People are eager to be listened to and really be understood by the people with whom they interact. The listening they receive is multidimensional in nature, and it includes cognitive processes, such as paying attention, understanding, receiving, and interpreting messages (Jones, 2011); affective processes, such as being empathic and nonjudgmental toward the speaker’s messages (Rogers, 1980); and behavioral processes, such as asking questions (Van Quaquebeke & Felps, 2016) and back-channeling (responses such as nodding and generic vocalizations; Bavelas, Coates, & Johnson, 2000). Experiencing high-quality listening has been found to have numerous effects on speakers, including improving their performance at work (Bergeron & Laroche, 2009), increasing perceptions of self-knowledge (Pasupathi, 2001), and decreased depression (Hale, Jansen, Bouhuys, & van den Hoofdakker, 1997), among others.

However, although listening is an essential part of every social interaction, it has not received much attention in the field of social psychology and, specifically, social influence. In this work, we sought to test whether listeners who are empathic, attentive, and nonjudgmental, who convey no persuasive attempt, influence speakers’ attitudes. We posit that high-quality listening will affect speakers’ emotional and cognitive processes and in turn will affect the certainty with which they hold their attitudes.

**Attitude Certainty**

Attitude certainty is defined as the extent to which people view an attitude as valid and hold it with confidence (Gross, Holtz, & Miller, 1995). The construct of attitude certainty can be conceptually and empirically separated into two distinct facets: attitude clarity—the subjective sense of truly knowing one’s attitude on a topic—and attitude correctness—the subjective sense that one’s attitude is correct and reflects the right way to think about an attitude object (Petrocelli et al., 2007). These facets have distinct antecedents and consequences. In terms of antecedents, attitude correctness, but not attitude clarity, is increased by social consensus (Petrocelli et al., 2007), whereas attitude clarity, but not attitude correctness, is increased by repeated expression (Petrocelli et al., 2007). In terms of consequences, both clarity and correctness independently increase resistance to persuasion (Petrocelli et al., 2007), and play a role in directing...
attitude-expression intentions (Cheatham & Tormala, 2015). Yet, attitude correctness, but not attitude clarity, promote a more competitive conflict style (Rios, DeMarree, & Statzer, 2014) and a drive to persuade others (Cheatham & Tormala, 2015). We seek to contribute to the differentiation between the constructs of attitude clarity and attitude correctness via an exploration of how these constructs are affected differentially by experiencing high-quality listening. We propose that attitude clarity, but not attitude correctness, increases when people share their attitude with a listener demonstrating high-quality listening.

**Listening and Clarity**

A listener who is attentive, empathic, and nonjudgmental conveys acceptance and perceived social regard to the speaker (Rogers, 1980), reducing the speaker’s self-presentation concerns (Itzchakov, Kluger, & Castro, 2017). By signaling acceptance, a high-quality listener reduces the speaker’s concerns about obtaining social approval (e.g., concerns with expressing an attitude that will yield social acceptance). Rather, such a speaker should be able to process and express thoughts with more accessibility, which is associated with greater clarity (Kernis & Goldman, 2006).

Indeed, Rogers (1951) hypothesized that the “atmosphere of safety” created by high-quality listening allows the speaker to relax and become aware of conflicting ideas within the self. Consequently, a speaker who experiences high-quality listening may have greater clarity because of this deeper understanding and awareness of the complexity of the issue. Moreover, because high-quality listening typically includes asking questions in an open way that invites the speaker to elaborate on the issue (e.g., “Is there anything more you want to add?”), Van Quaquebeke & Felps, (2016), the speaker may be encouraged to introspect and become more self-aware. This increased awareness of one’s evaluation, much like repeated expression (Petrocelli et al., 2007), could lead the speaker to experience greater clarity in their attitude.

The postulated effect of listening on attitude clarity is consistent with research that examined the correlation between listening and other, potentially related, forms of clarity. Specifically, among zero-acquaintance dyads engaging in a short-term conversation, perceived partner listening was correlated with self-clarity, using items such as “I got a clearer picture of who I am” (Lloyd, Boer, Kluger, & Voelpel, 2015). Second, week-to-week fluctuations in perceived mentor listening were positively correlated with fluctuations in reported clarity, operationalized both as role and situational clarity, among new workers in a high-tech organization (Cohen, 2014). Although these past studies did not manipulate listening quality nor measured attitude clarity, they are consistent with our hypothesis.

However, high-quality listening should not make speakers feel that their attitude is more correct. Foremost, receiving high-quality listening does not lead speakers to infer social consensus (Itzchakov et al., 2017; Study 4). That is, high-quality listening does not necessarily convey agreement with the speakers’ attitudes, but rather involves signals of alertness and responsiveness that cue speakers that what they have to say is valuable and worth consideration (Pasupathi & Hoyt, 2010). Support for this notion comes from work about intellectual humility. When people feel they are being heard and understood, they tend to experience an increase in intellectual humility, one consequence of which is people’s acknowledgment of their own limitations and the recognition that they might be wrong (Reis, 2017). Thus, because high-quality listening does not necessarily entail that the listener provides consensus to the speaker’s attitude and because it may open the listener up to the possibility that they might be wrong, we do not expect listening to have an independent effect on attitude correctness.

Furthermore, being listened to leads the speaker to express attitudes that are more objectively ambivalent—more aware of both pros and cons (Itzchakov et al., 2017). This, in turn, suggests that listening is unlikely to increase attitude correctness because a person who becomes aware of both pros and cons is not likely to feel that any specific attitude is the correct one. Critically, experiencing high-quality listening was found to make speakers acknowledge both the good and the bad aspects of their attitude while reducing the experience of evaluative conflict—subjective ambivalence.

Based on the above, our primary hypothesis is as follows:

**Hypothesis 1:** Perceiving high-quality listening increases speakers’ attitude clarity but not attitude correctness.

In addition, we sought to investigate the putative mechanisms underlying the proposed effect. We postulate that high-quality listening increases attitude clarity by affective (reduced social anxiety) and cognitive processes (increased self-awareness). We suggest that these processes work together to enhance attitude clarity.

Social anxiety involves fear of interpersonal evaluation in social settings (Schlenker & Leary, 1982). Anxiety has been found to impair decision-making processes, which might result in reduced clarity of one’s attitudes (Eysenck, Derakshan, Santos, & Calvo, 2007). Anxiety is also negatively related to self-concept clarity (SCC; Schwartz, Klimstra, Luyckx, Hale, & Meeus, 2012). Although most conceptualizations of SCC are broader than the definition of attitude clarity (Campbell et al., 1996; DeMarree & Bobrowski, in press), the documented relationship between social anxiety and SCC offers indirect support for the plausibility of anxiety as a mechanism. According to Rogers (1951), decreased anxiety leads to a more complete and nondefensive exploration of oneself, which would lead to discovering experiences of which a person had been unaware, thus creating a more broad and clear perspective. Congruent with this, feeling understood and validated by partners, which reduces anxiety (Dour et al., 2014), leads people to consider information they typically do not—their
shortcomings (Caprariello & Reis, 2011). Hence, reduction in anxiety should lead to deeper explorations of one’s attitudes, which we predict should increase attitude clarity. Thus, we expected that listening-reduced social anxiety will increase attitude clarity.

**Hypothesis 2:** Perceiving high-quality listening decreases speakers’ social anxiety and consequently increases attitude clarity.

The above reduction in social anxiety should facilitate self-awareness. By freeing the self from anxiety-related thoughts, a speaker will be better able to consider and articulate their opinion without the constraints of self-presentation concerns. However, receiving high-quality listening can also increase self-awareness more directly. A good listener creates a psychologically safe atmosphere for the speaker (Castro, Kluger, & Itzchakov, 2016; Itzchakov, Castro, & Kluger, 2016), which enables introspection and awareness. We suggest that this form of awareness corresponds to the construct of *reflective self-awareness*, which is defined as an attention toward the self that is motivated by curiosity or epistemic interest in the self. *Reflective self-awareness* can be distinguished from *ruminative self-awareness*, which is defined as attention toward the self that is motivated by perceived threat, loss, or injustice to the self (Trapnell & Campbell, 1999). The sense of acceptance provided by the listener will allow the speaker to be less defensive (i.e., less one-sided, extreme) in consideration of thoughts and feelings about an issue (Itzchakov et al., 2017). Furthermore, this sense of acceptance will lead the speaker to believe that their thoughts and feelings are worthy of consideration, leading the speaker to think more deeply and openly (i.e., with greater reflective self-awareness). Consequently, we predict that high-quality listening will increase reflective self-awareness both directly and indirectly through social anxiety.

The listening-induced increase in speakers’ self-awareness should subsequently increase attitude clarity because self-awareness entails greater self-knowledge (McGuire & McGuire, 1988). Indeed, perceived and actual self-knowledge increased attitude clarity, but not attitude correctness (Totton & Rios, 2015). Thus, we expect that listening-induced self-awareness will increase attitude clarity.

**Hypothesis 3:** Perceiving high-quality listening increases speakers’ reflective self-awareness and consequently increases attitude clarity.

We predict that high-quality listening increases attitude clarity both via its direct effects on social anxiety and reflective self-awareness and through an indirect effect of listening on self-awareness mediated by social anxiety (see Figure 1).

**Hypothesis 4:** The effects of listening on attitude clarity are simultaneously mediated by both social anxiety and reflective self-awareness.

In addition, we postulate that the listening-induced effect of attitude clarity is consequential. That is, perceiving high-quality listening also affects advocacy intentions. Advocacy has been conceptually and operationally defined in terms of attempts both to *express* one’s attitudes and to *persuade others* to adopt one’s attitudes (Akhtar, Paunesku, & Tormala, 2013). Attitude-persuasion intentions involve attempting or seeking to persuade others to adopt one’s attitude, whereas attitude-expression intentions refer to an interest and willingness to share one’s opinion with others, even when there is no explicit desire to change others’ attitudes. Attitude-expression intentions are positively related to both attitude correctness and attitude clarity, whereas attitude-persuasion intentions are positively related only to attitude correctness (Cheatham & Tormala, 2015).

**Hypothesis 5:** High-quality listening will increase speakers’ attitude-expression intentions, but not persuasion intentions, via an increase in attitude clarity.

Finally, we note that recent work has examined effects of listening on other dimensions of attitude strength. Specifically, Itzchakov et al. (2017) found that high-quality listening decreased attitude extremity and increased the presence of conflicting evaluations (i.e., objective ambivalence) while reducing the extent to which these conflicting evaluations predict the experience of ambivalence (i.e., subjective
ambivalence). Critically, we predict that any effects on clarity will occur beyond those documented in previous research. Furthermore, the consequence of clarity we examine (attitude-expression intentions) has not been linked to subjective ambivalence.

Overview of Studies

We conducted five experiments to test our hypotheses. Portions of Studies 2 and 3 were initially reported in Itzchakov et al. (2017). Critically, the analyses reported in the current article were not reported previously. In each study, we examined the effects of perceived listening on attitude clarity and examined the potential mediating role of social anxiety and reflective self-awareness. We used a variety of listening quality manipulations, including experimentally manipulated listening quality with a vignette (Study 1), by using trained versus untrained listeners (Study 2), and by using distracted versus nondistracted listeners (Studies 3-5). In addition, in Studies 3 to 5, we also examined potential consequences of attitude clarity. All materials in each study were presented to participants in Hebrew. English translations of all materials for each study are available in the supplementary materials.

Study 1

Our first goal in Study 1 was to test whether perceived listening increased speaker’s attitude clarity above and beyond any effects on attitude correctness. Our second goal was to test whether social anxiety played a role as a mediator of the effect of listening on attitude clarity.1

Method

Participants. We recruited 219 volunteer participants through social networks. Of these, 26 participants answered only the first items and, thus, were excluded from the analysis, leaving a sample size of 193, $M_{age} = 30.9$, $SD = 8.51$, 45.1% females. Our sample size has a power of .80 to detect the average effect size obtained in previous manipulations of attitude clarity (repeated expression; Cheatham & Tormala, 2015; Petrocelli et al., 2007), Cohen’s $f = .24$.

Procedure. We first invited participants to think for 20 s about a colleague toward whom they held a negative attitude. Participants were unable to go to the next screen before time ended. Next, we presented a scenario in which participants were talking with a friend, other than the one they imagined in the first part of the study. We manipulated perceived listening by changing the description of the friend’s attention, comprehension efforts, and presence (e.g., by manipulating the friend’s interest and asking follow-up questions; see supplementary materials). We randomly assigned participants to a high-, a moderate-, or a poor-quality listening condition. Finally, participants answered the questionnaires below.

Measures

Perceived listening. We adapted seven items from a Listening Scale (Itzchakov et al., 2017), tailored to the current vignette (e.g., “I felt the friend listened to me”).

Attitude clarity and correctness. We adapted a seven-item measure (Petrocelli et al., 2007), which consists of four items measuring clarity (e.g., “How certain are you that you know what your true attitude toward the colleague really is?”) and three items measuring correctness (e.g., “How certain are you that your attitude toward the colleague is the correct attitude to have?”).

Social anxiety. We used the seven-item State-Social-Anxiety scale (Kashdan & Steger, 2006) and adapted it to our experimental setting (e.g., “I was worried about what the listener thought of me”).

Objective ambivalence. We examined objective ambivalence as a control variable and measured it using a Split-Semantic-Differential scale, which included two pairs of items, one positive and one negative, asking about cognitive or emotional aspects of the attitude object (Kaplan, 1972). Items related to the positive aspect ranged from 0 to 10 on a Likert-type scale ($\alpha = .93$), whereas items related to the negative aspect ranged from −10 to 0 ($\alpha = .87$). We calculated objective ambivalence as $(Positive + |Negative|) / 2 - |Positive - Negative|)$ (Thompson, Zanna, & Griffin, 1995); scores range from −5 to 10.

Attitude extremity. We examined attitude extremity as a control variable and calculated it by the formula: $|Positive + Negative|$ (Kaplan, 1972). The scale ranged from 0 to 10. Higher scores indicated more extreme attitude.

Results and Discussion

Table 1 presents the descriptive statistics, including reliability, and intercorrelations for all measures. In all the studies, the means and standard deviations by experimental conditions are provided in the supplementary materials.

Listening manipulation check. Participants in the high-quality listening condition experienced the highest levels of perceived listening, whereas participants in the poor-quality listening condition experienced the lowest levels, $F(2, 190) = 168.76, p < .001, \eta_p^2 = .64$, 95% confidence interval ($CI) = [0.56, 0.70]$, indicating that our manipulation was successful.

Main effects. Listening increased both attitude clarity, $F(2, 190) = 8.34, p < .001, \eta_p^2 = .08$, 95% CI = [0.02, 0.16], and attitude correctness, $F(2, 190) = 5.23, p = .006, \eta_p^2 = .06$, 95% CI = [0.01, 0.12]. However, as in previous studies (Rios et al., 2014), the correlation between attitude clarity and
correctness was strong (see Table 1). Hence, to examine the independent effects of each measure, we submitted each certainty measure to an ANCOVA that controlled for the other form. Consistent with predictions, when controlling for attitude correctness, participants in the high-quality listening condition reported greater clarity, $M_{\text{adjusted}} = 4.83$, than participants in the moderate- and poor-listening conditions, $M_{\text{adjusted}} = 4.57, 4.40$, respectively, $F(2, 189) = 3.18, p = .044, \eta^2_p = .03$. Controlling for clarity, however, participants reported similar levels of attitude correctness in the high-, moderate-, and poor-quality listening conditions, $M_{\text{adjusted}} = 4.48, 4.42, 4.36$, respectively, $F(2, 189) = 0.27, p = .763, \eta^2_p = .00, 95\% \text{ CI} = [0.00, 0.03]$. Moreover, the effect of the listening manipulation on clarity was significant also when controlling for correctness and objective ambivalence, $F(2, 188) = 5.00, p = .008, \eta^2_p = .05, 95\% \text{ CI} = [0.004, 0.12]$, and marginally significant when controlling for both attitude correctness and extremity, $F(2, 188) = 2.50, p = .084, \eta^2_p = .03, 95\% \text{ CI} = [0.00, 0.08]$.

**Mediation analysis.** Participants in the high-quality listening condition reported the lowest levels of social anxiety, whereas participants in the poor-quality listening condition reported the highest levels, $F(2, 190) = 16.30, p < .001, \eta^2_p = .15, 95\% \text{ CI} = [0.06, 0.23]$. To simplify our mediation analysis and to be consistent with the relatively linear effects observed across conditions, we created a contrast code for the experimental manipulation, assigning the values of 1, 0, and −1, to the high-, moderate-, and poor-quality listening conditions, respectively.

Next, we examined whether social anxiety mediated the effect of listening condition on attitude clarity, using bootstrapping procedures (Preacher & Hayes, 2008). To test this hypothesis, in this and all the following studies, the dependent variable was attitude clarity, controlling for attitude correctness, and the test was based on 95\% CI of 5,000 bootstrapped samples. As can be seen in Figure 2, the indirect effect was significant, $\beta = .10, 95\% \text{ CI} = [0.05, 0.17]$, whereas the direct effect was not significant, $\beta = -.10, 95\% \text{ CI} = [-0.02, 0.23]$. The results suggest that social anxiety played a mediating role in the effect on attitude clarity.

In sum, in Study 1, the perception of being listened to increased attitude clarity, and this effect was mediated by social anxiety. Moreover, listening increased attitude clarity above and beyond the effects on attitude correctness and objective ambivalence. However, Study 1 employed vignettes to manipulate listening, rather than actual listening behavior. Although this is a potential weakness, past work suggests that people’s perceptions of listening are often critical to the effects of listening (e.g., Pasupathi, 2001), and some previous work also finds that these perceptions can even occur in the absence of an objectively high-quality-listening encounter (Bodie, Jones, Vickery, Hatcher, & Cannava, 2014). Nevertheless, all future studies manipulated actual listening behavior.

**Study 2**

Our goals in Study 2 were to replicate the results of Study 1 with actual listeners, to test both social anxiety and
self-awareness as potential mediators of the effect of perceived listening on attitude clarity, and to examine whether the effects are independent of listening effects documented in previous research.

**Method**

**Participants.** We recruited 98 first-year undergraduates from a local university to participate in exchange for course credit, \( M_{\text{age}} = 24.4, SD = 2.30, 48\% \) female. This sample size has a power of .82 to detect the overall effect on clarity obtained in Study 1 (Cohen’s \( d \) equivalent = .59).

**Procedure.** Participants first read a newspaper article describing a recent Supreme Court (Israel) decision ordering the Israeli military to return the corpses of terrorists who committed a suicide attack back to their families. After reading the article, participants completed a brief questionnaire about their political attitudes. Next, we told participants that they would be discussing the topic with another participant and that one of them would be randomly assigned to speak about their attitude for 15-min, while the other would listen. Actually, we assigned all participants the speaking role, and randomly assigned them to receive either high- or moderate-quality listening.

In the high-quality listening condition, the listeners were recent graduates from the university’s social work department (one female, two males, \( M_{\text{age}} = 26.9, SD = 1.26 \)). Social work students complete either five or six interpersonal-communication courses, and they undergo 2 years of practical training for 16 to 21 hr a week. A major part of the practical training is listening to clients. We instructed these social work students to “listen to your interlocutor as you were trained to listen.”

In the moderate listening condition, the listeners were three undergraduate business students (one female, two males, \( M_{\text{age}} = 25.44, SD = 1.88 \)). Listeners in the moderate listening condition were instructed to “listen to your interlocutor as you usually listen.” It is noteworthy that speakers did not know the listeners were confederates and thought they were simply other participants in the study. After the 15-min conversation, we asked participants to fill out questionnaires containing the manipulation check and dependent variables. Finally, participants were debriefed.

**Measures**

**Listening manipulation check.** We used seven items from the Constructive-Listening-Behavior scale (Kluger & Bouskila-Yam, in press), adapted to fit the experimental setting. Items ranged from 1 = *a very small degree* to 7 = *a very high degree* (e.g., “my interlocutor tried hard to understand what I was saying”).

**Article’s political leaning.** We asked participants to rate the extent to which they felt the content in the article represented a left- versus a right-wing opinion on a 100-point scale on which higher values corresponded to a right-wing opinion, with 50 representing a neutral/balanced view. Participants perceived the article to lean, not significantly, toward a left-wing opinion, \( M = 45.3, SD = 26.7, 95\% \) CI = [40.0, 50.6].

**Participant’s political attitude.** We asked participants to rate their political attitude using the following items: “What is your political preference?” and “When it comes to national security, what policy do you support?” The scale ranged from 0 to 10, where 0 = *extremely right*, 5 = *neutral*, and 10 = *extremely left*. The reliability of the items was sufficient, \( \alpha = .85 \); hence, we averaged the scores to a measure of political attitudes. Participants reported, on average, moderate political attitudes, leaning toward the left, \( M = 5.50, SD = 4.33 \).

**Listener’s political attitude.** We asked participants to rate their perception of the listener’s political attitude. Scores were on the same scale as for article’s political leaning. On average, participants perceived their listener’s political attitude as relatively moderate, leaning toward the left, \( M = 45.9, SD = 24.2 \).

**Attitude clarity and correctness.** We used the same measures of attitude clarity and correctness as in Study 1, adapted for the current topic.

**Social anxiety and objective ambivalence.** Measured as in Study 1.

**Self-awareness.** We adopted six items from the reflective self-awareness measure (Trapnell & Campbell, 1999) that were amenable to creating a *state*-self-awareness measure relevant to our experimental context (e.g., “When I was talking, I felt I explored my inner-self”), using a scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

**Subjective ambivalence.** We measured subjective ambivalence with a three-item scale, modified to fit the context of the conversation (e.g., “I feel conflicted regarding my attitude toward returning bodies”; Priester & Petty, 1996).

**Results and Discussion**

Table 2 presents the descriptive statistics and intercorrelations of all measures.

**Listening manipulation check and controls.** Speakers in the high-quality listening condition perceived better listening (our manipulation check) than participants in the moderate listening condition, \( t(96) = 5.08, p < .001, 95\% \) CI\textsubscript{difference} = [0.61, 1.45]\textsuperscript{2} \( d = 1.03 \). Thus, the manipulation was successful.

**Main effects.** Participants in the high-quality listening condition reported higher attitude clarity, \( t(96) = 3.04, p = .003, \)
95% CI\text{difference} = [0.17, 0.77], d = 0.62, and a marginally significant higher attitude correctness, r(96) = 1.64, p = .104, 95% CI\text{difference} = [–0.04, 0.50], d = 0.33, compared with the moderate listening condition. The effect of listening on attitude clarity remained significant after controlling for attitude correctness, with people in the high-quality listening condition reporting greater clarity, \( \bar{M}_{\text{adjusted}} = 5.03 \), than participants in the moderate-quality listening condition, \( \bar{M}_{\text{adjusted}} = 4.67 \), \( F(1, 95) = 6.46, p = .013, \eta^2_p = .06 \), 95% CI = [0.003, 0.19]. However, when controlling for attitude clarity, there was no effect on attitude correctness, \( F(1, 95) = 0.12, p = .729, \eta^2_p = .00 \), 95% CI = [0.00, 0.05]. The effects of the experimental manipulation on attitude clarity were significant when controlling for attitude correctness and objective ambivalence, \( F(1, 94) = 8.58, p = .004, \eta^2_p = .06 \), 95% CI = [0.01, 0.20]; attitude correctness and extremity, \( F(1, 94) = 4.63, p = .034, \eta^2_p = .05 \), 95% CI = [0.001, 0.15]; and marginally significant when controlling for attitude correctness and subjective ambivalence, \( F(1, 94) = 3.72, p = .057, \eta^2_p = .04 \), 95% CI = [0.00, 0.14].

Participants in the high-quality listening condition reported lower levels of social anxiety, \( r(96) = –4.22, p < .001 \), 95% CI\text{difference} = [–1.81, –0.65], \( d = –0.85 \), and higher self-awareness, \( r(96) = 4.03, p < .001 \), 95% CI\text{difference} = [0.37, 1.24], \( d = 0.82 \).

Because perceptions of social consensus can affect attitude correctness (Petrocelli et al., 2007), we wanted to make sure that the listening manipulation did not create perceptions of consensus by unintentionally manipulating perceived agreement of the listener. Such consensus would be indicated by increased congruence between participants’ own attitudes and the perceived attitudes of the listener in the high-quality listening condition. To examine this, we regressed participants’ perceptions of the listener’s attitude on participants’ own attitude, listening condition, and the interaction of these two variables. In a hierarchical regression analysis, the interaction was not significant, \( \Delta R^2 = .02 \), \( \Delta F = 1.18, p = .28 \), suggesting that the listening manipulation did not affect perceived consensus by the listener. Thus, this analysis did not provide support for the alternative that the listening condition affected perceived consensus.

**Mediation analysis.** We tested serial mediation using Model 6 in PROCESS (Hayes, 2013). The standardized indirect effect for the serial mediation (listening \( \rightarrow \) social anxiety \( \rightarrow \) reflective self-awareness \( \rightarrow \) attitude clarity) was significant, \( \beta = .02, 95\% \text{CI} = [0.001, 0.06] \). The parallel single-mediator indirect effects of the manipulation via social anxiety, \( \beta_s = .11, 95\% \text{CI} = [0.03, 0.20] \), and reflective self-awareness, \( \beta = .07, 95\% \text{CI} = [0.001, 0.20] \), were also significant. The direct effect was not significant, \( \beta = .05, 95\% \text{CI} = [–0.16, 0.26] \) (see Figure 3). Thus, this model suggests that clarity was affected by both social anxiety and reflective self-awareness, each of which was affected by listening. Furthermore, listening had both a direct and an indirect effect through social anxiety on self-awareness. That is, there was simultaneous support for parallel indirect effects through social anxiety and self-awareness and for a serial indirect effect.

Furthermore, to distinguish between attitude clarity and subjective ambivalence, we ran the same mediation model (PROCESS, Model 6) with subjective ambivalence as an outcome. Neither the serial, \( \beta = –.0001, 95\% \text{CI} = [–0.011, 0.004] \), nor the parallel indirect effects through social anxiety, \( \beta = .001, 95\% \text{CI} = [–0.04, 0.05] \), nor self-awareness, \( \beta = .03, 95\% \text{CI} = [–0.07, 0.15] \), were significant. These results suggest that the mediation model does not predict a change in subjective ambivalence.

In sum, Study 2 replicated the results of Study 1 while manipulating actual listening using trained listeners. Furthermore, perceiving high-quality listening decreased speakers’ social anxiety and increased reflective self-awareness; this, in turn, mediated the effect of the listening manipulation on attitude clarity. However, the use of trained listeners has a couple of limitations. First, it introduces a potential confound between the listener and the listening behavior. Second, although we used an actual interaction, the ecological validity of the interaction may be limited. Specifically, it is unclear whether the effects of listening would extend to differences in listening quality among untrained listeners. Hence, in Study 3, we manipulated listening in a way that is independent of the listener’s background training and more closely resembles an ordinary peer interaction.

### Table 2. Descriptive Statistics for Study 2.

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<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>1. Perceived listening</td>
<td>5.90</td>
<td>1.13</td>
<td>(.90)</td>
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<td></td>
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<td>2. Social anxiety</td>
<td>2.46</td>
<td>1.57</td>
<td>–.35</td>
<td>(.85)</td>
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<td></td>
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<tr>
<td>3. Reflective self-awareness</td>
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<td>1.17</td>
<td>.25</td>
<td>–.29</td>
<td>(.85)</td>
<td></td>
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<tr>
<td>4. Attitude clarity</td>
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<td>.27</td>
<td>–.33</td>
<td>.39</td>
<td>(.91)</td>
<td></td>
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<td>5. Attitude correctness</td>
<td>4.11</td>
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<td>.04</td>
<td>–.01</td>
<td>.17</td>
<td>.45</td>
<td>(.82)</td>
<td></td>
<td></td>
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<tr>
<td>6. Objective ambivalence</td>
<td>6.92</td>
<td>5.35</td>
<td>.21</td>
<td>–.29</td>
<td>.12</td>
<td>–.14</td>
<td>–.08</td>
<td>(NA)</td>
<td></td>
<td></td>
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<td>7. Attitude extremity</td>
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<td>.49</td>
<td>–.15</td>
<td>–.13</td>
<td>.09</td>
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<td>8. Subjective ambivalence</td>
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<td>–.26</td>
<td>.14</td>
<td>–.11</td>
<td>–.41</td>
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<td>.31</td>
<td>–.38</td>
<td>(.90)</td>
</tr>
</tbody>
</table>

Note. Reliabilities in parentheses. Values in bold differ from 0 at \( p < .05 \), and values in italics differ from 0 at \( p < .01 \).
Study 3

Studies 1 and 2 have demonstrated consistent effects of high-quality listening on attitude clarity, as well as on our proposed mediating variables of social anxiety and reflective self-awareness. However, a critical question is whether the effects of listening on attitude clarity consequently affect behavior intentions (Hypothesis 5). In addition, in Study 3, we manipulated low-quality listening via a distraction, which is easier to implement because it does not rely on using trained listeners.

Method

Participants. We recruited 102 first-year undergraduate students from the Hebrew University of Jerusalem to participate in exchange for course credit, $M_{age}$ = 23.60, $SD$ = 2.30, 64% female. This sample size has a power of .85 to detect the average effect size obtained in Studies 1 and 2 ($d$ = 0.60).

Procedure. We randomly assigned each dyad to either high- or low-quality listening condition and randomly determined which person in the dyad would adopt the speaker-first role or the listener-first role. Next, we asked randomly those assigned to a speaker-first role to read a short paragraph either about a possible tax on junk food to encourage healthier eating (Clark, Wegener, & Fabrigar, 2008), or about an ostensible-university requirement that students volunteer for 50 hr in some sort of work that will benefit society (Baker & Petty, 1994).

Then, the speaker–listener dyads set in predestinated chairs, facing each other, and asked speakers to talk for 12 min about the topic they had been assigned. We asked all listeners to “listen as you would listen to a close friend.” Yet, behind the speakers’ chair, there were five computer screens visible only to listeners. In the low-quality listening condition, the five computer screens flickered fast in black and white, whereas in the high-quality listening condition the computers were turned off. Note that we labeled the condition without distraction as high-quality listening, but this is a relative comparison, as the quality of listening is not necessarily as high as the listening of the trained listeners in Study 2.

After the conversation, speakers answered a questionnaire containing the research variables, including measures of their attitudes and attitude clarity toward the topic they just talked about. After answering the questionnaires, we asked participants to switch chairs and speaker–listener roles for an additional 12-min conversation. In the second round, speakers received the paragraph describing the second topic. After completion of the second conversation, we asked the speakers to complete the parallel measures, this time tailored to the topic of the second conversation.

We found no difference in perceived listening between the first and second speakers, $t(100) = 0.47, p = .64$, nor an interaction between the order of speaker and experimental condition on perceived listening, $F(1, 98) = 0.06, p = .81$. Moreover, there was no interaction between the attitude topic and experimental condition on any of our dependent variables (DVs), all $F$s(1, 98) $\leq 1.38$, $p$s $\geq .24$.

Measures. Unless otherwise noted, we presented all items on scales ranging from 1 = not at all agree to 9 = completely agree.

Perceived listening (manipulation check). We used the same items as in Study 2, but expanded to a 10-point response scale to 0 = not at all agree to 10 = completely agree.

Listener distraction. We measured the extent to which the distraction had an effect on listeners by asking them “during the conversation I experienced disturbances which hurt my ability to concentrate” and “the conditions in the room allowed me to listen without disturbances (reverse coded).”

Social anxiety, self-awareness, attitude clarity, attitude correctness, objective ambivalence, subjective ambivalence, attitude extremity. We used the same measure as in previous studies.
Attitude-expression intentions. Three items were used to assess attitude-expression intentions (Cheatham & Tormala, 2015). An example item was as follows: “Regarding the topic you just discussed, how likely would you be to share your views with your friends or family?”

Attitude-persuasion intentions. Three items were used to assess persuasion intentions (Cheatham & Tormala, 2015). An example item was as follows: “How likely would you be to try to persuade your friends or family to your position on this topic?”

Analysis. Because these data were potentially nonindependent (i.e., participants nested within a dyad), we first calculated the intraclass correlation (ICC) of all dependent variables. ICCs were between .15 and .39. When ICC < .45, in dyadic data, the level of nonindependence is consequential, and ordinary least squares (OLS) analyses typically yield the same conclusions as hierarchical linear modeling (Kenny, Kashy, & Cook, 2006). Hence, we employed OLS as in previous studies.

Results and Discussion

Descriptive statistics and intercorrelations among variables are presented in Table 3.

Listening manipulation check. Speakers in the high-quality listening condition perceived better listening than speakers in the distracted listening condition, \( t(100) = 4.41, p < .001, 95\% \text{ CI}_{\text{difference}} = [0.83, 2.09], d = 0.89 \). Thus, our manipulation was successful. In addition, listeners in the high-quality listening condition reported feeling less distracted than listeners in the distracted listening condition, \( t(100) = 6.20, p < .001, 95\% \text{ CI}_{\text{difference}} = [2.06, 4.00], d = 1.24 \).

Main effects. Speakers in the high-quality listening condition, in comparison with the distracted listening condition, reported lower social anxiety, \( t(100) = -3.29, p = .001, 95\% \text{ CI} = [-1.82, -0.45], d = -0.66 \); higher self-awareness, \( t(100) = 3.41, p < .001, 95\% \text{ CI}_{\text{difference}} = [0.54, 2.05], d = 0.68 \); higher attitude clarity, \( t(100) = 2.97, p = .004, 95\% \text{ CI}_{\text{difference}} = [0.29, 1.45], d = 0.59 \); and, marginally, higher attitude correctness, \( t(100) = 1.95, p = .054, 95\% \text{ CI} = [-0.01, 1.22], d = 0.39 \). An ANCOVA indicated that speakers in the high-quality listening condition, \( M_{\text{adjusted}} = 7.40 \), felt higher attitude clarity, controlling for attitude correctness, than speakers in the distracted listening condition, \( M_{\text{adjusted}} = 6.92, F(1, 99) = 4.76, p = .031, \eta^2_p = .05, 95\% \text{ CI} = [0.001, 0.15] \). However, when controlling for attitude clarity, speakers reported similar attitude correctness across the high quality, \( M_{\text{adjusted}} = 6.27 \), and the distracted listening conditions, \( M_{\text{adjusted}} = 6.30, F(1, 99) = 0.02, p = .887, \eta^2_p = .00, 95\% \text{ CI} = [0.00, 0.01] \). Moreover, the effects of the listening manipulation on attitude clarity were marginally significant when controlling for both attitude correctness and objective ambivalence, \( F(1, 98) = 3.23, p = .075, \eta^2_p = .03, 95\% \text{ CI} = [0.00, 0.12] \); significant when controlling for attitude correctness and attitude extremity, \( F(1, 98) = 8.00, p = .006, \eta^2_p = .08, 95\% \text{ CI} = [0.01, 0.19] \); and marginally significant when controlling for attitude correctness and subjective ambivalence, \( F(1, 98) = 3.84, p = .053, \eta^2_p = .04, 95\% \text{ CI} = [0.00, 0.13] \). In addition, the speakers in the high-quality listening condition reported more attitude-expression intentions than the speakers in the distracted listening condition, \( t(100) = 1.99, p = .049, 95\% \text{ CI}_{\text{difference}} = [0.003, 1.50], d = 0.39 \). However, there was no effect on persuasion intentions, \( t(100) = 0.95, p = .34, 95\% \text{ CI}_{\text{difference}} = [-0.43, 1.23], d = 0.19 \), consistent with Hypothesis 5.

Mediation analysis. As in Study 2, we conducted mediation analysis using Model 6 in PROCESS. The standardized indirect effect for the serial mediation was significant, \( \beta = .02, 95\% \text{ CI} = [0.002, 0.05] \). The parallel indirect effects of the manipulation via social anxiety, \( \beta = .13, 95\% \text{ CI} = [0.06, 0.22] \), and reflective self-awareness, \( \beta = .06, 95\% \text{ CI} = [0.01, 0.10] \), were also significant.

Table 3. Descriptive Statistics for Study 3.

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<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<td>1. Listener distraction</td>
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<td>(.94)</td>
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<td>2. Perceived listening</td>
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<td>1.81</td>
<td>- .70</td>
<td>(.90)</td>
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<td>3. Social anxiety</td>
<td>2.46</td>
<td>1.57</td>
<td>.39</td>
<td>- .33</td>
<td>(.95)</td>
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<td>4. Reflective self-awareness</td>
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<td>1.96</td>
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<td>.26</td>
<td>- .28</td>
<td>(.89)</td>
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<tr>
<td>5. Attitude clarity</td>
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<td>1.53</td>
<td>- .28</td>
<td>.56</td>
<td>- .42</td>
<td>.36</td>
<td>(.94)</td>
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<td>7. Objective ambivalence</td>
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<td>.21</td>
<td>- .26</td>
<td>.40</td>
<td>.07</td>
<td>- .04</td>
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<td>8. Attitude extremity</td>
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<td>.17</td>
<td>- .80</td>
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<td>9. Attitude-expression intentions</td>
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<td>.57</td>
<td>- .49</td>
<td>.15</td>
<td>.75</td>
<td>.59</td>
<td>.08</td>
<td>.06</td>
<td>(.92)</td>
<td></td>
<td></td>
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<td>10. Persuasion intentions</td>
<td>5.33</td>
<td>2.11</td>
<td>.05</td>
<td>.31</td>
<td>- .20</td>
<td>.29</td>
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<td>.65</td>
<td>.03</td>
<td>.15</td>
<td>.61</td>
<td>(.90)</td>
<td></td>
</tr>
<tr>
<td>11. Subjective ambivalence</td>
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<td>1.98</td>
<td>.25</td>
<td>- .34</td>
<td>.30</td>
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<td>- .28</td>
<td>.23</td>
<td>- .22</td>
<td>- .20</td>
<td>- .26</td>
<td>(.90)</td>
</tr>
</tbody>
</table>

Note: Reliabilities in parentheses. Values in bold differ from 0 at \( p < .05 \), and values in italics differ from 0 at \( p < .10 \).
were also significant, whereas the direct effect was not significant, β = .00, 95% CI = [–0.19, 0.21] (see Figure 4). Moreover, all standardized indirect effects of the listening manipulation via attitude clarity (residualized from attitude correctness) on attitude-expression intentions were significant (see supplementary materials for indirect effects in Studies 3-5), thus providing support for Hypothesis 5.

Furthermore, we ran the same mediation model with subjective ambivalence as an outcome replacing attitude clarity. Neither the serial, β = .001, 95% CI = [–0.005, 0.015], nor the parallel indirect effects through social anxiety, β = –.13, 95% CI = [–0.27, 0.04], nor self-awareness, β = –.05, 95% CI = [–0.15, 0.01], were significant.

In addition, we extended the mediation models to examine the outcome—attitude-expression intentions. When we tested the indirect effects of the listening manipulation via attitude clarity on attitude-expression intentions, controlling for subjective ambivalence, the indirect effect did not contain zero. On the contrary, when a parallel model was run predicting subjective ambivalence (and controlling for attitude clarity), the indirect effect did contain zero (see supplementary materials). These results suggest that attitude clarity, but not subjective ambivalence, is a predictor of attitude-expression intentions.

In sum, Study 3 replicated our earlier studies and showed that perceiving high-quality listening increases intentions to share attitudes via increasing attitude clarity. In this study, we manipulated perceived listening with distraction, rather than by using trained listeners, and yet we replicated the results. Moreover, this manipulation may be easier to replicate by researchers who have no access to trained listeners. However, it is still arguable that our distraction manipulation does not fully capture people’s daily interactions. Notably, people are often distracted by electronic devices, such as smartphones, which prevent people from being attentive and comprehend their interlocutors. Therefore, in Study 4, we manipulated listening perception by using smartphones.

**Study 4**

Study 4 had several goals: replicate the results of Studies 1 to 3, increase both the ecological and construct validity of the listening-perception manipulation, and test alternative mediators of the effect of listening on attitude clarity. As in Study 3, we manipulated low-quality listening via a distraction.

**Method**

**Participants.** We recruited 112 undergraduates from an academic college to participate in exchange for course credit, $M_{age} = 27.08, SD = 4.29$. This sample size has a power of .88 to detect the average effect size on attitude clarity obtained in Studies 1 to 3.

**Procedure.** We used the same procedure as in Study 3 with a minor change in the attitude topic and a change in the distraction manipulation. We randomly assigned speakers to read a paragraph either about a proposal for basic-universal income or (as in Study 3) about an ostensible-university requirement that students volunteer for 50 hr of work that will benefit society.

Then, we asked the speaker–listener dyads to sit face-to-face and converse for 10 min about the topic the speaker had been assigned to. We asked all listeners to “listen as you listen when you are at your best.” We randomly assigned the listeners in half of the dyads to receive a written instruction stating that during the conversation they will receive a text message on their cell phone with short questions which they will need to answer; for example, “What event irritated you the most recently?” and “What is the best recommendation that you can give to a new student?” Listeners were instructed not to share the instructions or content of the text messages they received with the speakers. We sent the text messages using an automatic system that sent the first message 1 min after the conversation begun and following messages in 90-s intervals. As in Study 3, after answering questionnaires containing the research variables, participants in each dyad switched roles where the speakers talked about the remaining attitude topic.

As in Study 3, there was no main effect for the order of the speakers on their perception of listening, $F(1, 108) = 2.31, p = .131$, nor an interaction between the order of speaker and experimental condition on perceived listening.

**Figure 4. Study 3: Standardized estimates of simultaneous-mediation model.**

*Note. Standard errors in parentheses.

*p < .05, **p < .01.
the distracted listening condition, better listening in the high-quality listening condition than in 
and .31, so we used OLS as in Study 3. Speakers perceived 
are presented in Table 4.

\[ ICC \text{ of all } DV \text{ were between .12 and .31.} \]

Descriptive statistics and intercorrelations among variables 
are presented in Table 4. ICCs of all DVs were between .12 
and .31, so we used OLS as in Study 3. Speakers perceived 
better listening in the high-quality listening condition than in 
the distracted listening condition, \( t(110) = 4.19, p < .001, \)

\[ 95\% CI_{\text{difference}} = [0.78, 2.18], d = 0.80. \] In addition, listeners 
in the high-quality condition felt less distracted than listeners 
in the distracted listening condition, \( t(110) = -6.00, p < .001, \)

\[ 95\% CI_{\text{difference}} = [-4.71, -2.38], d = -1.14, \] indicating successful manipulation.

\[ F(1, 108) = 0.98, p = .324. \] Moreover, there was no main 
effect of the topic on attitude clarity nor an interaction 
between the attitude topic and experimental condition on 
any of our DVs, \( F(1, 108) \leq 0.99, ps \leq .321. \)

Measures. Unless otherwise noted, we presented all items on 
scales ranging from 0 = not at all agree to 10 = completely 
agree.

Listener distraction, perceived listening, social anxiety, self- 
awareness, attitude clarity, attitude correctness, objective-attitude 
ambivalence, attitude-expression intentions, attitude-persuasion 
intentions. We used the same items as in Study 3.

Perception of agreement with the listener. We used three 
items that measure the extent to which speakers felt that the 
listeners agreed with the attitude they expressed. For example, “I think the listener agreed with my argument about the 
issue.”

Thought effort. We measured the amount of thought effort 
by asking speakers, “How much effort did you dedicate to 
thinking about the topic?”

Attitude importance. We measured attitude importance by 
asking speakers how important each issue was to them per- 
sonally and how much they personally cared about the issue 
(Holbrook, Berent, Kroasnick, Visser, & Boninger, 2005).

Results and Discussion

Descriptive statistics and intercorrelations among variables 
are presented in Table 4. ICCs of all DVs were between .12 
and .31, so we used OLS as in Study 3. Speakers perceived 
better listening in the high-quality listening condition than in 
the distracted listening condition, \( t(110) = 4.19, p < .001, \)

\[ 95\% CI_{\text{difference}} = [0.78, 2.18], d = 0.80. \] In addition, listeners 
in the high-quality condition felt less distracted than listeners 
in the distracted listening condition, \( t(110) = -6.00, p < .001, \)

\[ 95\% CI_{\text{difference}} = [-4.71, -2.38], d = -1.14, \] indicating successful manipulation.

Main effects. Speakers reported lower social anxiety in the 
high-quality listening condition than in the distracted listening 
condition, \( t(110) = -2.75, p = .007, 95\% CI_{\text{difference}} = 
[-1.88, -0.31], d = -0.52; \] higher self-awareness, \( t(110) = 
1.99, p = .049, 95\% CI_{\text{difference}} = [0.001, 1.49], d = 0.38; \) and 
higher attitude clarity, \( t(110) = 2.31, p = .02, 95\% CI = [0.12, 
1.53], d = 0.44. \] There was no effect on attitude correctness, 
\( t(110) = 0.86, p = .39, 95\% CI_{\text{difference}} = [-0.45, 1.13], d = 
0.34. \] An ANCOVA indicated that speakers in the high-quality 
listening condition, \( M_{\text{adjusted}} = 7.72, \) felt higher attitude 
clarity than speakers in the distracted listening condition, 
\( M_{\text{adjusted}} = 7.11, \) controlling for attitude correctness, 
\( F(1, 109) = 5.39, p = .02, \eta^2_p = .05, 95\% CI = [0.004, 0.14]. \) However, 
when controlling for attitude clarity, speakers reported similar 
attitude correctness across the high-quality listening, 
\( M_{\text{adjusted}} = 6.83, \) and the distracted listening conditions, 
\( M_{\text{adjusted}} = 7.10, F(1, 109) = 0.83, p = .364, \eta^2_p = .01, 95\% CI = [0.00, 
0.07]. \) Moreover, the effect of the listening manipulation on attitude clarity was significant when controlling for both attitude 
correctness and objective-attitude ambivalence, \( F(1, 108) = 4.96, p = .028, \eta^2_p = .04, 95\% CI = [0.0003, 0.15], \) and 
when controlling for correctness and extremity, \( F(1, 108) = 5.37, p = .02, \eta^2_p = .05, 95\% CI = [0.0004, 0.14]. \)

In addition, the speakers in the high-quality listening condition 
reported more attitude-expression intentions than the speakers in the distracted listening condition, \( t(110) = 2.16, p 
= .033, 95\% CI_{\text{difference}} = [0.13, 1.93], d = 0.41. \) However, 
there was no effect on persuasion intentions, \( t(110) = 1.30, p 
= .196, 95\% CI_{\text{difference}} = [-0.36, 1.73], d = 0.25. \) This result 
replicates Study 3 in supporting Hypothesis 5.
Importantly, there was no difference between the experimental conditions in speakers’ perception of listener agreement, $t(110) = 1.29, p = .199$, 95% CI difference $= [–0.28, 1.36], d = 0.25$; self-reported thought effort, $t(110) = 0.77, p = .442$, 95% CI difference $= [–0.45, 1.03], d = 0.15$; attitude importance, $t(110) = 0.54, p = .590$, 95% CI difference $= [–0.64, 1.12], d = 0.10$; or reported distraction, $t(110) = −1.20, p = .232$, 95% CI difference $= [–1.87, 0.46], d = −0.23$.

Mediation analysis. As in previous studies, we conducted mediation analysis using Model 6 in PROCESS. The standardized indirect effect for the serial mediation was significant, $\beta = .007$, 95% CI $= [0.004, 0.03]$. The parallel indirect effects of the manipulation via social anxiety, $\beta = .08$, 95% CI $= [0.04, 0.36]$, and reflective self-awareness, $\beta = .06$, 95% CI $= [0.02, 0.09]$, were also significant, whereas the direct effect was not significant, $\beta = .09$, 95% CI $= [–0.08, 0.26]$ (see Figure 5). Moreover, all indirect effects of the listening manipulation on attitude-expression intentions via attitude clarity were significant (see supplementary materials), replicating Study 3.

In sum, Study 4 provided additional support for our hypotheses using a different listening manipulation and ruled out alternative mediators of the effect of listening on attitude clarity. Importantly, this study lent additional support to the hypothesis that the effect of listening on attitude clarity carries over to attitude-expression intention.

Study 5

Study 5 was a preregistered replication of Study 3 (https://aspredicted.org/kz6ca.pdf). We also recorded the conversations to code for the extent that speakers tried to persuade the listeners.

Method

Participants. We recruited 186 undergraduates to participate in exchange for course credit or monetary compensation (approximately US$8), $M_{age} = 23.67, SD = 1.51$. This sample has a power of .97 to detect the average effect size of Studies 1 to 4 on attitude clarity, $d = 0.56$, controlled for correctness.

Procedure. The procedure and measures were identical to Study 3 except that we audio recorded the conversations. Two coders rated the extent to which each speaker attempted to persuade the listener on a 5-point scale (1 = not at all, 3 = moderately, 5 = completely); interrater reliability was high ($\alpha = .86$).

Results and Discussion

Descriptive statistics and intercorrelations among variables are presented in Table 5. ICCs of all DVs were between .28 and .42; hence, we used OLS as in previous studies. Speakers in the high-quality listening condition perceived better listening than speakers in the distracted condition, $t(184) = 8.96, p < .001$, 95% CI difference $= [0.99, 1.63], d = 1.31$. In addition, listeners in the high-quality condition felt less distracted than listeners in the distracted listening condition, $t(184) = −15.36, p < .001$, 95% CI difference $= [–2.62, –1.88], d = −2.25$. There was no difference in perceived listening between the first and second speakers, $t(184) = 0.72, p = .472$, nor an interaction between the order of speaker and experimental condition on perceived listening, $F(1, 182) = 0.63, p = .428$. Moreover, there was no interaction between the attitude topic and experimental condition on any of the DVs ($0.293 < ps < .637$).

Main effects. Speakers in the high-quality listening condition, relative to speakers in the distracted condition, reported lower social anxiety, $t(184) = −5.86, p < .001$, 95% CI $= [–3.35, –1.66], d = −0.86$; higher self-awareness, $t(184) = 8.17, p < .001$, 95% CI difference $= [2.10, 3.45], d = 1.19$; and higher attitude clarity, $t(184) = 3.91, p < .001$, 95% CI difference $= [0.64, 1.93], d = 0.57$. There was no effect on attitude correctness, $t(184) = 1.39, p = .166$, 95% CI difference $= [–0.17, 1.00], d = 0.20$. An ANCOVA indicated that speakers in the high-quality listening condition, $M_{adjusted} = 7.65$, reported more attitude clarity than speakers in the distracted listening
Table 5. Descriptive Statistics for Study 5.

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<th>M</th>
<th>SD</th>
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<th>2</th>
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<td>−.72</td>
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<td>.62</td>
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<td>2.09</td>
<td>−.27</td>
<td>.25</td>
<td>−.33</td>
<td>.22</td>
<td>.62</td>
<td>(.88)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Objective ambivalence</td>
<td>0.38</td>
<td>3.96</td>
<td>−.32</td>
<td>.31</td>
<td>−.35</td>
<td>.40</td>
<td>.07</td>
<td>−.10</td>
<td>(.NA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude extremity</td>
<td>4.61</td>
<td>3.41</td>
<td>.30</td>
<td>−.14</td>
<td>.22</td>
<td>−.27</td>
<td>.02</td>
<td>−.03</td>
<td>−.85</td>
<td>(.NA)</td>
<td></td>
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<tr>
<td>Expression intentions</td>
<td>6.99</td>
<td>2.84</td>
<td>−.24</td>
<td>.60</td>
<td>−.55</td>
<td>.42</td>
<td>.67</td>
<td>.40</td>
<td>.16</td>
<td>.13</td>
<td>(.96)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persuasion intentions</td>
<td>4.76</td>
<td>3.00</td>
<td>−.10</td>
<td>.30</td>
<td>−.31</td>
<td>.24</td>
<td>.39</td>
<td>.54</td>
<td>−.19</td>
<td>.16</td>
<td>.51</td>
<td>(.94)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective ambivalence</td>
<td>2.04</td>
<td>2.19</td>
<td>.29</td>
<td>−.06</td>
<td>.08</td>
<td>−.17</td>
<td>−.30</td>
<td>−.14</td>
<td>.20</td>
<td>.07</td>
<td>−.09</td>
<td>−.08</td>
<td>(.92)</td>
<td></td>
</tr>
<tr>
<td>Persuasion attempts</td>
<td>2.61</td>
<td>1.90</td>
<td>−.07</td>
<td>.09</td>
<td>−.16</td>
<td>.07</td>
<td>.15</td>
<td>.33</td>
<td>−.28</td>
<td>.34</td>
<td>.43</td>
<td>−.12</td>
<td>−.67</td>
<td>(.NA)</td>
</tr>
</tbody>
</table>

Note. Reliabilities in parentheses. Values in bold differ from 0 at p < .05, and values in italics differ from 0 at p < .10.

condition, $M_{adjusted} = 6.64$, controlling for attitude correctness, $F(1, 183) = 15.27, p < .001$, $\eta^2_p = .05$, 95% CI = [0.02, 0.16], but not vice versa, $F(1, 183) = 1.61, p = .206$, $\eta^2_p = .07$, 95% CI = [0.00, 0.05]. Moreover, the effect of the listening manipulation on attitude clarity was significant when controlling for attitude correctness and objective-attitude ambivalence, $F(1, 183) = 16.44, p < .001$, $\eta^2_p = .08$, 95% CI = [0.02, 0.16]; attitude correctness and attitude extremity, $F(1, 183) = 17.24, p < .001$, $\eta^2_p = .09$, 95% CI = [0.02, 0.17]; and correctness and subjective ambivalence, $F(1, 183) = 12.17, p = .001$, $\eta^2_p = .05$, 95% CI = [0.01, 0.14].

Speakers in the high-quality listening condition reported more attitude-expression intentions, $t(184) = 4.07, p < .001$, 95% CI$_{difference} = [0.85, 2.46]$, $d = 0.60$. There was no effect on persuasion intentions, $t(184) = 1.56, p = .120$, 95% CI$_{difference} = [−0.14, 1.19]$, $d = 0.23$. Furthermore, as indicated by the coding of the conversation, there was no difference between participants in the high-quality listening condition ($M = 2.77, SD = 1.86$) and participants in the distracted listening condition ($M = 2.43, SD = 1.92$), with regard to persuasion attempts during the conversation, $t(184) = 1.22, p = .224$, 95% CI$_{difference} = [−0.21, 0.88]$, $d = 0.18$.

Mediation analysis. Model 6 in PROCESS indicated a significant standardized indirect effect for the serial mediation, $\beta = .05$, 95% CI = [0.02, 0.11]. The parallel indirect effects of the manipulation via social anxiety, $\beta = .10$, 95% CI = [0.03, 0.20], and reflective self-awareness, $\beta = .11$, 95% CI = [0.04, 0.21], were also significant, whereas the direct effect was not significant, $\beta = .08$, 95% CI = [−0.28, 0.30] (see Figure 6). Moreover, as in Studies 3 and 4, all indirect effects of the listening manipulation on attitude-expression intentions via attitude clarity (controlling for attitude correctness) were significant (see supplementary materials), providing further support for Hypothesis 5.

Finally, as in previous studies, we distinguished between the effects of attitude clarity and subjective ambivalence by entering subjective ambivalence as an alternative mediator and outcomes. Therefore, we first run Model 6 in PROCESS with subjective ambivalence as an outcome replacing attitude clarity. Neither the serial, $\beta = −.02$, 95% CI = [−.07, 0.04], nor the parallel indirect effects through social anxiety, $\beta = .01$, 95% CI = [−.06, 0.10], nor self-awareness, $\beta = −.04$, 95% CI = [−.11, 0.01], were significant. Second, as in Study 3, we tested indirect effects of attitude clarity and subjective ambivalence on attitude-expression intentions controlling for each other. Attitude clarity predicted attitude-expression intentions controlling for subjective ambivalence, as evident by a significant indirect effects. On the contrary, subjective ambivalence did not predict attitude-expression intentions controlling for attitude clarity, as evident by insignificant indirect effects (see supplementary materials).

The results of Study 5 fully replicated Studies 3 and 4, while showing that listening does not affect actual persuasion attempts, and where actual persuasion attempts were correlated with relevant variables, as would be expected. This lends further support to our argument that listening increases attitude sharing intention, but not the more combative form of attitude-persuasion intention.

General Discussion

We developed a theoretical model according to which perceiving high-quality listening affects the clarity, but not the correctness component of attitude certainty. Across five experiments, we demonstrated this effect. Furthermore, we demonstrated that the effect of listening quality on attitude clarity was not only independent of attitude correctness but also independent of previously documented effects of listening on other strength-related facets (ambivalence and extremity). More so, we offered evidence that the effect of high-quality listening on attitude clarity was due to the effects of listening quality on speakers’ reduced social anxiety and increased reflective self-awareness. In addition, in
Studies 3 to 5, we showed that perceiving high-quality listening increased speakers’ attitude-expression intentions, via its effect on attitude clarity. Importantly, we found support for our model across studies using different designs and various attitude topics, including one preregistered replication (Study 5). To assess the effect size of listening on attitude clarity, we conducted a random effect meta-analysis across all studies to determine whether these effects were robust (for the need to conduct a meta-analysis of one’s own studies, see Goh, Hall, & Rosenthal, 2016). Results of these analyses indicated that listening increased attitude clarity controlling for all attitude strength covariates used in this research (see Table 6).

Our research extends the literature on attitude certainty, which thus far has never considered the effects of the quality of a dyadic interaction. Specifically, we showed that interlocutors can influence a speaker’s stated attitudes without any persuasive attempt. Moreover, high-quality listening is different in several ways from the previously established antecedent for attitude clarity—repeated expression. Repeated expression has been manipulated by asking participants to report their attitude once versus multiple times on semantic differential scales; on the contrary, perceived listening is an interpersonal variable that emerges within a social context.

Our research contributes to the domain of attitudes in other several ways. First, very little work has examined the social context in which attitudes are expressed (for exceptions, see Prislin, Shaffer, & Crowder, 2012). The work that has been done has tended to manipulate attitudinal variables present in the context (e.g., consensus, perceived persuasion of others, etc.; Visser & Mirabile, 2004). To our knowledge, this is only the second study where a social-context variable unrelated to the attitude itself affected participants’ attitudes and the first ever to demonstrate such an effect on a consequence of the attitude itself (i.e., attitude-expression intentions).

Related to this last point, the present research has implications for attitudinal advocacy research. As noted earlier, whereas attitude correctness influences more forceful forms of advocacy (Rios et al., 2014), attitude clarity—which is uniquely increased by listening—increases people’s tendency to share their opinion with others. Past research has found that an interpersonal variable, perceived consensus, increases attitude correctness and more forceful or persuasive advocacy attempts (Cheatham & Tormala, 2015; Rios et al., 2014).

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**Table 6. Mini Meta-Analyses Testing the Effects of Experimental Condition (High-Quality Listening) in Comparison With Control Conditions (Medium- and Low-Quality Listening) on Attitude Clarity Across Five Experiments (n = 717).**

<table>
<thead>
<tr>
<th>Attitude clarity controlling for . . .</th>
<th>d</th>
<th>LL</th>
<th>UL</th>
<th>τ</th>
<th>Q</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude correctness</td>
<td>0.46</td>
<td>0.31</td>
<td>0.62</td>
<td>.00</td>
<td>1.09</td>
<td>4</td>
<td>.89</td>
</tr>
<tr>
<td>Attitude correctness and objective ambivalence</td>
<td>0.44</td>
<td>0.29</td>
<td>0.60</td>
<td>.00</td>
<td>3.45</td>
<td>4</td>
<td>.49</td>
</tr>
<tr>
<td>Attitude correctness and attitude extremity</td>
<td>0.43</td>
<td>0.28</td>
<td>0.58</td>
<td>.00</td>
<td>2.29</td>
<td>4</td>
<td>.68</td>
</tr>
<tr>
<td>Attitude correctness and subjective ambivalence</td>
<td>0.38</td>
<td>0.18</td>
<td>0.59</td>
<td>.00</td>
<td>1.36</td>
<td>2</td>
<td>.51</td>
</tr>
</tbody>
</table>

Note. \( d = \) the average effect size in standardized units across the five experiments; LL = lower limit of 95% confidence interval; UL = upper limit of 95% confidence interval; \( τ = \) estimate of between-studies variance; \( Q = \) test statistic for significance of variance between studies; \( df = \) degrees of freedom of \( Q \) statistic; \( p = \) significance of variance between studies.

*Subjective ambivalence was measured in three studies, \( n = 386 \).
However, no previous work had found an interpersonal variable to influence attitude-expression intentions.

It is interesting to consider whether the effects of high-quality listening would extend to situations in which there were clear opinion disagreements, or ones in which roles dictate persuasion intentions (e.g., in a negotiation context). Situations like these would introduce other motives (e.g., to persuade the other or defend one’s own attitude) that would be present regardless of the listener’s behavior. Such a state could have the potential to overpower the effects of listening, such as by motivating biased information search rather than the more open-minded self-awareness observed in our studies. The processes observed here and in related work (increased objective ambivalence; Itzchakov et al., 2017) could also potentially increase or decrease a speaker’s persuasiveness. That is, messages that appear to be two-sided but that produce the same conclusion of a one-sided message can increase the strength of the resultant attitude, as indicated by greater certainty (Rucker, Petty, & Briñol, 2008) or resistance to persuasion (Lumsdaine & Janis, 1953). On the contrary, delivering a two-sided persuasive message that fails to produce a clear conclusion could undermine its efficacy. Moreover, this work, in concert with Itzchakov et al. (2017), sheds light on the power of merely listening in affecting speakers’ attitude structure. Specifically, listening increased strength by its effects on attitude clarity (current work) and subjective ambivalence (Itzchakov et al., 2017), but decreased attitude strength by its effects on objective ambivalence and extremity (Itzchakov et al., 2017). To our knowledge, listening is the first variable that has been documented to have opposing influences on different strength-related attitude features.

Although our results were consistent across relatively diverse paradigms, these studies are not without limitations. Most centrally, because the construct of listening is multidimensional, our individual manipulations may have been confounded with other variables. For example, it could be that the listening manipulation (smartphone text messages) we employed in Study 4 also induced a sense of social exclusion. Specifically, listeners concentrating on their smartphone may have conveyed that another conversation—one that the speaker was not a part of—was more important to the listener. However, this specific alternative does not appear applicable to Study 2. We suggest that the individual shortcomings and possible confounds of the individual listening manipulations are overcome by the consistent pattern of results across diverse paradigms.

An additional concern is that, although we randomly assigned participants to dyads, some participants knew each other prior to the study. Thus, it could be that the listening-induced effects are the result of prior knowledge of speakers about the listeners’ attitudes. However, given that we obtained supporting evidence to our hypotheses across various attitude topics, including novel topics, this is not a highly plausible alternative explanation.

Furthermore, although the current work showed that listening is beneficial to the speakers’ well-being, not all people benefit from being listened to. For example, speakers high on avoidance-attachment style gain less psychological safety than speakers low on that trait (Castro et al., 2016). Thus, it might be that for people high on avoidance-attachment style, listening will not affect social anxiety and self-awareness, and thus will have weaker effects on attitude clarity, if at all. Identifying possible boundary conditions, such as attachment style, could lend further insight into the processes by which listening affects the structure of attitudes.

Conclusion

Building on Carl Rogers’s (1980) theoretical perspective, we offered novel hypotheses regarding the effect of listening on attitude certainty. Although traditionally limited to clinical psychology, Rogers’s humanistic tradition has had an impact in other areas of social psychology, such as the study of motivation and well-being (Deci & Ryan, 1985). However, thus far, humanistic perspectives have rarely been applied to the attitudes and persuasion domain. We hope that the present research will open new opportunities for exploring the implications of humanistic variables, such as perceiving high-quality listening, in building a more complete understanding of attitudes.

Declaration of Conflicting Interests

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Notes

1. Our original focus was on social anxiety as a potential mediator, and consequently, reflective self-awareness was not included in Study 1.
2. Mean difference. Confidence Intervals without this subscript refer to effect sizes (partial eta-square or betas).
3. A form of social security in which all citizens or residents of a country regularly receive an unconditional sum of money, from either a government or some other public institution, in addition to any income received from elsewhere.

Supplemental Material

Supplementary material is available online with this article.
References


