University of Reading

Listening to understand: the role of high-quality listening on speakers' attitude depolarization during disagreements

Article

Accepted Version

Itzchakov, G., Weinstein, N. ORCID: https://orcid.org/0000-0003-2200-6617, Leary, M., Saluk, D. and Amar, M. (2024) Listening to understand: the role of high-quality listening on speakers' attitude depolarization during disagreements. Journal of Personality and Social Psychology, 126 (2). pp. 213-239. ISSN 1939-1315 doi: 10.1037/pspa0000366 Available at https://centaur.reading.ac.uk/114502/

It is advisable to refer to the publisher's version if you intend to cite from the work. See Guidance on citing.

To link to this article DOI: http://dx.doi.org/10.1037/pspa0000366

Publisher: American Psychological Association

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the End User Agreement.

www.reading.ac.uk/centaur

University of Reading

CentAUR

Central Archive at the University of Reading

Reading's research outputs online

Listening to Understand: The Role of High-Quality Listening on Speakers' Attitude Depolarization During Disagreements

Guy Itzchakov

University of Haifa

Netta Weinstein

University of Reading

Mark Leary

Duke University

Dvori Saluk

University of Haifa

Moty Amar

Ono Academic College

Authors' contributions: Guy Itzchakov played a lead role in the conceptualization, data curation, formal analysis, methodology, writing of the original draft, writing of revision, and editing, as well as funding acquisition. Netta Weinstein played a supporting role in the conceptualization, methodology, writing of the original draft, writing of revision, and editing, as well as funding acquisition. Mark Leary played a supporting role in the conceptualization, methodology, writing of the original draft, writing of revision, and editing. Dvori Saluk played a supporting role in data curation, methodology, formal analysis, writing of revision, and editing. Moty Amar played a supporting role in data curation and methodology.

Author's Note. Correspondence concerning this article should be addressed to Dr. Guy Itzchakov: gitzchako@univ.haifa.ac.il. Department of Human Services, the

University of Haifa, Abba Khoushy Ave 199, Haifa, 349883, Israel. This research was funded by grant Number 1235/21 from the Israeli Science Foundation to Dr. Guy Itzchakov and a grant from Templeton World Charity Foundation Inc. (TWCF0615) to Drs. Netta Weinstein and Guy Itzchakov.

The authors have no conflict of interest.

The authors thank Dr. Richard Petty for his help in incorporating listening into the Elaboration Likelihood Model of Persuasion.

Abstract

Disagreements can polarize attitudes when they evoke defensiveness from the conversation partners. When a speaker talks, listeners often think about ways to counterargue. This process often fails to depolarize attitudes and might even backfire (i.e., the Boomerang effect). However, what happens in disagreements if one conversation partner genuinely listens to the other's perspective? We hypothesized that when conversation partners convey high-quality listening—characterized by attention, understanding, and positive intentions—speakers will feel more socially comfortable and connected to them (i.e., positivity resonance) and reflect on their attitudes in a less defensive manner (i.e., have self-insight). We further hypothesized that this process reduces perceived polarization (perceived attitude change, perceived attitude similarity with the listener) and actual polarization (reduced attitude extremity). Four experiments manipulated poor, moderate, and high-quality listening using a video vignette (Study 1) and live interactions (Studies 2-4). The results consistently supported the research hypotheses and a serial mediation model in which listening influences depolarization through positivity resonance and non-defensive self-reflection. Most of the effects of the listening manipulation on perceived and actual depolarization generalized across indicators of attitude strength, specifically, attitude certainty and attitude morality. These findings suggest that high-quality listening can be a valuable tool for bridging attitudinal and ideological divides.

Statement of Limitations

The present work had the following limitations regarding the design: The conversations were optimized for clean manipulations. They focused on the speakers' role and did not involve a natural back-and-forth interaction between the conversants, thereby limiting ecological validity. Second, we did not manipulate the hypothesized mediators (positivity resonance and self-insight). Thus, although we have theoretical reasons to believe positivity resonance drives self-insight (when switching their order, the indirect effect was no longer significant), we cannot conclude that these mediators influenced condition effects on attitudes. Finally, participants were Jewish and Muslim individuals from Israel with varying levels of religiosity, so we should be careful when extrapolating the conclusions to non-Western societies.

Listening to Understand: The Role of High-Quality Listening on Speakers' Attitude Depolarization During Disagreements

In our increasingly polarized world, characterized by stark divisions and ideological rifts, the urgency of addressing the pressing challenges of effective communication and understanding one another has never been more evident. Extensive research has shed light on the severity of this polarization (Iyengar et al., 2019). The present paper examines the possibility that high-quality listening might be a powerful tool for bridging divides and facilitating constructive dialogue during disagreements.

During many disagreements, discussants find it difficult to listen well, particularly when speakers share beliefs that are viewed as inconsistent with reality or as immoral, racist, or violent. Disagreements, especially when focusing on topics important to the conversants, tend to escalate quickly and become conflictual, if not destructive (Tjosvold et al., 2014). During destructive disagreements, conversants often feel that their value as an individual and their worldview is threatened and become defensive (Brehm & Brehm, 1981). As a result, both parties in a disagreement are likely to end the conversation feeling disconnected from one another, their attitudes unchanged or even more extreme (Heller et al., 1973).

Our research examines one possible way to counteract these common effects of disagreements. Specifically, we test the hypothesis that when listeners exhibit high-quality listening during disagreements, speakers feel more aligned, socially comfortable, and connected with them (i.e., positivity resonance; Fredrickson, 2016). We predicted that experiencing high-quality listening allows speakers to think about their attitudes openly and less defensively, enabling them to gain insights about their attitudes and themselves (i.e., self-insight; Itzchakov, Weinstein, et al., 2022). We

explore the extent to which these inter- and intra-personal processes lead to attitude depolarization, defined as a reduction in the extremity and rigidness of attitudes (Petty & Krosnick, 1995). Reflecting this definition, we operationalize depolarization in the current study through moderated attitudes (attitude shift from a more extreme to a less extreme position) and heightened perceptions of similarity with disagreeing others. The primary question guiding this research was: Following a disagreement, can conversants who convey high-quality listening depolarize the attitudes of their speakers without trying to persuade them?

Listening in the Context of Disagreements

Unproductive or polarizing conversations can occur because conversation partners fail to listen carefully to one another. Presumably, high-quality listening can shift conversations to a more constructive space, where attitudes might soften as people consider the other's perspective (Itzchakov & DeMarree, 2022). High-quality listening is a multi-faceted process that includes paying attention, comprehending the other's points, and holding a positive intention toward the speaker (Kluger & Itzchakov, 2022). High-quality listening is distinguishable from other relational constructs, such as perceived responsiveness (Itzchakov, Reis et al., 2022; Reis & Itzchakov, 2023), autonomy support (Weinstein et al., 2022), and social support (Salinas et al., 2021). Specifically, unlike these other constructs, high-quality listening involves non-verbal and verbal behaviors used during conversations (Kluger & Itzchakov, 2022).

Good listeners convey the features of high-quality listening through behaviors such as maintaining eye contact, asking relevant follow-up questions, and displaying nonverbal cues that convey attentiveness. Attention refers to focusing on the speaker's message while avoiding extraneous stimuli that produce external distractions (e.g.,

text messages and other people in the room) and internal distractions (e.g., unrelated thoughts). Attention is conveyed by maintaining eye contact, orienting one's body toward the speaker (Bavelas et al., 2000), and effective backchannel behaviors (Pasupathi, 2001) such as nodding and indications that one is listening (such as "uh-huh" and "hmmm").

Comprehension refers to the degree to which listeners accurately understand a speaker's cognitive and affective states (Kluger & Itzchakov, 2022). Listeners convey comprehension by accurately paraphrasing the speaker's message (Nemec et al., 2017) and asking appropriate clarifying questions relevant to the speaker's points (Van Quaquebeke & Felps, 2018). Good listeners ask speakers to repeat parts of a missed message or elaborate when they are unsure they understood the speaker's messages (Kluger et al., 2022)

Finally, positive intention involves listening with a non-judgmental approach toward the speaker (Rogers, 1980). Positive intention does not necessarily entail agreeing with the speaker or liking what they say. Instead, it involves conveying that one values, respects, and cares for the speaker *regardless* of what is said and a desire to understand the speaker's point of view to learn more about them. Positive intention can be conveyed through warm tones of voice, smiles, open postures, and encouraging words (Itzchakov & Grau, 2022). For a graphical description of the dimensions of listening and their associated behaviors, see Figure 1 in the supplementary materials of Kluger and Itzchakov (2022), named "Listening Constructs and their Causal Relationships[1]."

Why Does Listening Inspire Change During Disagreements?

[1] https://www.annualreviews.org/doi/suppl/10.1146/annurev-orgpsych-012420-091013

Episodic Listening Theory (Kluger & Itzchakov, 2022) theorizes that listening creates a psychological experience of "togetherness" – an experience of interpersonal chemistry (Reis et al., 2021) and social connection (Zhou & Fredrickson, 2023). Togetherness is a psychological state in which a person perceives the world from a state of connection and a collective standpoint (Rossignac-Milon et al., 2021).

This bond reflects a state of social comfort and intimacy in which people feel they are on the same page (Itzchakov, Weinstein et al., 2022). However, this relational experience may be more complex in the context of disagreements, which can feel threatening to conversants. That is, when they disagree, conversants feeling 'together' may depend both on the sense of closeness they have to one another and simultaneously on the sense of comfort or safety they experience within the potentially threatening conversation.

Togetherness can, therefore, be understood in terms of positivity resonance, the experience in which people share positive affect, mutual care and concern, and synchrony (Fredrickson, 2016). For the purposes of this research, we rely on the construct of positivity resonance as a more general and cross-cutting framework of the relational context than specific tests of relatedness and, importantly, one that captures both social comfort and connection experienced during disagreements (West & Fredrickson, 2020).

On the surface, positivity resonance may appear to be identical to other constructs that involve perceived connections with other people, such as perceived similarity (Byrne, 1961), inclusion in the self (Aron et al., 1997), and shared reality (Echterhoff, 2012). Although positivity resonance may be facilitated by these (and other) processes, it is fundamentally different in that positivity resonance alone inherently involves the emotional connection and the mutual expression of positive

emotions (Fredrickson, 2016). Not only can people perceive themselves to be similar to or merged with another person without experiencing positivity resonance, but also positivity resonance can be experienced without perceiving that one is similar to or merged with the other person.

Based on research on listening, togetherness, and positivity resonance, we hypothesized that:

Hypothesis $_1$: The high-quality listening experience will increase speakers' positivity resonance.

Conceptual listening models suggest that the sense of togetherness that accompanies positivity resonance promotes divergent thinking, willingness to consider novel perspectives, and openness to changes in one's perspective (Rogers, 1980). When speakers experience positivity resonance with their listeners during disagreements, they should be more willing to explore their attitudes non-defensively and with an open mind because the feelings of social comfort and connection help individuals to feel accepted and lower their motivation to protect their public image in the eyes of a listener (Leary, 2005).

Namely, this *interpersonal* experience changes speakers' *intrapersonal* experiences. With greater openness, speakers might be more willing to reflect deeply on the strengths and limitations of their particular perspective and their emotional experiences in relation to it (Itzchakov et al., 2018). Prior work referred to this process as self-insight, defined as "a deeper reflection and understanding about how one relates to the topic under discussion" (Itzchakov et al., 2020). Self-insight involves curiosity that motivates exploration of both the issue at hand and oneself, including one's possible biases concerning the topic (Weinstein et al., 2013). Whereas related constructs that tap into this intrapersonal approach, such as intellectual humility

(Hoyle et al., 2016) and open-mindedness (Baron, 2019), involve an awareness of the limitations of one's views and an open attitude towards other perspectives, self-insight reflects an active engagement with one's limited perspective and desire to modify it if necessary. For example, high-quality listening (not during disagreements) increased speakers' self-insight across various topics, such as prejudice (Itzchakov et al., 2020), work attitudes (Itzchakov & Kluger, 2017), and Universal Basic Income (Itzchakov et al., 2018). Self-insight shares conceptual connections with Intellectual Humility (Hoyle et al., 2016; Leary et al., 2017) and Open-Mindedness (Baron et al., 2016) in that these constructs also reflect a willingness to consider diverse and even contrary perspectives from one's own.

Hypothesis $_{2a}$: High-quality listening will increase speakers' self-insight during disagreements.

Hypothesis $_{2b}$: The effect of high-quality listening on self-insight will be mediated through positivity resonance.

How Does High-Quality Listening Ultimately Influence Attitude Depolarization?

Disagreements provide a challenging context for attitude change because the speaker knows that the listener holds a different attitude, making it difficult to create the safe space needed for positivity resonance and self-insight. As speakers gain self-insight during a disagreement by stepping back and examining their initial attitudes, they may begin to recognize their own biases and limitations, consider alternative perspectives, and evaluate the strengths and weaknesses of their arguments, key drivers of depolarized attitudes (Kunda, 1990). Indeed, promoting self-insight is a primary goal of psychotherapeutic approaches that attempt to change behavior and

attitudes (Bennett-Levy & Thwaites, 2007) and effectively reduce prejudiced attitudes (Riley & Pettigrew, 1976).

Studies have found that high-quality listening can change speakers' attitudes by reducing attitude extremity (Itzchakov et al., 2017). However, these studies did not measure self-insight as a mediator. More directly aligned with our model, previous studies found that self-insight when experiencing high-quality listening can reduce speakers' prejudiced attitudes compared to a similar conversation in which moderate listening is conveyed (Itzchakov et al., 2020).

We tested whether high-quality listening can depolarize speakers' attitudes during disagreements through its effects on positivity resonance and subsequent self-insight. Depolarization was measured in two ways. *Actual* depolarization was measured by changes in speakers' attitude extremity, understanding that the less extreme the attitude, the less polarized it is. *Perceived* attitude depolarization was measured through speakers' perceptions of speakers' attitude similarity with listeners and perceived attitude change. Figure 1 presents the entire theoretical model, including the following hypotheses:

Hypothesis $_{3a}$: High-quality listening will decrease speakers' attitude extremity.

Hypothesis $_{3b}$: Positivity resonance and self-insight will mediate the effect of high-quality listening on speakers' attitude extremity.

Hypothesis $_{4a}$: High-quality listening will increase speakers' perceived attitude similarity with their listeners.

Hypothesis $_{4b}$: Positivity resonance and self-insight will mediate the effect of high-quality listening on speakers' perceived attitude similarity.

Hypothesis $_{5a}$: High-quality listening will increase speakers' perceived attitude change.

Hypothesis $_{5b}$: Positivity resonance and self-insight will mediate the effect of high-quality listening on speakers' perceived attitude change.

Listening in the Framework of Attitude Change

Good listeners provide speakers with a psychologically safe space and engage in behaviors such as question-asking and reflection to help speakers explore their attitudes open-mindedly (Rogers, 1962). Although listeners do not attempt to change speakers' attitudes, the listening-induced psychological processes can nonetheless result in changes to speakers' attitudes, such as increased objective ambivalence (Itzchakov et al., 2017), attitude clarity (Itzchakov et al., 2018), and reduced prejudice (Kalla & Broockman, 2020). When considering the effects of listening from the perspective of the Elaboration-Likelihood Model (ELM; Petty & Cacioppo, 1986), conversations with high-quality listening likely go through the central route of attitude change. Specifically, when speakers share their attitudes and experience high-quality listening, they process information less defensively (Itzchakov et al., 2017), engage in reflective self-awareness (Itzchakov & Kluger, 2017), and gain self-insight (Itzchakov et al., 2020). These effects suggest that speakers engage in cognitive effort and scrutinize attitude-relevant information when they share their attitude with a good listener, placing listening as a high-thought mechanism according to the ELM (Petty et al., 2003).

It might also be that listening operates as a low-thought mechanism per Balance Theory (Heider, 1958) and research on similarity and liking (Kelman, 1958) because it increases factors associated with peripheral cues such as liking (Huang et al., 2017). However, the ELM postulates that when elaboration is high, source factors such as liking are considered when attempting to assess the genuine merits of the attitude (Brinol & Petty, 2009; Petty & Cacioppo, 1986). For example, under low

elaboration, emotions act as peripheral cues. In contrast, emotions operate through the central route under high elaboration, serving as arguments in favor of a proposal when relevant to its merits (Petty & Briñol, 2015).

The notion that listening operates as a high-thought process is also consistent with work showing that being listened to changed speakers' attitude structure (Itzchakov et al., 2018; Itzchakov et al., 2017) and reduced speakers' prejudice (Itzchakov et al., 2020) outside the context of a disagreement. In those studies, speakers' attitudes changed when the listeners did not express any attitude toward the topic. Hence, it is less likely that low-thought processes that rely on liking the speaker played a role.

To examine the model's generalizability, we tested three moderators of the effects of listening on attitude depolarization. Each moderator provided an intriguing *boundary condition* for our proposed listening effect. We propose that when speakers are low in the need to belong or high in either attitude certainty or morality – all described below – they may be unswayed by the attentive, high-quality listener, and their attitude would remain unchanged despite the relational context. We first tested whether the model holds across speakers' level of need to belong. The need to belong is a psychological need to feel accepted, valued, and connected to others (Baumeister & Leary, 1995). Speakers who are high in need to belong may be more likely to change their attitudes during disagreements because they are motivated to maintain positive relationships with others (Sammut & Bauer, 2011). However, it might be that the need to maintain positive relationships with others will have an additive effect such that it will contribute to speakers' attitude change across all levels of listening quality.

We also tested for moderation by speakers' attitude certainty. Attitude certainty refers to people's confidence in their attitudes; people with high attitude certainty are more confident and less likely to change their views than those with low attitude certainty (Tormala & Rucker, 2007). Thus, speakers with high attitude certainty might be less likely to change their attitudes when they receive high-quality listening during disagreements.

Finally, we tested for generalizability across levels of attitude morality. Moral attitudes are held more strongly than those not moralized (Luttrell et al., 2016), which suggests that moral values will be less likely to shift towards moderation than low morality ones. However, research has found that people with a strong moral base for their attitude tend to be more open-minded when their viewpoint is acknowledged (Xu & Petty, 2021). Based on these findings, rather than reducing listening effectiveness, attitude morality may amplify the relationship between listening and attitude change because listening supports the moral speakers' open-mindedness by acknowledging their right and freedom to hold the attitude.

Contribution to Cumulative Theoretical Knowledge in Psychology

This work integrates clinical and social psychology, communication studies, attitudes research linking to political science literatures, and the social influence literature. The present studies shed light on how interpersonal listening can foster constructive disagreements and potentially resolve conflicts. Beyond attitude depolarization, perceiving high-quality listening enhances social connection and comfort, promoting constructive disagreements. Accepting different perspectives and others who think differently is essential for a stable and flourishing community, organization, or society.

Overview of Studies

We conducted four studies to test the above hypotheses. Study 1 ($N = 310$) tested Hypothesis 1 concerning the effects of listening on positivity resonance in an experiment that manipulated poor-, moderate-, and high-quality listening through video vignettes. Participants were asked to put themselves in the speaker role during a conversation between colleagues that involved a disagreement about hiring a job applicant. Studies 2-4 (Ns = 170,195, 241, respectively) involved live conversations conducted via Zoom with two phases. Confederates delivered high-quality or moderate-quality listening based on random assignment. Each study had two phases designed to develop and then discuss an attitude, creating a context for a live disagreement. In Phase 1, participants indicated their attitude toward the topic of the study and wrote a brief essay explaining it. In Phase 2, they conversed about their attitude with a listener who ostensibly held a different attitude. Three topics were explored, including returning undocumented people from Israel to Sudan (Study 2), COVID-19 vaccination certificates (Study 3), and Universal Basic Income (Study 4; preregistered). The Syntax and data for all studies, including the pilot studies and a supplementary materials document that includes the experimental protocol and example essays of the pre-conversation phase of studies 2-4. are available at https://osf.io/k7698/?view_only=ccf27eb69de244fc967d5d871c4ea854.

Statistical Power

In each of the four studies, we aimed to have a high-powered sample with sufficient power to detect small to moderate effect sizes. Recruiting large sample sizes for listening studies involving a live conversation is challenging for two reasons: they require a trained research assistant per participant to ensure the appropriate behaviors for the different listening conditions are enacted, and each session lasts about 45 minutes. Nevertheless, we managed to have powered samples in all studies. In order

to maximize power under these constraints, we conducted the studies that involved live conversations (Studies 2-4) simultaneously in two labs (names masked for peer review).

Specifically, in Study 1, the only experiment that did not require a research assistant as the listener, we recruited 310 participants. Our stopping rule was the end of the academic semester. Sensitivity analysis indicates that this sample has at least 80% power to detect a small-to-moderate effect size for a between-participant design with three groups, Cohen's $f = .177$ (Faul et al., 2007).

In Study 2, which included a live conversation between a participant in the speaker role and a research assistant in the listener role, our goal was to recruit at least 146 participants to obtain a power of .85 to detect a medium effect size on perceived depolarization (which was not measured in Study 1), Cohen's $d = 0.50$. Our stopping rule was 175 (to account for a possible exclusion rate of 20%) or the end of the academic semester (as long as the sample size was at least $N = 146$). We recruited 172 participants. Sensitivity analysis indicates that this sample size has at least 80% power to detect a small-to-moderate effect in a between-participant design with two groups; Cohen's $d = 0.429$ (Faul et al., 2007).

For Study 3, we based our power calculations on the effect size of the dependent variable (perceived attitude similarity), namely, $d = 0.78$. We assumed that the effect size on actual depolarization would be smaller than the effect on perceived polarization. Thus, we assumed $d = 0.50$. Power analysis indicates that a sample of $N = 200$ has a power of 94% to detect such an effect size, and sensitivity analysis indicates a power of 80% to detect $d = 0.398$.

Finally, in Study 4, we preregistered our sample size calculations. This study was the most time-and-resource consuming because it required two research assistants

for each participant. The target sample size was $N = 288$ (see explanation in the preregistration form). This sample size has a power of 80% to detect a small effect size, $d = 0.33$.

Diversity and Inclusiveness of Samples

Although all studies were conducted in Israel, our samples in all studies included diverse ethnic groups, including Secular, Jewish, Muslim, and Druse. Thus, the generality of the findings is relatively limited to Western cultures (though Israel is sometimes considered an Eastern culture). However, the heterogeneity within the Israeli culture in our studies provides reasons to believe that the findings might generalize to other societies. Regardless, replications in other cultures are needed.

Study 1

The goals of Study 1 were threefold. Most importantly, it tested whether listening quality increases speakers' positive resonance (Hypothesis 1) and, if so, explored whether listening quality influences resonance because of the benefits of high-quality listening, the costs of low-quality listening, or both. In addition, the study examined whether the need to belong moderates the relationship between listening and perceived attitude similarity to determine whether people higher in need to belong may be more responsive to high-quality listening.

Method

Listening quality was manipulated through a video-vignette experiment comparing low-, moderate-, and high-quality listening behaviors that varied on three core qualities of listening (Kluger & Itzchakov, 2022): attention, comprehension, and positive intention. As described below, independent raters validated each video to evaluate its listening quality. Video vignettes increase ecological validity compared to written vignettes, which are more commonly used in listening studies because they

depict specific verbal and non-verbal behaviors that convey listening (Castro et al., 2013). Through videos, participants could observe specific listening behaviors exhibited during conversations and visualize listening quality more fully.

Participants

Undergraduate students in a seminar who were blind to the research hypotheses recruited participants through social networks at an Israeli university. Only participants who completed pre- and post-manipulation questionnaires were included in the data analyses. The final sample size was $N = 310$ ($M_{age} = 41.10$ years, $SD = 11.27$; $N = 297$; 66% female, 34% male). The sample size was focused on testing our primary predictor –the effect of condition; two-way interactions for 'boundary conditions of listening' were tested on a purely exploratory basis. Sensitivity analyses indicated that the smallest effect size that this sample size can detect with a power of .80 in a between-participant design with three groups is *Cohen's f* = 0.18 (Faul et al., 2007).

Procedure

Participants were randomly assigned to a low-quality (n =105), moderate-quality (n = 104), or high-quality (n = 101) listening condition, which determined the video they viewed. Each video lasted one minute and 15 seconds and featured the same listener and speaker across conditions. The camera was focused solely on the listener, encouraging the participants to imagine themselves in the speaker's role; the speaker was heard but not seen. The video ostensibly showed two female employees as they discussed hiring a job candidate. First, the speaker opposed hiring the candidate and explained her arguments, after which the listener expressed an opposite attitude in favor of the candidate.

In the high-quality listening condition, the listener used non-verbal responses to convey attention and positive intention (constant eye contact, nodding, leaning towards the speaker, and facial expressions conveying interest) and provided verbal reflections, such as "I would like to make sure that I understood you correctly; you were talking about... Did I understand you correctly?"). The listener conveyed a non-judgmental approach through consistently receptive non-verbal behaviors.

The moderate-quality listening condition was designed to imitate typical real-life conversations: the listener maintained eye contact throughout most of the conversation, provided non-verbal responses, such as head nodding, and was silent except for one interruption when she said, "Yes, but.." and then let the speaker continue.

Finally, in the low-quality listening condition, the listener maintained little eye contact with the speaker and seemed distracted. The listener leaned backward, provided no verbal or non-verbal responses except for one disruption to begin to ask "why…" and occasional judgmental reactions (frowns directly following something said), and checked her smartphone several times. The listener did not ask questions to clarify the speaker's position. After watching the video, participants completed questionnaires and were debriefed.

Measures

Measures were anchored on a 9-point scale ranging from 1 (*not at all*) to 9 (*very much*) and translated into Hebrew. Each measure included the following preface: "Answer the following questions as if you were the speaker in the video," following the approach used by Weinstein et al. (2021).

Listening quality (manipulation check). Participants' perceptions of listening quality in the videos were measured with the 10-item Constructive Listening

subscale of the Facilitating Listening Scale (FLS; Kluger & Bouskila-Yam, 2018). Example items were "During the conversation, the conversation partner (a) listened to me attentively, and (b) gave me her undivided attention" (α = .94).

Positivity resonance. Positive resonance was measured with the Episode-Level Positivity Resonance Scale (Major et al., 2018), which includes 12 questions. Example questions were "Did you experience a mutual sense of warmth and concern toward the listener?", "Did thoughts and feelings flow with ease between you and the conversation partner?" and "Did you feel in 'in sync' with the conversation partner?" (α = .90).

Need to belong. We used the 10-item need-to-belong scale developed by Leary et al. (2013). Example items were: "I try hard not to do things that will make other people avoid or reject me" and "I need to feel that there are people I can turn to in times of need (α = .72).

Results

Table 1 presents the descriptive statistics and correlations among the variables. Table 2 presents the descriptive statistics separately by experimental condition.

Listening quality (manipulation check). An analysis of variance (ANOVA) with listening condition as the only independent variable showed a main effect of condition on participants' perception of listening quality, $F(2,307) = 63.46$, $p < .001$, $\eta^2_p = .29$. Cohen's $f = 0.64$. Post-hoc *LSD* analyses indicated that participants in the high-quality listening condition perceived that the listener displayed better listening than participants in the moderate-quality listening condition, $M_{difference} = 1.54$, $p < .001$, 95%*CI* [1.09, 1.99], and participants in the low-quality listening condition, $M_{difference} = 2.58$, $p < .001$, 95%*CI* [2.12, 3.03]. Participants in the moderate-quality listening condition perceived better listening than participants in the low-quality

listening condition, $M_{difference}$ = 1.03, p < .001, 95%*CI* [0.59, 1.48]. These results indicated that the listening manipulation was effective.

Positivity resonance. An ANOVA indicated a significant main effect of condition on positivity resonance, $F(2,307) = 29.38$, $p < .001$, $\eta^2_p = .16$, $f = 0.44$. Participants in the high-quality listening condition reported greater positivity resonance than participants in the moderate-quality listening condition, $M_{difference}$ = 1.06, $p < .001$, 95%*CI* [0.65, 1.46], and participants in the low-quality listening condition, $M_{difference}$ = 1.54, $p < .001$, 95%*CI* [1.14, 1.94]. In addition, participants in the moderate-quality listening condition reported greater positivity resonance than participants in the low-quality listening condition, $M_{difference}$ = 0.48, p = .02, 95%*CI* [0.08, 0.87]. These results support Hypothesis 1.

Need to belong. We examined whether the need to belong moderated the effects of the listening manipulation on positivity resonance using Model 1 in PROCESS (Hayes, 2017). We conducted a categorical moderation analysis with a sequential coding system that compared the interaction of different listening levels (low, moderate, high) and mean-centered need to belong. When comparing the high-and-moderate listening quality conditions, the Manipulation X Need to Belong interaction was not significant, b = -0.04, SE = .16, p = .81, 95% *CI* [-0.36, 0.28]. When comparing the moderate-and-high listening quality conditions, the interaction was also not significant, b = -0.03, SE = .18, p = .84, 95% *CI* [-0.39, 0.31]. None of the other predictors was significant ps ≥ .22.

Auxiliary Analysis

Although the need to belong did not moderate the effect of listening perception on positivity resonance, it might be related to greater perceived listening and positivity resonance across both low-quality and high-quality listening conditions.

Therefore, we tested if the need to belong had additive effects with the listening manipulation. Multiple regression analysis indicated that the need to belong did not have an additive effect on positivity resonance, $\beta = .01$, $p = .80$. The listening manipulation had a significant main effect, $\beta = .39$, $p < .001$. Positivity resonance had an additive effect on speakers' listening perception, $\beta = .16$, $p < .001$, with the listening manipulation, $\beta = .49$, $p < .001$.

Table 1

Study 1 Means and Standard Deviations for the Listening Conditions Predicting the Study Variables

	High-Quality listening		Moderate-quality listening		Low-quality listening	
	M	*SD*	*M*	*SD*	*M*	*SD*
1. Listening perception (manipulation check)	6.57	1.70	5.03	1.73	3.99	1.51
2. Positivity resonance	6.02	1.33	4.96	1.56	4.48	1.50

Table 2

Study 1 Descriptive and Correlations for Main Study Variables

	M	*SD*	1	2
1. Experimental condition	-	-		
2. Listening perception	5.09	1.97	.49**	
3. Positivity resonance	5.14	1.60	.39**	.63**

Notes. ** p <.01; The groups were coded as -1- poor-quality listening, 0- moderate-quality listening, and 1- high-quality listening.

Discussion

Study 1 provided support for Hypothesis 1. Participants who imagined themselves in the speaker's role reported more positivity resonance if they were in the high-quality than in the moderate- or low-quality listening conditions. Participants in

the moderate-quality condition reported higher positivity resonance than participants in the low-quality listening condition.

Study 2

Study 2 was designed to conceptually replicate the results of Study 1 regarding Hypothesis 1 in an actual conversation, thereby increasing ecological validity, and to test whether the effect of listening extended to speakers' perceived attitude depolarization, namely, perceived attitude similarity (Hypothesis 4a). Specifically, we tested whether speakers who experience high-quality listening change their perceptions of how similar their attitudes are with their listeners (perceived depolarization).

Method

Participants

Undergraduate students from a college and a university in Israel participated in the study in exchange for course credit. We aimed to recruit at least 146 participants to obtain a power of .85 to detect a medium effect size on perceived depolarization, Cohen's $d = 0.50$. Our stopping rule was 175 participants (to account for a possible exclusion rate of 20%) by the end of the fall semester of 2020/2021. We recruited 172 participants. Of those, two failed to answer the awareness check correctly (i.e., "In this question, please mark the number 3") and were excluded from the data analysis. Sensitivity analysis indicated that the sample of $N = 170$ ($M = 26.11$, $SD = 4.83$, 51.8% female) could detect the smallest effect size of $d = .43$ with a power of .80 in a between-participant design with two groups. As in Study 1, we chose the sample size to test the hypothesized condition effect, and two-way interactions for 'boundary conditions of listening' were tested on an exploratory basis.

Procedure

Study 2 included two phases. Upon registration, participants received a newspaper article about the peace agreement between Israel and Sudan. The article noted that, as part of the peace agreement, known as the Abraham Accord Declaration[2], the government in Sudan agreed to accept its undocumented immigrants who escaped to Israel and help them financially and legally. After reading the article, participants rated their attitude toward returning the immigrants from Israel to Sudan, indicated if they supported the proposal (40.6%), opposed it (15.3%), or were ambivalent/neutral (44.1%), and wrote a brief paragraph explaining their attitude.

After completing the first phase, participants received an email with the date and time of the second part of the study and a link to a Zoom meeting. The email explained that participants would converse with a research assistant who held an attitude opposite to the one they expressed. At the outset of the second phase, the research assistant asked participants to share their attitudes about the topic. The assistant reminded participants that, as mentioned in the email, they held an opposite attitude and mentioned it to the speaker. Afterward, the research assistant, now the listener, invited participants (in the speaker role) to talk about their attitudes. For the remainder of the conversation, the research assistant (i.e., the listener) listened without presenting any counterarguments.

We randomly assigned participants to a moderate (n = 79) or high-quality listening condition (n = 91). Each conversation lasted 10 minutes. Six confederates, five female and one male, received about 15 hours of listening training and followed a detailed listening protocol. For the high-quality listening condition, researchers were trained to provide consistent eye contact, responsive and open body behaviors, and verbal behaviors that conveyed their interest in and understanding of the speakers'

[2] https://www.state.gov/the-abraham-accords/

perspectives. For example, they were instructed to provide at least one summary of what was said by each participant, using words such as "I want to make sure I understand…." In the moderate listening condition, researchers provided minimal and neutral non-verbal behavior feedback and appeared distracted at least once during the conversation (Itzchakov et al., 2020).

Each research assistant performed both experimental conditions. We also created a technical protocol to meet the logistical requirements for good computer-mediated communication, consistent with research that involved the same listening manipulation via Zoom (Itzchakov, Weinstein, et al., 2022). Specifically, the participants were instructed to choose a time when they were in a quiet place, open their cameras, have a good internet connection, and talk freely.

Measures

We used the same measures as in Study 1: $\alpha_{\text{listening}} = .94$, $\alpha_{\text{positivity resonance}} = .93$, $\alpha_{\text{need to belong}} = .81$. All scales were measured on a nine-point scale, from 1 (*not at all*) to 9 (*very much*) unless mentioned otherwise.

Pre-conversation attitude favorability (categorical). In the first phase of the study, prior to writing the essay regarding the attitude, participants were asked to indicate their attitude using a three-item scale: "opposed," "neutral," and "in favor."

Perceived attitude similarity. New to this study, we measured perceived attitude similarity with the listener by asking: "To what extent is your attitude similar to the listener's attitude?" The response format was a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*). Higher scores indicate greater perceived attitude change because the listener's attitude was opposite to the speaker's initial attitude.

Results

Table 3 presents the descriptive statistics and correlations among the variables. Table 4 presents the descriptive statistics by experimental condition.

Main Effects

Listening quality (manipulation check). An independent t-test revealed a main effect of condition on the participant's perception of listening quality, $t(168) = 6.77$, $p < .001$, 95% *CI* [1.10, 1.99], $d = 1.08$. Participants experienced better listening in the high-quality listening condition than in the moderate-quality listening condition, indicating that the manipulation was effective.

Positivity resonance. A significant main effect of listening quality was observed on positivity resonance, $t(168) = 7.03$, $p < .001$, 95% *CI* [1.21, 2.16], $d = 1.11$. Participants in the high-quality listening condition experienced greater positivity resonance than participants in the moderate-quality listening condition, providing additional support for Hypothesis 1 and replicating Study 1 findings.

Perceived attitude similarity. A main effect of condition on perceived attitude similarity was obtained in the predicted direction, $t(168) = 5.07$, $p < .001$, 95%*CI* [0.44, 1.01], $d = 0.78$. Specifically, participants in the high-quality listening condition reported that their attitude was more similar to their listener's attitude than participants in the moderate-quality listening condition, supporting Hypothesis 4a. Notably, both means were below the scale's mid-point, indicating that in both conditions, participants still perceived a discrepancy between their own and the listener's attitudes.

Mediation Analyses

To examine whether positivity resonance mediated the effect between the listening manipulation and perceived attitude similarity, we used Model 4 in PROCESS (Hayes, 2017). As shown in Figure 2, positivity resonance mediated the

effect of the listening manipulation on perceived attitude similarity as indicated by a significant indirect effect, $b = 0.31$, $SE = .08$, 95%*CI* [0.16, 0.47]. The direct effect remained significant, $b = 0.42$, $SE = .16$, $t = 2.66$, $p = .01$, 95%*CI* [0.11, 0.73].

Moderation Analyses

We again examined whether the need to belong moderated the effects of the listening manipulation on positivity resonance using the same approach as in Study 1. Need to belong was mean-centered. As in Study 1, no interaction emerged, $b = -0.02$, $SE = .17$, $p = .91$, 95% *CI* [-0.35, 0.31]. The listening manipulation had a significant main effect, $b = 1.68$, $SE = .23$, $p < .001$, 95% *CI* [1.22, 2.14].

Auxiliary Analysis

Prior work shows that the valence of an individual's initial attitude can influence his or her willingness to change that attitude (Jost et al., 2003). Therefore, we examined whether results generalized across participants' initial attitudes by testing the main effects separately for each attitude group (i.e., participants who were against, ambivalent/neutral, or in favor of returning the immigrants to Sudan).

Listening quality (manipulation check). Participants in the high-quality listening condition reported experiencing better listening than participants in the moderate listening regardless of their initial attitude: participants who opposed the decision: $t(24) = 2.46$, $p = .02$, 95% *CI*[0.23, 2.56], $d = 0.97$; participants who were ambivalent/neutral toward the decision: $t(73) = 3.74$, $p < .001$, 95% *CI*[0.61, 2.02], $d = 0.91$; participants who were in favor the decision: $t(67) = 5.21$, $p < .001$, 95% *CI*[1.12, 2.54], $d = 1.27$. Thus, the listening manipulation had a strong effect on speakers' perception of listening quality regardless of the participants' initial attitude.

Positivity resonance. Participants in the high-quality listening condition reported greater positivity resonance than participants in the moderate listening

regardless of their initial attitude: participants who opposed the decision: $t(24) = 5.09$, $p < .001$, 95% *CI* [1.59, 3.77], $d = 2.00$; participants who were ambivalent/neutral toward the decision: $t(73) = 4.06$, $p < .001$, 95% *CI* [0.76, 2.25], $d = 0.99$; participants who were in favor the decision: $t(67) = 4.07$, $p < .001$, 95% *CI* [0.77, 2.27], $d = 0.99$. Thus, the listening manipulation had a strong effect on speakers' positivity resonance regardless of their initial attitude.

Perceived attitude similarity. Participants who opposed the decision reported greater perceived attitude similarity in the high-quality than moderate-quality listening condition: $t(24) = 3.86$, $p < .001$, 95% *CI* [0.61, 2.01], $d = 1.52$. A similar result emerged for participants who were ambivalent/neutral toward the decision: $t(73) = 3.83$, $p < .001$, 95% *CI* [0.40, 1.26], $d = 0.89$. Participants who favored the decision also perceived more attitude similarity in the high-quality listening condition than in the moderate-quality listening condition, although the effect was not significant: $t(67) = 1.67$, $p = .099$, 95% *CI* [-0.07, 0.83], $d = 0.40$. This result indicates that high-quality listening increased perceived attitude similarity across all groups, but the effect for participants who opposed the decision or were neutral/ambivalent was stronger than for participants who favored the decision. However, this difference should be interpreted with caution because the sample sizes of the sub-groups (n's = 26, 69, and 75, respectively) are too small to make meaningful interpretations.

We also tested whether initial attitude valence moderated the relationship between listening and perceived attitude similarity. We used Model 1 in PROCESS and entered the moderator as categorical with a sequential coding system. No moderation emerged when comparing the in-favor to the neutral/ambivalent initial attitude participants, $b = -0.48$, $SE = 0.42$, $p = .26$, 95%*CI*[-1.31, 0.35]. No

moderation was observed when comparing the neutral/ambivalent to the opposed participants, b = -0.45, SE = 0.31, p = .14, 95%CI[-1.06, 0.15].

Additive effects of Need to Belong. As in Study 1, we examined whether the need to belong had additive effects on speakers' listening perception, positivity resonance, and perceived attitude similarity. Multiple regression analysis indicated that, in contrast to Study 1, need to belong did not have an additive main effect on listening perception, β = .07, p = .29. The main effect of the listening manipulation was significant, β = .48, p < .001. As in Study 1, need to belong did not have an additive effect on positivity resonance, β = -.03, p = .75, while the main effect of the listening manipulation was significant, β = .49, p < .001. Similarly, the need to belong did not show an additive effect on perceived attitude similarity, β = .01, p = .90, whereas the listening manipulation remained a significant predictor, β = .36, p < .001.

Table 3

Study 2 Descriptive and Correlations for Main Study Variables

	M	*SD*	1	2	3	4
1. Experimental condition	-	-				
2. Listening perception	7.66	1.63	.48**			
3. Positivity resonance	6.72	1.73	.49**	.71**		
4. Perceived attitude similarity	2.12	1.00	.36**	.26**	.42**	
5. Need to belong	5.70	1.39	-.05	.05	-.05	-.01

Notes. ** p < .01. The groups were coded as follows: 1- moderate-quality listening, 2- high-quality listening.

Table 4

Study 2 Means and Standard Deviations for the Listening Conditions Predicting the Study Variables

	High-quality listening		**Moderate-quality listening**	
	M	*SD*	*M*	*SD*
Listening perception	8.39	1.08	6.84	1.76
Positivity resonance	7.50	1.17	5.82	1.83
Perceived attitude similarity	2.46	.99	1.73	.86

Discussion

Study 2 replicated the effect of the listening manipulation on positivity resonance (Hypothesis 1) in a live conversation and evidenced a listening-induced effect on perceived depolarization (perceived attitude similarity; Hypothesis 4a). Moreover, positivity resonance mediated the effect of the listening manipulation on perceived attitude similarity. Consistent with Study 1, the need to belong did not moderate the relationship between the listening manipulation and positivity resonance.

Study 3

Studies 1 and 2 provided initial evidence that high-quality listening affects positivity resonance and perceived depolarization. Study 3 was designed to replicate and extend these findings using a target attitude more important to the participants and, therefore, potentially less malleable. We also tested the effect of listening on speakers' self-insight (Hypothesis 2a), attitude extremity (Hypothesis 3a), and perceived attitude change (Hypothesis 5a), as well as the mediation models (Hypotheses 5a and 5b; See Figure 1).

In addition, we considered the possibility that speakers may perceive similarity with their listeners because they interpret listeners' high-quality listening as an

indication that they changed their listeners' attitudes. Thus, we tested whether speakers' perception of attitude similarity with the listeners reflects a change in their own attitude, their perception of the listeners' attitude, or both.

Finally, because Studies 1 and 2 showed no evidence for moderation by the need to belong, Study 3 instead examined attitude certainty as a potential moderator of the listening manipulation on perceived attitude change, perceived attitude similarity (perceived depolarization), and attitude extremity change (actual polarization). Attitudes high in certainty may be especially resistant to change (Tormala & Petty, 2004), potentially creating a boundary condition for the depolarizing effects of listening wherein listening benefits are reduced or eliminated when speakers are high in attitude certainty.

Method

Procedure

Pilot study. To identify a topic that would be meaningful to our participants, we first conducted a pilot study in which we asked 70 Israeli undergraduates (M_{age} = 27.22, *SD* = 7.91, 63.8% female) to rate on a 7-point scale (1 = *not at all*; 7 = *very much*) the extent to which each of eight topics interested them: gender-neutral actions (unisex restrooms, forms with "parent 1 and parent 2" instead of "mother" and "father," and promoting gender-neutral writing); inclusion of women in Israeli fighting units; legalization of cannabis; Covid-vaccination cards as a requirement to enter places; universal basic income due to the pandemic; the death penalty; tax on heritage above 1 million NIS (Israeli currency); and establishment of gas rigs on the coasts of Israel. At the time, the Covid-vaccination card (*M* = 5.84, *SD* = 1.60) was the topic of the greatest interest to the participants. Mixed ANOVA indicated that this

topic was rated significantly more interesting than the other topics, *p*s ≤ .001, so we selected this topic for Study 3.

As in Study 2, Study 3 included two phases. A few days before the experiments, participants read an article about COVID-19 vaccination cards reporting that the Israeli government was considering issuing a "green passport" based on vaccination status that would benefit individuals who receive it and discussed the complexities of this issue. Afterward, participants rated where they stood on this issue on a three-point scale (against, neutral, positive), wrote a brief essay explaining their attitude and rated their attitude favorability and certainty. After completing the first part, participants received an email with the date and time of the second part and a link to a Zoom meeting. As in Study 2, the email informed participants they would converse about the topic with a research assistant who held an opposite attitude to theirs.

Participants

We recruited participants to take part in a study about "conversation on the pandemic." Participants who took part in Study 2 were not eligible to take part in Study 3. We selected the sample size to achieve a power of at least 90% to detect a moderate effect size, Cohen's $d = 0.50$. Of the 200 participants, five did not answer the attention questions correctly and were excluded from the data analyses. This sample size ($N = 195$, $M_{age} = 26.26$, $SD = 7.72$, 54.4% female) has a power of above .95 to detect the effect size on attitude similarity observed in Study 2. As in Studies 1 and 2, our primary concern with determining sample size was on the hypothesized condition effects; two-way interactions for 'boundary conditions of listening' were tested on a purely exploratory basis.

We randomly assigned participants to a moderate-quality (n = 95) or high-quality listening condition (n = 100). All conversations lasted 10 minutes and were carried out by eight confederates (six females and two males), five of whom participated in Study 2. The three new confederates (a male and two females) received 15 hours of listening training. Each confederate performed both experimental conditions. We followed the same protocol as in Study 2. None of the participants reported experiencing technical issues that interrupted the conversation.

Measures

All scales were measured on a nine-point scale ranging from 1 (*not at all*) to 9 (*very much*) unless mentioned otherwise.

We used the same measures as in Studies 1 and 2 to assess listening perception (α = .93), positivity resonance (α = .92), and perceived attitude similarity. Studies new to this study are described below.

Prior to the Conversation

Attitude favorability (categorical). Attitude favorability was assessed in the study's first phase with the item: "Do you support applying for a vaccination card in Israel?" As in Study 2, this was a categorical variable with three response options: "opposed," "neutral," and "in favor."

Attitude favorability (continues). We asked participants, "How favorable is your view toward the topic?" This item served as the basis for calculating initial attitude extremity (i.e., deviation from the scale's mid-point).

Attitude certainty. We measured attitude certainty before the conversation with five items from a validated scale (Petrocelli et al., 2007). An example item was: "How certain are you that your attitude toward Covid vaccination cards is the correct attitude to have?" (α = .90).

After the Conversation

Self-insight. Self-insight reflects the extent to which people explore and develop a better understanding of the topic and their relation to it. We used a five-item measure from previous work (Itzchakov et al., 2020). Example items are:" How much do you feel this conversation: made you think more deeply about the topic?", "helped you to think about things in a different way," and "helped you to understand yourself better?" ($\alpha = .87$).

Perceived speaker and listener attitude change. We measured perceived speaker attitude change with a single item: "To what extent do you feel that the conversation changed your attitude about the vaccination card?" (Itzchakov et al., 2020; Omoto & Snyder, 1995) and adapted this to assess perceived listener attitude change with the item "to what extent do you think that you changed the listener's attitude on the topic?"

Attitude favorability. We asked participants again, "How favorable is your view toward the topic?" and used this measure to calculate post-conversation attitude extremity.

Attitude extremity change. This measure was computed as the difference between initial attitude extremity (before the conversation) and post-attitude extremity (after the conversation). In each measurement, attitude extremity was calculated as the deviation from the mid-point of the attitude favorability scale (Powell & Fazio, 1984).

Attitude favorability change. The pre-and post-attitude favorability measure tested whether the valence of speakers' attitudes changed from positive to negative or vice-versa. We used this analysis for exploratory purposes as previous listening research found a change in speakers' attitude structure but not attitude valence (Itzchakov et al., 2018; Itzchakov & Kluger, 2017; Itzchakov et al., 2017).

Note that attitude favorability change is not the same as attitude extremity change because participants have different initial attitudes (opposed, ambivalent/neutral/in favor). For example, participants can shift from being very negative by marking "1" on the pre-manipulation attitude favorability item to less negative by marking "2" on the post-manipulation attitude favorability item, but they can also shift from being very positive, such as marking "9" on the pre-manipulation attitude favorability item, to less positive by marking "8" on the post-manipulation attitude favorability item. This example reflects a change in attitude extremity – the two participants became less one-sided and closer to the scale's mid-point – without a change in attitude favorability.

Disagreement typicality. To ensure that participants in the two conditions did not differ in the extent to which they perceived the conversation as reflecting a typical disagreement, we asked, "To what extent is the conversation similar to a typical disagreement?" (1 = *not at all*; 5 = *very much*).

Results

Table 5 presents the descriptive statistics and correlations among the variables. Table 6 presents the descriptive statistics by experimental condition.

Main Effects

Listening perception (manipulation check). Participants in the high-quality listening condition experienced better listening than participants in the moderate-quality listening condition, $t(193) = 8.06$, $p < .001$, 95% *CI* [1.30, 2.15], $d = 1.17$.

Positivity resonance. Participants in the high-quality listening condition experienced greater positivity resonance than participants in the moderate-quality listening condition, $t(193) = 6.73$, $p < .001$, 95% *CI* [0.99, 1.80], $d = 0.97$, supporting Hypothesis 1 and results of Studies 1 and 2.

Self-insight. Supporting Hypothesis 2a, participants in the high-quality listening condition indicated that they thought more about the issue than participants in the moderate-quality listening condition $t(193) = 5.55$, $p < .001$, 95% *CI*[1.03, 2.17], $d = 0.80$.

Perceived attitude similarity. Consistent with Hypothesis 4a and results of Study 2, participants in the high-quality listening condition reported that their attitude was more similar to the listener's attitude than those in the moderate-quality listening condition, $t(193) = 2.37$, $p = .02$, 95% *CI*[0.06, 0.61], $d = 0.34$.

Perceived speaker attitude change. Participants in the high-quality listening condition perceived a greater change in their attitude than participants in the moderate-quality listening condition, $t(193) = 2.15$, $p = .03$, 95% *CI* [0.05, 1.29], $d = 0.30$.

Perceived listener attitude change. New to this study, we measured the extent to which the speakers perceived that they changed the attitude of their listeners. On the other hand, there was no difference between high-quality and moderate-quality listening conditions in ratings of perceived listeners' attitudes, $t(193) = 1.54$, $p = .12$, 95% *CI* [-0.13, 1.05], $d = 0.22$.

To understand the source of speakers' perceived attitude similarity, we conducted a multiple regression analysis using the experimental condition, perceived speaker attitude change, and perceived listener attitude change as simultaneous independent variables predicting perceived speaker attitude similarity. Only the perceived attitude change of the speaker was a significant predictor, $\beta = .30$, $p < .001$, whereas the experimental condition, $\beta = .11$, $p = .10$, and perceived listener attitude change, $\beta = .11$, $p = .11$, were not significant. This pattern suggests that the source of

speakers' perceived attitude similarity with the listeners was their own attitude change rather than the attitude change they ascribed to their listeners.

Attitude extremity change (i.e., actual depolarization). We conducted a Mixed ANOVA with the measurement time of attitude extremity (pre/post conversation) as the within factor and the experimental condition as the between factor. The analysis revealed a significant time X condition interaction, $F(1,193) = 6.37$, $p = .01$, $\eta^2_p = .03$, Cohen's $f = 0.18$. Specifically, participants in the high-quality listening condition became less extreme in their attitudes toward vaccination card following the conversation, $M_{difference} = -0.37$, $SE = .14$, $p = .01$. In contrast, the attitude extremity of participants in the moderate-quality listening condition did not change, $M_{difference} = 0.15$, $SE = .15$, $p = .32$.

Attitude favorability change. A Mixed ANOVA indicated no difference between the conditions as a main effect averaging across pre-and-post ratings of attitude favorability, $F(1,193) = 2.60$, $p = .11$, $\eta^2_p = .01$, $f = 0.10$.

Disagreement typicality. No difference was observed between the two listening conditions, $t(193) = 1.23$, $p = .22$, 95% *CI* [-0.11, 0.46], $d = 0.18$. This result suggests that the manipulation did not confound listening quality to the extent that the speakers perceived the conversation to reflect an ordinary disagreement.

Mediation Analyses

Table 7 presents all indirect effects on the dependent variables and their corresponding constituent parts.

To test Hypothesis 3b, namely that positivity resonance and self-insight mediate the effect of high-quality listening on speakers' attitude extremity, we conducted mediation analysis using Model 6 in PROCESS (Hayes, 2017) with 5000 bootstrapped samples, using pre-conversation attitude extremity as a covariate. The

benefit of Model 6 is that it allows for testing chains of effects across multiple mediators and provides results to challenge the mediation chain if only one of the two mediators we propose (e.g., self-insight or positivity resonance) provides a better indirect effect.

The indirect effect from the experimental condition to post-conversation attitude extremity through positivity resonance and self-insight was significant (Table 7). The direct effect was not significant, b = -0.40, SE = .20, t = -1.97, p = .05, 95%CI [-0.79, 0.00] (Figure 3c). The indirect effect was not significant when reversing the order of the mediators (when self-insight was modeled as a predictor of positivity resonance), b = 0.006, SE = .05, 95%CI [-0.10, 0.11].

Next, we tested Hypothesis 4b, namely that positivity resonance and self-insight mediate the effect of high-quality listening on speakers' perceived attitude similarity. The indirect effect from the experimental condition to perceived attitude similarity through positivity resonance and self-insight was significant (Table 7). The direct effect was no longer significant, b = 0.06, SE = .15, t = 0.42, p = .68, 95%CI [-0.23, 0.36] (Figure 3a). The indirect effect was not significant when reversing the order of the two mediators (when self-insight predicted positivity resonance), b = 0.06, SE = .04, 95%CI [-0.02, 0.15].

To test Hypothesis 5b, namely that positivity resonance and self-insight mediate the effect of high-quality listening on speakers' perceived attitude change, we examined speakers' perceived attitude change as the dependent variable. The indirect effect from the experimental condition to perceived attitude change through positivity resonance and self-insight was significant (Table 7), whereas the direct effect was not, b = -0.11, SE = .31, t = -0.37, p = .71, 95%CI [-0.73, 0.50] (Figure 3b). Furthermore, the indirect effect was not significant when reversing the order of the

mediators (self-insight -> positivity resonance), b = -0.05, SE = .08, 95%CI [-0.24, 0.09].

Moderation Analysis

Perceived attitude change. We conducted moderation analysis using Model 1 in PROCESS (Hayes, 2017). We mean-centered attitude certainty as it is a continuous variable in the interaction term. Attitude certainty did not moderate the effect of the listening manipulation on perceived attitude change as indicated by a non-significant Manipulation X Certainty interaction term, b = -0.13, SE = .21, p = .51, 95%CI [-0.54, 0.27]. Attitude certainty also had a main effect on perceived attitude change, b = -0.53, SE = 0.15, p < .001, 95%CI [-0.82, -0.24], such that higher levels of certainty were associated with less perceived attitude change of the speakers. The listening manipulation had a significant main effect, b = 0.68, SE = 0.29, p = .02, 95%CI [0.10, 1.26].

Perceived attitude similarity with the listener. We conducted moderation analysis using Model 1 and mean-centered attitude certainty. Attitude certainty did not moderate the effect of the listening manipulation on perceived attitude similarity as indicated by a non-significant Manipulation X Certainty interaction term, b = 0.04, SE = 0.10, p = .68, 95%CI [-0.15, 0.23]. Attitude certainty also did not have a main effect on perceived similarity, b = -0.12, SE = 0.07, p = .08, 95%CI [-0.26, 0.01]. The listening manipulation had a significant main effect, b = 0.33, SE = 0.14, p = .02, 95%CI [0.06, 0.61].

Attitude extremity change. We conducted this analysis using Model 3 in PROCESS, which allows for the examination of four interaction terms. We chose this model because when using a covariate, it is recommended to examine the interaction between the covariate and each predictor (Yzerbyt et al., 2004). We submitted post-

conversation (manipulation) attitude extremity as the dependent variable. Attitude certainty and pre-conversation (manipulation) attitude extremity were submitted as moderators and were mean-centered. None of the interactions were significant, Manipulation X Certainty: $b = 0.06$, $SE = 0.13$, $p = .63$, 95%*CI* [-0.19, 0.32], Manipulation X Pre-Conversation Extremity: $b = -0.01$, $SE = 0.13$, $p = .91$, 95%*CI* [-0.28, 0.25], Certainty X Pre-Conversation Extremity: $b = -0.004$, $SE = 0.05$, $p = .94$, 95%*CI* [-0.11, 0.10], Manipulation X Certainty X Pre-Conversation Extremity, $b = 0.07$, $SE = 0.08$, $p = .38$.

Attitude certainty had a main effect, $b = 0.35$, $SE = 0.09$, $p < .001$, 95%*CI* [0.16, 0.54]. The listening manipulation had a significant main effect, $b = -0.68$, $SE = 0.18$, $p < .001$, 95%*CI* [-1.03, -0.32]. Pre-conversation attitude extremity also had a significant main effect, $b = 0.39$, $SE = 0.10$, $p < .001$, 95%*CI* [0.19, 0.59].

In brief, attitude certainty did not moderate the effects of the listening manipulation on perceived or actual depolarization. However, the study was underpowered to detect a small effect size for the interaction because moderation was not its goal. Thus, these analyses should be interpreted with caution.

Auxiliary Analyses

Speakers with high attitude certainty may resist attitude change across the listening conditions. If so, this may explain why attitude certainty did not moderate the impact of listening quality. Rather, the influences of attitude certainty and listening quality on perceived depolarization may have additive effects. Therefore, we conducted multiple regression analyses with listening manipulation and attitude certainty as predictors. Indeed, attitude certainty had a significant negative main effect on perceived attitude similarity with the listener, $\beta = -.15$, $p = .03$. Specifically, speakers with higher attitude certainty reported lower perceived attitude similarity

with their listeners across the listening conditions. The listening manipulation also had a significant main effect, β = .17, p = .02.

Similar results were obtained regarding perceived attitude change. Specifically, speakers with high attitude certainty reported less perceived attitude change across the listening conditions, β = -.38, p < .001, and the listening manipulation remained significant, β = .15, p = .02.

We added pre-conversation attitude extremity as a predictor to examine whether attitude certainty had an additive effect on attitude extremity (actual depolarization). All predictors had significant main effects: attitude certainty, β = .36, p < .001, the listening manipulation, β = -.21, p < .001, and pre-conversation attitude extremity, β = .35, p < .001. Speakers with greater attitude certainty reported more extreme attitudes (less depolarization) across both listening conditions while controlling for the effect of initial attitude extremity. In sum, attitude certainty did not moderate the effect on the dependent variables but had an additive effect to the listening manipulation on all attitudinal variables.

Sub-group analysis. As in Study 2, we examined whether participants' initial attitudes impacted the results by conducting analyses separately for participants who were against (n = 29), ambivalent/neutral (n = 36), or in favor of Covid-vaccination cards (n = 130).[3]

Listening quality (manipulation check). The effect size for the listening manipulation on perceived listening was moderate to large for all sub-groups: opposed: $t(27) = 3.67$, p = .001, 95% *CI*[0.78, 2.80], d = 1.33; ambivalent/neutral:

[3] One participant did not answer the item about the initial attitude. However, the participant explicitly mentioned being in-favor of the vaccination cards. Thus, the participant was counted in the in-favor sub-group.

$t(34) = 4.83$, $p < .001$, 95% *CI*[0.96, 2.75], $d = 1.76$; in favor: $t(128) = 5.91$, $p < .001$, 95% *CI* [1.09, 2.20], $d = 1.02$.

Positivity resonance. The effect size for the listening manipulation on positivity resonance was moderate to large for all sub-groups: opposed: $t(27) = 1.97$, $p = .059$, 95% *CI* [-0.04, 2.10], $d = 0.73$; ambivalent/neutral: $t(34) = 4.50$, $p < .001$, 95% *CI* [0.86, 2.28], $d = 1.56$; in favor: $t(128) = 5.23$, $p < .001$, 95% *CI* [0.84, 1.94], $d = 0.91$.

Self-insight. The effect size on self-insight was also moderate to large for each sub-group: opposed: $t(27) = 1.67$, $p = .11$, 95% *CI* [-0.36, 3.51], $d = 0.62$; ambivalent/neutral: $t(34) = 5.24$, $p < .001$, 95% *CI* [1.57, 3.57], $d = 1.82$; in favor: $t(128) = 3.83$, $p < .001$, 95% *CI* [0.66, 2.06], $d = 0.67$.

Perceived attitude similarity. The effect of the listening manipulation on perceived attitude similarity was in the predicted direction for the ambivalent/opposed and in-favor groups but not for the opposed group: opposed: $t(27) = -0.16$, $p = .87$, 95% *CI* [-0.99, 0.84], $d = -0.06$; ambivalent/neutral: $t(34) = 2.18$, $p = .04$, 95% *CI* [0.50, 1.43], $d = 0.76$; in favor: $t(128) = 1.64$, $p = .10$, 95% *CI* [-0.05, 0.58], $d = 0.29$.

Perceived speakers' attitude change. The effect size on perceived attitude change was small to moderate across the sub-groups: opposed: $t(27) = 0.62$, $p = .54$, 95% *CI* [-1.47, 2.75], $d = 0.23$; ambivalent/neutral: $t(34) = 1.14$, $p = .26$, 95% *CI* [-0.75, 2.67], $d = 0.40$; in favor: $t(128) = 1.59$, $p = .11$, 95% *CI* [-0.14, 1.27], $d = 0.28$.

Perceived listeners' attitude change. The effect size on speakers' was negligible to small across the sub-groups: opposed: $t(27) = 0.04$, $p = .97$, 95% *CI* [-1.95, 2.02], $d = 0.1$; ambivalent/neutral: $t(34) = 0.23$, $p = .82$, 95% *CI* [-1.11, 1.40], $d = 0.08$; in favor: $t(128) = 1.53$, $p = .13$, 95% *CI* [-0.16, 1.24], $d = 0.27$.

Attitude extremity change. Post-conversation attitude extremity was lower than pre-conversation attitude extremity for each sub-group. However, the effect size varied among the sub-groups: opposed: $F(1, 27) = 0.61$, $p = .44$, $\eta^2_p = .022$, Cohen's $f = 0.15$; ambivalent/neutral: $F(1, 34) = 9.40$, $p = .004$, $\eta^2_p = .217$, Cohen's $f = 0.53$; in favor: $F(1,127) = 3.45$, $p = .06$, $\eta^2_p = .026$, Cohen's $f = 0.16$.

In addition, we tested whether initial attitude valence moderated the relationship between listening and the attitudinal measures. We used the same approach as in Study 2. No moderation emerged concerning perceived attitude similarity when comparing the in-favor to the neutral/ambivalent initial attitude participants, $b = 0.81$, $SE = 0.49$, $p = .10$, 95%*CI*[-0.16, 1.78]. No moderation was observed when comparing the neutral/ambivalent to the opposed participants, $b = -0.47$, $SE = 0.38$, $p = .21$, 95%*CI*[-1.22, 0.27].

No moderation emerged concerning speakers' perceived attitude change. Specifically, in-favor versus neutral/ambivalent initial attitude: $b = 0.32$, $SE = 1.13$, $p = .77$, 95%*CI*[-1.90, 2.54]. Neutral/ambivalent to the opposed attitude, $b = -0.40$, $SE = 0.86$, $p = .64$, 95%*CI*[-2.10, 1.30]. Finally, when analyzing moderation predicting post-conversation attitude extremity, we used Model 3 in PROCESS because we entered pre-conversation attitude extremity as a second moderator. Thus, the interaction between the covariate and moderator had to be included in the model (Yzerbyt et al., 2004). This analysis yielded four interaction terms, none of which were significant $ps \geq .06$.

In sum, the changes in the dependent variable across the three sub-groups reflected the overall effect, except for the effect of perceived attitude similarity for participants opposed to the issue, although the effects varied in magnitude. However,

extrapolations based on these auxiliary analyses are not recommended, given that only 33% of the participants were in the opposed and neutral sub-group combined.

Discussion

Study 3 provided support for the entire conceptual model. High-quality listening increased speakers' positivity resonance, self-insight, perceived attitude similarity with the listener, perceived attitude change, and decreased attitude extremity. The results of the mediation analyses supported the hypothesized path through which the listening manipulation affected speakers' attitudes, suggesting that positivity resonance and self-insight both mediated the effects. In addition, although we did not manipulate the mediators, the non-significant indirect effect when switching the temporal order of the mediators provides some support for their hypothesized order. An additional important finding is that speakers' perceptions of attitude similarity with their listeners seemed to arise from their *own* perceived attitude change rather than their perception of the listeners' attitude change.

Table 5

Study 3 Descriptive and Correlations for Main Study Variables

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Experimental condition	-	-											
2. Listening perception	7.47	1.71	.51**										
3. Positivity resonance	6.94	1.59	.44**	.88**									
4. Self-insight	5.01	2.16	.37**	.65**	.68**								
5. Perceived attitude similarity	2.10	0.99	.17*	.24**	.29**	.31**							
6. Perceived attitude change speaker	2.66	2.23	.15*	.28**	.30**	.49**	.35**						
7. Perceived attitude change listener	3.26	2.08	.11	.24**	.24**	.30**	.21**	.29**					
8. Pre-attitude favorability	6.64	2.63	.01	.02	.02	.03	-.03	-.15*	-.09				
9. Post-attitude favorability	6.99	2.31	-.07	-.05	-.02	-.02	-.10	-.18*	-.19*	.79**			
10. Pre-attitude extremity	2.77	1.38	-.06	-.03	-.02	-.01	-.16*	-.14*	-.16*	.30**	.28**		
11. Post-attitude extremity	2.66	1.49	-.23**	-.18*	-.19*	-.24**	-.20**	-.36**	-.18*	.44**	.55**	.49**	
12. Disagreement typicality	1.95	1.00	.09	.40**	.43**	.36**	.34**	.28**	.18*	.13	.08	.09	.04

Notes. The groups were coded as follows: 1- moderate-quality listening, 2- high-quality listening. ** $p < .01$, * $p < .05$; pre= before conversation, post = after conversation.

Table 6

Study 3 Means and Standard Deviations for the High-Quality and Moderate-Quality Listening Conditions Predicting the Study Variables.

	High-quality listening		**Moderate-quality listening**	
	M	*SD*	*M*	*SD*
Listening perception	8.31	1.09	6.59	1.79
Positivity resonance	7.62	1.19	6.22	1.65
Self-insight	5.79	1.87	4.19	2.14
Perceived attitude similarity	2.26	1.02	1.93	0.94
Perceived speaker attitude change	2.99	2.50	2.32	1.85
Perceived listener attitude change	3.48	2.06	3.02	2.09
Pre-attitude favorability	6.67	2.57	6.60	2.71
Post-attitude favorability	6.84	2.13	7.15	2.49
Pre-attitude extremity	2.69	1.46	2.86	1.28
Post-attitude extremity	2.32	1.59	3.01	1.30
Disagreement typicality	2.04	0.99	1.86	1.01

Table 7

Study 3 Indirect Effects For Each Dependent Variable

Dependent variable	Self-insight	Perceived attitude similarity	Perceived attitude change	Post-conversation attitude extremity
Predictors				
Group (0-moderate quality listening; 1- high-quality listening)	*b* = 0.40, *SE* = 0.25, *p* = .12, 95% *CI*[-0.10, 0.90]	*b* = 0.06, *SE* = 0.15 *p* = .68, 95% *CI*[-0.23, 0.36]	*b* = -0.11, *SE* = 0.31 *p* = .71, 95% *CI*[-0.73, 0.50]	*b* = -0.40, *SE* = 0.20, *p* = .05, 95% *CI*[-0.79, 0.000]
Positivity resonance	*b* = 0.86, *SE* = 0.08 *p* < .001, 95% *CI*[0.70, 1.01]	*b* = 0.09, *SE* = 0.06, *p* = .13, 95% *CI*[-0.03, 0.21]	*b* = -0.07, *SE* = 0.12 *p* = .58, 95% *CI*[-0.31, 0.18]	*b* = 0.000, *SE* = 0.08, *p* = .99, 95% *CI*[-0.16, 0.16]
Self-insight	NA	*b* = 0.09, *SE* = 0.04, *p* = .04, 95% *CI*[0.004, 0.17]	*b* = 0.55, *SE* = 0.09 *p* < .001, 95% *CI*[0.38, 0.73]	*b* = -0.13, *SE* = 0.06, *p* = .02, 95% *CI*[-0.24, -0.01]
Pre-conversation attitude extremity	NA	NA	NA	*b* = 0.52, *SE* = 0.06, *p* <. 001, 95% *CI*[0.39, 0.65]
Indirect effects				
Group → positivity resonance → self-insight	*b* = 1.20, *SE* = 0.21, 95% *CI* [0.80, 1.64].			
Group → positivity resonance → self-insight → perceived attitude similarity	*b* = 0.11, *SE* = 0.06, 95% *CI*[0.000, 0.22]			

Group → positivity resonance → self-insight →perceived attitude change	b = 0.66, SE = 0.17, 95% CI[0.38, 1.04]
Group → positivity resonance → self-insight →post-conversation attitude extremity	b = -0.15, SE = 0.08, 95% CI[-0.32, -0.01]

Notes. [*] denotes significant indirect effects; [a] pre-conversation attitude extremity was entered as a control variable when testing the indirect effects on post-conversation attitude extremity.

Study 4

Study 4 (preregistered; https://aspredicted.org/Q4B_7B9) had three primary goals. One drawback of both Studies 2 and 3 was that participants were aware that they were conversing with a research assistant, rendering study results vulnerable to demand characteristics. In order to create a more natural conversation, increase ecological validity, and reduce potential demand characteristics in Study 4, speakers conversed with a listener who was ostensibly also a naive participant. The second goal was to replicate the previous findings using a new attitude topic. Third, we measured attitude morality as a potential moderator of the effects of listening on attitude change. Finally, we measured behavioral intentions to share one's attitudes, behave open-mindedly, and interact with the listener in the future as potential effects of being listened to during a disagreement.

Method

Procedure

We invited undergraduate students in a university and college in Israel to participate in a study on "attitudes towards economic policies" in exchange for course credit. As in the previous studies, there were two phases. In Phase 1, participants completed the consent form and read a passage about universal basic income (UBI). Then, they indicated their attitude toward the topic and wrote a brief essay explaining it. They also completed measures of attitude favorability, certainty, and morality. Afterward, participants received a Zoom link for a conversation with another participant a few days later.

In Phase 2, participants met two people in the Zoom meeting. One individual was the research assistant who gave the instructions, and the other was a research confederate posing as another participant. The research assistant informed the

participants that they had been paired together because their answers in Phase 1 indicated they held opposite attitudes toward the topic. Then, the research assistant said they would give instructions to each of them for the conversation separately and use the Zoom breakout room for that. First, while the confederate was waiting in a Zoom waiting room, the research assistant informed the (actual and ostensible) participants that they would be assigned to either speaker or listener conversation roles. The speakers were instructed to share their attitudes about universal basic income, which they indicated in Phase 1, and the listeners were instructed to listen. The real participant was assigned to the speaker role, and the confederate (ostensible participant) was assigned to the listener role. The research assistant reminded the participants that they had been paired together because their answers in Phase 1 indicated they held opposite attitudes toward the topic. Then, the research assistant switched and placed the participant in the waiting room. During this time, the research assistant and confederate remained in the main Zoom room to make it appear as if the other participant (i.e., the listener) was receiving the instructions for the conversation.

Next, the research assistant moved the participants to a breakout room and informed them they had 10 minutes to converse with the confederate listener. Listeners followed the same protocol as in the previous studies and exhibited either moderate-quality or high-quality listening. Overall, 13 RAs (two males, 11 females) in their mid-20s were involved in the study, and each performed both listening conditions (moderate or high quality). None of the participants suspected that the listener was not an actual participant. Finally, participants completed questionnaires and were debriefed.

Participants

As described in the preregistration, we recruited 288 undergraduates from a university and a college in Israel to participate in a study about "conversations about economic policies" in exchange for course credit[4]. Of these participants, 37 did not show up for the study's second phase, wrote meaningless information in the essay on the topic (first phase), or wrote different personal codes that prevented merging their information. We excluded ten additional participants who failed to answer the attention item correctly or had severe technical problems during the conversation in the study's second phase. The final sample was $N = 241$ ($M_{age} = 25.85$ years, $SD = 7.28$, 70.1% female). Sensitivity analysis indicated that the smallest effect size that this sample size can detect in a between-participant design with two groups is $d = 0.36$. As in the previous two studies, the condition effect was our focal point, and interactions were tested on a purely exploratory basis. We randomly assigned participants to a moderate ($n = 119$) or high-quality listening condition ($n = 122$). Of the participants, 29.5% indicated an initial negative attitude toward UBI, 31.5% had an ambivalent attitude, and 39.0% favored UBI.

Measures

We used the same measures as before: listening perception ($\alpha = .93$), positivity resonance ($\alpha = .92$), self-insight ($\alpha = .89$), attitude certainty ($\alpha = .90$), perceived attitude similarity, perceived attitude change of the speaker, speaker's perception of the listener's attitude change, and attitude extremity change, pre-conversation attitude favorability (categorical), pre-conversation attitude favorability (continues), and disagreement typicality. All measures were anchored on a 9-point scale unless mentioned otherwise.

[4] Participants who took part in Study 3 were not allowed to participate.

Attitude morality. We measured attitude morality in Phase 1 using a four-item measure developed by Skitka and Morgan (2014). An example item was: "To what extent is your position on Universal Basic Income based on a moral principle?" ($\alpha = .89$).

Disagreement typicality. To account for the extent to which the disagreement was viewed by the participants as a typical one, as a potential confound of the listening manipulation, we asked participants, "To what extent is the conversation similar to a typical disagreement" (1 = *not at all*; 5 = *very much*).

Attitude-expression intentions. A three-item measure developed by Cheatham and Tormala (2015) assessed the extent to which speakers intended to share their attitudes with other people. An example item was: "Regarding the topic you just discussed, how likely would you be to share your views with a stranger?" ($\alpha = .81$). Research has shown that high-quality listening increased speakers' sharing intentions (Itzchakov et al., 2018). However, previous work did not include a difference of opinion between the listener and the speaker.

Open-minded behavior intentions. A nine-item scale assessed behavioral intentions to act open-mindedly (Itzchakov & Reis, 2021). An example item was: "To what extent would you be comfortable if your spouse supported the opposite position from yours regarding universal basic income?" ($\alpha = .82$).

Willingness for future interaction. Participants indicated the extent to which they wished to interact with the listener in the future using two items: "I would be happy to talk to my conversation partner more often," and "I do not want to talk with my conversation partner again" (reverse-coded; $\alpha = .76$).

Results

Table 8 presents the descriptive statistics by experimental condition. Table 9 presents the correlations among the variables.

Main Effects

Listening quality (manipulation check*).* Participants in the high-quality condition perceived better listening than participants in the modern-quality listening condition, $t(239) = 12.73$, $p < .001$, 95% *CI* [2.32, 3.16], $d = 1.65$, indicating that the listening manipulation was once again effective.

Positivity resonance. Participants in the high-quality listening condition experienced greater positivity resonance than participants in the moderate-quality listening condition, $t(239) = 11.16$, $p < .001$, 95% *CI* [1.66, 2.38], $d = 1.45$, supporting Hypothesis 1.

Self-insight. Participants in the high-quality listening condition thought more about the topic than participants in the moderate-quality listening condition, $t(239) = 9.48$, $p < .001$, 95% *CI*[1.88, 2.86], $d = 1.22$, supporting Hypothesis 2 and results of Study 3.

Perceived attitude similarity. Participants in the high-quality listening condition perceived that their attitude was more similar to the listeners' attitude than participants in the moderate-quality listening condition, $t(239) = 6.96$, $p < .001$, 95% *CI* [0.58, 1.04], $d = 0.90$, supporting Hypothesis 4a.

Perceived speaker and listener attitude change. Participants in the high-quality listening condition reported that they changed their attitude toward UBI to a greater extent than participants in the moderate-quality listening condition, $t(239) = 4.63$, $p < .001$, 95% *CI* [0.52, 1.30], $d = 0.59$, consistent with findings of Study 3. Unlike Study 3 results, they also perceived that their listeners had changed their

attitudes to a greater extent than did speakers in the moderate-listening condition, $t(239) = 3.97$, $p < .001$, 95% *CI* [0.55, 1.63], $d = 0.51$, supporting Hypothesis 5a.

As in Study 3, we examined what was the source of the effect on speakers' perceived attitude similarity using multiple linear regression analysis. The experimental condition, the perceived speaker's (own) attitude change, and the speaker's perception of the listener's attitude change were submitted as predictor variables, and perceived speaker attitude similarity was the dependent variable. As in Study 3, the speaker's perceived (own) attitude change predicted perceived similarity, $\beta = .24$, $p < .001$. The experimental condition was also a significant predictor, $\beta = .33$, $p < .001$. Importantly, speakers' perceived attitude change of their listeners was not significant in predicting perceived similarity, $\beta = .03$, $p = .60$. These results replicated Study 3 and provided further evidence that the source of speakers' perceived attitude similarity with the listeners was the speakers' perceived attitude change rather than the attitude change they ascribed to their listeners.

Attitude extremity change. As in Study 3, we conducted a mixed ANOVA with the measurement time of attitude extremity (pre/post conversation) as the within factor and the experimental condition as the between factor. The analysis indicated a significant Time X Condition interaction, $F(1,239) = 4.87$, $p = .03$, $\eta^2_p = .02$, *Cohen's* $f = 0.20$. Speakers in the high-quality listening condition became less extreme in their attitudes toward UBI following the conversation, $M_{difference} = -0.31$, $SE = .13$, $p = .02$. In contrast, the attitude extremity of participants in the moderate-quality listening condition did not change, $M_{difference} = 0.11$, $SE = .14$, $p = .42$. This result replicates the previous studies in supporting Hypothesis 3a

Attitude favorability change. A mixed ANOVA indicated no difference between the groups concerning the pre-and-post ratings of attitude favorability, $F(1,239) = 0.36$, $p = .55$, $\eta^2_p = .001$, $f = 0.10$.

Disagreement typicality. Participants did not differ across conditions regarding the extent to which they perceived that the conversation reflected a typical disagreement, $t(239) = 0.52$, $p = .61$, 95% *CI* [-0.20, 0.34], $d = 0.07$. Thus, in this study, disagreement typicality was not confounded with the listening manipulation.

Attitude-expression intentions. In the high-quality listening condition, participants reported a greater intention to share their attitudes with others than participants in the moderate-quality listening condition, $t(239) = 2.10$, $p = .037$, 95% *CI* [0.03, 0.84], $d = 0.27$.

Open-minded behavior intentions. In the high-quality listening condition, participants reported greater intention to consider the opposite attitude than participants in the moderate-quality listening condition, $t(239) = 2.19$, $p = .030$, 95% *CI* [0.04, 0.70], $d = 0.28$.

Willingness for future interaction. Participants in the high-quality listening condition were more interested in interacting again with their listeners than participants in the moderate-quality listening condition, $t(238) = 8.64$, $p < .001$, 95% *CI* [1.60, 2.55], $d = 1.12$.

Mediation Analyses

Table 10 presents all indirect effects on the dependent variables and their corresponding constituent parts, including exploratory mediation analyses for the behavior intention measures.

We conducted the same mediation analyses as in Study 3 using Model 6 in PROCESS (Hayes, 2017) with 5000 bootstrapped samples. To test Hypothesis 3b

regarding the mediation on speakers' attitude extremity change, we entered pre-conversation attitude extremity as a covariate and post-conversation attitude extremity as the dependent variable. The indirect effect from the experimental condition to post-conversation attitude extremity through positivity resonance and self-insight was significant (Table 10). The direct effect was not significant, b = -0.05, SE = .18, t = -0.28, p = .78, 95%CI [-0.40, 0.30] (Figure 4c). The indirect effect was not significant when reversing the order of the mediators (i.e., when self-insight was modeled as a predictor of positivity resonance), b = 0.05, SE = .04, 95%CI [-0.02, 0.15]. Thus, in general, the hypothesis that positivity resonance precedes self-insight in the mediation model was supported.

With regard to Hypothesis 4b, the indirect effect from the experimental condition to perceived attitude similarity through positivity resonance and self-insight was significant (Table 10). The direct effect was not significant, b = 0.21, SE = .13, t = 1.53, p = .13, 95%CI [-0.06, 0.47] (Figure 4a). The indirect effect was significant when reversing the order of the two mediators, b = 0.10, SE = .03, 95%CI [0.04, 0.17].

To test Hypothesis 5b, we analyzed speakers perceived attitude change as the dependent variable. The indirect effect from the experimental condition to perceived attitude change through positivity resonance and self-insight was significant (Table 10), whereas the direct effect was not significant, b = 0.30, SE = .23, t = 1.28, p = .20, 95%CI [-0.16, 0.76] (Figure 4b). The indirect effect was not significant when switching the order of the mediators (self-insight -> positivity resonance), b = -0.06, SE = .04, 95%CI [-0.16, 0.01].

Moderation Analysis

We conducted moderation analysis using the same approach as in Study 3. The main effects and mediation were our focal points, and interactions were tested for purely exploratory reasons[5]. Attitude morality and attitude certainty were mean-centered in all moderation analyses.

Attitude Morality

Perceived attitude change. Attitude morality did not moderate the effect of the listening manipulation on perceived attitude change as indicated by a non-significant Manipulation X Morality interaction term, $b = 0.15$, $SE = .11$, $p = .16$, 95%*CI* [-0.06, 0.37]. Attitude morality did not have a significant main effect, $b = -0.31$, $SE = 0.17$, $p = .07$, 95%*CI* [-0.65, 0.03]. The listening manipulation had a significant main effect, $b = 0.87$ $SE = 0.20$, $p < .001$, 95%*CI* [0.48, 1.26].

Perceived attitude similarity with the listener. Attitude morality did not moderate the effect of the listening manipulation on perceived attitude similarity as indicated by a non-significant Manipulation X Morality interaction term, $b = 0.07$, $SE = 0.06$, $p = .24$, 95%*CI* [-0.05, 0.20]. Attitude morality did not have a main effect on perceived similarity, $b = -0.13$, $SE = 0.10$, $p = .19$, 95%*CI* [-0.33, 0.06]. The listening manipulation had a significant main effect, $b = 0.80$, $SE = 0.12$, $p < .001$, 95%*CI* [0.56, 1.03].

Attitude extremity change. As in Study 3, we conducted this analysis using Model 3 in PROCESS. Post-conversation attitude extremity was the dependent variable. Attitude morality and pre-conversation attitude extremity were submitted as moderators and were mean-centered. The Manipulation X Morality interaction was not significant, $b = -0.12$, $SE = 0.09$, $p = .16$, 95%*CI* [-0.29, 0.05]. The Manipulation

[5] We used Model 1 instead of Model 87 (moderated-mediation) which is mentioned in the preregistration because it directly tests the interaction rather than testing the conditional indirect effects which was not our goal for this analysis.

X Pre-conversation Extremity was significant, b = -0.25, SE = 0.11, p = .02, 95%CI [-0.46, -0.04]. Specifically, when attitude morality was at its mean level, the listening manipulation did not affect post-conversation attitude extremity for low pre-conversation attitude extremity (1 *SD* below the mean), b = -0.10, SE = 0.21, p = .65, 95%CI [-0.52, 0.33], but decreased post-conversation attitude extremity for high pre-conversation attitude extremity (1 *SD* above the mean), b = -0.81, SE = 0.22, p < .001, 95%CI [-1.23, -0.38]. The Morality X Pre-conversation Extremity interaction was not significant, b = 0.00, SE = 0.10, p = .99, 95%CI [-0.19, 0.19] as well as the three-way Manipulation X Attitude Morality X Pre-conversation Extremity interaction, b = -0.01, SE = 0.06, p = .83, 95%CI [-0.13, 0.10].

Attitude morality did not have a significant main effect, b = 0.23, SE = 0.14, p = .09, 95%CI [-0.03, 0.50]. The listening manipulation had a significant main effect, b = -0.45, SE = 0.15, p = .003, 95%CI [-0.75, -0.15] as well as pre-conversation attitude extremity, b = 0.70, SE = 0.17, p < .001, 95%CI [0.38, 1.03].

Attitude Certainty

Perceived attitude change. Attitude certainty moderated the effect of the listening manipulation on perceived attitude change as indicated by a significant Manipulation X Certainty interaction term, b = -0.28, SE = .11, p = .01, 95%CI [-0.51, -0.05]. Simple slope analyses indicated that the listening manipulation increased speakers' perceived attitude change for participants with low attitude certainty (1 *SD* below the mean), b = 1.37, SE = .29, p < .001, 95%CI [0.80, 1.94], but not for participants with high attitude certainty (1 *SD* above the mean), b = 0.30, SE = .30, p = .31, 95%CI [-0.28, 0.39]. Attitude certainly did not have a significant main effect, b = -0.05, SE = 0.11, p = .05, 95%CI [-0.22, 0.00], such that higher attitude certainty

was associated with less perceived attitude change. The listening manipulation had a significant main effect, $b = 0.86$ $SE = 0.20$, $p < .001$, 95%CI [0.47, 1.24].

Perceived attitude similarity with the listener. Attitude certainty did not moderate the effect of the listening manipulation on perceived attitude similarity as indicated by a non-significant Manipulation X Certainty interaction term, $b = 0.04$, $SE = 0.07$, $p = .54$, 95%CI [-0.09, 0.18]. Attitude certainty also did not have a main effect on perceived similarity, $b = -0.04$, $SE = 0.03$, $p = .29$, 95%CI [-0.10, 0.03]. The listening manipulation had a significant main effect, $b = 0.79$, $SE = 0.12$, $p < .001$, 95%CI [0.56, 1.02].

Attitude extremity change. We conducted this analysis as in Study 3 (post-conversation attitude extremity as the dependent variable. Attitude certainty and pre-conversation attitude extremity as moderators and mean-centered). The Manipulation X Certainty interaction was not significant, $b = 0.08$, $SE = 0.09$, $p = .39$, 95%CI [-0.10, 0.27]. The Manipulation X Pre-conversation Extremity was significant, $b = -0.34$, $SE = 0.12$, $p = .004$, 95%CI [-0.56, -0.11]. Specifically, when attitude certainty was at its mean level, the listening manipulation did not affect post-conversation attitude extremity for low pre-conversation attitude extremity (1 *SD* below the mean), $b = 0.07$, $SE = 0.22$, $p = .75$, 95%CI [-0.37, 0.51], but decreased post-conversation attitude extremity for high pre-conversation attitude extremity (1 *SD* above the mean), $b = -0.88$, $SE = 0.24$, $p < .001$, 95%CI [-1.35, -0.42]. The Certainty X Pre-conversation Extremity interaction was not significant, $b = -0.01$, $SE = 0.11$, $p = .92$, 95%CI [-0.22, 0.20], as well as the three-way Manipulation X Certainty X Pre-conversation Extremity interaction, $b = -0.01$, $SE = 0.06$, $p = .87$.

Attitude certainty did not have a significant main effect, $b = 0.01$, $SE = 0.15$, $p = .94$, 95%CI [-0.29, 0.31]. The listening manipulation had a negative significant

main effect, b = -0.41, SE = 0.16, p = .01, 95%CI [-0.72, -0.09]. Pre-conversation attitude extremity also had a significant main effect, b = 0.78, SE = 0.18, p < .001, 95%CI [0.42, 1.14].

In brief, attitude certainty did not moderate the effects of the listening manipulation on perceived or actual depolarization. However, the study was underpowered to detect a small effect size for the interaction because moderation was not its goal. Thus, these analyses should be interpreted with caution.

Auxiliary Analyses

As in Study 3, we examined the individual effects of both attitude certainty and attitude morality as additive effects to those of the listening manipulation.

Attitude Certainty. Attitude certainty did not have a main effect on perceived attitude similarity with the listener, β = -.06, p = .31. The listening manipulation had a significant main effect, β = .40, p < .001. However, attitude certainty had a significant main effect on speakers' perceived attitude change, β = -.13, p = .03. As in Study 3, speakers with higher attitude certainty reported less perceived attitude change across the listening conditions. The listening manipulation remained significant, β = .27, p < .001.

As in Study 3, we added pre-conversation attitude extremity as a predictor to examine the additive effect on attitude extremity change. All predictors had significant main effects: attitude certainty, β = .17, p = .01, the listening manipulation, β = -.16, p = .005, and pre-conversation attitude extremity, β = .32, p < .001. That is, higher attitude certainty predicted higher post-conversation attitude extremity, which means more (actual) polarization across all the listening conditions while controlling for the effect of initial attitude extremity.

Attitude morality. Attitude morality did not have a significant main effect on perceived attitude similarity with the listener, β = -.04, p = .50, whereas the listening manipulation had a significant main effect, β = .41, p < .001. Similar results were obtained regarding perceived attitude change. The main effect of attitude morality was not significant, β = -.09, p = .13, while the listening manipulation remained significant β = .27, p < .001. Therefore, attitude morality did not account for additional variance in perceived depolarization.

We added pre-conversation attitude extremity as a predictor to examine whether attitude morality had an additive effect on attitude extremity (actual depolarization). The listening manipulation, β = -.18, p < .001, and pre-conversation attitude extremity, β = .38, p < .001, had significant main effects, whereas attitude morality did not, β = .06, p = .28.

In sum, attitude morality neither moderated the effects of the listening manipulation nor accounted for additional variance in either perceived or actual depolarization. However, the results suggest that it had an additive effect on attitude morality, though this should be interpreted cautiously (p = .049). As in the previous studies, the main goal was not to test the interaction, so the sample size was underpowered to detect a small effect size for an interaction. Any result regarding moderation is only suggestive.

Sub-group analysis. As in the previous studies, we examined whether participants' initial attitudes affected the results by analyzing the effects of the listening manipulation separately for participants who were against (n = 71), ambivalent/neutral (n = 76), or in favor of Universal Basic Income in Israel (n = 94).

Listening quality (manipulation check). A strong effect emerged on listening perception across all sub-groups: opposed: $t(69) = 6.02$, p < .001, 95% *CI* [1.46, 2.92],

d = 1.42. Ambivalent/neutral: $t(74) = 8.32$, $p < .001$, 95% *CI* [2.52, 4.15], d = 2.13. In favor: $t(92) = 7.78$, $p < .001$, 95% *CI* [2.03, 3.44], d = 1.53.

Positivity resonance. The effect size of the listening manipulation on positivity resonance was large for all sub-groups: opposed: $t(69) = 6.35$, $p < .001$, 95% *CI* [1.40, 2.68], d = 1.50, ambivalent/neutral: $t(74) = 7.25$, $p < .001$, 95% *CI* [1.73, 3.07], d = 1.84. In favor: $t(92) = 6.10$, $p < .001$, 95% *CI* [1.18, 2.33], d = 1.21.

Self-insight. The effect size on self-insight was large overall for each sub-group: Opposed: $t(69) = 3.99$, $p < .001$, 95% *CI* [0.94, 2.81], d = 0.94. Ambivalent/neutral: $t(74) = 6.16$, $p < .001$, 95% *CI* [1.74, 3.41], d = 1.42. In favor: $t(92) = 6.63$, $p < .001$, 95% *CI* [1.85, 3.43], d = 1.33.

Perceived attitude similarity. The effect size on perceived attitude similarity was moderate to strong and varied between the sub-groups: Opposed $t(69) = 1.97$, p = .05, 95% *CI* [-0.005, 0.86], d = 0.47. Ambivalent/neutral: $t(74) = 5.23$, $p < .001$, 95% *CI* [0.67, 1.49], d = 1.21. In favor: $t(92) = 4.62$, $p < .001$, 95% *CI* [0.47, 1.19], d = 0.95.

Perceived speakers' attitude change. The effect size on perceived attitude change was in the predicted direction across all sub-groups and was strong in the in-favor group: Opposed: $t(69) = 1.11$, p = .27, 95% *CI* [-0.36, 1.25], d = 0.26. Ambivalent/neutral: $t(74) = 1.89$, p = .06, 95% *CI* [-0.03, 1.27], d = 0.44. In favor: $t(92) = 4.78$, $p < .001$, 95% *CI* [0.89, 2.19], d = 1.04. .

Attitude extremity change. Post-conversation attitude extremity was lower than pre-conversation attitude extremity for each sub-group. Yet, the decrease was not meaningful in the opposed group: Opposed: $F(1, 69) = 0.04$, p = .85, η^2_p = .001, Cohen's f = 0.03. Ambivalent/neutral: $F(1, 74) = 5.80$, p = .02, η^2_p = .073, Cohen's f = 0.28. In favor: $F(1, 92) = 2.89$, p = .09, η^2_p = .031, Cohen's f = 0.18.

Attitude-expression intentions. The effect of listening quality on attitude-expression intentions was in the predicted direction across all sub-groups and was small to moderate opposed: $t(69) = 1.57$, $p = .12$, 95% *CI*[-0.16, 1.33], $d = 0.37$; ambivalent/neutral: $t(74) = 1.07$, $p = .29$, 95% *CI*[-0.34, 1.13], $d = 0.25$; in favor: $t(92) = 1.22$, $p = .23$, 95% *CI*[-0.26, 1.11], $d = 0.25$.

Open-minded behavior intentions. The effect size for the effect of listening quality on open-minded behavior intentions was small-to-moderate across the sub-groups and in the predicted direction: opposed: $t(69) = 0.81$, $p = .42$, 95% *CI*[-0.39, 0.92], $d = 0.19$; ambivalent/neutral: $t(74) = 1.66$, $p = .10$, 95% *CI*[-0.09, 1.01], $d = 0.39$'; in favor: $t(92) = 1.33$, $p = .19$, 95% *CI*[-0.18, 0.91], $d = 0.28$.

Willingness for future interactions. The effect size on willingness to future interactions with the listener was large across the sub-groups and in the predicted direction: Opposed: $t(69) = 4.85$, $p < .001$, 95% *CI* [1.37, 2.38], $d = 1.15$. Ambivalent/neutral: $t(74) = 5.61$, $p < .001$, 95% *CI* [1.38, 2.91], $d = 1.30$. In-favor: $t(91) = 4.85$, $p < .001$, 95% *CI* [1.08, 2.60], $d = 0.98$.

Finally, as in the previous studies, we tested whether initial attitude valence moderated the relationship between listening and the attitudinal measures. A significant Condition X Initial Attitude interaction emerged concerning perceived attitude similarity when comparing the (initial) in-favor to the neutral/ambivalent participants, $b = 0.66$, $SE = 0.29$, $p = .03$, 95%*CI*[0.68,1.49]. Specifically, the listening manipulation had a stronger effect on participants who initially had ambivalent/neutral attitudes, $b = 1.08$, $SE = 0.20$, $p < .001$, 95%*CI*[0.07, 1.24] than on participants who opposed, $b = 0.42$, $SE = 0.21$, $p = .04$, 95%*CI*[0.009, 0.84]. No moderation was observed when comparing the neutral/ambivalent to the opposed participants, $b = -0.25$, $SE = 0.28$, $p = .36$, 95%*CI*[-0.79, 0.29].

No moderation emerged concerning speakers' perceived attitude change. Specifically, in-favor vs. neutral/ambivalent initial attitude: $b = 0.17$, $SE = 0.51$, $p = .74$, 95%CI[-0.83, 1.17]. There was no significant interaction also when comparing the neutral/ambivalent to the opposed attitude, $b = 0.92$, $SE = 0.47$, $p = .05$, 95%CI[-0.01, 1.86].

Regarding the Condition X Initial Attitude interaction on post-conversation attitude extremity, Model 3 in PROCESS indicated that of the seven interactions, only the Manipulation X Pre-Conversation Attitude Extremity interaction was significant, $b = -0.47$, $SE = 0.22$, $p = .03$, 95%CI[-0.90, -0.08].

In sum, the changes in the dependent variable across the three sub-groups reflected the overall effect, except for the effect of perceived attitude similarity for participants opposed to the issue, although the effects varied in their magnitude. However, extrapolations based on these auxiliary analyses are not recommended, given that only 33% of the participants were in the opposed and neutral sub-groups combined.

Overall, the sub-group analysis indicated that the effects were in the predicted directions for all three initial attitudes with one exception, namely, attitude extremity change in the opposed sub-group.

Table 10 presents exploratory serial-mediation analyses for behavior intentions: Attitude expression, open-mindedness, and future interaction. The serial indirect effect from the listening manipulation to actual and perceived depolarization did not explain behavior intentions. However, the indirect effect through positivity resonance was significant for open-mindedness and future interaction.

Table 8

Study 4 Descriptive Statistics by Experimental Condition

	High-quality listening		Moderate-quality listening	
	M	*SD*	*M*	*SD*
1. Listening perception	8.30	0.89	5.56	2.18
2. Positivity resonance	7.34	0.90	5.32	1.76
3. Self-insight	5.60	1.67	3.22	2.17
4. Perceived attitude similarity	2.63	0.90	1.82	0.90
5. Perceived attitude change-speaker	2.39	1.83	1.48	1.17
6. Perceived attitude change-listener	4.87	2.09	3.78	2.16
7. Pre-attitude favorability	4.91	2.44	5.29	2.58
8. Post-attitude favorability	4.96	2.10	5.48	2.55
9. Pre-attitude extremity	2.02	1.36	2.12	1.48
10. Post-attitude extremity	1.71	1.21	2.23	1.31
11. Disagreement typicality	2.51	1.23	2.44	0.89
12. Attitude-expression intentions	7.34	1.53	6.90	1.69
11. Open-minded intentions	6.48	1.22	6.12	1.39
13. Willingness for future interaction	7.46	1.56	5.39	2.11

Table 9

Study 4 Descriptive Statistics and Correlations Between the Study Variables

	M	***SD***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1. Listening perception	6.95	2.15													
2. Positivity resonance	6.34	1.72	.87**												
3. Self-insight	4.42	2.27	.61**	.60**											
4. Perceived attitude similarity	2.23	0.98	.48**	.50**	.50**										
5. Perceived attitude change-speaker	1.94	1.60	.28**	.24**	.39**	.35**									
6. Perceived attitude change-listener	4.33	2.19	.28**	.28**	.47**	.13*	.08								
7. Pre-attitude favorability	5.10	2.51	-.03	.08	.005	-.01	-.04	-.03							
8. Post-attitude favorability	5.22	2.34	.01	.07	.07	.01	-.02	-.09	-.70**						
9. Pre-attitude extremity	2.07	1.42	.04	.06	.03	-.10	-.11	.006	.09	.07					

10. Post-attitude extremity	1.97	1.28	-.14	-.14*	-.37**	-.33**	-.29**	-.001	.12	.08	.39**				
11. Disagreement typicality	2.47	1.07	.20**	.23**	.23**	.20**	.25**	-.07	.18**	.12	.06	-.12			
12. Attitude-expression intentions	7.12	1.62	.14*	.15*	.13*	.07	.05	.04	.03	.003	.11	-.09	.01		
13. Open-minded intentions	6.30	1.31	.21**	.20**	.10	.16*	.04	.03	.15*	.09	-.05	-.16*	.19**	.28**	
14. Willingness for future interactions	6.43	2.12	.63**	.64**	.43**	.32**	.17**	.27**	.06	.06	.07	-.07	.11	.18**	.25**

Notes. The groups were coded as follows: 1- moderate-quality listening, 2- high-quality listening. ** $p < .01$, * $p < .05$; pre= before conversation, post = after conversation.

Table 10

Study 4 Indirect Effects For Each Dependent Variable

Dependent variable	Self-insight	Perceived attitude similarity	Perceived attitude change	Post-conversation attitude extremity	Attitude-expression intentions	Open-minded intentions	Willingness for future interactions
				Predictors			
Group (0-moderate quality listening; 1-high-quality listening)	*b* = 1.23, *SE* = 0.28, *p* < .001, 95% *CI*[0.67, 1.78]	*b* = 0.21, *SE* = 0.13, *p* = .13, 95% *CI*[-0.06 0.47]	*b* = 0.30, *SE* = 0.23, *p* = .20, 95% *CI*[-0.16, 0.76]	*b* = -0.05, *SE* = 0.18, *p* = .78, 95% *CI*[-0.40, 0.30]	*b* = 0.19, *SE* = 0.27, *p* = .48, 95% *CI*[-0.34, 0.71]	*b* = 0.12, *SE* = 0.21, *p* = .56, 95% *CI*[-0.30, 0.55]	*b* = 0.70, *SE* = 0.27, *p* = .009, 95% *CI*[0.17, 1.23]
Positivity resonance	*b* = 0.56, *SE* = 0.08, *p* < .001, 95% *CI*[0.40, 0.73]	*b* = 0.14, *SE* = 0.04, *p* < .001, 95% *CI*[0.06 0.22]	*b* = -0.09, *SE* = 0.07, *p* = .21, 95% *CI*[-0.23 0.05]	*b* = 0.08, *SE* = 0.05, *p* = .15, 95% *CI*[-0.03, 0.19]	*b* = 0.08, *SE* = 0.08, *p* = .34, 95% *CI*[-0.08, 0.24]	*b* = 0.15, *SE* = 0.06, *p* = .03, 95% *CI*[0.02, 0.28]	*b* = 0.64, *SE* = 0.08, *p* < .001, 95% *CI*[0.48, 0.81]

Self-insight	NA	b = 0.13, SE = 0.03, p < .001, 95% CI[0.07 0.19]	b = 0.33, SE = 0.05, p < .001, 95% CI[0.23 0.44]	b = -0.25, SE = 0.04, p < .001, 95% CI[-0.33, -0.17]	b = 0.04, SE = 0.06, p = .51, 95% CI[-0.08, 0.15]	b = -0.22, SE = 0.05, p = .64, 95% CI[-0.11, 0.07]	b = 0.03, SE = 0.06, p = .58, 95% CI[-0.08, 0.15]
Pre-conversation attitude extremity	NA	NA	NA	b = 0.36, SE = 0.05, p < .001, 95% CI[0.27, 0.46]	NA	NA	NA
	Indirect effects						
Group → positivity resonance → self-insight	b = 0.14, SE = 0.22, 95% CI [0.76, 1.59].						
Group → positivity resonance → self-insight → Perceived attitude similarity	b = 0.15, SE = 0.05, 95% CI[0.06, 0.26]						
Group → positivity resonance → self-insight	b = 0.38, SE = 0.11, 95% CI[0.19, 0.64]						

→ →perceived attitude change	
[a] Group → positivity resonance → self-insight → post-conversation attitude extremity	*b* = -0.28, *SE* = 0.07, 95% *CI*[-0.44, -0.16]
Group → positivity resonance → self-insight → attitude-expression intentions	*b* = 0.04, *SE* = 0.07, 95% *CI*[-0.10, 0.20]
Group → positivity resonance → self-insight →open-minded - intentions	*b* = 0.03, *SE* = 0.07, 95% *CI*[-0.16, 0.11]

Group →Positivity resonance → self-insight → willingness for future interaction	b = 0.04, SE = 0.07, 95% CI[-0.11, 0.18]

***Notes*.** * denotes significant indirect effects; [a] pre-conversation attitude extremity was entered as a control variable when testing the indirect effects on post-conversation attitude extremity.

Discussion

Study 4 supported all research hypotheses using a more ecologically valid procedure where speakers thought the listeners were students rather than confederates. Consistent with Study 3 results, perceived speakers' own attitude change drove attitude similarity as they recognized the listener's side rather than by speakers' assumption that they changed listeners' attitudes. The exploratory mediation analyses on the behavior intentions measures indicated that the serial mediation's indirect effect that explained perceived and actual depolarization does not explain behavior intentions. However, the indirect effect of positivity resonance was significant for open-minded intentions and willingness for future interaction. This might suggest that a social predictor (i.e., positivity resonance) is more important when predicting interpersonal behavior intentions than a cognitive predictor (i.e., self-insight).

General Discussion

When people who hold opposing attitudes converse, their exchange can make them feel threatened and alienated, ultimately reaffirming their disparate views. In four experiments, we found consistent evidence that one conversant's high-quality listening can help. Results showed that high-quality listeners fostered speakers' positivity resonance, reflecting speakers' closeness and connection, which inspired speakers to pursue self-insight. Ultimately, positivity resonance and self-insight helped to explain the effects of listening on attitude depolarization. No moderation effects were observed, indicating that the need to belong, attitude certainty, and attitude morality did not influence the effects of high-quality listening. This conclusion should be understood with some caution; whereas samples were well-powered to detect condition effects, they were less well-powered for testing interactions. We cannot rule out the possibility that more highly-powered studies would find moderation by these or other constructs.

Some of the most intriguing findings came from our supplementary analyses testing the sources of perceived attitude similarity. Namely, did speakers perceive that their attitudes became more similar to the listeners' attitudes because a) they changed their own attitudes or b) because they perceived they managed to shift the listeners' attitudes? Although both main effects were significant, regression analysis supported the first option; Speakers who received high-quality listening perceived themselves to be similar to their listeners because they saw their own attitudes had shifted, presumably in consideration of the opposing view the high-quality listening endorsed.

This research has theoretical implications for understanding attitude change, suggesting that high-quality listening can depolarize speakers' attitudes during disagreements without any persuasive attempt by listeners. The effects of high-quality

listening on perceived depolarization were demonstrated by higher perceived attitude similarity and attitude change in the high-quality listening condition relative to the moderate-quality listening condition. Importantly, speakers' attitudes in the high-quality listening condition moved toward the scale's mid-point but remained below the mid-point, indicating that their attitudes shifted toward those of their listeners but not enough to change the favorability or direction of their attitude. In other words, we observed moderation of the existing attitude but not a swing to the contrary attitude.

Nevertheless, we urge caution in assuming that listening always produces desirable attitude changes. In some instances, shifting a speaker's attitude during a disagreement toward the listener's attitude could lead the speaker to adopt socially undesirable attitudes, such as racist views, or more positive attitudes toward harmful or unacceptable behaviors. Uncovering such effects would demonstrate that high-quality listening may not be universally desirable and identify instances in which people should not exhibit good listening. A finding that good listeners with socially undesirable attitudes change speakers' attitudes will shed light on potential negative consequences or a "dark side" of listening. Such a finding will be novel to the listening literature as a recent meta-analysis of 664 effect sizes and 400,020 observations found that only 5.6% of the effect sizes were negative, including only one out of 30 experimental effects (Kluger et al., 2023). It is also possible that the listener holding a socially undesirable attitude serves as a boundary condition to the effect of listening on speakers' attitudes. Namely, high-quality listening might not change speakers' attitudes under such a condition. Alternatively, in those cases, listening may change the listeners' attitude, not the speaker's.

Another conceptual contribution of this research was identifying listening as an antecedent of positivity resonance. Despite the benefits of positivity resonance,

only a few of its antecedents have been examined, specifically shared laughter (Brown & Fredrickson, 2021), eye contact, and affectionate touch (Fredrickson, 2013). The current studies found that listening manipulations changed speakers' ratings of positivity resonance. However, in everyday conversations, a reverse causal pathway may also occur: engaging in high-quality listening without positivity resonance may be difficult or even impossible, and therefore, positivity resonance may precede high-quality listening.

Table 11

Table of Limitations

Source	Limitation	Future research	Challenge
Sampling	Although attitude certainty did not moderate the effects identified in the present studies, it is unclear whether results would generalize to especially strong attitudes. Political attitudes, for example, are known to be stable and resistant to change (Krosnick & Petty, 1995). Even if speakers who receive high-quality listening experience positivity resonance when disclosing their political attitudes, their attitudes may not depolarize.	A 2X2 design crosses listening quality (moderate vs. high) and attitude strength (strong vs. weak). Sampling ideally involves participants with extreme attitudes.	Attempts to manipulate high vs. moderate-quality listening produced inconsistent effects (Castro et al., 2016; Kluger & Itzchakov, 2022). The only replicable listening manipulation to date is with confederates. However, substantial research resources are needed in order to rely on confederates for a 2X2 manipulation with adequate power.
Method	When reversing the order of the two mediators (positivity resonance and self-insights), the indirect effects became non-significant in most mediation analyses.	No work to date has manipulated positivity resonance to test its effects on self-insight, and such studies would provide important next steps to	Studies manipulating positivity resonance would need careful design of the experimental manipulation to ensure it has the specific qualities of

	However, because we did not manipulate the mediators, the data are still mute concerning their temporal order (Fiedler et al., 2018)	understanding how social comfort shapes internal experiences during conversations.	positivity resonance (Major et al. 2018) in a clean intervention.
Method	We prioritized internal validity to establish a causal link between listening and the dependent variables. To achieve this, all studies assigned participants to a speaker role in an artificial, tightly controlled social setting with an attentive partner. However, a typical conversation is a back-and-forth interaction in which each conversant plays both the speaker and speaker role. Thus, the ecological validity of the present studies is limited.	A potential avenue for future research is manipulating listening behavior at the dyadic level without the use of confederates.	Several studies have manipulated poor- versus moderate-quality listening using distractions to the listeners (e.g., Castro et al., 2018; Pasupathi & Rich, 2005). However, additional work would benefit from using manipulations that engender high-quality listening in naïve participants.
Sampling	Although the sample included Jewish and Muslim participants with different levels of religiosity, we should be careful about extrapolating the conclusions to non-Western participants.		Replicate the present findings with a non-Western sample.
Design	We manipulated listening using trained research assistants and, therefore, could not test the effect of the listening manipulation on outcomes related to the listeners.	Participants in future studies could be provided the role of "listener" to measure reciprocity as well as explore additional mechanisms that help to depolarize attitudes. Such	To our knowledge, there is no replicable method to manipulate better-than-average listening merely using instructions (see also Kluger & Itzchakov, 2022).

	studies can employ the actor-partner interdependence model (Kenny et al., 2006) to assess actor and partner effects on perceived and actual depolarization.

Although the present research showed that positivity resonance and self-insight influence listening-induced attitude change, other possible processes should be examined in future research. For example, classic attitude change literature suggests that reciprocity may serve as an additional mechanism underlying our observed listening effects (Cialdini et al., 1992). Listening is indeed a reciprocal process (Kluger et al., 2021), so speakers might feel a need to reciprocate the listener's effort by shifting their attitude closer to the listener's. Because speakers recognize that the listener is willing to consider their arguments from the opposing side, they may reciprocate by enhanced self-insight and a greater willingness to consider the listener's perspective on the matter under discussion.

Another process that should be examined in future studies is shared reality – the mutual understanding among individuals about their social environment and shared experiences (Rossignac-Milon et al., 2021). Because people consider other people's attitudes in forming their own attitudes (Cialdini et al., 1973; Festinger, 1954), thinking about an attentive listener's perspective may change a speaker's attitude.

We did not find compelling evidence that the need to belong, attitude certainty, or attitude morality moderated the listening-induced effects on speakers' attitudes. Attitude certainty had an additive effect on some of the attitudinal outcomes. Nevertheless, the non-significant effects do not entirely rule out some of their

hypotheses regarding moderation, as a higher-powered study might find evidence for the moderation effect.

Finally, the listening manipulation provided strong and replicable effects on perceived listening across the studies. However, this methodological approach required numerous research assistants who received extensive training in enacting both listening conditions. Although this manipulation is commonly used in contemporary research on perceived listening (Itzchakov et al., 2020; Itzchakov, Weinstein, et al., 2022), it makes the experiments expensive and time-consuming. An ongoing challenge in listening research is creating a robust manipulation of better-than-average listening using instructions (see Kluger & Itzchakov, 2022, p. 21 Future Issues section point # 3) as prior attempts have not been consistently successful (e.g., Castro et al., 2016). Possible future directions can involve incorporating instructions from research on receptiveness (Hussein & Tormala, 2021; Yeomans et al., 2020) and behavioral mimicry (Fujiwara & Daibo, 2016).

Conclusion

The current research demonstrates that high-quality listening can reduce attitude depolarization during disagreements. Our findings demonstrate that when listeners convey high-quality listening, speakers feel more socially connected and comfortable, leading to a deeper reflection on their attitudes and themselves. This process results in both perceived and actual attitude depolarization. Our findings highlight the importance of high-quality listening to bridge divides and promote constructive interpersonal interactions when people disagree.

Bibliography

Baron, J. (2019). Actively open-minded thinking in politics. *Cognition, 188*, 8-18.

Baron, J., Gürçay, B., & Metz, S. E. (2016). Reflective thought and actively open-minded thinking. *Individual differences in judgment and decision-making: A developmental perspective*, 107-126.

Baumeister, R. F., & Leary, M. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.

Bennett-Levy, J., & Thwaites, R. (2007). Self and self-reflection in the therapeutic relationship: a conceptual map and practical strategies for the training, supervision and self-supervision of interpersonal skills. In *The therapeutic relationship in the cognitive behavioral psychotherapies* (pp. 271-298). Routledge.

Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. Academic Press.

Brinol, P., & Petty, R. E. (2009). Source factors in persuasion: A self-validation approach. *European review of social psychology, 20*, 49-96.

Brown, C. L., & Fredrickson, B. L. (2021). Characteristics and consequences of co-experienced positive affect: understanding the origins of social skills, social bonds, and caring, healthy communities. *Current Opinion in Behavioral Sciences, 39*, 58-63.

Castro, D. R., Alex, C., Tohar, G., & Kluger, A. N. (2013). The Role of Active Listening in Teacher–Parent Relations and the Moderating Role of Attachment Style. *International Journal of Listening, 27*, 136-145.

Castro, D. R., Anseel, F., Kluger, A. N., Lloyd, K. J., & Turjeman-Levi, Y. (2018). Mere listening effect on creativity and the mediating role of psychological safety. *Psychology of Aesthetics, Creativity, and the Arts, 12*, 489-502.

Castro, D. R., Kluger, A. N., & Itzchakov, G. (2016). Does avoidance-attachment style attenuate the benefits of being listened to? *European Journal of Social Psychology, 46*, 762-775.

Cheatham, L., & Tormala, Z. L. (2015). Attitude certainty and attitudinal advocacy: The unique roles of clarity and correctness. *Personality and Social Psychology Bulletin, 41*, 1537-1550.

Cialdini, R. B., Green, B. L., & Rusch, A. J. (1992). When tactical pronouncements of change become real change: The case of reciprocal persuasion. *Journal of Personality and Social Psychology, 63*, 30-40. https://doi.org/10.1037/0022-3514.63.1.30

Cialdini, R. B., Levy, A., Herman, C. P., & Evenbeck, S. (1973). Attitudinal politics: The strategy of moderation. *Journal of Personality and Social Psychology, 25*, 100-108. https://doi.org/10.1037/h0034265

Echterhoff, G. (2012). Shared-reality theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology*. Sage Publications Ltd. . https://doi.org/https://doi.org/10.4135/9781446249222.n35

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods, 39*, 175-191.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117-140.

Fiedler, K., Harris, C., & Schott, M. (2018). Unwarranted inferences from statistical mediation tests–An analysis of articles published in 2015. *Journal of Experimental Social Psychology, 75*, 95-102.

Fredrickson, B. L. (2013). Positive Emotions Broaden and Build. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 47, pp. 1-53). Academic Press. https://doi.org/https://doi.org/10.1016/B978-0-12-407236-7.00001-2

Fredrickson, B. L. (2016). Love: Positivity resonance as a fresh, evidence-based perspective on an age-old topic. In L. F. Barrett & J. M. Haviland (Eds.), *Handbook of emotions, 4th edition* (pp. 847-858). Guilford Press.

Fujiwara, K., & Daibo, I. (2016). Evaluating interpersonal synchrony: Wavelet transform toward an unstructured conversation. *Frontiers in Psychology, 7*, 516.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Heider, F. (1958). *The Psychology of Interpersonal Relations*. John Wiley & Sons.

Heller, J. F., Pallak, M. S., & Picek, J. M. (1973). The interactive effects of intent and threat on boomerang attitude change. *Journal of Personality and Social Psychology, 26*, 273-279.

Hoyle, R. H., Davisson, E. K., Diebels, K. J., & Leary, M. R. (2016). Holding specific views with humility: Conceptualization and measurement of specific intellectual humility. *Personality and Individual Differences, 97*, 165-172.

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*, 430.

Hussein, M. A., & Tormala, Z. L. (2021). Undermining your case to enhance your impact: A framework for understanding the effects of acts of receptiveness in persuasion. *Personality and Social Psychology Review, 25*, 229-250.

Itzchakov, G., & DeMarree, K. G. (2022). Attitudes in an Interpersonal Context: Psychological Safety as a Route to Attitude Change. *Frontiers in Psychology*, 4242. https://doi.org/https://doi.org/10.3389/fpsyg.2022.932413

Itzchakov, G., DeMarree, K. G., Kluger, A. N., & Turjeman-Levi, Y. (2018). The listener sets the tone: High-quality listening increases attitude clarity and behavior-intention consequences. *Personality and Social Psychology Bulletin, 44*, 762-778.

Itzchakov, G., & Grau, J. (2022). High-quality listening in the age of COVID-19: A Key to better dyadic communication for more effective organizations. *Organizational Dynamics, 51*, 100820. https://doi.org/https://doi.org/10.1016/j.orgdyn.2020.100820

Itzchakov, G., & Kluger, A. N. (2017). Can holding a stick improve listening at work? The effect of Listening Circles on Employees' emotions and cognitions. *European Journal of Work and Organizational Psychology, 26*, 663-676.

Itzchakov, G., Kluger, A. N., & Castro, D. R. (2017). I am aware of my inconsistencies but can tolerate them: The effect of high quality listening on speakers' attitude ambivalence. *Personality and Social Psychology Bulletin, 43*, 105-120.

Itzchakov, G., & Reis, H. T. (2021). Perceived responsiveness increases tolerance of attitude ambivalence and enhances intentions to behave in an open-minded manner. *Personality and Social Psychology Bulletin, 47*, 468-485.

Itzchakov, G., Reis, H. T., & Weinstein, N. (2022). How to foster perceived partner responsiveness: High-quality listening is key. *Social and Personality Psychology Compass, 16*, e12648. https://doi.org/https://doi.org/10.1111/spc3.12648

Itzchakov, G., Weinstein, N., Legate, N., & Amar, M. (2020). Can high quality listening predict lower speakers' prejudiced attitudes? *Journal of Experimental Social Psychology, 91*, 104022.

Itzchakov, G., Weinstein, N., Saluk, D., & Amar, M. (2022). Connection Heals Wounds: Feeling Listened to Reduces Speakers' Loneliness Following a Social Rejection Disclosure. *Personality and Social Psychology Bulletin*, 01461672221100369. https://doi.org/10.1177/01461672221100369

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The origins and consequences of affective polarization in the United States. *Annual review of political science, 22*, 129-146.

Jost, J. T., Pelham, B. W., Sheldon, O., & Ni Sullivan, B. (2003). Social inequality and the reduction of ideological dissonance on behalf of the system: Evidence of enhanced system justification among the disadvantaged. *European Journal of Social Psychology, 33*, 13-36.

Kalla, J. L., & Broockman, D. E. (2020). Reducing exclusionary attitudes through interpersonal conversation: evidence from three field experiments. *American Political Science Review*, 1-16.

Kelman, H. C. (1958). Compliance, identification, and internalization three processes of attitude change. *Journal of conflict resolution, 2*, 51-60.

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. Guilford press.

Kluger, A. N., Borut, L., Lehmann, M., Nir, T., Azoulay, E., Einy, O., & Gordoni, G. (2022). A New Measure of the Rogerian Schema of the Good Listener. *Sustainability, 14*, 12893.

Kluger, A. N., & Bouskila-Yam, O. (2018). Facilitating Listening Scale (FLS). In D. L. Worthington & G. D. Bodie (Eds.), *The Sourcebook of Listening Research: Methodology and Measures* (pp. 272-280). John Wiley & Sons.

Kluger, A. N., & Itzchakov, G. (2022). The Power of Listening at Work. *Annual Review of Organizational Psychology and Organizational Behavior, 9*, 121-146. https://doi.org/10.1146/annurev-orgpsych-012420-091013

Kluger, A. N., Lehmann, M., Aguinis, H., Itzchakov, G., Gordoni, G., Zyberaj, J., & Bakaç, C. (2023). A meta-analytic systematic review and theory of perceived listening and job outcomes (performance, relationship quality, affect, and cognition). *Journal of Business and Psychology.* https://doi.org/https://doi.org/10.1007/s10869-023-09897-5

Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. *Attitude strength: Antecedents and consequences, 1*, 1-24.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*, 480-498.

Leary, M. (2005). Sociometer theory and the pursuit of relational value: Getting to the root of self-esteem. *European review of social psychology, 16*, 75-111.

Leary, M., Diebels, K. J., Davisson, E. K., Jongman-Sereno, K. P., Isherwood, J. C., Raimi, K. T., Deffler, S. A., & Hoyle, R. H. (2017). Cognitive and interpersonal features of intellectual humility. *Personality and Social Psychology Bulletin, 43*, 793-813.

Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. *Journal of Personality Assessment, 95*, 610-624.

Luttrell, A., Petty, R. E., Briñol, P., & Wagner, B. C. (2016). Making it moral: Merely labeling an attitude as moral increases its strength. *Journal of Experimental Social Psychology, 65*, 82-93.

Major, B. C., Le Nguyen, K. D., Lundberg, K. B., & Fredrickson, B. L. (2018). Well-being correlates of perceived positivity resonance: Evidence from trait and episode-level assessments. *Personality and Social Psychology Bulletin, 44*, 1631-1647.

Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology, 68*, 671.

Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological Bulletin, 127*, 651-672.

Pasupathi, M., & Rich, B. (2005). Inattentive listening undermines self-verification in personal storytelling. *Journal of personality, 73*, 1051-1086.

Petrocelli, J. V., Tormala, Z. L., & Rucker, D. D. (2007). Unpacking attitude certainty: Attitude clarity and attitude correctness. *Journal of Personality and Social Psychology, 92*, 30-41.

Petty, R. E., & Briñol, P. (2015). Emotion and persuasion: Cognitive and meta-cognitive processes impact attitudes. *Cognition and Emotion, 29*, 1-26.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in experimental social psychology*.

Petty, R. E., Fabrigar, L. R., & Wegener, D. T. (2003). Emotional factors in attitudes and persuasion. *Handbook of Affective Sciences, 752*, 772.

Petty, R. E., & Krosnick, J. A. (1995). *Attitude strength: Antecedents and consequences*. Erlbaum.

Powell, M. C., & Fazio, R. H. (1984). Attitude accessibility as a function of repeated attitudinal expression. *Personality and Social Psychology Bulletin, 10*, 139-148.

Riley, R. T., & Pettigrew, T. F. (1976). Dramatic events and attitude change. *Journal of Personality and Social Psychology, 34*, 1004-1015.

Rogers, C. R. (1962). The interpersonal relationship. *Harvard Educational Review, 32*, 416-429.

Rogers, C. R. (1980). *A way of being*. Houghton Mifflin.

Rossignac-Milon, M., Bolger, N., Zee, K. S., Boothby, E. J., & Higgins, E. T. (2021). Merged minds: Generalized shared reality in dyadic relationships. *Journal of Personality and Social Psychology, 120*, 882-911.

Salinas, J., O'Donnell, A., Kojis, D. J., Pase, M. P., DeCarli, C., Rentz, D. M., Berkman, L. F., Beiser, A., & Seshadri, S. (2021). Association of Social Support With Brain Volume and Cognition. *JAMA Network Open, 4*, e2121122-e2121122.

Sammut, G., & Bauer, M. W. (2011). Social influence: Modes and modalities. *The social psychology of communication*, 87-106.

Skitka, L. J., & Morgan, G. S. (2014). The Social and Political Implications of Moral Conviction. *Political Psychology, 35*, 95-110. https://doi.org/https://doi.org/10.1111/pops.12166

Tjosvold, D., Wong, A. S., & Feng Chen, N. Y. (2014). Constructively managing conflicts in organizations. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 545-568.

Tormala, Z. L., & Petty, R. E. (2004). Resistance to persuasion and attitude certainty: The moderating role of elaboration. *Personality and Social Psychology Bulletin, 30*, 1446-1457.

Tormala, Z. L., & Rucker, D. D. (2007). Attitude certainty: A review of past findings and emerging perspectives. *Social and Personality Psychology Compass, 1*, 469-492.

Van Quaquebeke, N., & Felps, W. (2018). Respectful inquiry: A motivational account of leading through asking questions and listening. *Academy of Management Review, 43*, 5-27.

Weinstein, N., Itzchakov, G., & Legate, N. (2022). The Motivational Value of Listening During Intimate and Difficult Conversations. *Social and Personality Psychology Compass*. https://doi.org/https://doi.org/10.1111/spc3.12651

Weinstein, N., Przybylski, A. K., & Ryan, R. M. (2013). The integrative process: New research and future directions. *Current Directions in Psychological Science, 22*, 69-74.

West, T. N., & Fredrickson, B. L. (2020). Cultivating positive emotions to enhance human flourishing. In *Positive psychological science* (pp. 38-51). Routledge.

Xu, M., & Petty, R. E. (2021). Two-Sided Messages Promote Openness for Morally Based Attitudes. *Personality and Social Psychology Bulletin*, 0146167220988371. https://doi.org/10.1177/0146167220988371

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.

Yzerbyt, V. Y., Muller, D., & Judd, C. M. (2004). Adjusting researchers' approach to adjustment: On the use of covariates when testing interactions. *Journal of Experimental Social Psychology, 40*, 424-431.

Zhou, J., & Fredrickson, B. L. (2023). Listen to Resonate: Better Listening as a Gateway to Interpersonal Positivity Resonance through Enhanced Sensory Connection and Perceived Safety. *Current Opinion in Psychology*, 101669.

Figure 1. A theoretical model of the effects of high-quality listening on speakers' actual and perceived depolarization through increased positivity resonance and self-insight

Figure 1. A theoretical model of the effects of high-quality listening on speakers' actual and perceived depolarization through increased positivity resonance and self-insight

Figure 1. A theoretical model of the effects of high-quality listening on speakers' actual and perceived depolarization through increased positivity resonance and self-insight

Figure 1. A theoretical model of the effects of high-quality listening on speakers' actual and perceived depolarization through increased positivity resonance and self-insight

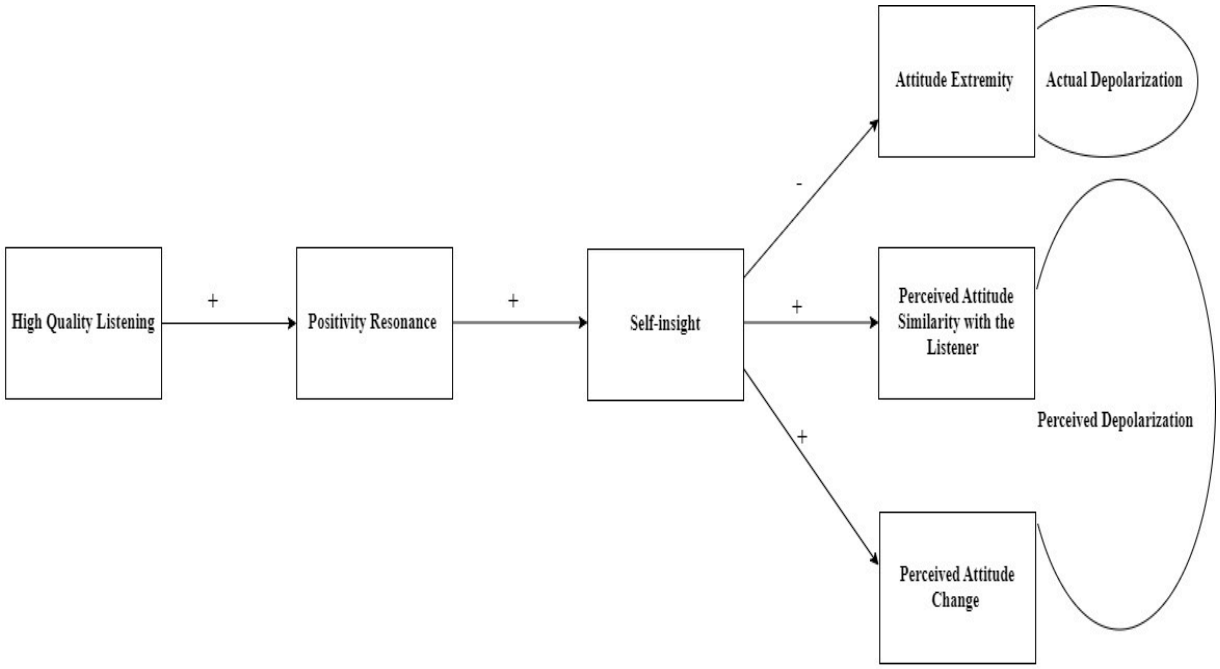

Figure 1. A model of the effects of high-quality listening on Speakers' actual and perceived depolarization through increased positivity resonance and self-insight

Figure 1. A theoretical model of the effects of high-quality listening on speakers' actual and perceived depolarization through increased positivity resonance and self-insight

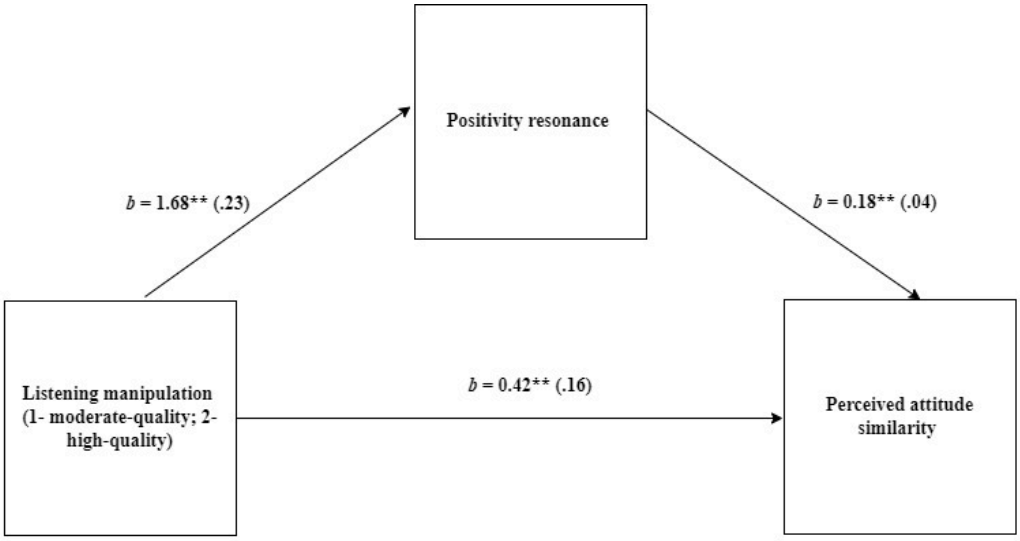

Figure 2. Mediation model of the effect of the listening manipulation on speakers' perceived attitude similarity through positivity resonance ** $p < .01$, * $p < .05$; standard errors in parentheses

Figure 2. Mediation model of the effect of the listening manipulation on speakers' perceived attitude similarity through positivity resonance; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

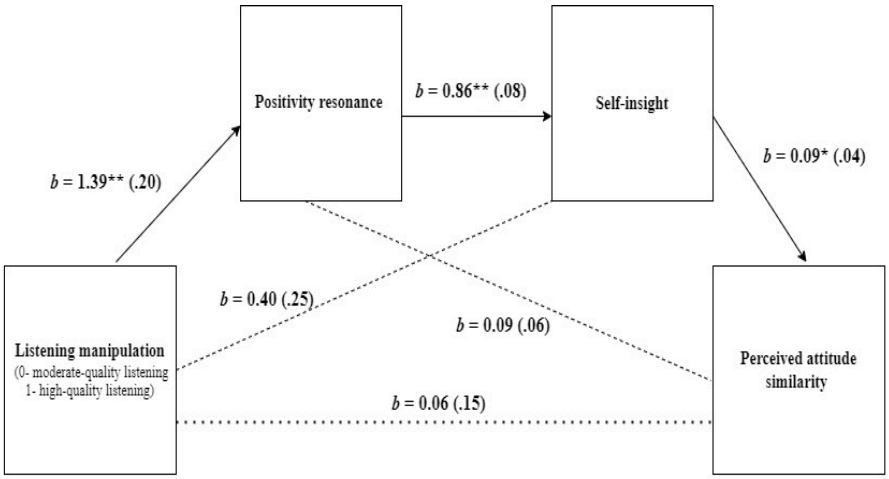

Figure 3a. Serial-mediation model of the effect of listening on speaker's perceived attitude similarity change via positivity resonance and self-insight; standard errors in parentheses

Figure 3a. Serial-mediation model of the effect of the listening manipulation on speakers' perceived attitude similarity via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

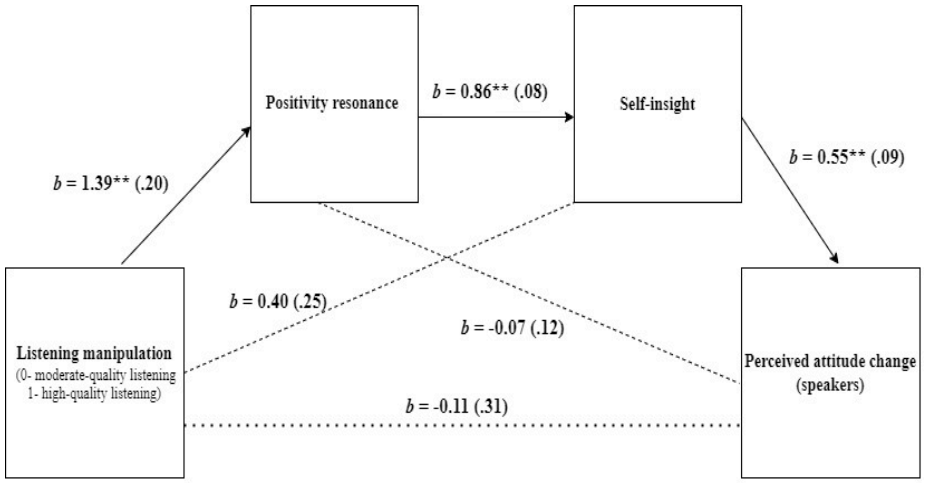

Figure 3b. Serial-mediation model of the effect of listening on speaker's perceived attitude change via positivity resonance and self-insight; standard errors in parentheses

Figure 3b. Serial-mediation model of the effect of the listening manipulation on speakers' perceived attitude change via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

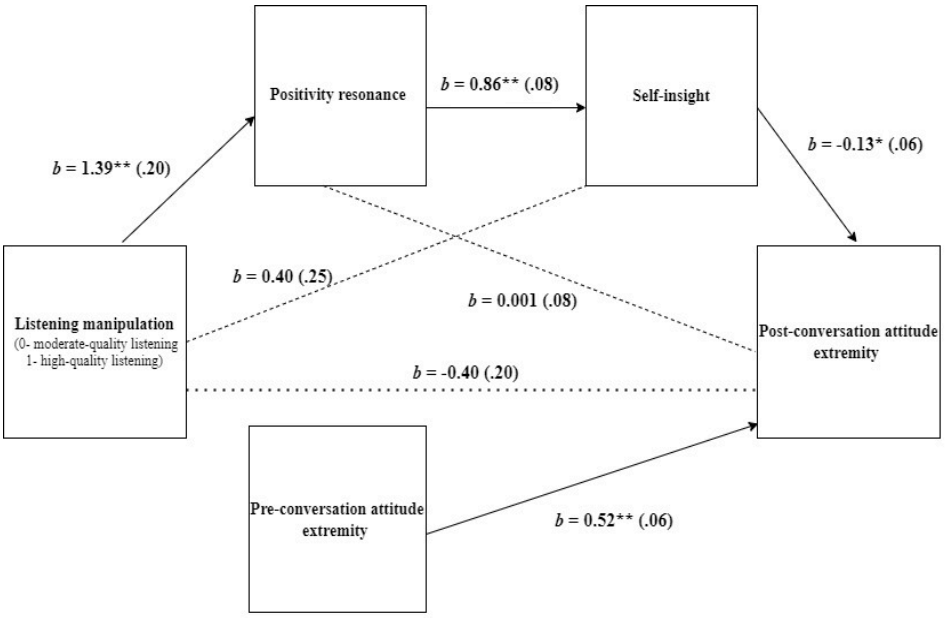

Figure 3c. Serial-mediation model of the effect of listening on attitude extremity via positivity resonance and self-insight and controlling for initial attitude extremity; standard errors in parentheses

Figure 3c. Serial-mediation model of the effect of the listening manipulation on speakers' post-conversation attitude extremity controlling for pre-conversation attitude extremity, via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

Figure 4a. Serial-mediation model of the effect of the listening manipulation on speakers' perceived attitude similarity via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

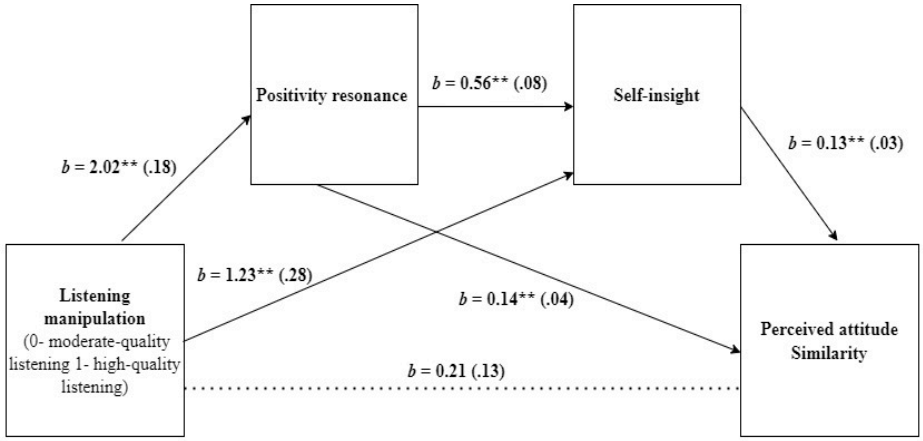

Figure 4a. Serial-mediation model of the effect of listening on speaker's perceived attitude similarity via positivity resonance and self-insight; standard errors in parentheses

Figure 4a. Serial-mediation model of the effect of the listening manipulation on speakers' perceived attitude similarity via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

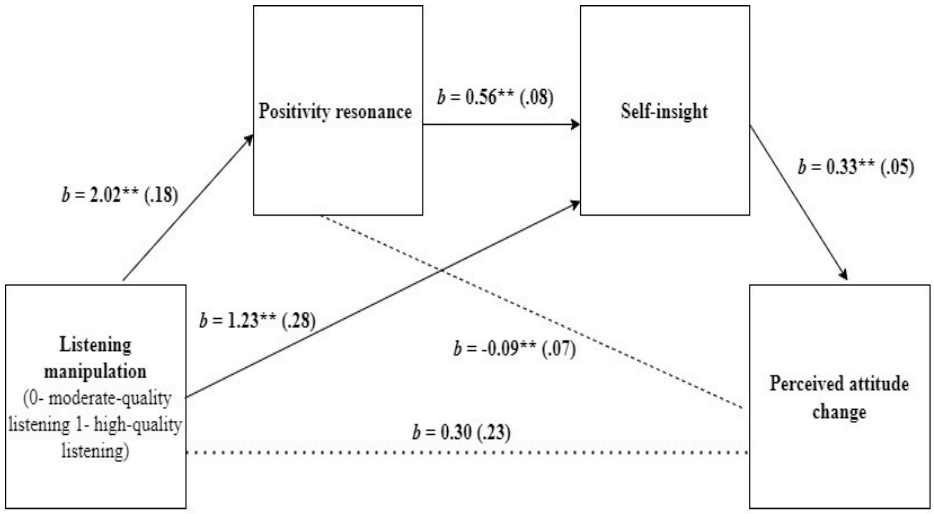

Figure 4b. Serial-mediation model of the effect of listening on speaker's perceived attitude change via positivity resonance and self-insight; standard errors in parentheses

Figure 4b. Serial-mediation model of the effect of the listening manipulation on speakers' perceived attitude change via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.

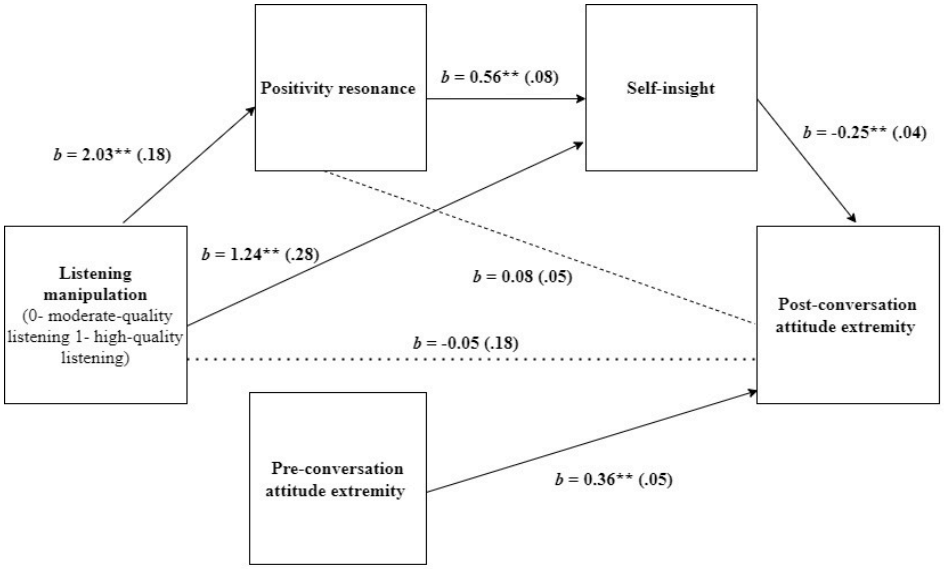

Figure 4c. Serial-mediation model of the effect of listening on attitude extremity via positivity resonance and self-insight and controlling for initial attitude extremity; standard errors in parentheses

Figure 4c. Serial-mediation model of the effect of the listening manipulation on speakers' post-conversation attitude extremity controlling for pre-conversation attitude extremity, via positivity resonance and self-insight; $^{**}p < .01$, $^{*}p < .05$; standard errors in parentheses.