Article

Receptiveness to Opposing Views: Conceptualization and Integrative Review

Personality and Social Psychology Review
2022, Vol. 26(2) 93–111

DOI: 10.1177/10888683211061037
pspr.sagepub.com
SAGE

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Abstract

The present article reviews a growing body of research on receptiveness to opposing views—the willingness to access, consider, and evaluate contradictory opinions in a relatively impartial manner. First, we describe the construct of receptiveness and consider how it can be measured and studied at the individual level. Next, we extend our theorizing to the interpersonal level, arguing that receptiveness in the course of any given interaction is mutually constituted by the dispositional tendencies *and* observable behaviors of the parties involved. We advance the argument that receptiveness should be conceptualized and studied as an interpersonal construct that emerges dynamically over the course of an interaction and is powerfully influenced by counterpart behavior. This interpersonal conceptualization of receptiveness has important implications for intervention design and raises a suite of novel research questions.

Keywords

conflict resolution, individual differences, interpersonal processes, social cognition

A pernicious problem confronting virtually all human societies is people's unwillingness to engage with views and opinions they do not share, particularly those they find antithetical to their most dearly held and identity-relevant beliefs. Lack of such willingness is particularly insidious because it prevents groups from effectively solving entire classes of *other* social-coordination problems that rely on thoughtful engagement with opposing views. For example, the COVID-19 pandemic led to heated clashes over policies to combat the spread of the virus, which motivated many individuals to make health decisions along ideological lines rather than thoughtful consideration of relevant medical facts (Ballew et al., 2020; Tyson, 2020).

This review builds on and extends prior research by describing a growing body of work on receptiveness to opposing views (Chen et al., 2010, 2013; Minson et al., 2020; Reschke et al., 2021; Yeomans et al., 2020)—a mindset that captures both the psychological and behavioral elements of seeking out and thoughtfully engaging with disagreeing others. The central argument advanced here is that receptiveness should be studied as an interpersonal construct, one that is mutually constituted by individual tendencies and the dynamics of a particular interaction between two parties. This argument is supported with evidence showing that one's receptiveness to opposing views both shapes and is shaped by the social environment, and specifically the receptiveness of one's counterpart. Thus, although receptiveness can be measured in the minds of individuals (which can help predict what they will bring to an interaction), we argue that it is essential to conceptualize and measure receptiveness and its consequences dynamically over time and at multiple levels of analysis.

In the sections below, the construct of receptiveness is first described and situated in the prior literature. Related constructs are discussed in terms of their overlap with, and differences from, receptiveness. Next, we consider the measurement of individual differences in receptiveness.[1] We then advance a new theoretical model of how specific relationship partners and social interactions shape the level of receptiveness that emerges in a particular context. After presenting evidence that supports this model, we conclude with a discussion of how a better understanding of receptiveness—especially as an emergent property of social interactions—has important implications for the design of effective interventions at levels from the individual to the societal.

Communication Challenges in Attitude Conflict

Differences of opinion on deeply held, identity-relevant issues often give rise to attitude conflict (Dorison et al., 2019; Dorison & Minson, 2021; Judd, 1978; Minson et al., 2020). As compared with mere disagreement, attitude conflict

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describes a fundamental intolerance for another person's attitudes and beliefs, as well as negative inferences about their morality, intelligence, and even basic grasp on reality. Although attitude conflict is frequently observed against the backdrop of armed intergroup conflict (Maoz et al., 2002), it can also exist in the absence of violence or strife over specific resources. This type of conflict plays a prominent role in current American political polarization, with recent research demonstrating that partisan animus is only loosely related to corresponding policy positions (Finkel et al., 2020; Iyengar et al., 2012).

A voluminous prior literature has examined the pitfalls in communication that frequently arise in the midst of attitude conflict. For example, research on the phenomenon of selective exposure (Frey et al., 1986; Frimer et al., 2017, for a review see Hart et al., 2009) has repeatedly demonstrated that people avoid consuming content that contradicts their beliefs, even when such avoidance has immediate and tangible costs (Frimer et al., 2017). Research on confirmation bias has shown that people are more likely to seek out, attend to, and recall belief-confirming evidence (see Nickerson, 1998 for an extensive review). And research on the phenomena of "naïve realism" (Robinson et al., 1995; Ross & Ward, 1995, 1996) and dehumanization (Bar-Tal, 2000; Schroeder et al., 2017) has shown that people readily derogate the views and even the basic humanity of disagreeing others. Relatedly, a large literature invokes the phenomenon of "motivated reasoning" to describe flawed inferential processes and thus flawed conclusions driven by individuals' desire to maintain cherished beliefs (Ditto & Lopez, 1992; Taber & Lodge, 2006).

These individual biases can be roughly arranged along an information-processing sequence that begins with individuals being exposed to a communication, continues with their processing of that communication, and is followed by their evaluation of the quality or veracity of the proffered information. Such sequential accounts have frequently appeared in the classic literature on attitude formation and change (e.g., Eagly & Chaiken, 1998; McGuire, 1968; Petty & Cacioppo, 1996). When this sequential information-processing framework is applied to communication in attitude conflict, it becomes clear from the existing literature that people exhibit bias at every stage of interacting with disagreeing others. Specifically, parties treat evidence and arguments by and for their side of the issue more favorably than evidence by and for the opposing side when deciding which information and which people to be exposed to, how much attention to devote to processing, and what evaluation to ultimately render.

What Is Receptiveness?

Prior work has conceptualized receptiveness to opposing views as a motivational tendency characterized by the willingness to access, consider, and evaluate contradictory opinions in a relatively impartial manner (Minson et al., 2020) at the three stages of information processing outlined above. In other words, higher receptiveness is characterized by less biased processing in (a) information seeking, (b) information attention, and (c) information evaluation. People in a receptive mindset are more willing to expose themselves to balanced information on both sides of an issue, give more equal attention to information supporting both perspectives, and evaluate relevant arguments more equitably. This conceptualization suggests a unifying psychological thread to the information-processing biases studied in conflict settings by prior scholars.[2]

Importantly, however, this does not mean that greater receptiveness will consistently lead to attitude change—an outcome that occurs (or does not occur) later in the information-processing sequence (McGuire, 1968). For example, two highly receptive individuals might consider each other's ideas deeply and, after concluding that reasonable people might endorse either perspective, walk away agreeing to disagree. Thus, receptiveness is not simply persuadability or a propensity toward holding weak attitudes. A voluminous literature has examined attitude change and persuasion. However, to the extent that social scientists seek a role in fostering civil discourse, researchers should give similar consideration to other outcomes important to the quality of an interaction or relationships, especially in cases when persuasion may be an unattainable goal.

Several rich research traditions have examined how people relate to divergent ideas, novel experiences, and those who endorse them. Much of this prior work (cited above) has focused on individual biases in how information related to opposing views is received and cognitively processed. However, understanding the errors that people make when confronting opposing perspectives is a somewhat different (although clearly related) enterprise from seeking to understand the psychology that enables them to successfully do so. Receptiveness can be seen as an underlying psychological construct, the lack of which manifests in many of the biases commonly studied at the intersection of negotiations, conflict, and judgment and decision-making research. According to this analysis, a liberal who tends to experience negative affect at the very thought of viewing Fox News is also more likely to tune out arguments for conservative positions when exposed to them, and to judge the proponents of those arguments harshly if compelled to pay attention.

Beyond the work on biases in conflict, which generally takes a situationist lens, several classic lines of research have produced individual difference measures that capture how people process new or contradictory information. Early work measured dogmatism, an unchangeable and unjustified certainty regarding one's beliefs (Altemeyer, 1996; Crowson et al., 2008; Rokeach, 1960). Later literatures on need for cognition (Cacioppo et al., 1984) and need for cognitive closure (Webster & Kruglanski, 1994) capture the extent to which individuals are motivated to think deeply about ideas and evaluate them extensively rather than reaching quick

conclusions based on shallow consideration. Related work on the construct of actively open-minded thinking more specifically addresses how individuals approach evidence for ideas or conclusions that differ from their own (Gurcay-Morris, 2016). Finally, the classic construct of openness to experience (John & Srivastava, 1999) captures people's tendency to enjoy unusual experiences and think in creative ways. This work is also related to the construct of threat rigidity, which captures people's tendency to think more or less creatively or generatively in conflict and negotiations settings (De Dreu & Nijstad, 2008).

Receptiveness to opposing views is both related to and distinct from these constructs. The main distinction lies in the fact that in addition to requiring a greater commitment of cognitive resources and a tendency toward divergent thinking, engaging with opposing views in conflict tends to arouse intense emotions, usually negative ones (Dorison et al., 2019; Dorison & Minson, 2021; Halperin, 2014). For example, considering a business partner's differing perspective about which investment to make requires cognitive effort but generally does not require downregulating negative affect. By contrast, considering an ex-wife's proposal for changing the kids' summer plans may require both additional cognitive resources (to think through a new plan) and emotional regulation (to overcome any resentment or irritation toward the former spouse). Thus, in addition to a tendency toward deeper information processing, receptiveness to opposing views in conflict also taps one's affective responses and emotion-regulation tendencies.

Importantly, although attitude conflict can exist between individuals (such as spouses or pairs of co-workers), those individuals often represent groups that share their ideas (i.e., Republicans vs. Democrats or Protestants vs. Catholics). Thus, to successfully engage with a disagreeing counterpart, people must often overcome their own prejudices and stereotypes regarding the group to which the counterpart belongs. In this manner, receptiveness is related to work on political tolerance (Sullivan & Transue, 1999) and other constructs capturing the tendency toward group-based prejudice (Cikara et al., 2011; Finkel et al., 2020; Paluck, 2009). However, because lack of receptiveness can emerge either between groups or between individuals, constructs that capture discord that arises primarily from group identities miss those drivers of receptiveness (or lack thereof) which are not group-based.

Many contexts that give rise to attitude conflict feature sacred or moral issues. People believe attitudes grounded in core moral beliefs to be objectively true and universally applicable (Skitka, 2010; Skitka et al., 2015, 2021). To the extent that a person considers an attitude to be beyond dispute, as in the case of many moral and religious beliefs, they may be unwilling to subject it to any debate or reconsideration. Importantly, there are many topics (e.g., government provision of universal health care) that some people see as a matter of absolute moral truth, others view as an opinion supported by empirical fact, and still others as a utilitarian convenience. The extent to which a particular topic is placed under the umbrella of sacred beliefs will make people more or less receptive to alternative consideration on that topic.

Finally, one's willingness to understand and seek potential merit in other's divergent views is related to the construct of conflict schemas in negotiation research (De Dreu et al., 2000). Research in this area has identified individuals who hold a cooperative or competitive schema with regard to conflict. A cooperative schema leads people to seek commonly acceptable "win–win" solutions, whereas a competitive schema leads them to promote their own interests at others' expense. It could be said that more receptive people have a cooperative schema with regard to ideas—they try to find merit in opposing views so that both parties can benefit from each other's thinking, rather than using arguments to annihilate the other side's beliefs.

In sum, extensive theorizing and empirical work has been devoted to constructs and measures that capture ideas related to and conceptually adjacent to receptiveness. However, this work does not fully capture the psychological and behavioral experience of communication between individuals in attitude conflict. We are reminded of the well-known parable in which an elephant appears to be a different creature depending on whether one is touching an ivory tusk, an enormous leg, or a swishing tail. Here, we attempt to take a comprehensive approach, gradually illuminating the size, shape, and behavior of the entire beast. In the sections below, we first describe the measurement of receptiveness as an individual difference construct. Then, we transition to new theorizing regarding situational influences on receptiveness, particularly the manner in which it emerges dynamically in the course of interactions, and as a function of interpersonal perceptions.

Measuring Receptiveness at the Individual Level

Self-reported receptiveness can be measured using an 18-item scale (Minson et al., 2020) that includes items such as "Listening to people with views that strongly oppose mine tends to make me angry" and "I like reading well thought-out information and arguments supporting viewpoints opposite to mine." Respondents rate the extent to which they agree or disagree with each item using a 7-point Likert-type scale. Prior research has demonstrated that the measure possesses strong internal consistency, and high convergent and discriminant validity (Minson et al., 2020).[3]

The items in the scale cluster into four positively correlated factors, each of which can be thought of as describing a different component of receptiveness. The factors conceptually map on to the key constructs identified by the prior literature as being intrinsic to being able to thoughtfully engage with opposing views. The first factor, "negative emotions," taps emotional reactions to attitude-incongruent views,

including anger, frustration, and disgust. The second factor, "curiosity about opposing views," consists of items that reflect a desire for greater insight and information about the beliefs of others. The third factor, "derogation of opponents," consists of items capturing a set of negative beliefs regarding holders of opposing views, their intelligence, and their motives. Finally, the fourth factor, "taboo issues," corresponds to a set of beliefs that some topics are off limits and not subject to debate. Interestingly, although the four factors are conceptually and empirically distinguishable, these specific factors have not been found to be more or less predictive of behavior at different stages of information processing. Instead, it appears that engagement with opposing views is driven by all four in concert.

Individuals who report greater receptiveness process belief-supporting and belief-opposing information in a more impartial manner than less receptive individuals. First, when faced with a choice of which information to consume, receptive individuals are more willing to expose themselves to others' opposing views. For example, more receptive participants were more willing to read the websites of senators from the opposing party relative to their less receptive counterparts (Minson et al., 2020). After the 2016 U.S. presidential election, voters who reported being more receptive but voted against Donald Trump were relatively more willing to watch his inaugural address than their less receptive counterparts (Minson et al., 2020). This effect spreads beyond political disagreement: more receptive baseball fans are more willing to interact with fans of their rival team than less receptive fans (Minson & Chen, 2020).

Second, more receptive individuals demonstrate a more equitable attentional focus on both attitude-confirming and attitude-disconfirming information, showing a lesser tendency to disengage with arguments incongruent with their position. For example, while people generally tend to mind-wander more when watching content that they disagree with rather than agree with, greater receptiveness is associated with an attenuated gap in mind-wandering in response to agreeable versus disagreeable content (Minson et al., 2020).

Finally, even after having been exposed to and having considered opposing views, people typically still find ways to denigrate undesirable evidence. However, more receptive individuals' evaluations of argument quality and argument sources are less affected by whether the argument supports or opposes their prior positions, even in the context of heated debates, such as U.S. immigration policy (Minson et al., 2020).

In sum, empirical data confirm that receptiveness toward opposing views operates at the three distinct stages of information consumption outlined above. At each stage, higher receptiveness is characterized by smaller differences in an individual's treatment of attitude-confirming versus attitude-disconfirming information. Together, these results support the idea that, rather than being entirely separate phenomena, many of the cognitive biases that have been documented in communication during attitude conflict stem from a common source—a lack of receptiveness.

Finally, although more receptive people are generally more moderate in their beliefs, being receptive does not mean that one does not care about an issue. Specifically, even after controlling for extremity of one's attitudes on a given topic, receptiveness still remains a strong predictor of one's level of biased processing.

Situational and Dynamic Influences on Receptiveness

The development of a precise definition of receptiveness grounded in classic theories of information processing, as well as the publication of an externally and internally valid measure of the construct, positions future research for asking (and being able to answer) more complex questions. Is receptiveness more state-like or trait-like? Does receptiveness vary by culture, gender, social status, or political orientation? Most importantly, given the poor state of political and social discourse in the world today, what factors moderate receptiveness? Although such questions grow more tractable with the aid of a conceptual definition and a validated measure, another key theoretical development is necessary: an understanding of how receptiveness is shaped by specific social contexts and processes.

Classic theorizing in social psychology suggests that the level of receptiveness during any given interaction between two individuals holding opposing views is a function of their stable traits as well as the features of the particular situation in which they find themselves (Gilbert & Malone, 1995; Mischel & Shoda, 1995; Ross & Nisbett, 2011). For example, imagine two individuals, Harry and Sally, who have opposing views on a number of issues. Each has a level of dispositional receptiveness that can be measured using the scale described above (and related scales[4]) and that predicts their typical level of engagement with and processing of opposing views. However, during any given conversation, they are also both subject to a host of situational influences, such as whether one or both of them feel strongly about the topic under discussion, whether the conversation is private or in front of an audience, or whether either party is affected by emotional and physical states (e.g., angry, sad, tired) that are incidental to the interaction.

This example is in line with classic theorizing suggesting that receptiveness exhibited by two individuals in any given interaction is likely to be driven by both dispositional and situational factors. Critically, however, many situational factors are not static but rather unfold over time. Indeed, receptiveness is a fundamentally dynamic construct because it emerges in *reaction* to encountering an opposing view and the individual who is presenting it.

Traditional laboratory approaches that examine individuals' solitary information consumption partly capture this dynamic. For example, when experimental participants

consider which news stories to read or how much attention to pay to a speech, they are either explicitly or implicitly confronting ideas offered by another human. However, many of the contexts in most desperate need of greater receptiveness are social interactions where holders of opposing views exchange opinions and reactions in real time and over multiple rounds of written or spoken conversation. Such situations possess a far more complex structure and are logistically more difficult to study than a single individual's reaction to counter-attitudinal content. Understanding these contexts, however, is critical to being able to predict and modify the forces driving civic discourse as well as other conflictual interactions. In the discussion below, we detail how receptiveness in such contexts evolves over the course of the encounter and thus can be meaningfully, and usefully, conceptualized as an emergent property of interpersonal interactions.

Below, we present theory and evidence for such a dynamic and interpersonal conceptualization of the construct, arguing that the level of receptiveness in any one interaction is shaped by and emerges over time from the behaviors and interpersonal perceptions of the two individuals involved. In other words, rather than being a function of the levels of dispositional receptiveness of the two parties plus the features of the situation they are in, receptiveness is mutually constituted by the participants in the course of a given interaction and over the span of the relationship.

The present conceptualization of receptiveness is closely related to prior work that examines explicitly interpersonal processes (such as person perception) using the Social Relations Model (SRM). Researchers describing and testing the SRM have made important contributions to social psychology, both by conceptually articulating the bidirectional influence of interacting parties, and by developing statistical methods for partitioning sources of variance in ongoing interpersonal relationships (Back & Kenny, 2010; Kashy & Kenny, 2000; Kenny & DePaulo, 1993). In other words, SRM researchers were early to recognize that the behavior of a given individual in the presence of another could be driven by the characteristics of the focal person, the influence of the observer, or the unique properties of their relationship. As a result, the SRM and the related Actor–Partner Interdependence Model (Cook & Kenny, 2005; Kashy & Kenny, 2000) have been utilized extensively in research on person perception, close relationships, and intergroup relations (West, 2011).

Receptiveness, which historically has been conceptualized as residing inside of an individual, can also be usefully conceptualized as an interpersonal process, with much of the variance attributable to the interaction between dyad members rather than their individual characteristics or behavior. This conceptualization advances work on receptiveness by connecting this construct with well-developed conceptual and statistical tools developed in the last three decades of research on dyadic processes and person perception and by opening new avenues for theorizing and empirical work.

A Conceptual Model of Receptiveness as an Interpersonal Construct

Figure 1 is a schematic representation of the influences that shape the level of receptiveness experienced and exhibited by two individuals over the course of a short conversation consisting of two turns. These influences contribute to and can be used to predict the level of receptiveness in any given interaction.

First, each party enters the conversation with a level of dispositional receptiveness that characterizes their typical conversations around conflictual topics. For example, Sally might be habitually receptive, and Harry less so. Second, each party is also immersed in the situational influences associated with this particular interaction. The day might be uncomfortably hot, or the topic of disagreement may be particularly thorny. Both of these factors—dispositional receptiveness and the features of the situation—are present before anyone reacts to the disagreement that will serve as the focal topic of the upcoming conversation.

As the first conversational turn[5] unfolds, two additional related but distinct variables can be measured for both participants: (a) their individual level of experienced cognitive receptiveness—the extent to which *in the present moment* they are thoughtfully attending to and impartially evaluating their counterpart's perspective, and (b) their observable behaviors that another individual is able to perceive and can use to try to infer their level of experienced receptiveness (interrupting, counter-arguing, smiling, eye contact, back channels, etc.). For example, Sally might be listening carefully to Harry's explanation of his beliefs and attempting to reconcile her strong disagreement with his views on a given topic with the fact that in other respects, Harry seems like a reasonable guy. At the same time, Harry might interpret Sally's serious facial expression and lack of eye contact as dismissive or judgmental, contrary to her earnest efforts of understanding his arguments. Thus, although Sally is *experiencing* herself as being receptive, she is not being *perceived* as such.

Separately considering the four variables above allows for several important distinctions. First, social psychology has long distinguished dispositional tendencies from thoughts and behavior "in the moment." Whereas the self-report scale of receptiveness provides a measure of the former along with some ability to predict the latter, immediate behavior is subject to the influence of multiple forces originating from the two actors and their current context. Second, when considering cognition and behavior in a specific interpersonal situation, it is important to draw a clear distinction between internal cognitive processes as experienced by one party and their observable behaviors apparent to the other party. Because only the latter behaviors are visible to counterparts, these behaviors have a unique ability to shape counterpart responses. In the section below, we consider the relationships between the four categories of variables outlined above with

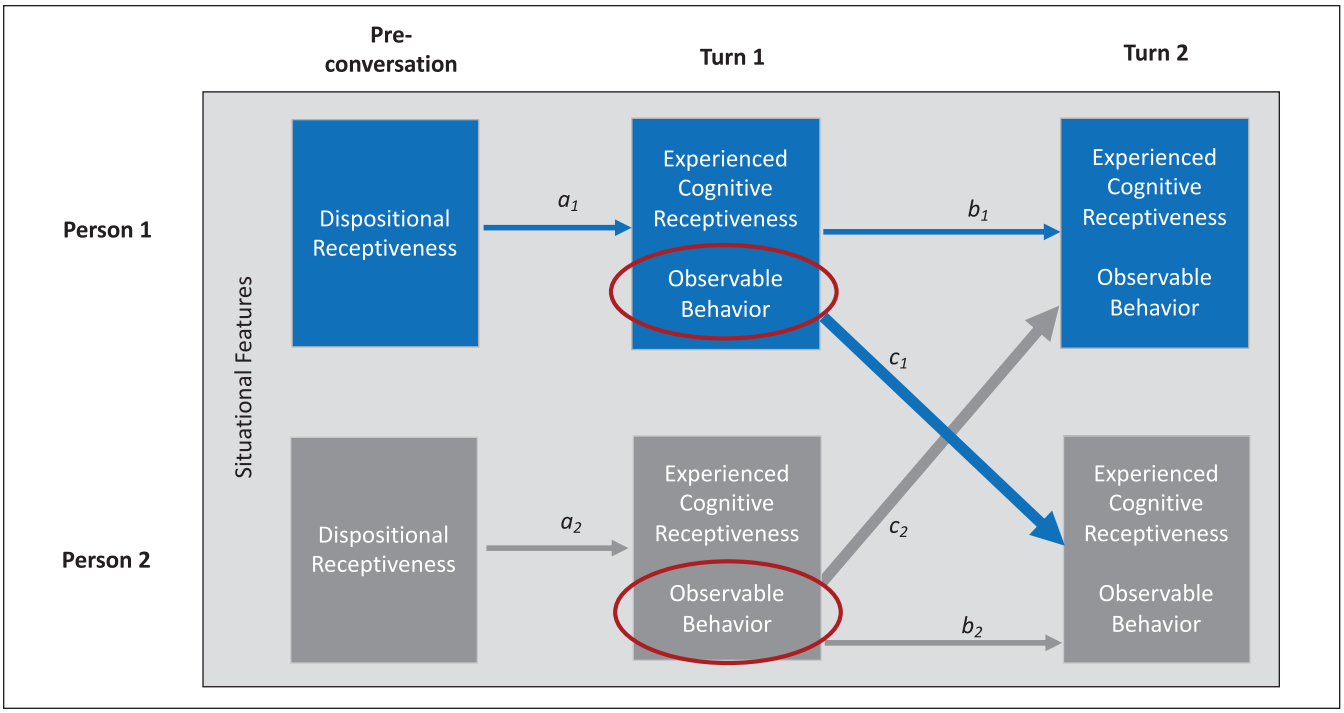

Figure 1. Proposed influences on receptiveness in a two-turn conversation between disagreeing parties.

a particular focus on the influence of each party's observable behaviors on the subsequent receptiveness of the other party.

Paths a_1 and a_2 in Figure 1 represent the influence of dispositional receptiveness on the internal experience and observable behaviors of the two parties at the outset of the conversation. Because the two parties have not yet visibly reacted to each other's views, the paths are intrapersonal and can be measured as the correlations between people's self-reported dispositional receptiveness and their cognitive processing tendencies, as demonstrated in Minson et al. (2020). Thus, Paths a_1 and a_2 might represent the correlation between someone's score on a self-report measure of receptiveness and the extent to which they are carefully considering the opposing attitude they just heard, rather than dismissing it as self-evidently wrong. Paths a_1 and a_2 are conceptually similar to Paths b_1 and b_2, which represent the ongoing intrapersonal influences of a person's predispositions and earlier actions on their own future behavior—in this case, between the first and second conversational turn. Although this example conversation consists of only two turns, in reality, during longer conversations, these influences continue to shape parties' receptiveness.

The novel prediction of the present theorizing, however, is captured by Paths c_1 and c_2, represented by the two thicker arrows. Specifically, during the first conversational turn, each party becomes privy to the observable behaviors of their counterpart, which allows them to form an impression of their counterpart's receptiveness. Below, we review the prior literature suggesting that these perceptions serve as particularly powerful determinants of the focal individual's level of receptiveness throughout the course of most interpersonal encounters.

The Central Role of Counterpart Receptiveness

People's interpersonal behaviors are shaped not only by the habits and intentions they bring to a conversation, but also by the reactions they elicit from their counterparts. Let us think back to the first occasion on which Harry meets Sally. Stuck on a long car ride, Harry quickly realizes that Sally disagrees with him on virtually everything. Prior theorizing would suggest that the level of receptiveness in this conversation will be simply a function of the dispositional levels of receptiveness of the two individuals, plus some variance due to contextual features, such as the magnitude of the disagreement or the level of annoyance associated with being on a road trip with a perfect stranger. However, research showing bidirectional influences in interpersonal contexts (Cook & Kenny, 2005; Kashy & Kenny, 2000) suggests that although the level of receptiveness displayed by Harry on average across many interactions varies around his dispositional level, the level of receptiveness that Harry displayed *in this specific interaction* will be powerfully determined by Sally.

Imagine, for example, that Harry, frustrated by Sally's cautious driving, asserts that women's general discomfort with risk is why they should not be assigned to combat roles in the military. Finding his claim to be sexist and in need of

correction, Sally is at a crossroads. To try to get Harry to acknowledge the error in his reasoning and recant his statement, she could strongly assert her disagreement and point to the many successes that women have achieved in traditionally male roles. Alternatively, after signaling her disagreement, Sally could ask Harry about the bases for his views and the different women he has encountered in professional contexts. She might then listen to his response and point out areas of partial agreement or similarity in their experiences while asking yet more questions. She might reveal that she also considered at some point in her life that women are not well-suited for certain jobs but that her views changed over time. By following such an approach, Sally might leave Harry with the impression that she truly considered his point of view while continuing to hold firm to her own position (Hussein & Tormala, 2021).

Note that in both scenarios above, Harry and Sally continue to disagree. Yet, it is easy to imagine that the two different responses from Sally would in turn elicit different responses from Harry, who would be more versus less willing to thoughtfully engage with Sally's perspective (i.e., be receptive) as a function of how she reacted to his original assertion. Holding Harry's disposition, the situation, and the level of disagreement constant, it is in fact Sally's reaction that will be critical—and possibly the most important factor—in determining the level of receptiveness that Harry exhibits on the next conversational turn.

Several existing literatures conceptually and empirically support this idea. People have a fundamental desire to be heard and understood. Carl Rogers, the founder of humanistic psychology, argued that active listening is a key therapeutic skill (see Hafen & Crane, 2003 for a review; Rogers & Farson, 1957). Interest in one's counterpart's views as assessed using the Specific Affect Coding System (Coan & Gottman, 2007) predicts marital satisfaction and stability (Buehlman et al., 1992; Gottman, 1993, 1994; Gottman & Levenson, 1999). Furthermore, the extent to which a listener expresses understanding, validation, and acceptance, a construct known as "responsiveness," predicts intimacy, attachment, and emotional health in close relationships (Caprariello & Reis, 2011; Laurenceau et al., 1998; Reis et al., 2004). Perceived responsiveness from a counterpart also enables people to tolerate opposing opinions with less discomfort and enhances their intentions to behave in an open-minded manner (Itzchakov & Reis, 2021). In other words, beyond simply being pleasurable, the subjective experience of being heard and understood addresses a fundamental psychological need. Consequently, whether a counterpart is listening and trying to understand their perspective is a feature of interactions that people closely attend to and one that powerfully shapes their impression of others and their conversational experiences.

However, humans are famously flawed mind-readers (Epley, 2008; Epley, 2014). Counterparts cannot know for certain whether someone is actually listening carefully and considering both sides of an issue or feigning listening while coming up with their own counter-arguments. Rather, impressions of receptiveness have to be based on externally observable signals such as question-asking, absence of interruption, nonverbal cues such as smiling or nodding, and back channels such as "uh-huh" and "yeah." Thus, *perceptions* of a counterpart's receptiveness based on externally observable behaviors exert a stronger influence on the trajectory of the interaction than the counterpart's *actual* internal level of experienced receptiveness because one is observable and the other is not. The relative strength of this relationship is depicted in Figure 1 with the thicker arrows connecting the observable behaviors of one party (circled in red) with the cognitions and behaviors of the other party on the subsequent conversational turn (Paths c_1 and c_2).

Beyond being desirable, observable receptiveness by the counterpart may play a particularly powerful role in shaping the focal individual's experienced and observable receptiveness later in the conversation. Extensive research has shown that at baseline, people readily derogate and stereotype disagreeing others. Once Harry recognizes that Sally disagrees with him on issues that matter deeply to him (like whether his views are sexist), he is likely to see her as less intelligent, rational, objective, trustworthy, and empathetic (Ehrlinger et al., 2005; Hagmann et al., 2021; Kteily et al., 2016; Kubin et al., 2021; Minson et al., 2020; Pronin et al., 2004; Ross & Ward, 1995; Schroeder et al., 2017). Yet, intelligence, rationality, and benevolence are the very characteristics people attribute to those who listen to and understand them. When counterparts demonstrate behaviors that are interpreted as being receptive, they violate the stereotypes and expectations people hold with respect to disagreeing others (Hussein & Tormala, 2021). A person who is thoughtfully engaging with our perspective is far more difficult to write off as ill-intentioned or irrational. They thus invite behaviors normally reserved for those on our side—thoughtful consideration of their arguments, politeness, and willingness to interact in the future (actions that they, too, will interpret as cues of receptiveness). Conversational counterparts who violate expectations in such ways have been shown to elicit greater involvement and processing of arguments, ultimately leading to greater persuasion (Wallace et al., 2021). In other words, observable acts of receptiveness by one party lead to experienced receptiveness (in this case, deeper information processing) in the other party.

Individuals may offer greater receptiveness to receptive-seeming counterparts not only because they have modified their beliefs about them but also because the norm of reciprocity compels them to do so. Reciprocity is a powerful force in social interactions (Gouldner, 1960) that contributes to the establishment of social norms (Cialdini, 1993). When a counterpart listens attentively and solicits additional information respectfully, one feels less justified in interrupting them with sarcastic remarks and thinly veiled insults on the next conversational turn. Conversational politeness is

Table 1. Example Measures of Receptiveness During Interaction Among Disagreeing Counterparts.

Exposure	Attention	Evaluation
Willingness for or actively engaging in: • Discussion • Future collaboration • Negotiation	• Asking elaboration questions • Lack of interruption • Recall of counterpart's beliefs	• Evaluation of arguments • Evaluation of counterpart • Evaluation of opposing group

broadly reciprocated in many human societies (Brown & Levinson, 1987), suggesting that other facets of communication style likely invite reciprocity as well. Thus, in addition to evolving beliefs about the counterpart, receptiveness may beget more receptiveness via the mechanism of reciprocated conversational norms.

Finally, even in the absence of a conscious desire to reciprocate one's partner's perceived level of receptiveness, individuals may still engage in unconscious mimicry of their counterpart. Mimicry, defined as "*unconscious* or automatic imitation of gestures, behaviors, facial expressions, speech and movements" (van Baaren et al., 2009), has been documented across many behaviors that might signal receptiveness. Although mimicry is more pronounced in affiliative than adversarial contexts (Mauersberger & Hess, 2019), it can occur in both. A related process, emotional contagion (Barsade, 2002), produces similar outcomes: people enact behaviors and take on affective states that are being modeled by their counterparts without being aware that they are doing so. These processes might apply to such nonverbal cues of receptiveness as eye contact (Chen et al., 2013; Ellsworth & Carlsmith, 1968, 1973), trunk lean, smiling, tone of voice, and use of back channels, further adding to the suite of forces that proliferate receptiveness throughout a conversation.

Thus far, we have considered an interaction wherein Harry's level of receptiveness is influenced by his perceptions of Sally's level of receptiveness toward him. But, as depicted in Figure 1, this process is bidirectional: While Harry is making inferences about Sally, she is making inferences about him. And just as his impressions of her are influencing his receptiveness, her own receptiveness is being similarly affected by her perceptions of him. This bidirectional exchange of interpersonal judgments and acts of reciprocity and mimicry, when repeated by both parties over multiple rounds of conversation, can create a cycle such that initial acts of receptiveness lead to more receptive responses. By contrast, behaviors associated with lack of receptiveness or disparagement can generate "conflict spirals" (Pruitt, 1998; Weingart et al., 2015). Because this dynamic is driven by multiple psychological processes and is contributed to by both parties in the conversation, it is likely to have more powerful effects on the receptive behaviors of each party than any other feature of the interaction, including one's own dispositional tendencies, initial level of receptiveness, or other situational features.

In summary, the level of receptiveness experienced and displayed in a conversation is based on a set of measurable influences, including dispositional and situational forces that are both internal to the participants and observable to counterparts. Counterparts' perceptions of each other's levels of receptiveness are particularly powerful predictors of interaction outcomes, because people habitually track and react to signals of listening, engagement, and understanding displayed by conversation counterparts. However, because they cannot directly observe how receptive someone's thoughts are, they must make inferences based on their own noisy interpretations of counterparts' externally observable behavior. These perceptions of counterparts' receptiveness affect our assessments of them and also trigger mimicry and reciprocity, ultimately creating a virtuous or destructive cycle. Ongoing observation and reaction to a counterpart's behavior over the course of the interaction ultimately leads to a level of receptiveness in the focal actor that is distinct from either their dispositional cognitive tendencies or the level of felt or intended receptiveness they might have reported at the beginning of the interaction.

Measuring Receptiveness in Interactions

Existing work on experienced receptiveness has defined the construct in terms of differences in individuals' willingness to expose themselves to, thoughtfully process, and dispassionately evaluate information for and against belief-confirming and belief-disconfirming views. The definition suggested a set of measures corresponding to each phase of information processing. This framework continues to be useful when considering receptiveness in interpersonal interactions, in addition to considering the receptiveness of an individual information consumer.

Specifically, most of the face-valid measures of thoughtful engagement with one's counterpart can be placed along the same information-processing continuum described previously. Table 1 includes several example measures organized in this manner. Column 1 lists measures that correspond to an individual's willingness to engage with holders of opposing views. Column 2 lists measures that can be collected during or after a conversation to establish the level of attention that counterparts paid to each other's views. Finally, Column 3 lists measures that reflect the manner in which counterparts evaluate each other and each other's perspectives.

As receptiveness emerges in the course of an interpersonal interaction, these measures should be expected to vary over time and be strongly responsive to counterparts' perceptions

of each other's receptiveness, but also be intercorrelated. For example, an individual who is willing to engage in a discussion with a member of an opposing ideological group should be more willing to ask questions and listen attentively during that discussion. Their partner should note these behaviors and reciprocate in kind. Both individuals should emerge with a more positive evaluation of the interaction and their partner, and consequently be more willing to engage in similar interactions in the future. By contrast, if a party who is willing to have a conversation finds themselves continuously interrupted by their counterpart or on the receiving end of hostile questions, they are more likely to emerge with negative evaluations of the counterpart and the perspective they represent.

The sections below provide an overview of recent work examining these dynamics. Although much more empirical work needs to be done, these findings offer initial support for the model depicted in Figure 1 and the central role played by perceptions of counterpart receptiveness in conflictual dialogue.

Initial Evidence on the Central Role of Counterpart Receptiveness

A thorough investigation of how receptiveness evolves in interpersonal contexts presents a nontrivial logistical challenge to the traditional laboratory-based methods of social psychology. At minimum, individuals who disagree with each other on important issues must be brought together for multiple turns of conversation. Setting aside the analytical and conceptual difficulties involved in such a research design, the very act of convening ideological opponents and persuading them to discuss a hot-button policy topic makes such research rare. Below, we review initial evidence that has emerged from such efforts and relate it to the model proposed above.

In an early study examining the interpersonal effects of expressing receptiveness, undergraduate students who opposed a purported policy proposal to add comprehensive exams to their university's graduation requirements engaged in a text-based conversation with a confederate advocating the opposite position (Chen et al., 2010). The confederate always offered the same arguments for their position in support of adding such a requirement. However, in the experimental condition, the confederate also included a question expressing their interest in the participant's opposing perspective and requesting that the speaker elaborate on their views. Participants then responded to the confederate in writing and evaluated the interaction.

In line with the theorizing presented above, participants who received an expression of receptiveness from their counterpart evaluated the counterpart in a more positive manner and were more willing to interact with them in the future. Most importantly, when raters who were blind to hypotheses evaluated the responses of the participants to the confederates, they observed differences in the tone of the response. Specifically, participants who received an expression of receptiveness in the form of a question and request to elaborate responded to their counterpart in a way that independent raters judged to be more receptive. Thus, participants responded to an observable signal of receptiveness with greater receptiveness of their own.

In a recent set of studies, Collins et al. (2021) evaluated participants' beliefs about their own and counterparts' willingness to learn about the other person's point of view during conflictual discussions. Importantly, a robust self-other difference was observed between the extent to which participants claimed to be interested in learning about their counterpart's perspective versus the extent to which they believed the same about their counterpart. In other words, people believe that in addition to being less intelligent and less benevolently motivated, as shown in previous research, holders of opposing views are also less interested in learning about opposing views. This finding is consistent with work on intergroup conflict, which finds a similar self-other difference such that members of different racial groups underestimate out-group members' willingness to engage in contact (Shelton & Richeson, 2005). The existence of this self-other difference lends support to the idea that expressions of interest during conflict violate counterpart expectations and are likely to draw attention.

In a follow-up study featuring live conversations between supporters of Donald Trump and Joe Biden in the weeks preceding the 2020 U.S. presidential election, Collins et al. (2021) found that participant perceptions of their counterparts' willingness to learn strongly predicted counterpart evaluations and willingness to engage in future interaction. Indeed, participant *perceptions* of counterpart willingness to learn was a stronger predictor of future interaction intentions than *participants' self-reported* willingness to learn or *counterparts' self-reported* willingness to learn. Participants who viewed their counterparts as willing to learn about their point of view evaluated those counterparts as more benevolent, intelligent, and objective.

To test the causal effect of perceived partner learning goals on interaction outcomes, Collins et al. (2021) manipulated participant beliefs about their counterpart. Participants dramatically amended their evaluations of their counterparts' personal characteristics and the quality of their arguments when they were led to believe that those counterparts were willing to learn about the participant's perspective. This effect emerged both in the context of the U.S. partisan conflict and among Israelis evaluating arguments made by a Palestinian counterpart regarding the resettlement of Palestinian refugees in Israel. This work provides direct evidence for the idea that perceptions of counterpart receptiveness (operationalized as stated willingness to learn about the other side's perspective) can causally impact several aspects of participants' own receptiveness, including their evaluations of their counterpart and the counterpart's arguments, as well as their willingness to interact in the future.

Initial Evidence on the Relationship Between Dispositional, Experienced, and Perceived Receptiveness

The centrality of observable cues to receptiveness for conversational outcomes raises important questions regarding how closely people's perceptions of partner receptiveness map onto their partner's actual mental states. One might imagine that receptiveness is easy to express and perceive, like one's preference for waffles over bacon. However, because receptiveness is primarily characterized by information processing, it seems more likely that people are poor at expressing it in a way that is transparent to others. Furthermore, to the extent that conflict counterparts reliably misperceive each other's mental states (Cikara et al., 2011; Lees & Cikara, 2020), it may be the case that even consistent and reasonably clear signals of receptiveness are not accurately interpreted. In other words, people could make errors in how they express receptiveness and/or in how they interpret the receptiveness of others.

A recent series of studies leveraging natural language processing (NLP) sheds light on this question by beginning to identify the linguistic cues that participants use to express and evaluate each other's level of receptiveness. In one study, individuals working in leadership positions in state and local government engaged in an online text-based chat regarding a controversial policy issue and then rated their own and their partner's receptiveness (Yeomans et al., 2020). Participants were much more willing to engage in future interactions with partners whom they saw as more receptive and evaluated those partners more positively, even controlling for their objective level of disagreement. This result is notable, given that participants were a sample of experienced government professionals with well-articulated policy opinions. Interestingly, however, individuals' evaluations of their own receptiveness in the course of the conversation were not well correlated with how receptive their partners evaluated them as being. Thus, although prior research has demonstrated that self-reported receptiveness is a reliable predictor of an individual's cognitive approach to opposing views, it appears that individuals in conflict largely fail to express this tendency in a way that is recognizable to counterparts.

Yeomans et al. (2019) developed a NLP algorithm that identifies features of language (words, phrases, and syntax) that reliably predict how receptive a particular individual is *perceived* as being by their partner. This approach provides a means of precisely capturing the nature of the disconnect between people's evaluations of their own receptiveness and others' perceptions.

Language that recipients evaluate as being particularly receptive has been termed "conversational receptiveness." Using this type of language in conflict can be seen as one form of observable behavior (along with nonverbal behaviors) that counterparts perceive as signaling one's willingness to thoughtfully engage with opposing views. Text rated high on conversational receptiveness contains frequent examples of acknowledgment (e.g., "I understand that . . ." or "I think you're saying . . ."), expressions of positive affect (e.g., "I'm glad that you . . ."), and hedging (e.g., "Sometimes . . ." "Perhaps . . ."). Conversely, receptive text is relatively low on negation (e.g., "does not," "will not") and explanatory language (e.g., "because," "therefore"). More broadly, conversational receptiveness appears to involve expending airtime that could otherwise be spent promoting your own views on acknowledging your counterpart's position and highlighting common ground. In contrast, speakers mistakenly believe that language that communicates receptiveness is characterized by politeness (e.g., avoiding curse words, expressing gratitude) and formality (e.g., "Sir"), rather than active engagement with opposing ideas. Thus, part of the distinction between a person's experienced receptiveness (which can be measured by the self-report scale) and conversational receptiveness (which can be detected by one's discussion counterparts and the NLP algorithm) seems to stem from the fact that speakers may have an incorrect lay theory about how to express their mental state to effectively convey receptiveness.

Defining and measuring conversational receptiveness using NLP allows researchers to identify how this behavior is enacted, perceived, and evolves in real time (without requiring pauses in a conversation for participants to answer questionnaires). Importantly, because conversational receptiveness can be trained, it can also be experimentally manipulated. Because the cues of conversational receptiveness are based on participant perceptions of what people find to be receptive, inducing participants to use these linguistic cues constitutes an effective manipulation of perceptions of partner receptiveness. Manipulating perceived receptiveness in this manner makes it possible to test whether conversational receptiveness has the positive downstream consequences predicted by the theorizing outlined above.

For example, in one study, participants were randomly assigned to receive conversational receptiveness training (consisting of four categories of words and phrases) and told to include these linguistic cues in their arguments regarding the Black Lives Matter movement and university sexual assault policies. Counterparts perceived these trained participants as more receptive than untrained participants and were more willing to collaborate with them in the future (Yeomans et al., 2020). Relatedly, participants who were randomly assigned to receive conversational receptiveness (vs. control) instructions before writing a message about the safety and efficacy of COVID-19 vaccines to vaccine-hesitant counterparts were found by those counterparts to be more trustworthy and reasonable (Minson & Hagmann, 2021). Importantly, the vaccine-hesitant counterparts were also more willing to have future discussions with the persuaders who had received the conversational receptiveness instructions. The results of both of these studies dovetail with the findings from Collins et al. (2021), in that observable signals

of receptiveness lead to greater engagement in counterparts and more positive evaluations of opposing perspectives, even controlling for the level of disagreement and across a variety of "hot-button" topics.

Developing an algorithmic measure of conversational receptiveness has also enabled researchers to analyze longer conversations and examine the evolution and persistence of receptiveness across successive conversational rounds. For example, in the study described above involving leaders in state and local government, participants exchanged views more than five rounds of conversation lasting approximately 20 min in total. Conversational receptiveness in the first round shaped outcomes for the duration of the conversation, with partners converging on a common level of conversational receptiveness, despite having been randomly paired at the start.

Another study relied on a dataset of online discussions by Wikipedia editors regarding proposed edits on the platform. Conversational receptiveness expressed during the first round of the discussion predicted not only the conversational receptiveness at the end of the discussion (typically several rounds later), but also the probability that the discussion led to a personal attack launched by one party against the other, a behavior sanctioned by Wikipedia (Yeomans et al., 2020). Importantly, because the Wikipedia dataset contained a wide swath of naturally occurring topics, this study provides an important robustness check of the conversational receptiveness algorithm on topics beyond those used to develop it.

A recent study by Yeomans et al. documents that conversational receptiveness is "contagious" by leveraging a large dataset of forum discussions in an online political science course. Beyond replicating the earlier results, these results also control for the average level of receptiveness exhibited by the same posters across multiple conversations with multiple partners. This finding points to the important distinction between dispositional tendencies and one's behavior within a specific context and at a given moment. In line with the theorizing presented above, these results again suggest that observable features of counterpart behavior (i.e., receptiveness displayed through language) may have a more potent influence on behavior than one's more general inclinations.

More broadly, the recent emergence of NLP as a tool for studying social interaction offers unprecedented opportunities for generating novel research insights. Dyadic interactions between holders of opposing views are often difficult to observe using laboratory methods, and thus researchers must navigate a trade-off between external validity and experimental control. However, when it comes to the study of conversation and conflict, *language is behavior*. By recording the natural language used by conflict counterparts under different conditions, researchers can move away from subjective measures of participant perceptions or beliefs and directly capture their behavior toward their counterparts.

Recording language has been possible for many decades. However, until recently, turning recordings into analyzable data would have required hundreds of hours of manual transcribing and coding by training research assistants, each of whom would add some level of subjectivity and idiosyncratic construal to the task. Advances in computational linguistics enable the analyses of massive quantities of natural language data to be performed quickly and reliably, turning the infinite richness of human language into quantifiable and analyzable data.

Interventions to Increase Receptiveness and Implications for Intervention Design

Although the study of conflict has permeated social psychology since the origins of the field, the growing levels of affective polarization in the United States and around the globe lend new urgency to intervention research. Importantly, most prior research efforts have focused on ways to impact the cognitions and emotions of a focal individual, with some notable successes described below. Ultimately, however, interventions aimed solely at increasing internally experienced cognitive receptiveness are not sufficient to ensure receptive interactions. To generate interpersonal effects with potentially longer-term consequences, an intervention must lead individuals to express their receptiveness in transparent ways that can be directly observed and recognized by their counterparts.

As described above, the receptiveness self-report scale is made up of four factors that initially emerged from prior theorizing (Chen et al., 2010). Beyond shaping the psychometric structure of the self-report scale, the four factors can be thought of as capturing latent constructs that advance versus impede one's ability and willingness to maintain a receptive mindset. The review of interventions below is organized around these four latent constructs.

Interventions to Decrease Derogation of Opponents

A number of studies in the cognitive biases tradition have examined interventions that lead individuals to make more charitable attributions of disagreeing others and their beliefs. Many studies achieve this outcome by teaching partisans about particular biases, providing them with favorable information about disagreeing others, or simply asking them to reflect on their views and reimagine their interactions with conflict counterparts. For example, in one study, simply raising awareness of naïve realism (the tendency to see one's own views as fundamentally objective) led to greater openness to an adversary's narrative (Nasie et al., 2014). Relatedly, encouraging individuals to "consider the opposite" led them to see more merit in arguments and evidence for an opposing

point of view (Lord et al., 1984). Similarly, asking people to take an opponent's perspective led them to express more favorable evaluations of the opponent's group and increased approach-oriented action tendencies (Todd & Galinsky, 2014).

Some interventions have focused directly on reducing the tendency to see out-groups as monolithic, finding that greater individuation of out-group members decreased prejudice and discrimination (Brauer et al., 2012; Bruneau et al., 2015). Similarly, increasing perceptions of in- versus out-group similarity and inducing people to extend their belief in a "good true self" to out-group members decreased bias and reduced aggression (De Freitas & Cikara, 2018; Kimel et al., 2016). Teaching people that groups are capable of change and improvement led to more positive attitudes toward the out-group and willingness to compromise (Goldenberg et al., 2018; Halperin et al., 2011). In summary, a number of interventions have been shown to decrease individuals' tendency to derogate opposing views and groups. Future research is needed to explicitly assess the extent to which these interventions lead individuals to behave in ways that are perceived by others as more receptive.

Interventions to Decrease Negative Emotions

Another substantial body of work has focused on the emotional barriers to receptiveness, recognizing that people often avoid engaging with opposing perspectives because they experience or expect to experience negative affect as a result (Dorison & Minson, 2021; Festinger & Carlsmith, 1959; Hart et al., 2009). For example, work on cognitive reappraisal (Gutentag et al., 2017; Tamir et al., 2019) has targeted the affective component of receptiveness by leading individuals to reinterpret disagreement in a way that generates a different, less aversive, suite of affective responses. Relatedly, recent work on debiasing affective forecasts in conflict (Dorison et al., 2019) has induced individuals to engage with opposing views by leading them to recognize that this experience will not be as negative as they expect it to be.

While decreasing negative emotions is a promising route for increasing an individual's cognitive receptiveness, simply refraining from expressing hostility, frustration, and/or disgust may not be sufficient to increase counterparts' perceptions of one's receptiveness. Indeed, prior work demonstrates that others perceive the proactive expression of *positive* emotions as receptive (Yeomans et al., 2020). Especially, given the "contagious" nature of emotion (Barsade, 2002), one individual's observable emotions during conflictual dialogue are likely not only to affect their counterpart's perceptions of their receptiveness but also to trigger similar (positive or negative) emotional reactions in the counterpart that may have cascading effects on conversational outcomes. Examining the effect of emotional *expression* in conflict appears to be a promising direction for future intervention research.

Interventions to Boost Curiosity Toward Opposing Views

Although we are not aware of interventions that have directly attempted to increase curiosity toward opposing views, Loewenstein's (1994) information gap theory suggests that exposure to new, inconsistent, or ambiguous information can heighten curiosity. Thus, interventions that lead individuals to recognize gaps in their own understanding of a hotly contested topic, appreciate the limits of their knowledge (Fernbach et al., 2013), and/or cultivate "intellectual humility" (Bowes et al., 2020; Krumrei-Mancuso & Rouse, 2015; McElroy et al., 2014) may increase their curiosity toward opposing views. Importantly, curiosity is likely to be associated with behaviors that are observable by others during social interactions and thus may serve as an honest signal of receptiveness. For example, as compared with those who are less curious, curious individuals may ask a greater number of clarification questions (Chen et al., 2010) or spend a greater proportion of time listening to their counterparts, which may in turn increase the counterparts' perceptions of their receptiveness.

Interventions to Increase Engagement With "Taboo" Issues

It is perhaps unsurprising that few attempts to intervene on taboo issues that are considered beyond the pale of discussion have been published, as such beliefs are likely to have deep cultural roots that are continually reinforced by one's social environment. Indeed, offering material incentives to encourage people to compromise over a sacred value can backfire, leading to heightened opposition to such compromise (Ginges & Atran, 2013). However, some interventions have found purchase by framing a position that a person or group might normally find offensive in a way that more closely aligns with that specific person's or group's core moral values (e.g., care, fairness, loyalty, authority, sanctity; Graham et al., 2009). These "moral reframing" interventions have been found to increase the persuasiveness of an argument directed at specific audiences (Feinberg & Willer, 2019).

Relatedly, people may also avoid discussing controversial topics when they fear that they will be judged harshly for their views. When a person's unwillingness to discuss an issue stems from a desire to appear politically correct or fear of being "canceled" (Norris, 2021), the result is often a vicious social cycle in which pluralistic ignorance proliferates, mistaken assumptions arise about others' views, and individuals become even less willing to express opinions that they wrongly believe to be unique (Van Boven, 2000). Interventions that expand the universe of topics that individuals consider appropriate to re-evaluate, by perhaps highlighting the diversity of opinions on a given topic, may be critical for breaking these cycles.

Given that it is hard to fake one's willingness to discuss an issue that others might consider taboo or sacred, a person's willingness to simply "take a seat at the table" sends a strong signal of receptiveness that is clearly observable to counterparts. Thus, interventions that achieve this are likely to be relevant across the political spectrum, across religious and secular beliefs, and across generational cohorts in which specific (but different) issues are considered taboo.

Interventions Focused on Increasing Perceptions of Counterpart Receptiveness

The interpersonal conceptualization of receptiveness outlined above suggests that a particularly effective way to improve communication in disagreement is to increase perceptions of receptiveness among conflict counterparts. This approach suggests several new and promising approaches to designing more effective interventions.

First, interventions aimed at influencing an individual's perceptions of their counterpart may be more effective than interventions aimed at directly influencing the receptiveness of a focal individual. Such counterpart perceptions should in turn shape the receptiveness of the focal actor over the course of an interaction. In other words, a powerful way to make someone truly listen and engage with a different perspective is to show them that we are already doing so ourselves.

To the extent that individuals become more receptive in response to apparently receptive counterparts, interventions should strive to increase observable cues to receptiveness rather than attempting to directly amend participants' mental states. In other words, feeling receptive is not enough; individuals need to *demonstrate* receptiveness. Recent research suggests that such observable cues will shift stereotypes, prompt reciprocity and imitation, and ultimately leading to shifts in internal, experienced receptiveness.

Finally, the work on linguistic markers of receptiveness suggests that people fail to express receptiveness when left to their own devices but easily learn to use the relevant cues when explicitly instructed. Related streams of research on using language that communicates receptiveness have shown promising results. For example, Feinberg and Willer (2019) showed that reframing political arguments in terms of the other side's moral priorities increased support for out-group priorities (e.g., Republican support for universal health care). Although persuasion on particular issues is not a requirement for a receptive conversation, it seems likely that a similar technique would improve out-group perceptions more broadly. Relatedly, Zhao et al. (2021) recently demonstrated that an intervention grounded in practices of improvisational comedy, in which strangers with opposing views were taught a technique for showing gratitude and building on each other's ideas, led conversational partners to feel more heard and valued, and to perceive more common ground. This work suggests that rather than attempting to shift participants' mental experience in the hope that it will lead to observable receptive behavior, interventions may have greater success if they offer individuals concrete instructions on how to behave.

Although early research shows that such approaches have promise, much more empirical work is needed. Future research should examine the types of receptive behaviors that are most readily learned by individuals and recognized by counterparts. Although much work thus far has focused on verbal cues, it seems likely that adding nonverbal cues would produce a more vivid picture of the mental state the actor is trying to communicate. For example, nonverbal signals of conversational involvement (e.g., nodding, smiling, relaxed laughter, facial animation, forward lean; Burgoon & Koper, 1984; Coker & Burgoon, 1987) may also serve to communicate a listener's receptiveness. Mimicking the postures, mannerisms, and facial expressions of a conversational partner (either consciously or nonconsciously, as in the "chameleon effect," Lakin et al., 2003) may similarly signal a less combative mindset.

Open Questions and Future Directions

All collaborative human endeavors, from raising children to building nations, are eventually challenged by the need for communication and collaboration among individuals with opposing perspectives. The present review focused on ongoing research on receptiveness to opposing views—a construct that is key to understanding behavior in such contexts. We propose a new, interpersonal conceptualization of receptiveness as an emergent property of individual tendencies and features of a particular interaction. Specifically, we argue that an important and understudied determinant of one's own receptiveness is the observable level of receptiveness enacted by one's conflict counterpart.

Recent research suggests that receptiveness can and should be measured in multiple ways. First, individuals can report their own habitual level of experienced receptiveness using a self-report scale; these self-reports are predictive of cognitive processing, which in turn guides behavior. More receptive individuals are more willing to expose themselves to opposing views, pay greater attention to them, and give more even-handed evaluations to content they agree versus disagree with. They are also more likely to form close relationships with holders of opposing views, especially ones who are also receptive (Reschke et al., 2021). These behavioral measures clearly suggest that self-reports of experienced receptiveness capture a mental state that has the ability to direct complex behaviors. Importantly, the receptiveness scale is more predictive of these behaviors than many related self-report scales, such as openness to experience (John & Srivastava, 1999), need for cognition (Cacioppo et al., 1984), and actively open-minded thinking (Gurcay-Morris, 2016).

Second, parties in attitude conflict appear to be highly attuned to behavioral signals of a counterpart's receptiveness. Expressions of receptiveness can take many forms,

including asking elaboration questions (Chen et al., 2010), explicitly signaling a willingness to understand the other's perspective (Collins et al., 2021), or acknowledging mistakes (Hussein & Tormala, 2021). Work using NLP has identified a specific set of words and phrases that lead a passage of text to be perceived as more receptive—a construct that has been termed "conversational receptiveness." Across laboratory experiments and naturally occurring conversations, behaviorally demonstrating receptiveness improves people's perceptions of counterparts and future willingness to interact. Importantly, initial levels of receptiveness seem to spread through the duration of a conversation, with participants' initial linguistic and behavioral choices impacting ultimate outcomes. These effects suggest that future research should examine additional behaviors that can offer cues to counterpart receptiveness as well as the systematic errors that individuals make in this domain.

Considering receptiveness as emerging during social interactions from the combined dispositional tendencies of the parties involved as well as their perceptions of each other's observable receptiveness offers a new lens on the relevant psychology and leads to novel insights. Importantly, viewing receptiveness through this lens suggests that increasing observable signals of counterpart behavior may function as an effective lever for improving civic discourse.

Receptiveness in Larger Groups

Although the research discussed here has focused on dyadic interactions, it opens fascinating new directions for investigating the emergent levels of receptiveness in larger groups and over longer periods of time. Prior research has repeatedly demonstrated that interacting groups establish social norms (Bettenhausen & Murnighan, 1985; Sherif, 1936) wherein group members adapt and conform to each other's behavior and manner of interaction. This prior work and the model outlined here suggest that over a period of extended interaction, both dyads and larger groups will form a set of social norms with regard to behaviors signaling receptiveness as well. Such theorizing is supported by research on other complex behaviors that originate within individuals and spread throughout social networks (e.g., Christakis & Fowler, 2009; Fowler & Christakis, 2010).

Considering the level of receptiveness in larger groups and its development over longer timespans raises important questions. For example, when an established social group (such as a work team, a family, or a romantic partnership) develops a set of norms around how receptiveness is expressed and communicated, can these norms eventually "get under the skin" to affect the dispositional receptiveness of individual group members? When and how are habits that develop within one dyad (e.g., marriage partners) likely to "spill over" to other similar relationships (e.g., with other relatives) or to wider social spheres (e.g., with coworkers, neighbors, and strangers)?

These questions require examining receptiveness at multiple levels of analysis and over time—a task that is both analytically and logistically daunting. But they also can enable us to understand how receptiveness shapes and is shaped by the myriad interactions individuals engage in, and how receptive mindsets can be fostered within individuals, among group members, and across societal factions.

To the extent that receptiveness is a crucial construct in conflict, it is imperative to study how it varies with culture, with the characteristics of individual conflict partners, and within different types of relationships. To date, most participant samples in research on receptiveness have skewed young, liberal, secular, and Western. This limitation restricts the field's current understanding of receptiveness and its consequences (Henrich et al., 2010). Furthermore, it is likely that communication that is perceived as receptive possesses an overlapping yet distinct set of markers in other languages or cultures. Emerging social trends may also lead to measurable differences in how older and younger people think about receptiveness to opposing views in relation to other social values that they hold. Thus, future research should examine both the experience and expression of receptiveness across a broader set of age groups, cultures, languages, and belief systems.

Relatedly, because most existing work has examined relatively brief interactions between strangers, it is not yet clear how expressions of receptiveness may lead to different outcomes as a function of power and status differences between parties in conflict, the presence of third-party observers, or other interpersonal dynamics. For example, it remains unclear whether positive assessments of receptive peers generalize to leaders who are receptive during conflict. Extensive further research is necessary to address these questions.

Is Greater Receptiveness Always Desirable?

Although receptiveness is defined in opposition to a suite of classic cognitive biases known to decrease decision quality, and research has empirically documented that expressing receptiveness carries interpersonal benefits, it is worth considering whether greater receptiveness is *always* beneficial. Answering this question, in turn, requires greater specificity about whom receptiveness would benefit and to what end.

In most social situations, individuals who encounter holders of opposing views are likely to hold multiple goals. They may want to learn why others hold opposing beliefs, either out of genuine curiosity or because they realize that collecting information from different perspectives improves decision-making (Surowiecki, 2005). They may be eager to express their own perspective to feel heard and validated (Davis & Perkowitz, 1979; Laurenceau et al., 1998; Reis & Patrick, 1996; Reis & Shaver, 1988), and be willing to help their counterpart to feel the same way. Perhaps they may be engaging in "opposition research" to learn the weaknesses in the other person's argument. Alternatively, they

may hold a longer-term perspective and realize that engaging with an opponent on one issue may allow them to cooperate more successfully on other issues in the future. Being in a more receptive mindset and signaling this to one's counterpart is consistent with many of these goals.

However, it should be acknowledged that receptiveness may have costs. There may be instances when simply allowing extreme views (e.g., justifying child pornography or White supremacy) to be aired could give these perspectives an undeserved legitimacy or traction. Furthermore, being visibly receptive to opposing perspectives may incur the wrath of one's own ingroup (Hart et al., 2009; Kahan, 2013), which may be particularly costly to those in leadership positions. Yet, although these concerns are legitimate, such instances appear to be much less common than situations wherein receptiveness might be socially constructive. Additional empirical work can go a long way toward evaluating whether and how frequently high levels of receptiveness can cause personal or societal harm.

Most broadly, in evaluating the potential costs or benefits of receptiveness, future research should consider the specific goals of the parties in question. Greater receptiveness is desirable when having a balanced awareness of and appreciation for arguments on both sides of an issue would help the parties achieve their goals. Especially in situations of mutual dependence between individuals or groups—situations that often arise within the context of polarized social and political issues—more thoughtful and respectful interactions in the present are likely to establish conditions for more productive future interactions.

Conclusion

Although classic and contemporary research has touched on many of the key questions related to receptiveness, its consequences, and its antecedents, for each question answered, several others readily emerge. One fact that we are certain of, however, is that the manner in which people engage with others with whom they passionately disagree is a vitally important topic for research in the experimental social sciences. The set of cognitive, affective, and behavioral processes involved in interactions between disagreeing others permeate nearly every facet of social life and are crucial for everything from maintaining a happy marriage to maintaining the very fabric of democracy. We hope that future researchers continue to build and innovate in this important area.

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) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by a Harvard Foundations of Human Behavior Initiative Grant to JAM and FSC, and a Discovery Grant from the Natural Sciences and Engineering Research Council of Canada (2015-06753) to FSC. FSC was also supported by a Killam Research Fellowship.

Notes

1. Throughout the article, we use the term "receptiveness," but the term "receptivity" would also be appropriate.
2. Although receptiveness is the first unifying psychological construct that has been posited to underpin the different biases, this idea seems implicit in much of the prior research where very different experimental operationalizations were brought under the same umbrella of "confirmation bias" (Nickerson, 1998) or "motivated reasoning" (Dawson et al., 2002; Kunda, 1990).
3. Discriminant validity statistics in this prior work also compare the receptiveness scale to measures of openness to experience (John & Srivastava, 1999), need for cognition (Cacioppo et al., 1984), need for cognitive closure (Webster & Kruglanski, 1994), and actively open-minded thinking (Gurcay-Morris, 2016). Importantly, the receptiveness scale was found to predict relevant behaviors more robustly than these other measures.
4. Because self-reported receptiveness is positively correlated with other constructs, such as Extraversion or Need for Cognition, it is possible to get some sense of a person's receptiveness by administering other measures.
5. Although the phrase "conversational turns" implies a neat pattern of alternating speaking and listening, turns are not as clearly defined in natural conversation. For example, one person might dominate the speaking role for several turns in a row with only occasional contributions from their counterpart, or a turn could feature both people speaking over each other. Nevertheless, using conversational turns as a measurement unit is useful for modeling the dynamic and interactive nature of conversation.

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