

# Undermining Your Case to Enhance Your Impact: A Framework for Understanding the Effects of Acts of Receptiveness in Persuasion

Personality and Social Psychology Review  
2021, Vol. 25(3) 229–250  
© 2021 by the Society for Personality  
and Social Psychology, Inc.  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/10888683211001269  
pspr.sagepub.com  


Mohamed A. Hussein<sup>1</sup>  and Zakary L. Tormala<sup>1</sup>

## Abstract

Past research has uncovered actions that would seem to undermine but in fact frequently enhance persuasion. For example, expressing doubt about one's view or presenting arguments against it would seem to weaken one's case, but can sometimes promote it. We propose a framework for understanding these findings. We posit that these actions constitute *acts of receptiveness*—behaviors that signal openness to new information and opposing viewpoints. We review four classes of acts of receptiveness: conveying uncertainty, acknowledging mistakes, highlighting drawbacks, and asking questions. We identify conditions under which and mechanisms through which these actions boost persuasion. Acts of receptiveness appear to be more persuasive when they come from expert or high-status sources, rather than non-expert or low-status sources, and to operate through two primary mechanisms: increased involvement and enhanced source perceptions. Following a review of this work, we delineate potentially novel acts of receptiveness and outline directions for future research.

## Keywords

persuasion, receptiveness, openness, source perceptions, bias

Imagine that you are a policymaker and are about to present a plan to reopen the economy during the coronavirus pandemic. Would it make you more persuasive to express confidence or doubt about your plan? What if you described your own prior mistakes as a policymaker, or rather noted your successes? Would you be more convincing if you focused on the arguments supporting your plan or if you mentioned some of the arguments against it? If you asked questions or made declarative statements? It is intuitive to surmise that most people seeking to persuade others would choose to express confidence rather than doubt, to cite prior successes rather than mistakes, to focus on arguments that support rather than oppose their policy, and to use declarative statements rather than questions when endorsing it.

Indeed, we assessed these intuitions in a sample of participants from Amazon's Mechanical Turk ( $N = 253$ ; 47.83% female;  $M_{\text{Age}} = 37.28$ ). We asked participants to imagine that they were policymakers with a great deal of expertise who were trying to persuade others to their point of view on a particular issue. We then presented participants with the four pairs of actions noted above and asked them to indicate which of the two actions in each pair would make them more persuasive (see Appendix for exact phrasing and statistical analyses; Supplemental Study 1 [SS1]). The majority of participants indicated that conveying certainty (95.3%), making declarative statements (68.4%), focusing on supportive arguments (66.4%), and highlighting prior successes (61.7%)

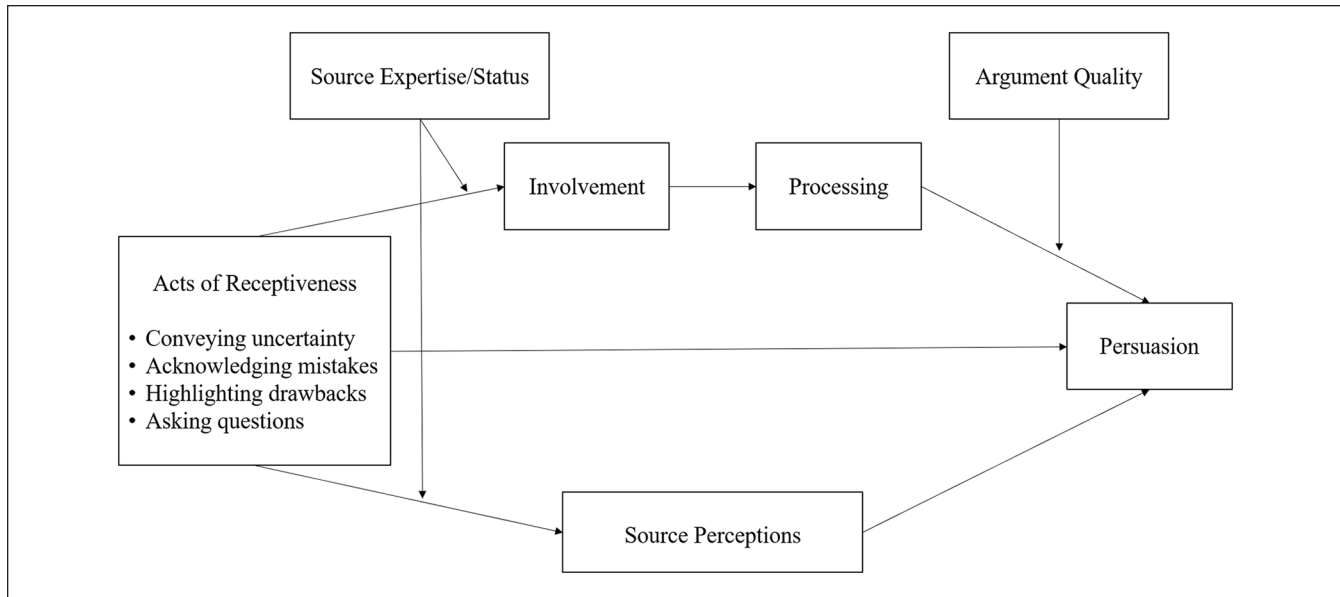
would make them more persuasive. Interestingly, though, a growing literature suggests that under specifiable conditions the counterintuitive action in each pair—that is, expressing uncertainty, asking questions, highlighting the shortcomings of one's argument, and playing up past mistakes—can boost rather than undermine persuasion. When and why do these counterintuitive actions boost persuasion? What do they have in common? This review attempts to answer these questions.

We posit that these diverse actions cohere around a single underlying construct: *acts of receptiveness*. We define acts of receptiveness as behaviors or actions that signal a person's openness to ideas, arguments, and attitudes that are new or opposing to their own. Acts of receptiveness suggest that the source is not overly zealous, biased, or one-sided in their beliefs. They signal open-mindedness—a willingness to consider ideas that may contradict one's own, a humility to acknowledge that one's position might be wrong, and balance or objectiveness in presenting arguments and opinions. This perception of openness, we submit, helps explain a diverse array of counterintuitive effects in persuasion—for example,

<sup>1</sup>Graduate School of Business, Stanford University, CA, USA

## Corresponding Author:

Mohamed A. Hussein, Graduate School of Business, Stanford University,  
655 Knight Way, Stanford, CA 94305-6104, USA.  
Email: mhusein@stanford.edu



**Figure 1.** A simplified conceptual framework detailing the persuasive benefits of acts of receptiveness, as observed in past research.

why confessing doubts, playing up mistakes, highlighting drawbacks or negatives to one's position, and asking questions can sometimes enhance one's persuasive impact. We argue that these actions converge in that they convey receptiveness, which can be advantageous in persuasion. In this review, we document the ways researchers have manipulated acts of receptiveness and show that they have remarkably similar implications for persuasion. In particular, we review past research exploring the persuasive benefits of four classes of acts of receptiveness: conveying uncertainty, acknowledging mistakes, highlighting drawbacks to one's position, and asking questions.

In addition to identifying these classes, we review evidence suggesting that acts of receptiveness operate under common conditions and through similar mechanisms. Consider the conditions. Past research suggests that acts of receptiveness are especially likely to promote persuasion when source expertise or status is high—that is, when the person displaying receptiveness is perceived to be an expert or authority on the topic at hand (e.g., Blankenship & Craig, 2007; Karmarkar & Tormala, 2010; Reich et al., 2018). Under expert or high-status source conditions, it appears that message recipients can be more persuaded by people who express doubt rather than confidence about their opinion, who mention rather than mask mistakes they have made, who highlight flaws in their arguments or reference views that oppose their own, and who ask questions instead of making declarative statements. Under low-expertise or low-status source conditions, these same actions generally offer little advantage or can even backfire.

Why do acts of receptiveness boost persuasion for expert and high-status sources? The evidence points to two underlying mechanisms. First, when delivered by an expert or

high-status source, acts of receptiveness can increase involvement—that is, interest in the message or topic at hand and motivation to think about it—which boosts message processing and promotes persuasion as long as the message contains reasonably strong arguments (e.g., Petty & Cacioppo, 1979, 1986). Under weak-argument conditions, increased involvement offers little persuasive benefit (and can even backfire) as it increases processing and tunes people in to the lack of cogent support offered in the message. Second, acts of receptiveness can elicit more favorable impressions of the source. For example, when expert or high-status sources highlight drawbacks to their position or acknowledge their own mistakes, people might view them more favorably—for example, as more trustworthy or likable. These perceptions, in turn, are well-documented facilitators of persuasion (e.g., McGinnies & Ward, 1980; Wood & Kallgren, 1988).

We present evidence for a new framework suggesting that acts of receptiveness can promote persuasion under conditions of high source expertise or status, and through increased involvement and enhanced source perceptions. Figure 1 offers a visual depiction of this framework, summarizing findings from extant research. After reviewing representative findings from the literature and how they speak to these conditions and mechanisms, we discuss the relationship between these mechanisms and the more specific pathways through which they might operate. To be clear, our argument is not that acts of receptiveness invariably promote persuasion, but rather that they can introduce an advantage under some conditions. We outline these conditions, highlight exceptions, and speculate about potential moderators in this review.

In addition to merging insights from persuasion research and organizing them into a coherent framework, our review

advances a growing literature focused specifically on receptiveness (Catapano et al., 2019; Chen et al., 2010; Itzhakov & Reis, in press; Minson et al., 2020; Reschke et al., 2020; Xu & Petty, in press; Yeomans et al., 2020). The bulk of the work on this topic has explored how *feeling* receptive can influence social and attitudinal outcomes. For example, recent work has explored dispositional receptiveness (Minson et al., 2020; Reschke et al., 2020; Yeomans et al., 2020). Reschke et al. (2020) found that individuals who scored highly on dispositional receptiveness were more likely to build close ties with others who held opposing political views, but only when those others also scored highly on dispositional receptiveness. Other work has explored situational factors that affect feelings of receptiveness. For instance, Catapano et al. (2019) investigated how perspective-taking in a self-persuasion context influenced felt receptiveness and, ultimately, openness to attitude change. The current review uses the lens of receptiveness to understand a wide range of empirical findings in the persuasion literature. However, rather than explore how feeling receptive affects one's openness to others and opposing views, we examine how actions taken by persuaders might shape perceptions of *their* receptiveness, and thus dictate their persuasive impact (see also Yeomans et al., 2020).

Our review also contributes to a burgeoning literature on source bias (Wallace et al., 2020a, 2020b, 2020c, in press). Biased sources are defined as those who present slanted or skewed (though not necessarily dishonest) perspectives, or as those who have vested interest in a specific outcome (e.g., a partisan news source). Work on this topic has distinguished perceived source bias from other source perceptions such as untrustworthiness (see Wallace et al., 2020a, for a review) and has shown that perceptions of source bias have implications for persuasion. For example, Wallace et al. (2020b) found that people expect biased (but not untrustworthy) sources to maintain their positions over time. Thus, when biased (but not untrustworthy) sources switch positions, people are more surprised, which boosts processing and promotes persuasion as long as argument quality is high. We view source bias and receptiveness as related constructs, such that the less biased a source seems, the more receptive to divergent viewpoints they are assumed to be. As such, we believe the current review contributes to the new and growing literature on source bias by delineating a series of actions a source can take to increase perceptions of their receptiveness and reduce their perceived bias.

The structure of our review is as follows: First, we review evidence for four different classes of acts of receptiveness in persuasion. For each, we highlight research that shows the predicted effect and speaks in some way to the proposed conditions and mechanisms. Following this review, we delve deeper into our framework and attempt to clarify its key components. For example, we speculate as to precisely how and why each of the two proposed mechanisms (involvement and source perceptions) translates into favorable persuasion

outcomes and we discuss when each mechanism is likely to operate. Next, we reach beyond persuasion and consider how work in other domains might illuminate novel acts of receptiveness and how our framework might have implications for other phenomena, such as impression formation and management. We also highlight exceptions to our framework—that is, instances in which acts of receptiveness appear to offer no persuasive advantage or even backfire. Throughout the review, we identify unanswered questions and important steps for future research in this area.

## Acts of Receptiveness

There are various actions a persuader can undertake to display receptiveness and, thus, potentially boost persuasion. In this review, we focus on four main classes: conveying uncertainty, acknowledging mistakes, highlighting drawbacks, and asking questions.

### Conveying Uncertainty

One class of acts of receptiveness involves conveying uncertainty. By conveying uncertainty, we mean communicating or displaying doubt, hesitance, or ambiguity. For example, a source who expresses doubt about an opinion (Karmarkar & Tormala, 2010) or provides a range of possible outcomes when making a forecast or prediction (Howe et al., 2019; see also van der Bles et al., 2020) conveys more uncertainty than a source who expresses confidence or makes a singular, precise forecast or prediction. Conveying uncertainty constitutes an act of receptiveness in that it signals that the source has at least some openness to other perspectives. A source who conveys uncertainty takes a position or provides an estimate, but implicitly acknowledges that other positions or estimates exist and might be valid. By conveying uncertainty, the source suggests that they understand that their knowledge is not definitive and that they are open to other perspectives on the topic.

To verify this perspective, we conducted a study in which participants ( $N = 200$ ; 46.97% female;  $M_{\text{Age}} = 33.60$ ) were randomly assigned to read a control message or a message in which the source expressed uncertainty (see SS2 in Appendix). The message outlined a plan to reopen the economy during the Coronavirus pandemic and was identical across conditions, except that in the uncertainty condition it included two expressions of uncertainty (e.g., “I cannot be entirely sure, but I believe that . . .”) that were omitted in the control condition. After reading the message, participants rated the source on open-mindedness and receptiveness. The open-mindedness item read, “How open-minded did you find the speaker to be? By open-minded we mean you find the speaker to be open to new information, and open to opinions and perspectives that differ from his own.” The receptiveness item read, “How receptive did you find the speaker to be? By receptive we mean you find the speaker to be

interested in or willing to listen to new ideas or different ways of thinking about the issue.” As detailed in SS2, the source was perceived as significantly more open-minded and receptive in the uncertainty condition than in the control condition. We now turn to the evidence suggesting that conveying uncertainty can also promote persuasion.

**Expressing uncertainty.** First, explicitly expressing uncertainty about one’s position (e.g., one’s judgment or opinion) has been shown to enhance persuasion under some conditions. In one study, Karmarkar and Tormala (2010) presented participants with a restaurant review in which the reviewer expressed uncertainty (e.g., “I don’t have complete confidence in my opinion, but I suppose I would give . . .”) or certainty (e.g., “I can confidently give . . .”) about his opinion. In addition, the reviewer was described as either a renowned food critic (expert) or an administrator at a community college (non-expert). After reading the review, participants reported their attitudes toward the restaurant and completed measures of involvement. Karmarkar and Tormala found that participants reported more favorable attitudes toward the restaurant when the non-expert expressed certainty rather than uncertainty. However, participants reported more favorable attitudes toward the restaurant when the expert expressed uncertainty rather than certainty. Moreover, the involvement measures showed a similar pattern and mediated the attitude effect.

In another study, Karmarkar and Tormala (2010) provided further evidence for the involvement mechanism. In this study, in addition to expressed certainty and expertise, the authors manipulated the quality of arguments contained in the restaurant review. Discriminating between strong and weak arguments is a well-established indicator of message processing, such that greater argument quality effects generally reflect greater processing (Petty & Cacioppo, 1986). Thus, relative differences in argument quality effects can help pinpoint where message recipients feel most involved with a persuasive message (because involvement triggers deeper processing; e.g., Petty & Cacioppo, 1979). The authors followed the same procedure as in the previous study, but also presented strong or weak arguments in the review. They found that under non-expert source conditions, the argument quality effect was greater when the reviewer expressed certainty rather than uncertainty. Under expert source conditions, the argument quality effect was greater when the reviewer expressed uncertainty rather than certainty. In other words, participants processed the non-expert’s message more carefully when he expressed certainty, but processed the expert’s message more carefully when he expressed uncertainty. This boost in processing helped promote persuasion as long as the message was strong.

Further evidence for the persuasive role of expressing doubt about one’s position comes from work by Hagmann and Loewenstein (2017). Hagmann and Loewenstein investigated the effects of expressing uncertainty when providing

numerical estimates. They found that messages accompanied by expressions of doubt (e.g., “Although I am not completely convinced that my estimate is right, I think . . .”) were more persuasive than messages accompanied by expressions of confidence (e.g., “I think someone would be foolish not to listen to my argument”). These results further underscore the notion that expressing uncertainty about one’s position can facilitate one’s persuasive impact in at least some cases.

**Providing range estimates.** Uncertainty can also be conveyed by providing a range of possible outcomes when articulating one’s position or estimating an outcome. For example, when giving a numerical estimate as part of an argument, instead of offering a precise value (e.g., “our earnings will grow by 10%”), one could offer something more ambiguous such as a best-worst case range (e.g., “at best, our earnings will grow by 15%; at worst, 5%”) or a rough rather than specific guess (e.g., “roughly 3–5” rather than “4”). Just as wider confidence intervals around a statistical estimate communicate less certainty about that estimate (Greenland et al., 2016), offering a wider range of values around a numerical estimate conveys reduced certainty. In essence, wider ranges introduce or recognize ambiguity, which functions as an acknowledgment of uncertainty.

A recent test of the effect of providing ranges of outcomes on persuasion was conducted by Howe et al. (2019). All participants received a prediction made by climate scientists about the effect of climate change on sea-levels. In one condition, participants received a precise estimate (4 feet over the next 100 years). In a second condition, participants received a range of estimates: the precise estimate along with a worst-case scenario (“. . . about 4 feet. However, sea level could rise as much as 7 feet”). In a third condition, participants were given a wider range, including the precise estimate along with best- and worst-case scenarios (“. . . about 4 feet. However, sea level could rise as little as 1 foot or it could rise by as much as 7 feet”). Participants then completed measures of message acceptance and trust in scientists. Howe et al. found that including the full range—that is, the best- and worst-case scenarios alongside the precise estimate—produced the greatest message acceptance. In other words, participants were most persuaded when the range of estimates (and, thus, presumably the degree of uncertainty conveyed) was greatest. Furthermore, this effect was mediated by trust in scientists (see also van der Bles et al., 2020).

Although not directly relevant to persuasion, range estimates have been shown to have benefits over precise estimates in the domain of motivation as well. For instance, motivation research has identified conditions under which uncertain rewards can be more motivating than their more certain counterparts (see Dhar et al., 1999; Goldsmith & Amir, 2010; Mishra et al., 2011; Ruan et al., 2018; Shen et al., 2015, 2019). Across domains, then, there appears to be a potential benefit to using range rather than precise estimates in some circumstances.

**Emphasizing potential.** Further indirect evidence for the upside of uncertainty comes from work on the preference for potential, which has shown that messages that emphasize high but uncertain potential are sometimes more persuasive than messages emphasizing high and very certain achievement (Kupor et al., 2014; Tormala et al., 2012; see also Poehlman & Newman, 2014; Sun et al., 2015). For example, Tormala et al. (2012) found that although potential is inherently less certain than achievement, high potential claims can generate more interest, and thus stimulate deeper message processing, which enhances persuasion under strong argument conditions. In one study, participants read a college professor's recommendation for an applicant to graduate school. In the opening paragraph, the professor praised the applicant's achievements or potential. The professor then provided strong or weak arguments in favor of the candidate. Results indicated that high potential claims were more persuasive than high achievement claims, but only under strong argument conditions. When the letter contained weak arguments, there was no difference between potential and achievement claims. Given that potential is imbued with uncertainty by its nature, these findings hint at the persuasive benefit of conveying uncertainty.

**Conditions and mechanisms.** In short, evidence from several streams of research suggests that conveying uncertainty—by expressing doubt, providing range estimates, and emphasizing potential—can promote persuasion. To the extent that conveying uncertainty implies receptiveness, as our data suggest (see SS2), these findings support the argument that acts of receptiveness can enhance persuasion.

In addition to providing diverse evidence for the advantages of conveying uncertainty in persuasion, past research also speaks to the conditions surrounding this effect and the processes driving it. First, as hypothesized, this effect appears to be most likely to emerge when the source of a message can be assumed to have, or is explicitly described as having, expertise or high status in the domain at hand. In the most direct evidence, Karmarkar and Tormala (2010) found that expressing uncertainty about one's opinion boosted persuasion when the source was an expert, but not when the source was a non-expert. Further consistent with this proposition, most studies pointing to the persuasive advantage of conveying uncertainty used message sources who had clear expertise or status on the topic at hand, such as college professors (Tormala et al., 2012) and climate scientists (Howe et al., 2019).

Also important, the positive effect of conveying uncertainty on persuasion appears to be driven by one or both of the postulated mechanisms: increased involvement (and thus processing) and enhanced source perceptions. Karmarkar and Tormala (2010) found that involvement increased when an expert expressed uncertainty rather than certainty about his opinion. Moreover, these authors found that participants were more responsive to argument quality when the expert

expressed uncertainty rather than certainty, suggesting that participants processed the message more carefully. Likewise, Tormala et al. (2012) observed greater argument quality effects when messages emphasized potential rather than known accomplishments. Other evidence suggests that conveying uncertainty can enhance source perceptions. Howe et al. (2019) found that participants were more open to persuasion by messages that provided a range of estimates rather than a precise estimate, and trust in scientists mediated the effect. Combined, these findings suggest that the advantage of conveying uncertainty in persuasion can be driven by involvement (and thus processing) and enhanced source perceptions. Notably, Karmarkar and Tormala (2010) measured perceived trustworthiness and found that expressing uncertainty had no effect on this dimension. Understanding which mechanism operates when is an important question that we return to later in the article.

### Acknowledging Mistakes

Another class of acts of receptiveness is acknowledging mistakes. By acknowledging mistakes, we mean explicitly or implicitly taking responsibility for an error that has been committed. Explicitly acknowledging a mistake may take the form of recognizing or highlighting one's mistake and/or apologizing for it. For example, a message source might confess, "I used to think X, but I was wrong," or, "I purchased Y, and that was a bad call; you should go with Z." Implicitly acknowledging a mistake may take the form of changing one's opinion to correct for a presumed error. For example, if an audience member challenges a seminar speaker about their interpretation of a study result, the speaker might say, "Yes, that's true; what I meant to say is . . ." or "I see what you mean; that might be a better interpretation." Acknowledging that one has erred or committed a mistake signals openness to information that is potentially adversarial to one's position. Rather than reverting to defensiveness or blame, acknowledging a mistake signals that one is not single-minded; that one is open to updating one's position.

Do people perceive individuals who acknowledge mistakes as more receptive? To find out, we conducted a study in which participants ( $N = 200$ ; 52.24% female;  $M_{\text{Age}} = 32.04$ ) read a message in which the source acknowledged previous mistakes or made no mention of mistakes (see SS3 in Appendix). Using the same measures as SS2, we found that participants perceived the source as more receptive in the mistakes condition than in the control condition. We now review evidence suggesting that acknowledging mistakes can promote persuasion as well.

**Explicitly acknowledging mistakes.** Reich and Maglio (2020) examined the effect of explicitly acknowledging a past mistake on the persuasiveness of one's current message. In one study, participants were asked to choose between two sets of headphones and read a review that recommended one set

over the other. The authors manipulated whether the reviewer referenced a prior purchase mistake (“I ended up buying the Nidec VIA headphones, and that was a mistake . . .”) or success (“I ended up buying the Nidec VIA headphones, and that was a good choice . . .”). Importantly, in both conditions the reviewer recommended the same set of headphones for the current choice; the only difference was whether the prior purchase of a different set of headphones was framed as a mistake or a success. Reich and Maglio found that participants chose the recommended headphones more often when the reviewer referenced his own prior mistake rather than success.

In related work, Reich et al. (2018) investigated the consequences of learning that a product was made by mistake. In one study, participants read about a music producer who added the sound of his breathing to a recent song, which enhanced the music. In one condition, participants were told that the breath was added intentionally; in another, the breath was added by mistake. Pertinent to our framework, the authors also varied source expertise. Participants were told that the source was a hip-hop producer who worked in the recording industry (expert) or a community college administrator taking a music production class (non-expert). Participants were given a choice between listening to the song described in the study or listening to a song they already knew. In the non-expert condition, there was no effect of labeling the breathing as a mistake or as intentional. However, in the expert condition, labeling the breathing as a mistake increased the proportion of participants who chose to listen to the song described in the study.

Gonzales (1992) found that acknowledging a mistake can increase the persuasiveness of a direct request. In this experiment, participants spent 30 minutes completing a task and then learned that the task was the wrong one, which rendered their data invalid. The experimenter either acknowledged (“this whole mess is my fault”) or denied (“this looks like my fault, but it’s not”) the mistake and then asked participants to return to retake the study. Participants were more willing to comply with this request when the experimenter had acknowledged rather than denied his mistake. In addition, participants viewed the experimenter more favorably (e.g., more trustworthy and friendly) when he acknowledged rather than denied the mistake, suggesting enhanced source perceptions under mistake-admission conditions (see also Kim et al., 2004).

The idea that mistakes can enhance source perceptions is reminiscent of classic research on the pratfall effect (Aronson et al., 1963). In this research, Aronson et al. (1963) investigated the effect of acknowledging a clumsy mistake on a person’s perceived attractiveness.<sup>1</sup> Participants reviewed a tape recording of a candidate applying to join a College Quiz Bowl team. The authors manipulated the ability and clumsiness of the candidate during the interview. In the high-ability condition, the candidate correctly answered 92% of the questions asked; in the low-ability condition he answered just 30%

correctly. In the clumsy mistake condition, the candidate spilled coffee on himself, mumbling “Oh my goodness, I’ve spilled coffee all over my new suit.” In the non-clumsy condition, no such mistake occurred. The authors found that the mistake enhanced impressions of the high-ability candidate, but undermined impressions of the low-ability candidate. Although Aronson et al. did not assess persuasion, these results are consistent with the notion that under high expertise or status conditions, mistakes can enhance source perceptions.

Further underscoring these ideas, studies in diverse domains such as close relationships, medicine, and leadership point to the positive effects of acknowledging mistakes. For example, in relationships research, personally acknowledging a transgression has been shown to enhance relationship outcomes (compared with having the same transgression reported by a third-party; Afifi et al., 2001; Walters & Burger, 2013). Likewise, leadership research suggests that acknowledging mistakes enhances trust in leaders (Basford et al., 2014) and research on doctor–patient relationships suggests that doctors who acknowledge (versus fail to acknowledge) medical mistakes are trusted more and less likely to see patients switching to other doctors (Gallagher et al., 2003; Mazor et al., 2006, 2004; Sorensen et al., 2010).

*Implicitly acknowledging mistakes.* In addition to explicitly acknowledging mistakes, implicitly acknowledging mistakes appears to enhance persuasion. For example, John et al. (2019) explored the consequences of “backing down”—that is, changing or updating one’s position in response to a correction. It seems reasonable to assume that when a source backs down, or updates their view in response to resistance or push back, they might be viewed as conceding that they erred or were mistaken. In one study, John et al. asked participants to imagine that they were investors judging the performance of entrepreneurs at a pitching competition. Participants learned that the entrepreneur they were evaluating was informed of a mistake in his business plan and then read that the entrepreneur backed down (“changes his initial business plan”) or refused to back down (“sticks to his initial business plan”). Participants then indicated the extent to which they thought the entrepreneur should advance to the next round, and they rated the entrepreneur on intelligence and confidence. Results indicated that participants were more likely to advance the entrepreneur when he backed down rather than refused to back down. In addition, participants viewed the entrepreneur as more intelligent (but less confident) when he backed down, and perceived intelligence mediated the effect of backing down on participants’ decisions to advance.

Kupor et al. (2018) provided further evidence that acknowledging (and fixing) mistakes might sometimes increase persuasion-type outcomes. In one condition, participants read that a lead engineer at a company failed to update the company’s technology, but later realized his mistake and

company policies were changed to ensure that it would not reoccur. In another condition, the company proactively changed its policies to preempt any such mistake in the first place. Kupor et al. found that participants indicated a higher likelihood of purchasing the company's product when the policy was updated following rather than preceding a mistake.

**Conditions and mechanisms.** In sum, past research suggests that acknowledging mistakes—by explicitly referencing them or implicitly conceding them—can enhance persuasion. Given our data showing that people perceive those who acknowledge mistakes as more receptive than those who do not (see SS3), this work fits with our general framework for acts of receptiveness. Moreover, as hypothesized, the available evidence suggests that the effect of acknowledging mistakes on persuasion is most likely to emerge when the source's expertise or status is at least moderately high, and operates through at least one of the proposed mechanisms.

First consider the expertise condition. Reich et al. (2018) found that acknowledging a mistake boosted persuasion when the source was an expert (an experienced hip-hop producer with many successful albums) but not when the source was a non-expert (a community college student doing an assignment for class). In addition, even when source expertise was not manipulated, the sources used in the reviewed studies appeared to have knowledge or authority on the topic at hand—for example, an experimenter (Gonzales, 1992), an entrepreneur (John et al., 2019), a lead engineer (Kupor et al., 2018) or a consumer with past purchase experience in the relevant domain (Reich & Maglio, 2020). These observations fit with our proposition that acknowledging mistakes has the potential to promote persuasion when the person doing so has at least some expertise or status (see also Aronson et al., 1963).

Also important, aligning with one of our proposed pathways, the positive effect of acknowledging mistakes appears to be driven by enhanced source perceptions, such as likability (Aronson et al., 1963; Gonzales, 1992), knowledge (Reich & Maglio, 2020), trustworthiness (Basford et al., 2014; Gallagher et al., 2003; Mazor et al., 2004, 2006; Sorensen et al., 2010), and intelligence (John et al., 2019). We found no evidence to suggest that the persuasive effect of acknowledging mistakes is driven by involvement, but it stands to reason that this mechanism could play a role as well. Indeed, acknowledging a mistake might be unexpected or surprising, which is a well-known trigger of information processing (e.g., Baker & Petty, 1994). Future research investigating this potential mechanism would be worthwhile.

### Highlighting Drawbacks

Another class of acts of receptiveness is highlighting drawbacks to one's position. Highlighting drawbacks involves

bringing up defects, downsides, and opposing arguments to one's own point of view or position. We submit that doing so signals receptiveness, and thus can offer a persuasive advantage over doing the opposite—for instance, sharing only supportive arguments or asserting that one's proposal or position is perfect or superior on all dimensions. By sharing defects or flaws in one's own argument or points that oppose one's own, the source implicitly admits that their position is neither perfect nor the only position one could take. Instead of displaying a zealous dedication to a single position, the source displays receptiveness to other perspectives. To assess whether highlighting drawbacks does indeed boost perceived receptiveness, we ran a study ( $N = 200$ ; 48.26% female;  $M_{\text{Age}} = 30.82$ ) in which we manipulated whether the source did (e.g., "One of the disadvantages of this plan is that . . .") or did not highlight drawbacks to his own proposal (see SS4 in Appendix). As predicted, the source was seen as more receptive when he highlighted rather than ignored the drawbacks to his plan.

How does highlighting drawbacks affect persuasion? The most direct evidence comes from research on two-sided messages (Bohner et al., 2003; Etgar & Goodwin, 1982; Golden & Alpert, 1987; Kamins & Marks, 1987; Schwarz et al., 1980; Settle & Golden, 1974; R. E. Smith & Hunt, 1978; Xu & Petty, in press; for a review, see Crowley & Hoyer, 1994; for a meta-analysis, see Eisend, 2006) and blemishing effects (Ein-Gar et al., 2012), which suggests that highlighting drawbacks or counterpoints to one's position can enhance persuasion under some conditions.

**Two-sided messages.** Etgar and Goodwin (1982) offered a classic example in an advertising context. Participants read an ad for a beer brand that contained a one- or two-sided message. In the one-sided message condition, the ad claimed that the brand outperformed other brands on a variety of attributes. In the two-sided message condition, the ad claimed that the same brand outperformed other brands on some but not all attributes. Results indicated that compared with the one-sided message, two-sided messaging enhanced attitudes and increased purchase intentions.

In a similar study, Golden and Alpert (1987) presented participants with an ad for deodorant that contained a one- or two-sided message. The one-sided message listed exclusively positive attributes (e.g., non-irritating to the skin), whereas the two-sided message listed mostly positive attributes paired with two negatives (e.g., the packaging was not beautiful). Compared with one-sided messages, two-sided messages increased purchase intent, enhanced perceptions of the product's attributes, and boosted the believability of the advertisement.

In a more contemporary example, Xu and Petty (in press) provided participants with counterattitudinal messages about social issues (e.g., gun control) that were either one- or two-sided. Xu and Petty found that two-sided (versus one-sided) messages increased participants' felt openness and enhanced

persuasion. Moreover, Xu and Petty found that two-sided messages were particularly effective among participants with morally based attitudes, hinting at the possibility that acts of receptiveness might be especially impactful as the need to reduce resistance rises.

**Blemishing.** Related work by Ein-Gar et al. (2012) investigated the effect of blemishing—providing a minor negative detail in an otherwise positive message—on persuasion, and examined whether this effect would be moderated by depth of processing. Ein-Gar et al. presented participants with persuasive messages and manipulated the content of those messages (whether they contained only positive information or mostly positive information plus a minor negative detail) and participants' processing effort (high or low). Results indicated that including a negative detail generally increased persuasion (e.g., increased purchase intentions for the product being promoted). Moreover, this effect was especially likely to occur under conditions of moderate or relatively low processing—for example, when participants were focused on an unrelated task.

**Conditions and mechanisms.** In short, highlighting drawbacks to one's message or position can enhance persuasion. Taken with our own evidence that highlighting drawbacks increases perceived receptiveness (see SS4), this research provides further evidence that acts of receptiveness can boost persuasion under some conditions. Notably, we did not identify any direct evidence that this effect was moderated by source expertise or status, as our framework proposes. However, there is tentative evidence for the expertise condition in this domain. For example, in some studies, the persuasive messages came from celebrities who had used the advertised services in the past and might have been viewed as having relevant knowledge (e.g., Kamins et al., 1989). In others, the message source was an experimenter or salesperson, who presumably would be viewed as having status or knowledge about the product at hand (e.g., Ein-Gar et al., 2012).

We did find evidence consistent with one of the hypothesized mechanisms: enhanced source perceptions. Most germane, highlighting drawbacks has been found to increase source likability and perceived trustworthiness (Bohner et al., 2003; Hastak & Park, 1990; Kamins & Marks, 1987). Relatedly, a meta-analysis of the two-sided messaging literature concluded that delivering a two- as opposed to one-sided message generally promotes persuasion because it increases the perceived truthfulness and credibility of a message's claims (Eisend, 2006).

### Asking Questions

Asking questions, as opposed to making declarative statements, constitutes a final class of acts of receptiveness. Intuitively, asking a question, even when one knows the answer, seems more open and inviting than does making a

statement. A person who makes declarative statements (e.g., "this new policy will boost productivity") could be seen as more firm or assertive than someone who phrases the same position as a question (e.g., "won't this new policy boost productivity?"). By implicitly inviting input, a source who asks questions might be seen as more receptive to others' views. This prediction is consistent with literature spanning multiple domains, which suggests that asking questions can have numerous interpersonal benefits. For example, asking questions boosts the likelihood of receiving help (due to perceived humility; Cojuharenco & Karelaia, 2020), a second date (due to enhanced likability; Huang et al., 2017), and a good negotiation outcome (due to enhanced trust and likability; Bitterly & Schweitzer, 2020). In addition, asking questions—for instance, about intentions—has been shown to have a potent effect on recipients' judgments and behaviors (e.g., Morwitz & Fitzsimons, 2004).

To assess whether asking questions enhances a source's perceived receptiveness, we ran a study ( $N = 200$ ; 49.50% female;  $M_{\text{Age}} = 29.97$ ) in which participants read ostensible snippets of a public debate on how to respond to the coronavirus pandemic. In the questions condition, one of the speakers finished two of his sentences with questions that invited input (e.g., "Now, I would like to ask you: how can we make this plan better?"). The control condition omitted these questions. As detailed in SS5 in the Appendix, we found that the speaker was seen as more receptive when he asked rather than did not ask questions during his speech.

Consistent with this finding, previous research suggests that asking questions can convey receptiveness. Chen et al. (2010) had students engage in debates with counterparts who held opposing views. In one condition, the counterparts provided opposing arguments that ended with an elaboration question (e.g., "Can you tell me more about how come you think that?"). In another, only the opposing arguments were provided. Participants saw their counterpart as more receptive in the question condition relative to the control, and participants themselves became more receptive in turn.<sup>2</sup> This latter effect (whereby participants became more receptive to their partners' views) hints at a possible boost to persuasion from asking elaboration questions. We now turn to other types of questions explored in the persuasion literature.

**Tag questions.** One illustration of the persuasiveness of asking questions comes from work on tag questions. Tag questions refer to statements transformed into questions by adding a tentative query at the end, such as: Da Vinci was American, wasn't he? Because tag questions imply a request for confirmation (Lakoff, 1973; Ng & Bradac, 1993), we submit that they signal openness to input and other perspectives—for example, to confirmation or disconfirmation of the statement—from message recipients. Blankenship and Craig (2007) investigated the effect of tag questions on persuasion. In one experiment, the authors varied the use of tag questions (tag questions versus no

questions), argument quality, and source expertise. Undergraduates read an editorial promoting comprehensive exams as a new college graduation requirement. In the tag questions condition, the message included five tag questions such as “right?” and “isn’t it?” and “don’t you think?” In the control condition, these were omitted. In addition, the author of the message was described as either a high school student (low expertise) or a dean at the participants’ university (high expertise). The authors found that when the source of the message was an expert and the message itself was strong, tag questions enhanced persuasion. If these conditions were not in place, tag questions backfired (see also Blankenship & Holtgraves, 2005).

**Rhetorical questions.** Further evidence that asking questions can promote persuasion comes from work on rhetorical questions (Ahluwalia & Burnkrant, 2004; Burnkrant & Howard, 1984; Petty et al., 1981; Zillmann, 1972; Zillmann & Cantor, 1974). In an early demonstration, Zillmann (1972) asked participants to act as jurors judging a juvenile charged with second-degree murder. In one condition, the defense arguments were framed as declarative statements (e.g., “but he never used his knife as a weapon before”); in the other, the arguments were framed as rhetorical questions (e.g., “but did he ever use his knife as a weapon before?”). Compared with declarative statements, rhetorical questions were more persuasive in the suspect’s defense.

In follow-up research, Petty et al. (1981) shed light on when and why rhetorical questions enhance persuasion. Rhetorical questions, they argued, increased involvement, which boosted persuasion if the message contained strong arguments. To test this mechanism, the authors manipulated three variables: involvement, argument quality, and use of rhetorical questions. Undergraduates listened to a taped communication arguing for comprehensive exams as a graduation requirement. Participants in the high involvement condition were told that policy would be implemented at their own university next year. Participants in the low involvement condition were told that the exams would be implemented at a distant university 10 years later. Participants in the strong (weak) arguments condition were provided with compelling (specious) arguments. Finally, participants in the rhetorical questions condition encountered six argument-summarizing questions (e.g., “Wouldn’t instituting a comprehensive exam be an aid to those who seek admission to graduate and professional schools?”), whereas those in the declarative statement condition received equivalent statements (e.g., “Thus, instituting a comprehensive exam would be an aid to those who seek admission to graduate and professional schools.”).

Petty et al. found a three-way interaction. Of greatest import, under low involvement–strong argument conditions, rhetorical questions were more persuasive than declarative statements. Under high involvement–strong argument conditions, rhetorical questions were *less* persuasive than

declarative statements. Importantly, though, these effects were not observed under weak-argument conditions. Petty et al. interpreted these results as indicating that rhetorical questions affected message processing. When participants were not highly motivated to process the message (relatively low involvement), questions boosted processing and enhanced persuasion when the message contained strong but not weak arguments. When participants were highly motivated to process the message (relatively high involvement), questions distracted from the content of the message, which decreased persuasion in response to strong arguments. Subsequent work replicated these effects placing rhetorical questions at the beginning rather than end of paragraphs (e.g., Ahluwalia & Burnkrant, 2004; Burnkrant & Howard, 1984).

**Conditions and mechanisms.** In short, past research suggests that asking questions—elaboration questions that convey interest in others’ views, tag questions, and rhetorical questions—can boost persuasion under some conditions. Furthermore, asking questions appears to increase one’s perceived receptiveness (see SS5; Chen et al., 2010). Taken together, these findings fit with our framework for acts of receptiveness. In fact, the persuasive advantage of asking questions appears to be most likely to occur under the conditions and through the mechanisms predicted by our framework. For instance, high source expertise or status appears to be conducive to these effects: Studies showing the persuasive benefit of rhetorical questions have used expert and high-status sources, such as a university president (Petty et al., 1981) or a lawyer (Zillmann, 1972), and research on tag questions has directly shown that tag questions boost persuasion when the source is high but not low in expertise (Blankenship & Craig, 2007).

Also important, research provides direct evidence for increased involvement and indirect evidence for enhanced source perceptions as drivers of the effect. Regarding involvement, both Petty et al. (1981) and Blankenship and Craig (2007) found that argument quality moderated the effects of questions on persuasion, consistent with an involvement account. Regarding enhanced source perceptions, question askers have been shown to be perceived as more humble (Cojuharenco & Karelaia, 2020), likable (Huang et al., 2017), and trustworthy (Bitterly & Schweitzer, 2020). These latter studies did not assess traditional persuasion outcomes, but if getting more help (Cojuharenco & Karelaia, 2020), second dates (Huang et al., 2017), and better negotiation outcomes (Bitterly & Schweitzer, 2020) can be viewed as persuasion-adjacent, the findings suggest that questions might promote persuasion through enhanced source perceptions.

## Summary

The primary aim of this review is to integrate research from disparate literatures showcasing a broad array of actions that

would seem to undermine one's persuasiveness but often enhance it. Indeed, despite people's intuitions to the contrary (see SS1), conveying uncertainty, mentioning personal mistakes, highlighting drawbacks, and asking questions can in some cases be more persuasive than their opposites—conveying certainty, mentioning personal successes, focusing on the positives or supporting arguments, and making declarative statements. We propose that these diverse findings converge around a common theme of acts of receptiveness. When people engage in these actions, they show that they are open and receptive to new information or different perspectives, which boosts their persuasive impact.

As noted, the evidence suggests that despite their diversity, these acts of receptiveness produce similar persuasive consequences and operate under similar conditions and through similar mechanisms. As a starting point, although there are bound to be multiple moderators of these effects, previous research points to the source's status and/or expertise as a potentially important factor in determining when acts of receptiveness facilitate persuasion. In general, acts of receptiveness appear to confer greater persuasive benefit when the source is high rather than low in expertise or status. Supporting this condition are studies that directly manipulated expertise (Blankenship & Craig, 2007; Karmarkar & Tormala, 2010; Reich et al., 2018) and studies in which expertise or status was held constant at a moderately high or high level (e.g., Blankenship & Holtgraves, 2005; Gonzales, 1992; Howe et al., 2019; John et al., 2019; Petty et al., 1981; Reich & Maglio, 2020; Tormala et al., 2012).

Furthermore, based on the research reviewed, there appear to be two primary mechanisms driving these effects: increased involvement (and consequent message processing) and enhanced source perceptions (e.g., increased likability and trustworthiness). First, acts of receptiveness can affect persuasion by increasing message recipients' involvement and processing. Support for this mechanism comes from work on conveying uncertainty (Karmarkar & Tormala, 2010; see also Mishra et al., 2011) and asking questions (Blankenship & Craig, 2007; Petty et al., 1981). Second, acts of receptiveness can enhance recipients' perceptions of the source. In essence, acts of receptiveness appear to cast the source in a more favorable light—for example, as more trustworthy and likable. These perceptions, in turn, are well-documented facilitators of persuasion (e.g., McGinnies & Ward, 1980; Wood & Kallgren, 1988). We found evidence for the source perceptions mechanism in all four classes of acts of receptiveness (e.g., Aronson et al., 1963; Chen et al., 2010; Eisend, 2006; Gonzales, 1992; Howe et al., 2019).

## A Closer Look at Mechanism

Although it is evident from our review that increased involvement and enhanced source perceptions tend to drive the positive effects of acts of receptiveness in persuasion, several questions remain. Why do acts of receptiveness affect

involvement and source perceptions? Which source perceptions are most likely to be affected? What is the relationship between the involvement and source perceptions mechanisms? Here, we expand on the evidence for each mechanism and speculate as to how, when, and why they drive persuasion.

### *Increased Involvement*

First, why would acts of receptiveness increase involvement? To answer this question, it is important to reiterate that the acts of receptiveness we reviewed appear to be especially likely to promote persuasion under high-status or expert source conditions. It could be that acts of receptiveness are surprising under these conditions, or incongruent with recipients' expectations for how experts or high-status individuals usually behave. For example, people might expect experts to have well-formed opinions that they express with certainty. If true, an expert who expresses uncertainty might violate expectations and surprise message recipients. Likewise, people might expect high-status sources to be able to rattle off prior successes, making it surprising when they detail personal mistakes. Expectancy violations and surprise, in turn, are well-documented determinants of involvement and processing (e.g., Baker & Petty, 1994; S. M. Smith & Petty, 1996). Indeed, this was the exact process outlined by Karmarkar and Tormala (2010) in their work on expressing uncertainty.

A closely related possibility is that acts of receptiveness pique curiosity (Berlyne, 1954; Loewenstein, 1994). When experts express uncertainty or high-status sources acknowledge mistakes, for instance, people might be curious to learn more. Why were they uncertain? What did they learn? This curiosity, in turn, could raise involvement and deepen message processing. Indeed, recent research suggests that curiosity stimulates information seeking and message processing in persuasion contexts, which can amplify the impact of a persuasive message (Kupor et al., in press; Kupor & Tormala, 2015). Although past research is clear in suggesting that feelings of involvement and consequent information processing help drive at least some acts of receptiveness in persuasion, a complete articulation of the reasons why (e.g., surprise, curiosity, or another intermediate mechanism) awaits further research.

### *Enhanced Source Perceptions*

In addition to involvement, past research suggests that acts of receptiveness sometimes promote persuasion by enhancing source perceptions. What aspects of the source are most likely to be enhanced by acts of receptiveness? Are these effects confined to a specific trait or do they generalize to other traits (e.g., as a halo effect)? The literature is ambiguous with respect to these issues. In general, past research in this area either measured some perceptions but not others

with little to no explanation or used composite indices of numerous (potentially distinct) perceptions, which unfortunately obfuscates the matter. In this section, we offer speculation that we hope inches toward clarity on these issues and highlights useful next steps in research on this topic.

To begin with, which source perceptions are most likely to be enhanced by an act of receptiveness? In general, the evidence suggests that perceptions of warmth, such as trustworthiness and likability, are more likely to be affected than perceptions of competence, such as intelligence and knowledge (for more on warmth and competence, see Fiske, 2018). Indeed, the only evidence we identified pointing to the role of competence came from the domain of acknowledging mistakes, where acknowledging mistakes was associated with perceptions of greater intelligence and knowledge (John et al., 2019; Reich & Maglio, 2020). As noted, however, studies have shown that acknowledging mistakes can enhance perceived trustworthiness too (e.g., Basford et al., 2014; Mazor et al., 2006). For the other acts of receptiveness, the evidence generally revolved around perceptions of trustworthiness and likeability (e.g., Bitterly & Schweitzer, 2020; Eisend, 2006; Hastak & Park, 1990; Howe et al., 2019; Huang et al., 2017; Kamins & Marks, 1987)—that is, perceptions of warmth (Fiske, 2018).

The overall tendency for the source perceptions mechanism to revolve around perceived warmth might also shed light on the finding that expert and high-status sources are especially likely to benefit. First, by virtue of their expertise or status, these sources are already perceived as competent, so there might be less room to grow or need for growth on the competence dimension. Also important, though, expert and high-status sources (e.g., scientists) might often be assumed to have low warmth, meaning there is room and perhaps a need to grow on the warmth dimension. Consistent with this proposition, past research suggests a warmth–competence tradeoff such that people who are perceived as highly competent tend to be perceived as cold as well (Fiske et al., 2002, 2007; Judd et al., 2005; Kervyn et al., 2010). In general, this literature shows that perceived warmth and competence are negatively correlated, so much so that establishing that a person is high on one of these dimensions (e.g., competence) is often interpreted as implying that they are low on the other (e.g., warmth; Kervyn et al., 2012). Extending this notion to the current concerns, if experts are assumed to be cold, an act of receptiveness that enhances their warmth could be especially beneficial. If non-experts are already assumed to be warm (or at least warmer), they would be less likely to receive the same lift. Non-experts might be better off finding a way to convey competence (e.g., expressing certainty; Karmarkar & Tormala, 2010). Diving further into the implications of warmth–competence tradeoffs for persuasion would be an exciting path for new work in this area.

Ultimately, we suspect that even if the primary effect of acts of receptiveness is on perceptions of warmth, these effects can generalize. For instance, if one infers

trustworthiness from an act of receptiveness in one context, this inference might extend beyond that context and reflect a more general impression of trustworthiness across settings. If true, an act of receptiveness in one domain (e.g., a product recommendation) might spillover and enhance one's persuasive impact in another (e.g., a policy endorsement; Wallace et al., in press; cf. Reich & Maglio, 2020). In addition, when an act of receptiveness influences perceptions of a specific trait such as trustworthiness, this effect might generalize to other traits (e.g., likeability). Indeed, our read of the literature is that acts of receptiveness can create global positive impressions. For example, many of the source impression indices in past research assessed multiple perceptions and showed high reliability across items (e.g., Gonzales, 1992). If acts of receptiveness can cause halo-type effects that shape general impressions of sources, this would be important in revealing generalized positive reactions that might predict consequences beyond persuasion in the moment (e.g., willingness to interact with and follow the source's advice in the future, to recommend the source to others, and so on). Future research exploring the global versus local impact of acts of receptiveness on source perceptions would expand our insight into these issues.

### *Which Mechanism, When?*

Another important question is: How do the involvement and source perceptions pathways relate to each other? When does each mechanism operate? Unfortunately, the reviewed literature does not answer this question. Some studies point to one mechanism and some studies point to the other (for one attempt to address both, see Karmarkar & Tormala, 2010). Here, with the hope of stimulating future research in this domain, we offer initial speculation.

One possibility, rooted in the elaboration likelihood model (ELM; Petty & Cacioppo, 1986), is that elaboration plays a role. Elaboration refers to an individual's extent of thinking; the degree to which someone is motivated and able to process the central merits of a message or position. Past research suggests that elaboration dictates the mechanism through which a variable affects persuasion (for reviews see Petty & Wegener, 1998; Tormala & Briñol, 2015). When elaboration is high, variables have been shown to affect persuasion by biasing the valence of thoughts that come to mind. This effect is likely to occur when the message itself is ambiguous in quality (i.e., not clearly strong or weak; e.g., Chaiken & Maheswaran, 1994). When elaboration is low, variables tend to affect persuasion by serving as a simple cue or heuristic. When baseline elaboration is moderate—that is, neither high nor low at the outset—variables often affect persuasion by influencing the amount of thinking that occurs. Extending this theorizing to the current concerns, the ELM might predict that when initial elaboration is moderate, acts of receptiveness operate through the involvement pathway, increasing interest in the message and stimulating deeper processing

that facilitates persuasion under strong but not weak-argument conditions. When initial elaboration is clearly low or high, however, perhaps the source perceptions pathway dominates and drives persuasion by acting as a cue (low elaboration) or biasing thoughts in a favorable direction (high elaboration).

To be clear, past research on acts of receptiveness does not speak to this issue, so the application of the ELM to this context is purely speculative. That said, studies highlighting the involvement mechanism hint at the possibility of moderate elaboration conditions at baseline, which would be compatible with an ELM account. For example, in their work on rhetorical questions, Petty et al. (1981) asked undergraduates to read about a campus policy (comprehensive exams). In the low involvement condition (where rhetorical questions boosted processing and enhanced the impact of strong arguments), participants read that the issue was being considered at a distant university for the distant future. This condition was designed to induce low elaboration, but it might actually have produced more moderate elaboration. Indeed, although comprehensive exams were not under consideration at participants' university, they were relevant to college education and might have been of interest to undergraduates, who perhaps wondered whether their university would consider a similar policy. Thus, elaboration levels might have been more moderate than low in this condition. Unfortunately, involvement was not measured in the study, so it is difficult to ascertain participants' precise levels of involvement.<sup>3</sup> For now, all we can do is conjecture. Further research is needed to assess whether elaboration moderates the mechanism driving the effects of acts of receptiveness.

As a second and perhaps simpler possibility, surprise or unexpectedness could also determine which mechanism operates. For example, particularly surprising acts of receptiveness might trigger the involvement pathway (e.g., Baker & Petty, 1994; S. M. Smith & Petty, 1996). Consistent with this speculation, past studies pointing to the involvement mechanism generally tested acts of receptiveness that seemed potentially surprising—for instance, when a renowned food critic expressed doubt about his opinion (Karmarkar & Tormala, 2010) or a university dean asked tag questions (e.g., “don’t you think?”) when promoting a campus policy (Blankenship & Craig, 2007). In each case, participants might have felt surprised, and thus increased message scrutiny. In contrast, in studies pointing to enhanced source perceptions, the acts of receptiveness seemed potentially less surprising, such as when an entrepreneur fixed a mistake in his model (John et al., 2019) or a scientist expressed uncertainty about a prediction (Howe et al., 2019). It could be that especially surprising acts of receptiveness trigger the involvement mechanism, whereas less surprising ones trigger the source perceptions mechanism.

Delineating the conditions under which involvement versus source perceptions guide the effects of acts of receptiveness will be complicated. In fact, source perceptions can

influence involvement and message processing (e.g., Priester & Petty, 1995). Thus, it could be that acts of receptiveness that influence source perceptions sometimes affect involvement and processing as well. As one possibility along these lines, if an act of receptiveness makes a source seem more thoughtful (e.g., Kupor & Tormala, 2018), it might increase the perceived value or importance of attending to the source’s message, which boosts involvement and deepens processing. Future work should investigate these complex and dynamic pathways.

## Audience Characteristics

Our review has focused on actions persuaders (i.e., sources) can take to communicate receptiveness and open people up to their messages. Importantly, though, persuasion is also critically dependent on audience factors. Are there particular audience characteristics that determine the effectiveness of acts of receptiveness in persuasion? Past research is mostly silent on this issue, but we see it as a crucial topic for ongoing work in this area. One possibility we have already discussed is that the audience’s processing motivation could play a role in determining which mechanism prevails. Here, we highlight additional audience characteristics—for example, initial attitude or position, moralization, dispositional receptiveness, and tolerance for uncertainty—that could shape whether an act of receptiveness is useful in persuasion.

### Attitude Position

First, the audience’s attitude position might play a moderating role. In particular, whether the audience’s attitude is congruent or incongruent with the message could be an important factor. We submit that acts of receptiveness might be especially advantageous under counterattitudinal message conditions. Acts of receptiveness signal that a source is open-minded to other perspectives, which might diffuse the defensiveness or threat people sometimes feel from counterattitudinal messages (see Clark & Wegener, 2013). Rather than unabashedly trying to convert people to an opposing viewpoint, a source who displays receptiveness seems open to new or different perspectives (Chen et al., 2010; Xu & Petty, in press; see also Schwarz et al., 1980). This benefit could be especially useful in the face of counterattitudinal persuasion. When a message is proattitudinal—that is, already aligned with audience’s attitude—the need to reduce threat or defensiveness abates and acts of receptiveness might have less impact.

Consistent with this general proposition, some of the work we reviewed used topics and messages that were clearly counterattitudinal in nature. For example, in their work on asking questions, Petty et al. (1981) had undergraduates read about comprehensive exams as a college graduation requirement (see also Blankenship & Craig, 2007). It is reasonable

to surmise that many students would be initially opposed to this idea. Likewise, Xu and Petty (in press) presented participants with one- or two-sided messages that contradicted their own viewpoints (e.g., regarding gun control or mask-wearing in a pandemic). Thus, there is reason to think that at least some of the effects we reviewed can operate under counterattitudinal message conditions. Note, however, that not all of the research reviewed used clearly counterattitudinal stimuli (e.g., Karmarkar & Tormala, 2010). For now, then, whether acts of receptiveness might be especially conducive to counterattitudinal persuasion remains an open question.

### **Moralization**

Second, the extent to which the audience sees an attitude as grounded in morality might moderate the effect of an act of receptiveness. People differ in the extent to which they see their attitudes as morally based (Skitka, 2010). Two individuals holding the same attitude (e.g., pro-vegan) can differ in the extent to which they see their attitudes as grounded in morality (e.g., based on moral arguments like animal cruelty vs. non-moral arguments like health). We submit that acts of receptiveness might prove especially effective when the audience holds moralized attitudes. Indeed, engaging in an act of receptiveness (e.g., asking questions) could convey that the source acknowledges the importance of the topic and intends to treat the audience's view with respect and understanding. If true, this could put the audience at ease and open them up to the persuasion attempt. Consistent with this view, the Xu and Petty (in press) work on two-sided messaging found that two-sided messages were especially effective when the audience held a morally based attitude. Investigating whether moralization impacts the effectiveness of other acts of receptiveness would be another useful direction for future work.

### **Dispositional Receptiveness**

Recent work has found that people differ in their natural tendency to be receptive to opposing views (Minson et al., 2020). Would the audience's disposition to be receptive moderate the effect of an act of receptiveness? An extensive literature on matching effects suggests that it might (see Teeny et al., in press). Indeed, past research has shown that matching a message to a recipient's personality tends to increase persuasion. For example, messages framed in extraverted terms have been shown to be more persuasive for extraverts than introverts (Wheeler et al., 2005). Perhaps acts of receptiveness are especially persuasive to audiences high in trait receptiveness (Minson et al., 2020), because they match those audiences' underlying inclination toward receptiveness. On the other hand, dispositionally receptive individuals are already open-minded and might not need an act of receptiveness to open them up to a persuasion attempt. It could be that individuals *low* in dispositional receptiveness respond

more favorably to acts of receptiveness, precisely because they need a dose of receptiveness to open up to persuasion. Exploring matching versus mismatching effects would be a valuable step in this domain. As a note, dispositional receptiveness might also influence the *production* of acts of receptiveness. Extant research is unclear about when and why people use acts of receptiveness of their own accord, and one possibility is that the more naturally receptive people are, the more likely they are to use them (see also Yeomans et al., 2020). Future work on this topic could be enlightening.

### **Tolerance for Uncertainty**

In addition to dispositional receptiveness, audiences can also differ in their tolerance for uncertainty. Tolerance for uncertainty captures comfort with and excitement about being in uncertain situations (Frenkel-Brunswick, 1949). People with low tolerance for uncertainty avoid uncertain situations, whereas those with high tolerance for uncertainty seek them out (Buhr & Dugas, 2002). It seems reasonable to speculate that acts of receptiveness sometimes trigger uncertainty. For instance, expressing doubts could induce uncertainty, highlighting drawbacks could make a choice seem uncertain, and asking questions could highlight a knowledge gap or missing information. If true, acts of receptiveness might be more effective for audience members with high rather than low tolerance for uncertainty (see Kupor et al., 2014, for an example of this result with the preference for potential). Moreover, related dispositional factors such as the preference for consistency (Cialdini et al., 1995) and need for cognitive closure (Webster & Kruglanski, 1994) might produce similar moderation effects. Future work examining these moderators would deepen our understanding of potential boundaries on acts of receptiveness.

### **Novel Acts of Receptiveness**

Another important step for research in this area would be to explore novel acts of receptiveness. What other actions constitute acts of receptiveness, and how would those actions affect persuasion? Past research has explored a number of factors that open people up to new, opposing, or threatening information. We ask how these factors might be viewed through the lens of acts of receptiveness, and thus begin the process of brainstorming.

### **Affirmation**

First, research on self-affirmation has shown that people are less defensive and more open to threatening information and divergent perspectives when they are affirmed—for example, when they are given an opportunity to express their values (Cohen et al., 2000; Sherman et al., 2000; Steele et al., 1993). Could persuaders harness this insight? Although it is unlikely that persuaders would be perceived

as more receptive by affirming their own values, affirming the *audience's* values could constitute an act of receptiveness and pave the way to persuasion. Consider a political example in which a conservative source seeks to persuade a liberal audience, or vice versa. Perhaps affirming the audience's liberal or conservative values at the outset of the pitch would cast the source as more receptive to opposing views and thus open the door to persuasion (e.g., via increased involvement or enhanced source perceptions). Indeed, research on moral matching suggests that couching a message in conservative or liberal values can make that message more persuasive for a conservative or liberal audience, respectively (e.g., Feinberg & Willer, 2015; see also Luttrell et al., 2019). Perhaps simply affirming the audience's values could induce the same underlying effect.

### ***Deliberative Mindset***

Research on mindsets has shown that being in a deliberative rather than implemental mindset sparks more open-minded information processing (Fujita et al., 2007; Taylor & Gollwitzer, 1995). In essence, choosing a goal is associated with increased openness to different information, whereas pursuing a goal creates more selectivity (Gollwitzer, 1990). For example, Taylor and Gollwitzer (1995) found that people in deliberative mindsets considered both the pros and cons of a decision, whereas those in an implemental mindset considered mostly the pros. Applying this finding to the current concerns, we submit that communicating that one has a deliberative mindset—or, more specifically, that one is still deliberating between the pros and cons on an issue—might convey receptiveness to others. Although disclosing that one is still deliberating or weighing various options could cast an individual as indecisive or ambivalent, it also suggests that the source is not fixated on one idea or resistant to different perspectives. As such, communicating a deliberative mindset (e.g., “I haven’t come to a final decision yet; I’m still debating . . .”) might constitute a novel act of receptiveness in persuasion.

### ***Positive Mood***

Another factor that can increase receptiveness is positive mood. Trope and Neter (1994) found that positive (negative) mood increases people's interest in negative (positive) feedback. In other words, positive mood increases people's receptiveness to negative information. Would *displaying* a positive mood (e.g., smiling or stating that one feels happy) convey such receptiveness? If people hold the lay theory that individuals in positive states feel less challenged by threatening information, they might indeed infer greater receptiveness on behalf of others in positive as opposed to negative moods. Positive emotional displays such as smiling have been shown to facilitate persuasion under some conditions (Gunnery & Hall, 2014). It would be informative to examine whether these effects function as acts of receptiveness.

### ***Expressed Moderation***

Expressing moderate as opposed to extreme views might also serve as an act of receptiveness. Indeed, in a world in which people are becoming increasingly extreme in their opinions (McCarty, 2019), expressing a moderate rather than an extreme position might come across as more receptive. Would this enhance persuasion? Recent evidence suggests that it could. Kupor and Tormala (2018) found that expressing moderate opinions, especially when the prevailing norm or default is to express extreme opinions, can be advantageous in persuasion. For example, Kupor and Tormala found that customer reviews with moderate ratings (e.g., 4 out of 5) were more persuasive than reviews with extreme ratings (e.g., 5 out of 5) when the default or normative rating in a particular context was extreme (i.e., 5 out of 5). Moderate ratings, they argued, can make the source seem more thoughtful, which boosts the perceived accuracy of their endorsement. Future research assessing whether moderate opinions also convey receptiveness and warmth (e.g., trustworthiness) would be valuable.

### ***Pausing***

Momentary interruptions of persuasive messages can increase persuasion by boosting curiosity and processing (Kupor & Tormala, 2015). While work on this topic has examined contexts in which external events interrupted messages, it hints at the possibility that pausing could offer a persuasive advantage of its own. Pausing during a message might undermine a source's perceived competence (e.g., if it implies hesitation or confusion), but also signal receptiveness. If asked a question, for example, a pause could indicate that the source has not considered the question before, while also suggesting that the source is deliberating or weighing multiple sides of the issue. To the extent that audience members perceive a pause to reflect an internal deliberation, we postulate that sources might be perceived as more receptive when using as opposed to avoiding pauses. In a sense, pausing might function as an implicit consideration of drawbacks or a signal that the source's certainty is low. If true, experts or high-status sources who pause might be more persuasive compared with those who do not (c.f., Ziano & Wang, in press).

### ***Slow Speech***

Pace of speech could also affect perceived receptiveness. Slow speech has been shown to communicate a lack of confidence (Guyer, Briñol et al., 2019), but it has potential to convey receptiveness too. A slow pace, for instance, might be viewed as more inviting and easier to interrupt with questions or comments. A source who speaks slowly is unlikely to be perceived as barreling through a message without giving others a chance to weigh in. In contrast, a fast pace seems more likely to convey a lack of receptiveness and be

perceived as an attempt to steamroll the audience with the source's perspective and arguments. Consistent with this possibility, recent research suggests that paralinguistic cues, such as speed of speech, can influence source perceptions such as thoughtfulness, sincerity, and confidence (Schroeder et al., 2017; Tenney et al., 2019; Van Zant & Berger, 2020). Notably, though, this research generally suggests that paralinguistic displays of confidence outperform paralinguistic displays of doubt (e.g., Guyer, Briñol et al., 2019; Van Zant & Berger, 2020). Future work should explore when the opposite effect emerges and whether these outcomes might be moderated by source expertise or status.

### *High-Level Construal*

Finally, compared with low-level construal, high-level construal has been shown to increase receptiveness to unpleasant information, such as negative feedback (Freitas et al., 2001). Would communicating high-level construal suggest receptiveness to others? It might. Studies have shown that high-level construal increases people's use of abstract (versus concrete) language (Wakslak & Joshi, 2020) and that people are sometimes more likely to follow advice phrased in abstract (versus concrete) terms (Reyt et al., 2016). If audiences intuit that abstract language is associated with high-level construal, then using abstract language might constitute an act of receptiveness. On the other hand, there is reason to think that concrete language would convey greater receptiveness. For instance, concrete language might imply that someone (especially an expert) is trying to communicate simply or clearly to enhance the audience's understanding and facilitate dialogue. Consistent with this notion, use of concrete language has been shown to foster favorable reactions (e.g., trust) in investing, dating, and crowdfunding contexts (Larrimore et al., 2011; Pan et al., 2018; Toma & Hancock, 2012). Assessing the effect of abstract versus concrete language on perceived receptiveness would be another valuable step for research in this domain.

### **Potential Exceptions and Negative Consequences**

To this point, we have focused on the evidence for and possibility of positive effects of acts of receptiveness in persuasion. Importantly, though, our review also identified exceptions—instances in which actions that would seem to fit our definition of acts of receptiveness appear to have no or even negative effects on persuasion. These exceptions are important to consider and may deepen our insight into the conditions under which acts of receptiveness foster persuasion.

First, although the acts of receptiveness we reviewed appear to promote persuasion under expert and high-status source conditions, they seem to offer less benefit or even backfire under non-expert or low-status source conditions.

We uncovered direct evidence for this moderation in the context of expressing uncertainty (Karmarkar & Tormala, 2010), asking tag questions (Blankenship & Craig, 2007), and acknowledging mistakes (Reich et al., 2018; see also Aronson et al., 1963). Further indirect evidence speaks to this issue in the domain of expressing uncertainty. A number of studies have shown that people are more persuaded by information expressed with high rather than low certainty (e.g., Brewer & Burke, 2002; Gaertig & Simmons, 2018; Guyer, Fabrigar et al., 2019; Penrod & Cutler, 1995; Price & Stone, 2004; Sniezek & Van Swol, 2001), and in most of these studies the source had low or ambiguous expertise or status—for example, eyewitnesses with no particular credentials (Brewer & Burke, 2002; Penrod & Cutler, 1995) or study participants offering advice on topics on which they had no known expertise (Gaertig & Simmons, 2018; Sniezek & Van Swol, 2001). These findings fit with the notion that although expressing uncertainty can promote persuasion when the source has high expertise or status, it tends to hinder persuasion when the source has low expertise or status. In a potential departure from our framework, Price and Stone (2004) found that financial advisers were preferred when they made stock forecasts with more rather than less certainty; it seems safe to assume that financial advisers would be seen as experts in this arena. It could be that in some settings (e.g., investment decisions), people feel especially risk averse (or intolerant of uncertainty) and gravitate toward advisers (or sources) with both expertise and certainty to mitigate personal risk (see our section on tolerance for uncertainty for further discussion).

As another potential exception, consider hedging. Hedging refers to the use of language that qualifies, softens, or lessens the forcefulness of a message, including words or phrases such as “kind of” or “probably.” Hedging can be associated with uncertainty and interest in other perspectives (Cheatham & Tormala, 2017) and would seem to constitute an act of receptiveness. However, Blankenship and Holtgraves (2005) found that hedging had no benefit and could even backfire, depending on participants' involvement levels. In the Blankenship and Holtgraves research, no information was offered about the source. It could be that in the absence of source information, hedging comes across as shaky or stammering and suggests a lack of expertise or status. It is worth exploring whether hedging might be conducive to persuasion (e.g., Yeomans et al., 2020) when the source has clear expertise or status in the domain of interest.

Why would acts of receptiveness require expertise or status? In addition to the two accounts provided already—namely, that acts of receptiveness are more surprising and deliver more-needed warmth under expert or high-status source conditions—it is possible that expertise and status shape the attributions people form following an act of receptiveness. In particular, expertise and status might attenuate concerns that an act of receptiveness reflects a lack of competence or knowledge, leaving openness and receptiveness as more likely inferences. For example, people may assume

that a source who asks questions or offers a range of estimates lacks knowledge or insight when that source is a non-expert. These attributions are less viable when the source is an expert, which could shift the focus to more charitable inferences. Going forward, it would be useful to determine whether all acts of receptiveness are moderated by source expertise and status, or whether expertise and status uniquely moderate acts of receptiveness that seem to have the potential to reduce perceptions of competence and expertise (like conveying uncertainty, acknowledging mistakes, highlighting drawbacks, and asking questions). This distinction could prove particularly important as we explore novel acts of receptiveness that may not all have the same intuitive potential to undermine one's case.

Aside from exceptions introduced by source characteristics, the timing of an act of receptiveness could prove important as well. Some evidence comes from the literature on two-sided messaging. Contrary to the work reviewed earlier, Hastak and Park (1990) found that two-sided (versus one-sided) messages undermined persuasion. One salient difference between the Hastak and Park research and the work showing positive effects of two-sided messages is that Hastak and Park *began* their persuasive message with the negative information. It could be that the placement of negative information at the beginning of the message (as opposed to the middle or end) undermines the benefit of including it. Indeed, other work has found positive effects of including negative information on persuasion when negative information is included at the end but not the beginning of a message (Ein-Gar et al., 2012; Kamins & Marks, 1987; see Tenney et al., 2019, for a discussion of the role of timing in shaping the effects of expressed uncertainty). Investigating the temporal dynamics of acts of receptiveness would be worthwhile.

## Status and Sociocultural Factors

A key aspect of our framework is that acts of receptiveness are more conducive to persuasion when the source is viewed as high rather than low in status. Prior research has shown that people sometimes rely on sociocultural factors—such as gender, race, and ethnicity—as indicators of social status. For example, women and people of color are often stereotypically viewed as having lower status than their male and white counterparts (e.g., Dupree et al., 2021; Eagly & Wood, 1982). Would sociocultural aspects of the source (e.g., gender or race) influence the effectiveness of acts of receptiveness? Like persuasion research more broadly, studies in this area have paid little to no attention to this issue. As one exception, Gonzales (1992) examined gender and found that acknowledging mistakes enhanced compliance when the source was male, but not when the source was female. Moreover, when other studies on acts of receptiveness offered a clue as to the source's gender, in most cases the source was likely to be perceived as male (e.g., a stereotypically male name). Thus, it could be that acts of receptiveness

offer greater benefits to sources stereotypically viewed as having high status (such as white men) but have reduced value or even backfire when used by sources stereotypically viewed as having low status (e.g., women or people of color). A systematic study of how sociocultural factors moderate the effects of acts of receptiveness (and persuasion variables more generally) would be immensely valuable.

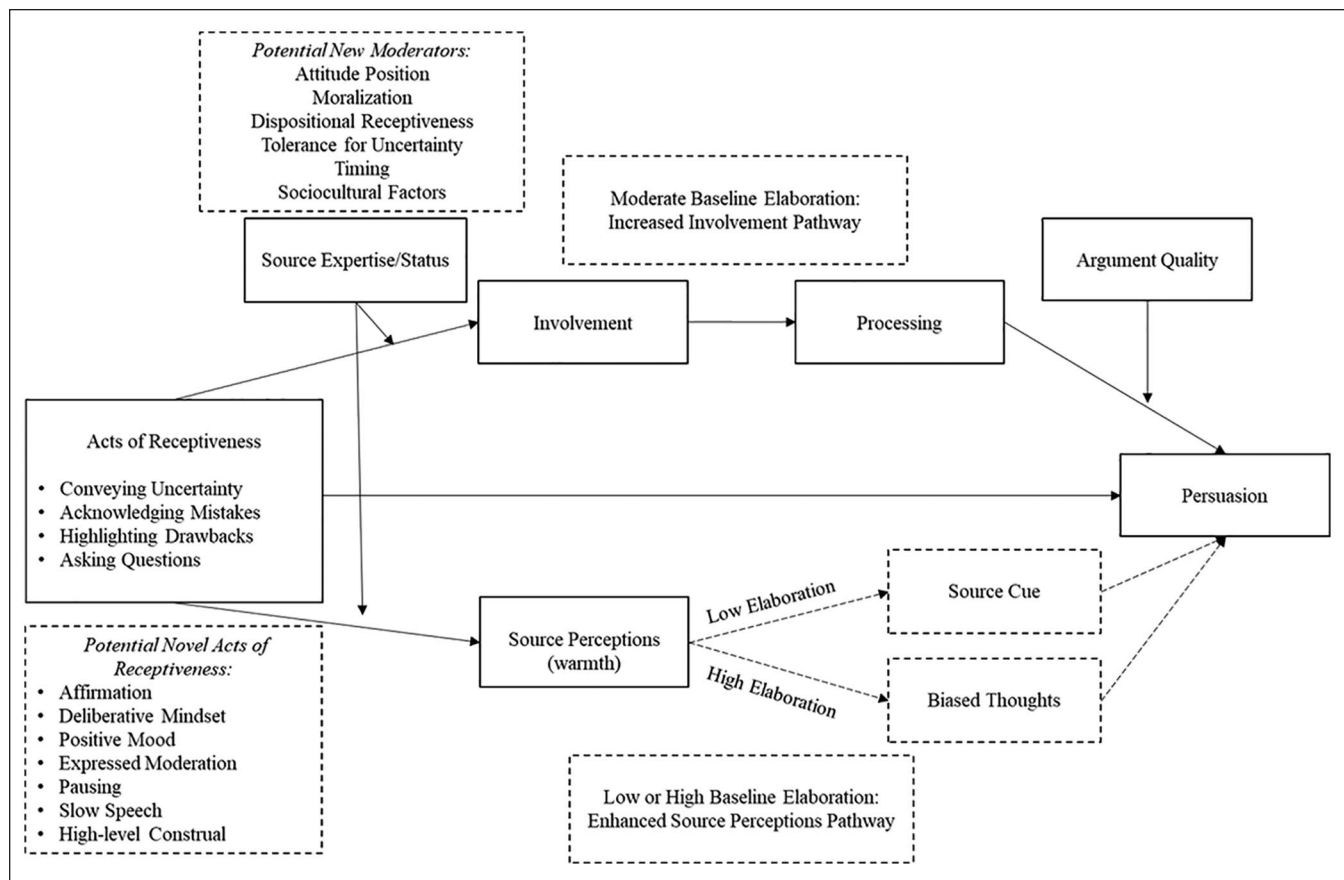
## Summary of New Directions

As a summary of our framework and several promising new paths for research in this area, see Figure 2. This figure expands on Figure 1 to depict both the elements of our framework for which we identified empirical evidence in the literature and new elements that fit with our framework but have yet to be investigated empirically in the current context. Previously documented elements are presented as boxes and arrows with solid lines. Figure 2 also introduces additional factors—new moderators, mediators, and novel acts of receptiveness—that we have put forth as conjectures and promising directions for future research. These factors are presented as boxes and arrows with dashed lines.

## Impression Formation and Management

Our review focuses on the role of acts of receptiveness in persuasion, but acts of receptiveness likely have implications for other phenomena as well—for example, impression formation and management. How do acts of receptiveness feed people's impressions? Past research suggests that they cast a favorable light, but there is some variance as to which dimensions are most likely to be affected. For example, most acts of receptiveness have been shown to affect perceived warmth, but acknowledging mistakes appears to affect perceived competence as well. Future research is needed to assess how acts of receptiveness influence fundamental dimensions of person perception (e.g., warmth versus competence) and map out which specific traits (e.g., trustworthiness, likeability) are most likely to be affected in a given context. Do people strategically use acts of receptiveness to foster favorable impressions? Our data suggest that people might be unaware of the persuasive benefits of acts of receptiveness, but perhaps they recognize that acts of receptiveness can help them achieve other goals, such as seeming likable or approachable. Exploring lay theories of the tradeoffs associated with these actions, and how these tradeoffs affect people's decisions to use them, would be worthwhile.

Finally, while our review has focused on the upside of acts of receptiveness, it is worth asking whether their opposite (acts of closed-mindedness) might have benefits as well. For example, perhaps being receptive to the views of an outgroup can make one seem weak-minded or wishy-washy to ingroup members. In some cases, displaying *resistance* to ideas espoused by outgroup members might boost a person's



**Figure 2.** Detailed conceptual framework for the persuasive benefits of acts of receptiveness.

Note. Solid lines indicate results that have been directly observed in past research. Dashed lines represent (untested) conjectures and highlight directions for future research.

standing within their ingroup. In political domains, for instance, openness to changing one's mind can be associated with interpersonal penalties and fewer votes (Tomz & Van Houweling, in press). Outlining the contexts in which unreceptiveness yields positive outcomes is an important undertaking for ongoing research in this area.

## Conclusion

This review documents a broad array of potentially counterintuitive persuasive actions and proposes a framework for viewing them through a common lens of acts of receptiveness. It appears that regardless of the specific action in question, acts of receptiveness can produce similar persuasive consequences and operate under similar conditions and through similar mechanisms. In merging insights from prior research on seemingly unrelated persuasion phenomena, our framework is both explanatory and generative. Indeed, our review organizes diverse persuasion findings under a common theoretical umbrella, and raises new questions and directions for future research. We hope that other researchers will be sparked to further enrich our understanding of the

construct of acts of receptiveness, and further delineate the conditions and mechanisms that guide their effects.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## ORCID iD

Mohamed A. Hussein  <https://orcid.org/0000-0003-0025-410X>

## Supplemental Material

Supplemental material for this article is available online.

## Notes

1. Aronson et al. (1963) did not detail the specific items included in their "attractiveness" measure.

2. The manipulation in this experiment involved more than asking a question, namely a preamble that expressed interest in the other person's views ("But I was interested in what you're saying."). Further research is needed to verify whether increased receptiveness was driven by the question, the preamble, or both.
3. Readers might wonder about the lack of a positive effect of rhetorical questions on persuasion under high involvement / strong argument conditions in Petty et al. (1981). Petty et al. (1981) used clearly weak or clearly strong arguments, so the ambiguous quality condition required for the biased thoughts mechanism was not in place. It could be that rhetorical questions played a different role under high elaboration in that study—for instance, reducing thought confidence, which attenuated the argument quality effect under high involvement (Petty et al., 2002). Indeed, Petty et al. (1981) inserted rhetorical questions at the end of arguments, and post-argument timing has been shown to be a key moderator of thought confidence effects in persuasion (e.g., Tormala et al., 2007).

## References

- Afifi, W. A., Falato, W. L., & Weiner, J. L. (2001). Identity concerns following a severe relational transgression: The role of discovery method for the relational outcomes of infidelity. *Journal of Social and Personal Relationships*, 18(2), 291–308.
- Ahluwalia, R., & Burnkrant, R. E. (2004). Answering questions about questions: A persuasion knowledge perspective for understanding the effects of rhetorical questions. *Journal of Consumer Research*, 31(1), 26–42.
- Aronson, E., Turner, J. A., & Carlsmith, J. M. (1963). Communicator credibility and communication discrepancy as determinants of opinion change. *Journal of Abnormal Psychology*, 67(1), 31–36.
- Baker, S. M., & Petty, R. E. (1994). Majority and minority influence: Source-position imbalance as a determinant of message scrutiny. *Journal of Personality and Social Psychology*, 67(1), 5–19.
- Basford, T. E., Offermann, L. R., & Behrend, T. S. (2014). Please accept my sincerest apologies: Examining follower reactions to leader apology. *Journal of Business Ethics*, 119(1), 99–117.
- Berlyne, D. E. (1954). A theory of human curiosity. *British Journal of Psychology*, 45, 180–191.
- Bitterly, T. B., & Schweitzer, M. E. (2020). The economic and interpersonal consequences of deflecting direct questions. *Journal of Personality and Social Psychology*, 118(5), 945–990.
- Blankenship, K. L., & Craig, T. Y. (2007). Language and persuasion: Tag questions as powerless speech or as interpreted in context. *Journal of Experimental Social Psychology*, 43(1), 112–118. <https://doi.org/10.1016/j.jesp.2005.12.012>
- Blankenship, K. L., & Holtgraves, T. (2005). The role of different markers of linguistic powerlessness in persuasion. *Journal of Language and Social Psychology*, 24(1), 3–24. <https://doi.org/10.1177/0261927X04273034>
- Bohner, G., Einwiller, S., Erb, H.-P., & Siebler, F. (2003). When small means comfortable: Relations between product attributes in two-sided advertising. *Journal of Consumer Psychology*, 13(4), 454–463. [https://doi.org/10.1207/S15327663JCP1304\\_12](https://doi.org/10.1207/S15327663JCP1304_12)
- Brewer, N., & Burke, A. (2002). Effects of testimonial inconsistencies and eyewitness confidence on mock-juror judgments. *Law and Human Behavior*, 26(3), 353–364. <https://doi.org/10.1023/A:1015380522722>
- Buhr, K., & Dugas, M. J. (2002). The intolerance for uncertainty scale: Psychometric properties of the English version. *Behavior Research and Therapy*, 40, 931–945.
- Burnkrant, R. E., & Howard, D. J. (1984). Effects of the use of introductory rhetorical questions versus statements on information processing. *Journal of Personality and Social Psychology*, 47(6), 1218–1230.
- Catapano, R., Tormala, Z. L., & Rucker, D. D. (2019). Perspective taking and self-persuasion: Why “putting yourself in their shoes” reduces openness to attitude change. *Psychological Science*, 30(3), 424–435. <https://doi.org/10.1177/0956797618822697>
- Chaiken, S., & Maheswaran, D. (1994). Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgment. *Journal of Personality and Social Psychology*, 66(3), 460–473.
- Cheatham, L. B., & Tormala, Z. L. (2017). The curvilinear relationship between attitude certainty and attitudinal advocacy. *Personality and Social Psychology Bulletin*, 43, 3–16.
- Chen, F. S., Minson, J. A., & Tormala, Z. L. (2010). Tell me more: The effects of expressed interest on receptiveness during dialog. *Journal of Experimental Social Psychology*, 46(5), 850–853. <https://doi.org/10.1016/j.jesp.2010.04.012>
- Cialdini, R. B., Trost, M. R., & Newsom, J. T. (1995). Preference for consistency: The development of a valid measure and the discovery of surprising behavioral implications. *Journal of Personality and Social Psychology*, 69(2), 318–328.
- Clark, J. K., & Wegener, D. T. (2013). Message position, information processing, and persuasion: The discrepancy motives model. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 47, pp. 189–232). Academic Press.
- Cohen, G. L., Aronson, J., & Steele, C. M. (2000). When beliefs yield to evidence: Reducing biased evaluation by affirming the self. *Personality and Social Psychology Bulletin*, 26, 1151–1164.
- Cojuharenco, I., & Karelaia, N. (2020). When leaders ask questions: Can humility premiums buffer the effects of competence penalties? *Organizational Behavior and Human Decision Processes*, 156, 113–134. <https://doi.org/10.1016/j.obhdp.2019.12.001>
- Crowley, A. E., & Hoyer, W. D. (1994). An integrative framework for understanding two-sided persuasion. *Journal of Consumer Research*, 20(4), 561–574. <https://doi.org/10.1086/209370>
- Dhar, S. K., González-Vallejo, C., & Soman, D. (1999). Modeling the effects of advertised price claims: Tensile versus precise claims? *Marketing Science*, 18(2), 154–177. <https://doi.org/10.1287/mksc.18.2.154>
- Dupree, C. H., Torrez, B., Obioha, O., & Fiske, S. T. (2021). Race-status associations: Distinct effects of three novel measures among White and Black perceivers. *Journal of Personality and Social Psychology*, 120(3), 601–625. <https://doi.org/10.1037/pspa0000257>
- Eagly, A. H., & Wood, W. (1982). Inferred sex differences in status as a determinant of gender stereotypes about social influence. *Journal of Personality and Social Psychology*, 43(5), 915–928.

- Ein-Gar, D., Shiv, B., & Tormala, Z. L. (2012). When blemishing leads to blossoming: The positive effect of negative information. *Journal of Consumer Research*, 38(5), 846–859. <https://doi.org/10.1086/660807>
- Eisend, M. (2006). Two-sided advertising: A meta-analysis. *International Journal of Research in Marketing*, 23(2), 187–198. <https://doi.org/10.1016/j.ijresmar.2005.11.001>
- Etgar, M., & Goodwin, S. A. (1982). One-sided versus two-sided comparative message appeals for new brand introductions. *Journal of Consumer Research*, 8(4), 460–465. <https://doi.org/10.1086/208888>
- Feinberg, M., & Willer, R. (2015). From gulf to bridge: When do moral arguments facilitate political influence? *Personality and Social Psychology Bulletin*, 41, 1665–1681.
- Fiske, S. T. (2018). Stereotype content: Warmth and competence endure. *Current Directions in Psychological Science*, 27(2), 67–73.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77–83. <https://doi.org/10.1016/j.tics.2006.11.005>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. <https://doi.org/10.1037/0022-3514.82.6.878>
- Freitas, A. L., Salovey, P., & Liberman, N. (2001). Abstract and concrete self-evaluative goals. *Journal of Personality and Social Psychology*, 80(3), 410–424.
- Frenkel-Brunswik, E. (1949). Intolerance of ambiguity as an emotional and perceptual personality variable. *Journal of Personality*, 18, 108–143.
- Fujita, K., Gollwitzer, P. M., & Oettingen, G. (2007). Mindsets and pre-conscious open-mindedness to incidental information. *Journal of Experimental Social Psychology*, 43(1), 48–61.
- Gaertig, C., & Simmons, J. P. (2018). Do people inherently dislike uncertain advice? *Psychological Science*, 29(4), 504–520. <https://doi.org/10.1177/0956797617739369>
- Gallagher, T. H., Waterman, A. D., Ebers, A. G., Fraser, V. J., & Levinson, W. (2003). Patients' and physicians' attitudes regarding the disclosure of medical errors. *Journal of the American Medical Association*, 289(8), 1001–1007.
- Golden, L. L., & Alpert, M. I. (1987). Comparative analysis of the relative effectiveness of one- and two-sided communication for contrasting products. *Journal of Advertising*, 16(1), 18–68. <https://doi.org/10.1080/00913367.1987.10673056>
- Goldsmith, K., & Amir, O. (2010). Can uncertainty improve promotions? *Journal of Marketing Research*, 47(6), 1070–1077. <https://doi.org/10.1509/jmkr.47.6.1070>
- Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp. 53–92). Guilford Press.
- Gonzales, M. H. (1992). A thousand pardons: The effectiveness of verbal remedial tactics during account episodes. *Journal of Language and Social Psychology*, 11(3), 133–151.
- Greenland, S., Senn, S. J., Rothman, K. J., Carlin, J. B., Poole, C., Goodman, S. N., & Altman, D. G. (2016). Statistical tests, P values, confidence intervals, and power: A guide to misinterpretations. *European Journal of Epidemiology*, 31(4), 337–350. <https://doi.org/10.1007/s10654-016-0149-3>
- Gunnery, S. D., & Hall, J. A. (2014). The Duchenne smile and persuasion. *Journal of Nonverbal Behavior*, 38, 181–194. <https://doi.org/10.1007/s10919-014-0177-1>
- Guyer, J. J., Briñol, P., Petty, R. E., & Horcajo, J. (2019). Nonverbal behavior of persuasive sources: A multiple process analysis. *Journal of Nonverbal Behavior*, 43(2), 203–231.
- Guyer, J. J., Fabrigar, L. R., & Vaughan-Johnston, T. I. (2019). Speech rate, intonation, and pitch: Investigating the bias and cue effects of vocal confidence on persuasion. *Personality and Social Psychology Bulletin*, 45(3), 389–405.
- Hagmann, D., & Loewenstein, G. (2017). *Persuasion with motivated beliefs* [Working Paper]. <https://nf.vse.cz/wp-content/uploads/page/995/Hagmann.pdf>
- Hastak, M., & Park, J. W. (1990). Mediators of message sidedness effects on cognitive structure for involved and uninvolved audiences. In M. E. Goldberg, G. Gorn, & R. W. Pollay (Eds.), *NA—Advances in consumer research* (Vol. 17, pp. 329–336). Association for Consumer Research. <https://www.acrwebsite.org/volumes/9832/volumes/v17/NA-17>
- Howe, L. C., MacInnis, B., Krosnick, J. A., Markowitz, E. M., & Socolow, R. (2019). Acknowledging uncertainty impacts public acceptance of climate scientists' predictions. *Nature Climate Change*, 9, 863–867. <https://doi.org/10.1038/s41558-019-0587-5>
- Huang, K., Yeomans, M., Brooks, A. W., Minson, J., & Gino, F. (2017). It doesn't hurt to ask: Question-asking increases liking. *Journal of Personality and Social Psychology*, 113(3), 430–452. <https://doi.org/10.1037/pspi0000097>
- Itzhakov, G., & Reis, H. T. (in press). Perceived responsiveness increases tolerance of attitude ambivalence and enhances intentions to behave in an open-minded manner. *Personality and Social Psychology Bulletin*.
- John, L. K., Jeong, M., Gino, F., & Huang, L. (2019). The self-presentational consequences of upholding one's stance in spite of the evidence. *Organizational Behavior and Human Decision Processes*, 154, 1–14. <https://doi.org/10.1016/j.obhdp.2019.07.001>
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89(6), 899–913. <https://doi.org/10.1037/0022-3514.89.6.899>
- Kamins, M. A., Brand, M. J., Hoeke, S. A., & Moe, J. C. (1989). Two-sided versus one-sided celebrity endorsements: The impact on advertising effectiveness and credibility. *Journal of Advertising*, 18(2), 4–10. <https://doi.org/10.1080/00913367.1989.10673146>
- Kamins, M. A., & Marks, L. J. (1987). Advertising puffery: The impact of using two-sided claims on product attitude and purchase intention. *Journal of Advertising*, 16(4), 6–15.
- Karmarkar, U. R., & Tormala, Z. L. (2010). Believe me, I have no idea what I'm talking about: The effects of source certainty on consumer involvement and persuasion. *Journal of Consumer Research*, 36(6), 1033–1049. <https://doi.org/10.1086/648381>
- Kervyn, N., Bergsieker, H. B., & Fiske, S. T. (2012). The innuendo effect: Hearing the positive but inferring the negative. *Journal*

- of *Experimental Social Psychology*, 48(1), 77–85. <https://doi.org/10.1016/j.jesp.2011.08.001>
- Kervyn, N., Yzerbyt, V., & Judd, C. M. (2010). Compensation between warmth and competence: Antecedents and consequences of a negative relation between the two fundamental dimensions of social perception. *European Review of Social Psychology*, 21(1), 155–187. <https://doi.org/10.1080/13546805.2010.517997>
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: The effects of apology versus denial for repairing competence- versus integrity-based trust violations. *Journal of Applied Psychology*, 89(1), 104–118. <https://doi.org/10.1037/0021-9010.89.1.104>
- Kupor, D., Jia, J., & Tormala, Z. (in press). Change appeals: How referencing change boosts curiosity and promotes persuasion. *Personality and Social Psychology Bulletin*. Advance online publication. <https://doi.org/10.1177/0146167220941294>
- Kupor, D., Reich, T., & Laurin, K. (2018). The (bounded) benefits of correction: The unanticipated interpersonal advantages of making and correcting mistakes. *Organizational Behavior and Human Decision Processes*, 149, 165–178.
- Kupor, D., & Tormala, Z. (2015). Persuasion, interrupted: The effect of momentary interruptions on message processing and persuasion. *Journal of Consumer Research*, 42(2), 300–315.
- Kupor, D., & Tormala, Z. (2018). When moderation fosters persuasion: The persuasive power of deviatory reviews. *Journal of Consumer Research*, 45, 490–510.
- Kupor, D., Tormala, Z., & Norton, M. (2014). The allure of unknown outcomes: Exploring the role of uncertainty in the preference for potential. *Journal of Experimental Social Psychology*, 55, 210–216.
- Lakoff, R. T. (1973). *The logic of politeness: Minding your P's and Q's*. Chicago Linguistics Society.
- Larrimore, L., Jiang, L., Larrimore, J., Markowitz, D., & Gorski, S. (2011). Peer to peer lending: The relationship between language features, trustworthiness, and persuasion success. *Journal of Applied Communication Research*, 39(1), 19–37.
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75–98.
- Luttrell, A., Phillip-Muller, A., & Petty, R. E. (2019). Challenging moral attitudes with moral messages. *Psychological Science*, 30(8), 1136–1150.
- Mazor, K. M., Reed, G. W., Yood, R. A., Fischer, M. A., Baril, J., & Gurwitz, J. H. (2006). Disclosure of medical errors: What factors influence how patients respond? *Journal of General Internal Medicine*, 21(7), 704–710. <https://doi.org/10.1111/j.1525-1497.2006.00465.x>
- Mazor, K. M., Simon, S. R., Yood, R. A., Martinson, B. C., Gunter, M. J., Reed, G. W., & Gurwitz, J. H. (2004). Health plan members' views about disclosure of medical errors. *Annals of Internal Medicine*, 140(6), 409–418.
- McCarty, N. (2019). *Polarization: What everyone needs to know*. Oxford University Press.
- McGinnies, E., & Ward, C. D. (1980). Better liked than right: Trustworthiness and expertise as factors in credibility. *Personality and Social Psychology Bulletin*, 6(3), 467–472.
- Minson, J. A., Chen, F. S., & Tinsley, C. H. (2020). Why won't you listen to me? Measuring receptiveness to opposing views. *Management Science*, 66(7), 3069–3094. <https://doi.org/10.1287/mnsc.2019.3362>
- Mishra, H., Mishra, A., & Shiv, B. (2011). In praise of vagueness: Malleability of vague information as a performance booster. *Psychological Science*, 22(6), 733–738. <https://doi.org/10.1177/0956797611407208>
- Morwitz, V. G., & Fitzsimons, G. J. (2004). The mere-measurement effect: Why does measuring intentions change actual behavior? *Journal of Consumer Psychology*, 14(1), 64–74. [https://doi.org/10.1207/s15327663jcp1401&2\\_8](https://doi.org/10.1207/s15327663jcp1401&2_8)
- Ng, S. H., & Bradac, J. J. (1993). *Power in language: Verbal communication and social influences*. SAGE.
- Pan, L., McNamara, G., Lee, J. J., Halebian, J., & Devers, C. E. (2018). Give it to us straight (most of the time): Top managers' use of concrete language and its effect on investor reactions. *Strategic Management Journal*, 39(8), 2204–2225.
- Penrod, S., & Cutler, B. (1995). Witness confidence and witness accuracy: Assessing their forensic relation. *Psychology, Public Policy, and Law*, 1(4), 817–845. <https://doi.org/10.1037/1076-8971.1.4.817>
- Petty, R. E., Briñol, P., & Tormala, Z. L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology*, 82, 722–741.
- Petty, R. E., & Cacioppo, J. T. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, 37(10), 1915–1926. <https://doi.org/10.1037/0022-3514.37.10.1915>
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In R. E. Petty & J. T. Cacioppo (Eds.), *Communication and persuasion: Central and peripheral routes to attitude change* (pp. 1–24). Springer. [https://doi.org/10.1007/978-1-4612-4964-1\\_1](https://doi.org/10.1007/978-1-4612-4964-1_1)
- Petty, R. E., Cacioppo, J. T., & Heesacker, M. (1981). Effects of rhetorical questions on persuasion: A cognitive response analysis. *Journal of Personality and Social Psychology*, 40(3), 432–440. <https://doi.org/10.1037/0022-3514.40.3.432>
- Petty, R. E., & Wegener, D. T. (1998). Attitude change: Multiple roles for persuasion variables. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (p. 323–390). McGraw-Hill.
- Poehlman, T. A., & Newman, G. E. (2014). Potential: The valuation of imagined future achievement. *Cognition*, 130(1), 134–139.
- Price, P. C., & Stone, E. R. (2004). Intuitive evaluation of likelihood judgment producers: Evidence for a confidence heuristic. *Journal of Behavioral Decision Making*, 17(1), 39–57. <https://doi.org/10.1002/bdm.460>
- Priester, J. R., & Petty, R. E. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. *Personality and Social Psychology Bulletin*, 21(6), 637–654.
- Reich, T., Kupor, D. M., & Smith, R. K. (2018). Made by mistake: When mistakes increase product preference. *Journal of Consumer Research*, 44(5), 1085–1103. <https://doi.org/10.1093/jcr/ucx089>
- Reich, T., & Maglio, S. J. (2020). Featuring mistakes: The persuasive impact of purchase mistakes in online reviews. *Journal*

- of *Marketing*, 84(1), 52–65. <https://doi.org/10.1177/0022242919882428>
- Reschke, B. P., Minson, J. A., Bowles, H. R., de Vaan, M., & Srivastava, S. B. (2020). *Dampening the echo: Receptiveness to opposing views, majority-minority distance, and network homogeneity* [Working Paper]. [http://www.juliaminson.com/uploads/1/1/3/1/113175333/reschke\\_minson\\_bowles\\_de\\_vaan\\_and\\_srivastava\\_2018.pdf](http://www.juliaminson.com/uploads/1/1/3/1/113175333/reschke_minson_bowles_de_vaan_and_srivastava_2018.pdf)
- Reyt, J. N., Wiesenfeld, B. M., & Trope, Y. (2016). Big picture is better: The social implications of construal level for advice taking. *Organizational Behavior and Human Decision Processes*, 135, 22–31.
- Ruan, B., Hsee, C. K., & Lu, Z. Y. (2018). The teasing effect: An underappreciated benefit of creating and resolving an uncertainty. *Journal of Marketing Research*, 55(5), 556–570. <https://doi.org/10.1509/jmr.15.0346>
- Schroeder, J., Kardas, M., & Epley, N. (2017). The humanizing voice: Speech reveals, and text conceals, a more thoughtful mind in the midst of disagreement. *Psychological Science*, 28(12), 1745–1762.
- Schwarz, N., Frey, D., & Kumpf, M. (1980). Interactive effects of writing and reading a persuasive essay on attitude change and selective exposure. *Journal of Experimental Social Psychology*, 16(1), 1–17.
- Settle, R. B., & Golden, L. L. (1974). Attribution theory and advertiser credibility. *Journal of Marketing Research*, 11(2), 181–185.
- Shen, L., Fishbach, A., & Hsee, C. K. (2015). The motivating-uncertainty effect: Uncertainty increases resource investment in the process of reward pursuit. *Journal of Consumer Research*, 41(5), 1301–1315. <https://doi.org/10.1086/679418>
- Shen, L., Hsee, C. K., & Talloen, J. H. (2019). The fun and function of uncertainty: Uncertain incentives reinforce repetition decisions. *Journal of Consumer Research*, 46(1), 69–81. <https://doi.org/10.1093/jcr/ucy062>
- Sherman, D. A., Nelson, L. D., & Steele, C. M. (2000). Do messages about health risks threaten the self? Increasing the acceptance of threatening health messages via self-affirmation. *Personality and Social Psychology Bulletin*, 26(9), 1046–1058.
- Skitka, L. J. (2010). The psychology of moral conviction. *Social and Personality Psychology Compass*, 4, 267–281. <https://doi.org/10.1111/j.1751-9004.2010.00254.x>
- Smith, R. E., & Hunt, S. D. (1978). Attributional processes and effects in promotional situations. *Journal of Consumer Research*, 5(3), 149–158. <https://doi.org/10.1086/208725>
- Smith, S. M., & Petty, R. E. (1996). Message framing and persuasion: A message processing analysis. *Personality and Social Psychology Bulletin*, 22(3), 257–268.
- Snizek, J. A., & Van Swol, L. M. (2001). Trust, confidence, and expertise in a judge-adviser system. *Organizational Behavior and Human Decision Processes*, 84(2), 288–307. <https://doi.org/10.1006/obhd.2000.2926>
- Sorensen, R., Iedema, R., Piper, D., Manias, E., Williams, A., & Tuckett, A. (2010). Disclosing clinical adverse events to patients: Can practice inform policy? *Health Expectations*, 13(2), 148–159.
- Steele, C. M., Spencer, S. J., & Lynch, M. (1993). Self-image resilience and dissonance: The role of affirmational resources. *Journal of Personality and Social Psychology*, 64, 885–896.
- Sun, X., Xu, D., Luo, F., Wei, Z., Wei, C., & Xue, G. (2015). A cross-cultural perspective on the preference for potential effect: An individual participant data (IPD) meta-analysis approach. *PLOS ONE*, 10(3), Article e0124170.
- Taylor, S. E., & Gollwitzer, P. M. (1995). Effects of mindset on positive illusions. *Journal of Personality and Social Psychology*, 69(2), 213–226.
- Teeny, J. D., Siev, J. J., Briñol, P., & Petty, R. E. (in press). A review and conceptual framework for understanding personalized matching effects in persuasion. *Journal of Consumer Psychology*.
- Tenney, E. R., Meikle, N. L., Hunsaker, D., Moore, D. A., & Anderson, C. (2019). Is overconfidence a social liability? The effect of verbal versus nonverbal expressions of confidence. *Journal of Personality and Social Psychology*, 116(3), 396–415. <https://doi.org/10.1037/pspi0000150>
- Toma, C. L., & Hancock, J. T. (2012). What lies beneath: The linguistic traces of deception in online dating profiles. *Journal of Communication*, 62, 78–97.
- Tomz, M., & Van Houweling, R. (in press). *Political repositioning*. Princeton University Press.
- Tormala, Z. L., & Briñol, P. (2015). Attitude change and persuasion: Past, present, and future directions. In M. I. Norton, D. D. Rucker, & C. Lambertson (Eds.), *Cambridge handbook of consumer psychology* (pp. 29–64). Cambridge Press.
- Tormala, Z. L., Briñol, P., & Petty, R. E. (2007). Multiple roles for source credibility under high elaboration: It's all in the timing. *Social Cognition*, 25(4), 536–552. <https://doi.org/10.1521/soco.2007.25.4.536>
- Tormala, Z. L., Jia, J. S., & Norton, M. I. (2012). The preference for potential. *Journal of Personality and Social Psychology*, 103(4), 567–583.
- Trope, Y., & Neter, E. (1994). Reconciling competing motives in self-evaluation: The role of self-control in feedback seeking. *Journal of Personality and Social Psychology*, 66(4), 646–657.
- van der Bles, A. M., van der Linden, S., Freeman, A. L. J., & Spiegelhalter, D. J. (2020). The effects of communicating uncertainty on public trust in facts and numbers. *Proceedings of the National Academy of Sciences*, 117(14), 7672–7683. <https://doi.org/10.1073/pnas.1913678117>
- Van Zant, A. B., & Berger, J. (2020). How the voice persuades. *Journal of Personality and Social Psychology*, 118(4), 661–682.
- Wakslak, C., & Joshi, P. (2020). Expansive and contractive communication scope: A construal level perspective on the relationship between interpersonal distance and communicative abstraction. *Social and Personality Psychology Compass*, 14(5), 271–284.
- Wallace, L. E., Wegener, D. T., & Petty, R. E. (2020a). Consuming information from sources perceived as biased versus untrustworthy: Parallel and distinct influences. *Journal of the Association for Consumer Research*, 5(2), 137–148.
- Wallace, L. E., Wegener, D. T., & Petty, R. E. (2020b). Influences of source bias that differ from source untrustworthiness: When flip-flopping is more and less surprising. *Journal of Personality and Social Psychology*, 118(4), 603–616.
- Wallace, L. E., Wegener, D. T., & Petty, R. E. (2020c). When Sources honestly provide their biased opinion: Bias as a

- distinct perception with independent effects on credibility and persuasion. *Personality and Social Psychology Bulletin*, 46(3), 439–453.
- Wallace, L. E., Wegener, D. T., Quinn, M. E., & Ross, A. J. (in press). Influences of position justification on perceived bias: Immediate effects and carry-over across persuasive messages. *Personality and Social Psychology Bulletin*.
- Walters, A. S., & Burger, B. D. (2013). "I love you, and I cheated": Investigating disclosures of infidelity to primary romantic partners. *Sexuality & Culture*, 17(1), 20–49.
- Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049.
- Wheeler, S. C., Petty, R. E., & Bizer, G. Y. (2005). Self-schema matching and attitude change: Situational and dispositional determinants of message elaboration. *Journal of Consumer Research*, 31(4), 787–797.
- Wood, W., & Kallgren, C. A. (1988). Communicator attributes and persuasion: Recipients' access to attitude-relevant information in memory. *Personality and Social Psychology Bulletin*, 14(1), 172–182.
- Xu, N., & Petty, R. E. (in press). Two-sided messages promote openness for morally-based attitudes. *Personality and Social Psychology Bulletin*.
- Yeomans, M., Minson, J., Collins, H., Chen, F., & Gino, F. (2020). Conversational receptiveness: Improving engagement with opposing views. *Organizational Behavior and Human Decision Processes*, 160, 131–148. <https://doi.org/10.1016/j.obhdp.2020.03.011>
- Ziano, I., & Wang, D. (in press). Slow lies: Response delays promote perceptions of insincerity. *Journal of Personality and Social Psychology*.
- Zillmann, D. (1972). Rhetorical elicitation of agreement in persuasion. *Journal of Personality and Social Psychology*, 21(2), 159–165. <https://doi.org/10.1037/h0032316>
- Zillmann, D., & Cantor, J. R. (1974). Rhetorical elicitation of concession in persuasion. *Journal of Social Psychology*, 94(2), 223–236.