supported.

#### Discussion

Study 4 shows that, by reducing attitudinal ambivalence, watching commercials on media platforms that prompt distrust can have opposite effects on consumer behavior. If the consumer has a preexisting positive attitude toward the target brand (e.g., toward Pepsi), watching an ad for this brand on a platform that prompts distrust results in a higher likelihood of picking this brand over a competitor's brand (e.g., Pepsi over Coke). However, if the consumer has a preexisting positive attitude toward a competitor's brand (e.g., Coke), watching an ad for the target brand (e.g., Pepsi) on a platform that prompts distrust results in a lower likelihood of picking this brand

over a competitor's brand (e.g., Pepsi over Coke). When inserted after an extract from Fox News, a commercial therefore failed to "convert" consumers that did not like the brand into purchasers of it and, instead, had the opposite effect of moving them toward the competitor.

## **GENERAL DISCUSSION**

The current research adds to the existing consumer behavior literature in three ways. First, it introduces a new antecedent of attitudinal ambivalence, distrust, and thereby contributes to the literature on attitudinal ambivalence and attitude strength. Even with a recent article that calls for a better understanding of attitudinal ambivalence (DeMarree et al. 2014), research on the drivers of subjective ambivalence is still at its early stages.

Second, this research adds to the literature on persuasion by showing that the effects of distrust need not be restricted to the target that prompted distrust. Instead, the effects of distrust activated in a noncommercial domain can influence how consumers develop attitudes toward unrelated objects in a subsequent domain.

Finally, the present results contribute to the literature on mindsets by showing that a distrust mindset can fundamentally change how consumers form their preferences. In a similar vein, Xu and Wyer (2012) studied the counterarguing mindset and showed that refuting arguments led to less favorable product attitudes in a second and unrelated task. The results of the present research complement this work by demonstrating that consumers in a distrust mindset see both sides of an argument and elaborate more on the attitudinal target, resulting in lower attitudinal ambivalence.

# Implications for Theory

We have brought together two streams of work, the use of distrust to elicit inconsistent cognitions and the effortful reconciliatory elaboration that reduces attitudinal ambivalence. We found that the net effect of these two forces is an overall reduction in ambivalence. The more balanced analytical process of reconciliatory elaboration may well affect other product information besides the description of a new product (study 3) and commercials/advertisements (study 4). Possible information sources include websites and blogs, external advice, word-of-

mouth, and normative influence. Considering the last source, research shows that those who are susceptible to normative influence tend to avoid self-representations that risk disapproval (Wooten and Reed 2004). If distrust reduces the susceptibility to normative influence, consumers could be more likely to choose products that are less accepted by a peer group but better fit their personal needs.

More generally, the balanced analysis prompted by distrust may affect consumer behaviors beyond the use of product information. To illustrate, consider the challenge of self-regulation. For people to achieve their goals, they need to recognize impediments. Distrust might facilitate goal achievement by helping individuals to become better aware of the obstacles to achieving their goals. The subsequent reconciliation of these incongruent cognitions may facilitate goal attainment. This hypothesis about the effect of distrust on self-regulation is at first sight consistent with the current research on self-control, which has shown that presenting two options (a healthy snack or an indulgent snack) in a way that highlights how the alternatives conflict with each other increases self-control (Fishbach and Zhang 2008). In a similar fashion, Gratton, Coles, and Donchin (1992) find that a conflict at time N facilitates self-control at time N+1. A distrust mindset may, therefore, help self-control by automatically inducing consumers to see both sides of a target and to resolve conflict in a way that is in line with their target goal.

## Managerial Implications

If managers want to persuade nonconsumers of the value of their products, they might want to avoid advertising on platforms that are not trusted. When distrust is activated, the analytical process that follows is no friend to the persuasive intent of sellers. This barrier to increasing the likelihood of product purchase is particularly formidable for a nonpreferred product and may also be a challenge for a new brand. Therefore, our results additionally suggest that, when managers can identify a platform whose patrons are mainly purchasers of their product, distrust should strengthen that existing product preference. However, such a tactic requires prior knowledge of the product preferences of a platform's patrons. Even then, the success achieved by reinforcing the positive attitude toward the brand amounts to little more than "preaching to the choir".

However, a silver-lining is that distrust has also been shown to increase attitudinal strength and, therefore, the consistency between consumers' attitudes and behavioral intentions. This is actually a positive for consumers who are already loyal to the brand. By lowering attitudinal ambivalence, advertising on media that are not trusted may lead *loyal* consumers of the brand to be more likely to voice their love of the brand on social media. Overall, advertising on media that prompt distrust may, therefore, be more likely to encourage chatter about the brand on social media by consumers who are already convinced of the benefits of the products. The content of the chatter could be manipulated by advertising on media that prompt distrust only for brands that the audience already likes, leaving the duty of finding new consumers for the brand to other media platforms that are more likely to induce trust.

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