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Keep Talking: (Mis)Understanding the Hedonic Trajectory of Conversation

Michael Kardas¹, Juliana Schroeder², and Ed O'Brien³

¹Northwestern University; ²UC Berkeley; ³University of Chicago

Abstract

People regularly interact with new acquaintances, yet little research has examined the hedonic dynamics of these conversations or the extent to which people are aware of them. Five preregistered laboratory experiments (N = 1,093 participants, including 966 spoken conversations) address these gaps. We find that people misunderstand the hedonic trajectory of conversation: After enjoying the initial minutes of conversation with a new acquaintance, participants expected their enjoyment to decline as their conversations continued, but experienced stable or increasing enjoyment in reality. This miscalibration arose at least partly because participants underestimated how much they would have to discuss. Thus, instructing participants to mentally simulate the conversation in detail drew their attention to the conversation material they could discuss and helped to calibrate their enjoyment predictions. When left uncorrected, misunderstanding the hedonic trajectory of conversation can undermine well-being. In one study, participants preferred to spend less time in conversation and more time alone than was optimal for their enjoyment—a finding that emerged even among participants who reported wanting to enjoy themselves. Throughout our experiments we assessed various conversational contexts (including whether participants had one long conversation with a single partner or several short conversations with different partners), and features of conversation (including participants' perceived and actual interest in talking to each other, fatigue, and the intimacy of conversation), thus shining novel light on conversational dynamics more broadly. People hold incorrect assumptions about how social interaction changes over time and, consequently, may avoid longer-lasting conversations that would forge closer connections. (248 words).

Keywords: conversation; social interaction; enjoyment; accuracy; prediction

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Imagine you are boarding a flight and start talking with the passenger seated next to you. You pleasantly chat for several minutes and then pause for take-off. You now face a decision: Should you keep the conversation going once the plane steadies, or should you retreat from the conversation to enjoy your solitude? If you continue chatting, for how long could you and the other passenger sustain your discussion before running out of things to talk about?

From chance encounters on airplanes to routine social gatherings, people regularly speak with new acquaintances. Recent data suggest that people spend about a third of their waking hours talking with or listening to others (Milek et al., 2018), including considerable time spent in conversation with new acquaintances (Carmichael, Reis, & Duberstein, 2015; Sandstrom & Dunn, 2014). These everyday interactions matter because they can increase one's momentary enjoyment and create social connection, consequently enhancing one's happiness and well-being (Altman & Taylor, 1973; Aron, Melinat, Aron, Vallone, & Bator, 1997; Diener & Seligman, 2002; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004; Killingsworth & Gilbert, 2010).

Despite these documented benefits, people also frequently choose to *disengage* from conversation, as we suspect many readers imagined wanting to do in our opening example. Of course, there may be sound reasons for doing so—time spent engaged in social interaction means time not spent pursuing other goals—but one reason may be that people assume that speaking with a new acquaintance will quickly grow dull ("What else are we *possibly* going to keep talking about?"). In such cases the current research suggests that people's beliefs, on average, are mistaken.

Specifically, the current research explores how people's enjoyment changes over the course of conversation with a new acquaintance and the extent to which people are aware of

3

these dynamics. We propose that people systematically misunderstand the hedonic trajectory of conversation: Even after enjoying the start of a conversation, people *expect* their enjoyment to decline as they continue talking, but *experience* smaller decreases in their enjoyment than they anticipate. People's hedonic expectations guide their choices (Mellers & McGraw, 2001; Mellers, Schwartz, & Ritov, 1999), and so in settings in which talking with others is discretionary (i.e., in which people can engage in conversation for as short or long as they prefer), this misunderstanding may lead people to devote less time for talking than would be ideal for their enjoyment. Our hypothesis thus raises the possibility that people may mismanage opportunities to form closer friendships that might enhance their well-being.

Hedonic Enjoyment in Conversation

One aim of our paper is to document what people think and feel in conversation with a new acquaintance, as well as how their experiences change over the course of the interaction. Although conversations between new acquaintances can lead to many outcomes—including relational outcomes such as a sense of social connection (Baumeister & Leary, 1995; Mitchell, Schlegelmilch, & Mone, 2016; Sprecher, Wenzel, & Harvey, 2018) and knowledge-based outcomes such as teaching others and learning from others (Bandura & Walters, 1977)—we focus primarily on the *hedonic* outcomes of conversation, such as people's experiences of enjoyment and happiness. These hedonic outcomes often drive people's decisions about whether to enter conversation to begin with (Diener & Seligman, 2002; Mellers & McGraw, 2001; Mellers, Schwartz, & Ritov, 1999; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004).

We hypothesize that people's enjoyment should depend at least partly on their abilities to sustain the conversation. When new acquaintances find ample *conversation material*—that is, when they discuss many thoughts, feelings, perspectives, or ideas during the conversation—they

should enjoy themselves considerably more than when they find less material to discuss (Aron et al., 1997; Jaworski, 2000; Newman, 1982; Stivers et al., 2009; Wiemann, 1977).

Indeed, having ample conversation material, at least when the topics themselves are generally pleasant, could lead to many specific outcomes that enhance conversation partners' enjoyment. For example, having ample material should prevent people from growing bored with the content of the conversation (Frederick & Loewenstein, 1999; Lyubomirsky, 2010) and from experiencing awkward silences that might cause them to feel disliked or rejected by their conversation partner (Koudenburg, Postmes, & Gordijn, 2011; Koudenburg, Postmes, & Gordijn, 2013). Moreover, having ample conversation material may promote social dynamics that allow people to more easily connect with one another through conversation. Upon finding new topics to discuss, conversation partners may share personal information about themselves, ask each other questions, and respond to each other in ways that are sensitive to each other's beliefs and desires-dynamics that may create a sense of social connection and sustain enjoyment (Altman & Taylor, 1973; Echterhoff, Higgins, & Groll, 2005; Epley, Keysar, Van Boven, & Gilovich, 2004; Huang, Yeomans, Brooks, Minson, & Gino, 2017; Sinclair, Lowery, Hardin, & Colangelo, 2005). When a conversation becomes more intimate over time, people may also reciprocate each other's self-disclosures (Altman & Taylor, 1973; Clark & Brennan, 1991; Collins & Miller, 1994; Reis, 2012; Reis & Gable, 2015; Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011; Reis & Shaver, 1988), which in turn may satisfy their curiosity to learn about one another and help them establish common ground (Garrod & Pickering, 2004; Hsee & Ruan, 2016; Kardas & Epley, 2021; Mallett, Wilson, & Gilbert, 2008; Ruan, Reis, Clark, Hirsch, & Bink, 2019; Sandstrom et al., 2016), both of which could enhance their enjoyment of the conversation. Thus, we hypothesize that the *more* conversation material that new acquaintances have to discuss, the

more likely they are to enjoy the conversation.¹ Given that new acquaintances in particular have many new things to discuss and learn about each other, their conversations are likely to remain relatively enjoyable for some time.

Studying the progression of people's experiences in conversation helps fill several gaps in the literature. Existing research has measured people's self-reported experiences during social interaction, but to our knowledge these past studies do not trace people's real-time hedonic ratings as a conversation progresses, nor do they directly assess conversation material as a source of enjoyment. For example, past studies have typically measured retrospective evaluations only once, at the *end* of such interactions (e.g., post-interaction closeness: Aron et al., 1997; postinteraction happiness: Epley & Schroeder, 2014; post-interaction liking: Reis et al., 2011), providing little insight about how people's hedonic experiences in conversation may progress from start to finish. Thus, in the current research we first sought to measure people's actual experiences in conversation by measuring their judgments of enjoyment and conversation material across multiple time points. We also provide fuller insight into the progression of people's real-time conversation experiences by measuring changes not only in conversation material and enjoyment but also changes in related dynamics such as the individuals' interest in speaking with one another and the intimacy of the conversation.

(Misplaced) Concerns About Diminishing Enjoyment in Conversation

A second aim of the current paper is to study the accuracy of people's *expectations* about what they will think and feel as a conversation continues, including how much they will enjoy the conversation and how much material they will have to discuss. That is, we compare people's actual experiences in conversation against the progression that participants expect after first

¹ As noted earlier, this hypothesis assumes that the conversation material is generally pleasant in nature.

meeting a new acquaintance. Although prior research suggests that lengthy conversations can build friendships even among initial strangers (Aron et al., 1997), people are less likely to form such connections in everyday life if they underestimate how much they will enjoy a longerlasting conversation and so allocate relatively little time to continue speaking. Therefore, we also leverage the current experimental paradigm to study real behavior—namely, how much time people prefer to devote to conversation versus other activities after meeting a new acquaintance.

As outlined earlier, people's enjoyment of conversation should depend on how much content they find to talk about with a conversation partner. Likewise, supplemental Experiment S1 (see Supplemental Material for the full method and results) established that people's predictions about how much they will enjoy a conversation depend on how much conversation material they *expect* to find as they continue talking, suggesting that how accurately people anticipate their enjoyment may depend on how accurately they anticipate conversation material. In this experiment (N = 105), participants imagined meeting a new acquaintance as part of a research study, enjoying the first five minutes of their conversation, and then having either very many or very few things to talk about as the conversation continued. Those who anticipated having many things to discuss expected that continuing to speak with the other person would be significantly more enjoyable (1 to 7: Ms = 6.04 vs. 2.42, respectively; SDs = 0.85 vs. 1.10; p < 100.001) and were significantly more interested in continuing to chat with the person (Ms = 5.46 vs. 1.88; SDs = 1.49 vs. 1.05; p < .001) than those who expected to have few things to discuss. One's expected enjoyment of conversation appears to depend, at least in part, on how much material one expects to have to talk about as the conversation continues.

For two reasons we hypothesize that people may expect to run out of conversation material more quickly than they actually do, causing them to underestimate their enjoyment as conversation progresses. First, conversation topics that one has yet to discuss may not be highly salient at the beginning of a conversation, causing people to overlook material that they will discuss as they continue speaking. Indeed, people's predictions about future experiences reflect their mental simulations of those experiences, but mental simulations are "mere cardboard cutouts of reality" (Gilbert & Wilson, 2007, p. 1354) that omit details and nuance of the actual experience (Habbert & Schroeder, 2020; Kahneman & Snell, 1992; Kardas & O'Brien, 2018; Keil, 2003; Klein & O'Brien, 2018). As a result, after people initially experience an enjoyable stimulus, they tend to underappreciate the extent to which repeat exposures will reveal new information that can help sustain their enjoyment (Galak, Kruger, & Loewenstein, 2011; Kahneman & Snell, 1992; Read & Loewenstein, 1995; Snell, Gibbs, & Varey, 1995). For example, in one series of experiments participants engaged in a solo activity such as playing a video game or walking through a museum exhibit and then imagined repeating the same activity again. These participants underestimated how many novel details they would discover while repeating the activity, and so underestimated how much they would enjoy the repeat experience (O'Brien, 2019).

Relatedly, prior research reveals that when predicting their future hedonic states, people tend to overweight details that are salient to them at the time of the prediction (Wilson et al., 2000; Wilson & Gilbert, 2005), meaning that people may underestimate or overestimate their enjoyment depending on what is salient. In particular, people should underestimate their enjoyment when negative aspects of the experience are more salient to them while they imagine the experience than during the experience itself. Accordingly, they should overestimate enjoyment when positive aspects of the experience are more salient to them while they imagine the experience than during the experience itself. For example, when people imagine moving to

sunny California, they anticipate more happiness than they would likely experience because they imagine the warm weather—a salient positive quality of life in California—but overlook the less salient, more mundane events of day-to-day living that are likely to reduce the impact of the warm weather on their overall happiness (Schkade & Kahneman, 1998). In the context of conversation, topics that one has already discussed may be more salient than those that one has yet to discuss, meaning that people may not focus on new topics of conversation that are likely to draw their attention and sustain their enjoyment as they continue speaking. We therefore predicted that participants would systematically *underestimate* how much they would enjoy themselves during longer-lasting conversations.

Second, people may be especially prone to overlook the depth of *social* experiences. The elaborate mental lives of others are inaccessible to observers and thus are especially hard to appreciate (Waytz, Schroeder, & Epley, 2014). As a result, people expect others to generate less-nuanced thoughts, feelings and opinions than others actually do (Haslam, Bain, Douge, Lee, & Bastian, 2005; Heath, 1999; Jones & Nisbett, 1971; Pronin, 2008; Pronin, Kruger, Savitsky, & Ross, 2001). Moreover, many social dynamics that help to sustain conversation, such as asking questions (Huang et al., 2017), switching conversation topics (Planalp & Tracy, 1980), and discussing more intimate information as conversation continues (Altman & Taylor, 1973), may be difficult for people to mentally simulate at a conversation's earlier stages before those dynamics emerge. Additionally, as reviewed above, people tend to omit what is presently missing when imagining the future. To the extent that people overlook this dynamic nature of longer-lasting social interaction, an increasingly wide gap may emerge between a person's expected and actual enjoyment as conversation continues.

Overview of Hypotheses and Experiments

Together, these literatures lead us to hypothesize that people may underestimate how much new content they and a new acquaintance will find to discuss beyond the initial minutes of conversation. As a result, people may underestimate their enjoyment of conversation over time, with the gap between predicted and actual enjoyment growing larger as conversation continues. These miscalibrated predictions should also affect behavior: To the extent that people prefer to end conversations that seem likely to run dry of enjoyable material, they might often end such conversations sooner than necessary, leading them to derive less hedonic value from social interaction than they otherwise would, had their expectations been more accurately calibrated.

We tested these hypotheses across five preregistered laboratory experiments (N = 1,093 participants, including 966 spoken conversations). For all experiments, we developed a novel paradigm in which pairs of strangers meet and engage in conversation for one "session," with each member of the pair privately reporting their enjoyment upon completion. Each participant then privately predicts their enjoyment for several more sessions of conversation. Finally, the pair continues talking, with each member privately reporting their actual enjoyment at the end of each session. In this way participants in our experiments meet and begin speaking *before* predicting how the remainder of the conversation will unfold, ensuring that participants will not blindly guess about an unknown stranger or falsely imagine interacting with a less friendly stranger than the one with whom they are actually paired (which otherwise might elicit dulled predictions for other reasons).

Using this paradigm, we conducted one experiment with structured conversation prompts (Experiment 1) and four experiments with unstructured conversations (Experiments 2-5), each testing the primary hypothesis that people expect their enjoyment to diminish more than it does as a conversation continues. Experiments 2 to 5 additionally test the proposed mechanism—that

people expect to run out of content to discuss more quickly than they actually do—through *mediation* by measuring predicted and actual conversation material. We further tested this proposed mechanism through *moderation* in two ways:

In Experiment 3, we manipulated whether participants continued speaking with one partner versus spoke with different partners over time, hypothesizing that when participants expected to talk with different partners they would expect to have more material to discuss and thus should expect more stable enjoyment throughout the conversation. Next, in Experiment 4, we either instructed participants to mentally simulate the topics of conversation in detail before reporting predictions, or did not. Because we theorize that people's mental simulations tend to omit details such as the content of a conversation, explicitly prompting participants to more thoughtfully consider these details should draw their attention to the remaining material they are likely to discuss and so should help to calibrate the trajectory of their enjoyment predictions. If, however, people misunderstand the hedonic trajectory of conversation because they imagine their conversations in detail but mis-imagine discussing progressively less enjoyable content over time, then instructing participants to think about this content in detail may instead amplify the tendency to underestimate one's enjoyment for prolonged conversation.

Finally, we tested a potential consequence: People may prefer shorter conversations than would be ideal for their own enjoyment--that is, before deriving as much enjoyment as they otherwise could from continuing the conversation (Experiment 5). In this experiment, we also measure other dynamics that may follow from (mistaken) concerns about running out of conversation material, such as participants' perceived versus actual interest in each other, fatigue, and the intimacy of the conversation. All surveys, data, code, preregistrations for all experiments, and the Supplemental Material are at <u>https://tinyurl.com/hedonic-trajectory</u>. To ensure that our experiments were well powered, we preregistered sample sizes of 100 participants (50 pairs) per condition in Experiments 1, 2, 4, and 5 (Simmons, Nelson, & Simonsohn, 2018). In Experiment 3, we preregistered double this number to test for hypothesized three-way interaction effects. All experiments were approved by the university's Institutional Review Board, and we obtained informed consent from all participants. We report all measures, conditions, and data exclusions in the main text, and report analyses without data exclusions in the Supplemental Material.

Experiment 1: The Predicted and Actual Hedonic Trajectory of Conversation

Experiment 1 tests whether pairs of strangers will mispredict the trajectory of their enjoyment in conversation. Participants spoke for a few minutes and then privately reported their enjoyment. We then randomly assigned half of the pairs to imagine continuing the conversation for another four sessions with the same person, and to predict how much they would enjoy each session ("Predictors"). The other half was assigned to continue speaking with the same person and to report their actual enjoyment after each session ("Experiencers"). We hypothesized that Predictors would expect their enjoyment to decline more sharply than would occur in actuality for Experiencers.

Method

Participants. As preregistered, we recruited 200 participants (making 100 pairs) from a university participant pool ($M_{age} = 32.55$; $SD_{age} = 14.37$; 34.00% female; 28.00% Caucasian) to complete the experiment for \$6.00. We performed sensitivity power analyses after data collection using *SIMR* (Green & MacLeod, 2016), an R package for performing power analyses within mixed linear models. These sensitivity power analyses indicated that our sample size

provided about 80% power to detect a two-way role (Predictor, Experiencer) × session (1, 2, 3, 4, 5) interaction effect of size b = 0.13.

Procedure. Participants entered a computer lab individually and were paired with a stranger. Each participant sat at their own private computer, separated by a divider to ensure that they could not view each other's computer monitors. Both participants opened the survey and viewed one "icebreaker" question each, randomly selected from a set of 15 questions pre-tested to be similarly interesting and easy to answer (see Supplemental Material for pretest details). These included questions like, "What is your favorite hobby, and why?" and "When you were a child, what did you want to be when you grew up?" The two participants received different icebreaker questions from one another. Using icebreaker questions allowed us to naturally divide participants' conversations into separate rating periods. In all subsequent experiments we assessed unstructured conversations, while asking participants to pause their conversations to complete survey items at fixed time intervals.

We instructed pairs to "get to know each other" by answering and discussing the questions in a spoken, face-to-face conversation. Participants sat in front of the same computers where they completed survey items but turned to face each other while speaking. After one conversation session, participants responded to the following items in the survey: "How enjoyable did you find this get-to-know-you session?"; "How interesting did you find this get-to-know-you session?"; "How interesting did you find this get-to-know-you session?"; "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; and "How pleasurable did you find this get-to-know-you session?"; (each from 1 = not at all; 7 = extremely). We included several items to ensure that we would obtain reliable estimates of the participants' predicted and actual enjoyment, and we preregistered to average these items to form a single index of enjoyment.

Participants responded privately—to these and all measures—on their own computer, during a short break from the conversation. Participants knew that they would not see each other's responses, given that each computer station was separated from the others by a divider.

We then randomly assigned pairs to one of two experimental conditions. *Predictors* (n = 50 pairs) imagined continuing to speak for four additional sessions. They read in the survey that they would receive new icebreaker questions in each session, but they did not read the specific icebreakers that they and their partner would respond to.² Predictors then predicted their enjoyment on the same five items for each session (e.g., "How enjoyable do you think you would find get-to-know-you session #X?"). Experiencers (n = 50 pairs) were informed through the survey that they would continue to speak for four additional sessions, exactly as Predictors imagined. For each session, participants viewed an icebreaker question through the survey, discussed both their own question and their partner's question, and reported their experiences on the same dependent measures after each session. Experiencers received different icebreaker questions in each session, selected at random from the original set of 15 questions. Experiencers were never assigned the same icebreaker question in multiple sessions.

After reporting predicted or actual experiences for the five conversation sessions, participants completed exploratory items. Predictors read: "Please tell us whether you generally expected your enjoyment to increase, stay the same, or decrease from Session 1 to Session 5" (*increase* vs. *stay the same* vs. *decrease*). Those who expected their enjoyment to increase then selected from the following options to explain why: *I would get to know the other participant better; We would begin to get along better; The conversation would become less awkward; We*

² Note that we assigned icebreaker questions at random without replacement in each session. Therefore, Predictors received each of the icebreakers equally often in Session 1 before reporting their enjoyment predictions for Sessions 2-5.

would discuss increasingly personal information; Other. Those who expected their enjoyment to decrease selected from: I would become impatient and simply want to finish the study; I would become bored while discussing so many questions; The conversation would become increasingly awkward; The conversation would not change much from round to round; Other. Those who expected unchanging enjoyment selected from all these options. Experiencers answered the same questions with the response options written in the past tense.

Finally, participants reported demographic information, and were paid and debriefed.
Results

We averaged the five items to form an enjoyment scale (each session, $\alpha s \ge .98$). We then fit a mixed linear model to the data with fixed-effects terms for role (Predictor, Experiencer), session (1, 2, 3, 4, 5), and the role × session interaction, a random-intercept term for pair number, and random-slope terms for role, session, and the role × session interaction for each pair. We centered the session variable around Session 3.

Consistent with our hypotheses, participants underestimated their enjoyment, and were increasingly likely to do so as the conversation progressed. We found no effect of role, b = 0.14, SE = 0.16, t(99.99) = 0.86, p = .392, 95% CI = [-0.18, 0.46]. We did find an effect of session, b = -0.07, SE = 0.02, t(136.77) = -2.93, p = .004, 95% CI = [-0.11, -0.02], such that predicted or actual enjoyment declined in aggregate across the sessions, and critically, the hypothesized role × session interaction, b = 0.23, SE = 0.05, t(136.77) = 4.97, p < .001, 95% CI = [0.14, 0.32] (see Figure 1; see Supplemental Material for session-by-session analyses). Whereas Predictors expected significant declines in enjoyment (b = -0.18, SE = 0.04, t(51.07) = -5.07, p < .001, 95%

CI = [-0.25, -0.11]), Experiencers reported no significant changes (b = 0.05, SE = 0.03, t(49.12)= 1.60, p = .116, 95% CI = [-0.01, 0.11]).³



Figure 1. Mean enjoyment as conversation progressed in Experiment 1. Error bars represent ±1

SE.

As seen in Figure 1, we observed incidental differences for enjoyment in Session 1 before the manipulation had occurred, with Predictors reporting greater enjoyment than Experiencers, t(154.81) = 2.11, p = .037, 95% CI_{difference} = [0.02, 0.75], d = 0.47. Critically, however, the hypothesized role × session interaction effect remained significant when restricting the analyses to sessions 2 through 5, b = 0.19, SE = 0.06, t(351.14) = 3.08, p = .002, 95% CI = [0.07, 0.32],

³ The extent to which participants underestimated their enjoyment over time did not differ significantly between same-gender and mixed-gender pairs, b = -0.09, SE = 0.09, t(132.97) = -0.98, p = .330, 95% CI = [-0.27, 0.09], nor between same-ethnicity and mixed-ethnicity pairs, b = -0.07, SE = 0.09, t(135.11) = -0.71, p = .481, 95% CI = [-0.25, 0.12]. Our findings were similar for the remaining experiments and so we report analyses of demographic variables in the Supplemental Material.

with Predictors expecting significant declines in enjoyment, b = -0.19, SE = 0.05, t(49.55) = -4.13, p < .001, 95% CI = [-0.28, -0.10], and Experiencers reporting no significant changes, b = 0.004, SE = 0.04, t(49.33) = 0.10, p = .923, 95% CI = [-0.08, 0.09].

Converging patterns emerged in exploratory analyses (see Supplemental Material for further details). Predictors reported expecting their enjoyment to decrease (29.00%), increase (30.00%), and stay the same (41.00%) at rates that did not differ significantly from chance, χ^2 (2, N = 100) = 2.66, p = .264, whereas Experiencers were significantly more likely to report that their enjoyment increased (50.00%) or stayed the same (45.00%) than decreased (5.00%), χ^2 (2, N = 100) = 36.50, p < .001. These retrospective judgments of the trajectory of enjoyment differed significantly between Predictors and Experiencers, χ^2 (2, N = 200) = 22.13, p < .001, consistent with the findings described earlier. In the participants' session-by-session ratings, 74.00% of Predictors expected declining enjoyment, whereas 30.00% of Experiencers reported declining enjoyment. These proportions differed significantly, χ^2 (1, N = 100) = 19.39, p < .001 (see Supplemental Figure S1).

Discussion

Experiment 1 provides initial evidence that people misunderstand the hedonic trajectory of conversation, even after meeting a new acquaintance and speaking for several minutes. Predictors expected significantly more negative changes in their enjoyment than Experiencers reported after the conversation.

Notably, Predictors underestimated enjoyment over time despite knowing that they would receive different icebreaker questions in each session. Predictors may have underestimated their enjoyment in part because they did not view the actual questions they would discuss in the later sessions, meaning that the procedure did not draw their attention to conversation material that they were likely to discuss as the conversation continued. Thinking in detail about the upcoming conversation may be necessary for forming more calibrated beliefs about the trajectory of one's enjoyment. We investigate this possibility in Experiment 4. Although Experiment 1 does not provide a test of our proposed mechanism of underestimating conversation material, it does indicate that people underestimate their enjoyment in a conversation over time, supporting our primary hypothesis.

Experiment 2: Unstructured Conversations, and Finding Things to Discuss

In Experiment 2, we attempted to conceptually replicate the findings of Experiment 1 while also directly assessing the proposed mechanism of conversation material through mediation. We hypothesized that participants would misunderstand the hedonic trajectory of conversation, and that their underestimation of enjoyment would arise at least partly because participants would expect their conversations to be less rich with material than the conversations actually were.

We also made two changes to the design from Experiment 1. First, we allowed participants to engage in unstructured conversation without discussion questions. Experiment 2 thus extends generalizability by examining a less constrained conversation context. Second, we measured predictions and experiences in a within-participants design: After the first conversation session, participants predicted how the remaining sessions would unfold, and then engaged in those sessions, reporting their experiences after each. Thus, we can compare participants' *own* expectations to their *own* experiences of enjoyment.

Method

Participants. As preregistered, 100 participants (making 50 pairs) from a university participant pool ($M_{age} = 31.88$; $SD_{age} = 13.57$; 42.00% female; 25.00% Caucasian) completed the

study for \$5.00. Sensitivity power analyses performed after data collection indicated that this sample size provided about 80% power to detect a two-way evaluation type (predictions, experiences) × session (1, 2, 3, 4, 5) interaction effect of size b = 0.15 for the enjoyment measure. We excluded two additional pairs because they reported several post-conversation experiences in the survey before actually having their conversations. Retaining all participants produces no meaningful differences in the results (see Supplemental Material).

Procedure. The procedure was similar to Experiment 1. We recruited two strangers to participate in each session. The experimenter asked the participants to sit in adjacent seats in front of separate computer monitors, with divider walls blocking each participant's view of their partner's screen, and instructed them to have a spoken, face-to-face conversation for three minutes. They were instructed to talk about anything they preferred and to continue speaking until they heard a timer beep at the end of three minutes. After the experimenter left the room, the participants began their conversation. At the end of the three-minute conversation, the participants paused to complete survey items on their separate computers.

After this first session, participants completed a single measure of enjoyment: "How enjoyable did you find this get-to-know-you session?" (1 = not at all; 7 = extremely). We included only the most face-valid measure, because the five enjoyment measures were highly correlated in Experiment 1, and because we sought to reduce the duration of breaks between the conversation sessions. To test our hypothesized mechanism, we measured experiences of *conversation material*: "How much did you have to talk about during this get-to-know-you session?" (1 = nothing at all; 7 = quite a bit).⁴ To test one potential alternative mechanism—that

⁴ After finishing Experiment 2, we sought to confirm whether the enjoyment and conversation material items indeed measure the outcomes that they are designed to measure. To do this, we first conducted supplemental Experiment S2, in which a separate group of participants (N = 150) read more detailed definitions of "enjoyment" and "conversation material" and then listened to audio recordings of two conversation sessions from Experiment 2.

participants might mistakenly expect their conversations to become more awkward over time we also measured perceived awkwardness: "How awkward did you find this get-to-know-you session?" (1 = not at all; 7 = extremely). Participants answered the enjoyment item first, then answered the conversation material and awkwardness items in counterbalanced order.

Next, participants were asked to imagine continuing to speak for four additional sessions, and predicted the outcomes for each using the same measures as described above for Session 1. After both participants finished reporting predictions, the experimenter instructed them to continue speaking for another three minutes, thus initiating Session 2. This process repeated throughout Sessions 2 through 5, with the participants rating their experiences after each session on the same measures described earlier.⁵ As in the prior experiment, we measured the key variables using self-report survey items so that we could compare the participants' predictions against their experiences throughout the conversation.

Finally, participants reported demographic information, and were paid and debriefed.

Results

For each measure, we fit mixed linear models to the data with fixed-effects terms for evaluation type (predictions, experiences), session (1, 2, 3, 4, 5), the evaluation type × session interaction, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and the evaluation type × session interaction for each pair. We centered the session

These listeners discriminated low-enjoyment sessions from high-enjoyment sessions, and low-material sessions from high-material sessions, at rates significantly greater than chance using these more detailed definitions (ps < .001), suggesting that the laboratory participants likely interpreted these items as we intended as well. Second, we computed correlations between the ratings of paired participants, finding that participants' ratings of enjoyment and conversation material tended to be positively correlated throughout Experiments 1-5 (see Supplemental Material for details).

⁵ Participants also completed an exploratory item (added to the survey after the first 18 pairs): "Did these get-toknow-you sessions feel like five distinct conversations or like one continuous conversation?" (5 distinct vs. 1 continuous). Most (75.00%) felt they had one continuous conversation, $\chi^2(2, N = 64) = 15.68, p < .001$. There are no predictions for comparison, so we do not discuss this item further.

variable around Session 3. The predicted trajectory refers to the slope across Session 1 experiences and Sessions 2 through 5 predictions. The experienced trajectory refers to the slope across Sessions 1 through 5 experiences. Anchoring both trajectories on Session 1 allows us to compare predicted and actual changes in the conversation relative to the same initial experience.

Enjoyment. Replicating the findings of Experiment 1, participants underestimated their enjoyment, with the amount of miscalibration increasing as the conversation continued. We found a significant effect of evaluation type, b = 0.30, t(57.51) = 3.64, SE = 0.08, p < .001, 95% CI = [0.13, 0.46], such that participants underestimated their enjoyment, and an effect of session, b = -0.08, SE = 0.02, t(50.89) = -3.37, p = .001, 95% CI = [-0.12, -0.03], such that predicted or actual enjoyment declined across the sessions. Critically, we also found the hypothesized evaluation type × session interaction, b = 0.15, SE = 0.05, t(76.82) = 2.87, p = .005, 95% CI = [0.04, 0.25] (see Figure 2; Table 1).

This interaction effect indicates that participants expected their enjoyment to decline more rapidly than it did. As in Experiment 1, participants predicted that their enjoyment would decline significantly over time (b = -0.15, SE = 0.04, t(50.70) = -4.17, p < .001, 95% CI = [-0.22, -0.08]), but they were mistaken: Participants did not experience significant changes in enjoyment (b = -0.004, SE = 0.03, t(50.34) = -0.11, p = .915, 95% CI = [-0.07, 0.06]). We then computed the observed slopes of predicted and actual enjoyment for each pair. Whereas 70% of pairs expected their enjoyment to decline across the five sessions, only 50% of pairs experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 100) = 4.17$, p = .041(see Supplemental Figure S2; see Supplemental Material for session-by-session analyses).



Figure 2. Mean enjoyment as conversation progressed in Experiment 2. Error bars represent ±1

SE.

Table 1

Predicted and Experienced Enjoyment, Conversation Material, and Awkwardness by Session in

Experiment 2

		Predictions		Experiences			
	Enjoyment	Conversation Material	Awkwardness	Enjoyment	Conversation Material	Awkwardness	
S 1				5.97 (0.88)	5.91 (1.06)	2.69 (1.43)	
S2	5.76 (0.86)	5.59 (0.97)	2.87 (1.32)	5.97 (0.82)	6.00 (0.82)	2.97 (1.77)	
S 3	5.56 (0.94)	5.47 (0.98)	2.92 (1.34)	5.79 (1.07)	5.91 (1.01)	3.03 (1.53)	
S4	5.49 (1.06)	5.36 (1.16)	2.90 (1.38)	5.91 (0.88)	5.87 (1.12)	3.02 (1.71)	
S5	5.37 (1.26)	5.25 (1.16)	2.96 (1.41)	5.99 (0.99)	6.01 (1.06)	2.71 (1.66)	

Note. S1 through S5 denote Sessions 1 through 5 in Experiment 2. Numbers outside parentheses denote means; numbers inside parentheses denote standard deviations.

Conversation material. There was an effect of evaluation type, b = 0.42, SE = 0.09, t(52.51) = 4.73, p < .001, 95% CI = [0.25, 0.60], such that participants underestimated conversation material, an effect of session, b = -0.07, SE = 0.03, t(50.02) = -2.26, p = .029, 95% CI = [-0.14, -0.01], such that predicted or actual conversation material in aggregate decreased across the sessions, and again, the critical evaluation type × session interaction, b = 0.16, SE = 0.05, t(93.75) = 3.38, p = .001, 95% CI = [0.07, 0.25] (see Table 1).

This interaction effect again indicates that participants expected to run out of conversation material more quickly than they did, consistent with our hypothesis. Specifically, participants predicted that conversation material would diminish over time (b = -0.15, SE = 0.04, t(50.67) = -3.82, p < .001, 95% CI = [-0.23, -0.07]), yet reported that the amount of conversation material did not change significantly (b = 0.01, SE = 0.04, t(50.65) = 0.16, p = .871, 95% CI = [-0.08, 0.09]).

Awkwardness. We found no significant effects for awkwardness (see Table 1), indicating that participants had relatively calibrated beliefs about how awkward their conversations would feel. Specifically, we found a non-significant effect of evaluation type, b =0.02, SE = 0.18, t(50.81) = 0.09, p = .929, 95% CI = [-0.21, 0.11], a non-significant effect of session, b = 0.03, SE = 0.04, t(149.57) = 0.87, p = .384, 95% CI = [-0.04, 0.11], and a nonsignificant evaluation type × session interaction, b = -0.05, SE = 0.08, t(94.93) = -0.59, p = .557,95% CI = [-0.21, 0.11]. Participants neither predicted (b = 0.06, SE = 0.05, t(49.29) = 1.14, p =.262, 95% CI = [-0.04, 0.16]), nor experienced (b = 0.01, SE = 0.06, t(50.00) = 0.14, p = .890,95% CI = [-0.11, 0.13]), significant changes in awkwardness across the sessions. **Mediation**. Two exploratory mediational analyses found evidence that underestimating conversation material may help to explain why participants misunderstood the hedonic trajectory of their conversations. In the first mediational analysis, we tested whether underestimation of conversation material explained underestimation of enjoyment throughout the five sessions. The model used evaluation type (prediction vs. experience) as the independent variable, conversation material as the mediating variable, and enjoyment as the dependent variable. To test this model, we constructed separate mixed linear models to estimate the *a* and *b* paths, and performed Monte Carlo simulation with 100,000 repetitions to estimate the indirect and direct effects (Selig & Preacher, 2008). The indirect effect was significant, b = 0.18, SE = 0.04, 95% CI = [0.10, 0.26], as was the direct effect, b = 0.11, SE = 0.04, 95% CI = [0.03, 0.19], indicating that differences between predicted and experienced enjoyment were partially mediated by differences between predicted and experienced conversation material.

In the second analysis, we tested whether differences between predicted and experienced *changes* in conversation material explained differences between predicted and experienced changes in enjoyment—that is, whether conversation material explained why participants misunderstood the hedonic trajectory of conversation. The model used evaluation type (prediction vs. experience) as the independent variable, changes in conversation material as the mediating variable, and changes in enjoyment as the dependent variable, deriving these "change" scores from the pair-level slopes estimated by our mixed linear models. In repeated-measures mediational analyses with bias-corrected confidence intervals (Montoya & Hayes, 2017), the indirect effect was significant, b = -0.07, SE = 0.03, 95% CI = [-0.15, -0.02], as was the direct effect, b = -0.08, SE = 0.04, 95% CI = [-0.15, -0.01], indicating that differences between predicted and experienced changes in enjoyment were partially mediated by differences between

predicted and experienced changes in conversation material. Thus, although mediational analyses cannot provide causal evidence of mediation (Spencer, Zanna, & Fong, 2005), these findings are at least consistent with our theorizing that people misunderstand the hedonic trajectory of conversation partly because they underestimate how much material they will have to discuss.

In contrast, mediational analyses found no evidence that awkwardness explained why participants underestimated their enjoyment of the conversation. Differences between predicted and experienced enjoyment were not mediated by differences between predicted and experienced awkwardness (indirect effect: b = -0.002, SE = 0.02, 95% CI = [-0.05, 0.05]; direct effect: b = 0.30, SE = 0.02, 95% CI = [0.25, 0.35]), nor were differences between predicted and experienced changes in enjoyment mediated by differences between predicted and experienced changes in awkwardness (indirect effect: b = 0.03, SE = 0.19, 95% CI = [-0.23, 0.64]; direct effect: b = -0.18, SE = 0.12, 95% CI = [-0.43, 0.07]).

Discussion

Experiment 2 extends our findings in three ways. First, we replicate the findings of Experiment 1 in unstructured conversations: Participants expected their enjoyment to decline but later reported that their enjoyment did not change significantly across the five sessions. Second, Experiment 2 provides mediational support for the hypothesized mechanism: Conversation remained replete with material for longer than participants imagined. Finally, Experiment 2 finds little support for an alternative mechanism for the underestimation of enjoyment, namely, that participants expect prolonged conversation to feel more awkward than it actually does. Participants did not significantly misjudge changes in awkwardness as a conversation progressed.

Experiment 3: Talking With One Partner Versus Multiple Partners

If people underestimate their enjoyment over time because they fail to appreciate their and their partner's ability to sustain conversation material, as we hypothesize, then people may underestimate their enjoyment more for a prolonged conversation with one person than for multiple shorter conversations with different people, because they should expect to have ample conversation material at each fresh start with a different conversation partner. Experiment 3 tested this possibility by manipulating whether participants talked with the same partner multiple times (such that participants might expect their conversation material, and hence enjoyment, to decline over time as the conversations continue) or different partners each time (such that participants might expect to have new conversation material with each new partner and hence higher enjoyment).

Method

Participants. We planned to recruit 200 individuals in each of two conditions. In total, 395 participants⁶ from a university participant pool ($M_{age} = 22.10$; $SD_{age} = 5.38$; 69.37% female; 25.57% Caucasian) completed the study for \$15.00. Sensitivity power analyses performed after data collection indicated that this sample size provided about 80% power to detect a three-way evaluation type (predictions, experiences) × partner type (single, multiple) × session (1, 2, 3, 4, 5) interaction effect of size b = 0.09 for the enjoyment measure. We excluded an additional 13 participants: 12 because they were non-strangers and one because the participant engaged in the Session 2 conversation before predicting their enjoyment for Session 2. Retaining these participants produces no meaningful differences in the results (see Supplemental Material). In addition, we removed another 6 participants from all analyses because we could not analyze their data (four with duplicate IDs and two whose surveys crashed during the study).

⁶ The sample include an odd number of participants because, as noted, we excluded another 13 from analyses. The mixed linear models allow us to analyze the data despite having partial data from some dyads.

Procedure. The procedure was similar to Experiment 2, except that we recruited 6-10 individuals at a time so that participants could be assigned to speak with a different partner or the same partner in each session. First, the participants entered a computer lab and sat in designated seats in front of separate computers (with screens separated by divider walls). We then paired each participant with another participant who they had not met before and asked the pairs to have unstructured, face-to-face conversations for three minutes. After three minutes, the experimenter asked the participants to return to their computers, after which the participants rated their experiences of enjoyment and conversation material, in that order.

Then, we randomly assigned participants to either the *single-partner* (n = 199) or *multiple-partner* (n = 196) condition. We randomized at the level of the group so that all participants who visited the lab simultaneously were assigned to one condition. Participants in the single-partner condition proceeded exactly like participants in Experiment 2: They imagined interacting with the same person for another four sessions and predicted each session's enjoyment and conversation material (reporting each of these predictions immediately after Session 1). Then, they actually spoke for another four sessions and reported their experiences after each. Participants in the multiple-partner condition followed identical procedures except that they imagined interacting with a different individual in each session, selected at random in the room, and then proceeded to interact with a different individual in each session, selected at random. Participants in the multiple-partner condition were never assigned to speak with the same individual in multiple sessions.⁷

⁷ Participants then completed one exploratory item: "Did these get-to-know-you sessions feel like five distinct conversations or like one continuous conversation?" (*5 distinct* vs. *1 continuous*). Most participants in the single-partner condition (89.45%) felt they had one continuous conversation, $\chi^2(1, N = 199) = 123.86, p < .001$, while few participants in the multiple-partner condition did (12.24%), $\chi^2(1, N = 196) = 111.76, p < .001$. Participants also completed one free-response item after each conversation session in which they reported what they had talked about (see data files).

Finally, participants reported demographic information, and were paid and debriefed. Results

For each measure, we fit mixed linear models to the data with fixed-effects terms for evaluation type (predictions, experiences), session (1, 2, 3, 4, 5), partner type (single partner, multiple partners), and their higher-order interactions, random-intercept terms for the participant, the partner, and the participant-partner pairing in each session, and random-slope terms for evaluation type, session, and the evaluation type × session interaction, separately for the participant and the partner in each session. We centered the session variable around Session 3.

Enjoyment. Participants underestimated their enjoyment as their conversations progressed, replicating the earlier experiments. We found an effect of evaluation type, b = 0.42, SE = 0.03, t(436.70) = 13.16, p < .001, 95% CI = [0.35, 0.48], such that participants underestimated their enjoyment, and an effect of session, b = -0.06, SE = 0.01, t(417.53) = -5.43, p < .001, 95% CI = [-0.08, -0.04], such that predicted or actual enjoyment decreased across the sessions. Critically, we again found the hypothesized evaluation type × session interaction, b = 0.20, SE = 0.02, t(416.00) = 13.13, p < .001, 95% CI = [0.17, 0.23], such that predicted enjoyment declined more sharply than actual enjoyment (see Table 2).

We further hypothesized that this evaluation type × session interaction would be significantly stronger among participants who spoke with one partner than among those who spoke with multiple partners, leading to a three-way interaction with partner type. Unexpectedly, this three-way interaction was *not* significant (see Figure 3), b = 0.01, SE = 0.03, t(416.13) =0.47, p = .641, 95% CI = [-0.04, 0.07]. (For all other partner type effects, which are incidental to our primary hypotheses, see Supplemental Material.)

	Single-Partner Condition					Multiple-Partner Condition				
	Predictions		Experiences			Predictions		Experiences		
	Enjoyment	Conversation Material	Enjoyment	Conversation Material	Ε	Enjoyment	Conversation Material	Enjoyment	Conversation Material	
S 1		_	5.79 (1.00)	5.95 (0.92)		_	_	5.66 (0.97)	5.79 (1.10)	
S2	5.70 (0.89)	5.71 (1.01)	5.87 (0.85)	5.95 (0.98)	5	.29 (0.92)	5.37 (1.00)	5.63 (1.04)	5.65 (1.14)	
S3	5.53 (0.91)	5.45 (1.01)	5.95 (0.92)	5.94 (1.04)	5	.18 (0.96)	5.37 (1.00)	5.56 (1.14)	5.57 (1.20)	
S4	5.34 (1.07)	5.17 (1.16)	5.91 (1.00)	5.82 (1.13)	5	.03 (1.04)	5.31 (1.01)	5.65 (0.98)	5.63 (1.12)	
S5	5.22 (1.26)	4.91 (1.37)	5.98 (1.07)	5.86 (1.19)	4	.94 (1.12)	5.28 (1.15)	5.83 (0.95)	5.75 (1.12)	

Table 2. Mean enjoyment and conversation material across partner type (single vs. multiple). S1 through S5 denote Sessions 1 through 5. Numbers inside parentheses denote standard deviations.

To better understand these patterns, we examined the single-partner and multiple-partner conditions separately. The findings of Experiments 1 and 2 replicated in the single-partner condition (evaluation type × session interaction: b = 0.19, SE = 0.02, t(210.13) = 9.34, p < .001, 95% CI = [0.15, 0.23]): Participants predicted declining enjoyment (b = -0.15, SE = 0.02, t(200.12) = -6.78, p < .001, 95% CI = [-0.19, -0.11]), yet then experienced increasing enjoyment (b = 0.04, SE = 0.02, t(199.99) = 2.54, p = .012, 95% CI = [0.01, 0.08]). Whereas 59% of participants predicted declining enjoyment across the five sessions, only 40% of participants experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 398) = 15.29$, p < .001 (see Supplemental Figure S3; see Supplemental Material for session-by-session analyses).

Unexpectedly, participants in the multiple-partner condition *also* showed the evaluation type × session interaction effect, b = 0.20, SE = 0.02, t(220.00) = 9.15, p < .001, 95% CI = [0.16, 0.25]: They too predicted declining enjoyment (b = -0.17, SE = 0.02, t(169.28) = -9.31, p < .001, 95% CI = [-0.21, -0.14]), but did not experience significant changes in enjoyment (b = 0.03, SE =0.02, t(162.31) = 1.71, p = .090, 95% CI = [-0.005, 0.07]). Whereas 69% of these participants predicted declining enjoyment across the five sessions, only 49% of participants experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 392) = 16.90, p < .001$ (see Supplemental Figure S3).



Single-Partner Condition

Figure 3. Mean enjoyment over time in Experiment 3. Error bars represent ± 1 SE.

Conversation material. Participants underestimated how much material they would have to talk about as their conversations progressed—particularly in the single-partner condition. We

found an effect of evaluation type, b = 0.36, SE = 0.04, t(445.06) = 9.67, p < .001, 95% CI = [0.29, 0.43], such that participants underestimated conversation material, and an effect of session, b = -0.10, SE = 0.01, t(409.02) = -7.75, p < .001, 95% CI = [-0.13, -0.08], such that predicted or actual conversation material declined across the sessions. We again found the hypothesized evaluation type × session interaction, b = 0.16, SE = 0.02, t(434.51) = 9.60, p < .001, 95% CI = [0.13, 0.20], such that predicted conversation material generally declined more sharply than actual conversation material. Furthermore, here this evaluation type × session interaction *was* significantly stronger in the single-partner condition than in the multiple-partner condition, as indicated by the hypothesized three-way interaction with partner type, b = -0.13, SE = 0.03, t(434.64) = -3.92, p < .001, 95% CI = [-0.20, -0.07] (see Figure 4; Table 2). (For all other partner type effects, which are incidental to our primary hypotheses, see the Supplemental Material.)

To better understand these patterns, we examined the single-partner and multiple-partner conditions separately. First, participants in the single-partner condition showed the critical evaluation type × session interaction, b = 0.23, SE = 0.02, t(211.72) = 9.28, p < .001, 95% CI = [0.18, 0.28]: They predicted that conversation material would decline (b = -0.26, SE = 0.02, t(199.73) = -10.80, p < .001, 95% CI = [-0.31, -0.21]), yet then experienced no significant decline (b = -0.03, SE = 0.02, t(199.89) = -1.44, p = .152, 95% CI = [-0.07, 0.01]).

In contrast, participants in the multiple-partner condition showed a significantly weaker interaction, b = 0.10, SE = 0.02, t(221.57) = 4.03, p < .001, 95% CI = [0.05, 0.14]: Although they too predicted that conversation material would decline (b = -0.11, SE = 0.02, t(167.02) = -5.34, p < .001, 95% CI = [-0.15, -0.07]), and experienced no significant decline (b = -0.01, SE = 0.02, t(173.67) = -0.54, p = .590, 95% CI = [-0.06, 0.03]), the three-way evaluation type × session ×

partner type interaction indicates that participants in the multiple-partner condition were significantly less likely to underestimate conversation material as the sessions progressed (see Figure 4).



Figure 4. Mean conversation material over time in Experiment 3. Error bars represent ± 1 SE.

Mediation. Exploratory mediational analyses found support for conversation material as a mediator. Using the same models as in Experiment 2, differences between predicted and experienced enjoyment were partially mediated by differences between predicted and experienced conversation material in both the single-partner condition (indirect effect: b = 0.14, SE = 0.02, 95% CI = [0.11, 0.18]; direct effect: b = 0.24, SE = 0.02; 95% CI = [0.21, 0.28]) and the multiple-partner condition (indirect effect: b = 0.15, SE = 0.03, 95% CI = [0.09, 0.21]; direct effect: b = 0.29, SE = 0.03, 95% CI = [0.25, 0.35]). Differences between predicted and experienced changes in enjoyment were partially mediated by differences between predicted and experienced changes in conversation material in both the single-partner condition (indirect effect: b = -0.11, SE = 0.02, 95% CI = [-0.15, -0.08]; direct effect: b = -0.08, SE = 0.02, 95% CI = [-0.12, -0.05]) and the multiple-partner condition (indirect effect: b = -0.04, SE = 0.01, 95% CI = [-0.06, -0.02]; direct effect: b = -0.16, SE = 0.01, 95% CI = [-0.19, -0.14]).

Discussion

In Experiment 3, participants expected to have more conversation material to discuss with multiple partners than with one. Yet unexpectedly, participants in both the single-partner and multiple-partner conditions expected their enjoyment to decline and underestimated their enjoyment as the sessions continued. In particular, replicating the prior experiments, participants in the single-partner condition expected their enjoyment to diminish more rapidly than it did, and this miscalibration was statistically mediated by their underestimation of how much conversation material they would have to discuss as they continued speaking. Yet unexpectedly, participants in the multiple-partner condition, who anticipated having more material to discuss with each new partner, also underestimated their enjoyment over time. This finding raises the possibility that assigning participants to talk with one person versus multiple people manipulates more than just beliefs about conversation material. For instance, participants may have expected that speaking with many partners would feel more tiring than speaking with one partner, or may have expected that introducing themselves and making small talk with many partners would feel more repetitive from session to session than having a longer-lasting conversation with one partner, potentially explaining why participants might have predicted declining enjoyment despite having raised expectations about conversation material. To circumvent these possible confounds between the single-partner and multiple-partner conditions, we investigated the proposed conversation material mechanism solely within single-partner conditions in Experiments 4-5.

Experiment 4: Mentally Simulating the Topics of Conversation

To continue investigating why people misunderstand the hedonic trajectory of conversation, we next manipulated one cognitive process thought to underlie people's predictions: mental simulation. When judging an upcoming conversation, people are likely to mentally simulate the conversation to predict how the actual conversation will unfold. Our theory suggests that people tend to mentally simulate their conversations with insufficient detail, such that people do not naturally bring to mind the remaining topics that they may still talk about and therefore underestimate how much they will enjoy longer-lasting conversations. If so, explicitly prompting participants to mentally simulate the topics of conversation in detail should draw their attention to new material that they are likely to discuss, and so should help to calibrate their expectations about the trajectory of their enjoyment as a conversation progresses.

An alternative hypothesis, however, is that people's mental simulations are sufficiently detailed but inaccurate, such that people bring to mind ample conversation material when mentally simulating a conversation but mis-imagine discussing progressively less enjoyable topics—or perhaps discussing the same old material repetitively—as the conversation continues.

If so, explicitly prompting participants to think about the topics of conversation in detail should not affect, or might even accentuate, the tendency to predict declining enjoyment and to underestimate one's enjoyment as the conversation progresses.

We tested these competing hypotheses in Experiment 4 by asking participants to have unstructured conversations for several minutes and then manipulating whether or not they mentally simulated the remainder of the conversation in detail before reporting predictions. In particular, participants in the detailed-simulation condition thought about the content of the remaining 20 minutes of conversation in detail. To ensure participants followed this instruction, we asked them to write down topics that they thought they were likely to discuss with their partner throughout the remainder of the conversation.⁸ In contrast, participants in the control condition did not complete this task before reporting predictions. We expected that participants assigned to complete the detailed-simulation task before reporting predictions would have significantly more calibrated beliefs about finding material to discuss, and would be significantly less likely to misjudge the hedonic trajectory of conversation, than participants who were not assigned to complete this task.

Method

Participants. We recruited 200 participants through a university's Virtual Lab (50 pairs in each of the two conditions: $M_{age} = 27.83$; $SD_{age} = 10.76$; 70.50% female; 27.00% Caucasian) to complete the study using the Zoom video conferencing software in exchange for \$9. Sensitivity power analyses performed after data collection indicated that this sample size

⁸ Note that one possible concern is that participants might have trouble simulating the conversation. A pre-test (N = 102; see Supplemental Material) suggested participants are indeed able to simulate a conversation in detail: In the pre-test, participants who completed the detailed-simulation task considered the task to be relatively easy (p < .001, d = 1.05) and reported thinking about the remainder of the conversation in significantly more detail—that is, they reported thinking significantly more about topics they would discuss, statements they would make, and words that they and their partner would use during the conversation—than did participants who were not instructed to complete this detailed-simulation task (p < .001, d = 0.69).

provided about 80% power to detect a three-way evaluation type (predictions, experiences) × simulation type (control, detailed) × session (1, 2, 3, 4, 5) interaction effect of size b = 0.20 for the enjoyment measure. We excluded an additional 3 pairs based on criteria in our preregistration: 1 pair because the participants could not see or hear each other for much of the conversation, and 2 pairs because one participant did not follow instructions in the detailed-simulation task. Retaining all pairs produces no meaningful differences in the results (see Supplemental Material).

Procedure. We recruited 2-10 participants in each session. Participants connected to the video conference from their personal computers. After all participants had arrived, the experimenter sent each participant a personalized survey link corresponding to their condition assignment and asked the participants not to browse the Internet or leave their computers during the session. The experimenter verified that none of the participants knew one another, paired each participant with a stranger in the same condition, and assigned each pair to have five minutes of spoken, unstructured conversation. These conversations took place in private video conferencing rooms to ensure that the participants could see and hear their conversation partner but not the other participants. After five minutes, each participant completed two dependent measures in the survey: "How enjoyable did you find these last 5 minutes of conversation?" (1 = *not at all enjoyable*; 7 = very enjoyable), and "How much new material did you and the other person have to talk about during these last 5 minutes of conversation? That is, new material that you had not already discussed with one another?" (1 = *no new material*; 7 = very much new material).
After reporting these experiences, participants read that they and their study partner would continue speaking for another 20 minutes. Pairs were assigned to one of two conditions. Pairs in the detailed-simulation condition read the following instructions:

> "Please think about how the next 20 minutes of your conversation are likely to unfold. Specifically, think about the topics that you and your study partner may talk about. In the spaces below, write down a few topics that you think you will discuss with your study partner throughout the conversation. Again, please spend some time thinking in detail about how you believe the rest of the conversation will go."

These participants then wrote down topics that they expected to discuss in each fiveminute interval (minutes 5-10, minutes 10-15, minutes 15-20, minutes 20-25). Common topics that participants expected to discuss included academics, personal hobbies, and travel. They then read that during the conversation they would be allowed, but not required to discuss the topics they had written down. Participants in the control condition—like all conditions in the prior experiments—did not complete this task. Participants in both conditions then reported two sets of predictions: "How enjoyable do you think you will find these next 20 minutes of conversation? (Again, your rating was X out of 7 for the first 5 minutes.)" (1 = not at all enjoyable; 7 = very*enjoyable*), and "How much new material do you think you and the other person will have to talk about during these next 20 minutes of conversation? That is, new material that you had not already discussed with one another? (Again, your rating was X out of 7 for the first 5 minutes.)" (1 = no new material; 7 = very much new material). We measured judgments of new conversation material to test whether imagining the conversation topics in detail would draw participants' attention to material they had yet to discuss, as our theory suggests. Participants reported these predictions for each five-minute interval (minutes 5-10; minutes 10-15; minutes 15-20; minutes 20-25). Participants in the detailed-simulation condition viewed the topics that they expected to discuss next to the scales where they reported predictions for each five-minute interval.

After reporting predictions, participants continued speaking with the same partner. Participants in the detailed-simulation condition did not view the conversation topics they had written down while speaking. To minimize interruptions between sessions of conversation, the experimenter sent a written message to the private video conferencing rooms after 5 minutes, 10.5 minutes, 16 minutes, and 21.5 minutes asking the participants to pause their conversation to complete survey items and to immediately resume the conversation after both participants had reached the stop screen in the survey. Each time the participants paused their conversation, they rated their experiences on the same enjoyment and conversation material measures described earlier. The experimenter sent the second, third, and fourth messages every 5.5 minutes to allow up to 30 seconds for the participants to complete survey items before resuming their conversations.

After finishing their conversations, participants in the detailed-simulation condition reread the topics they had written down earlier and completed the following item: "Please think back on minutes 5-25 of your conversation. Approximately what percentage of minutes 5-25 did you spend discussing any of the topics listed above? (all combined)" (0% vs. 10% vs. ... vs. 100%). Participants then completed two exploratory measures: "Back at the start of the session, who did you think would sustain the conversation more?" (*me* vs. *the other person* vs. *both of us equally*), and "Now at the end of the session, who ended up sustaining the conversation more?" (*me* vs. *the other person* vs. *both of us equally*).

Participants then indicated whether they had difficulty seeing or hearing the other participant during the conversation (*no* vs. *yes (please explain)*). Finally, participants reported demographic information and were debriefed.

Results

For each measure, we fit a mixed linear model to the data with fixed-effects terms for evaluation type (predictions vs. experiences), session (1, 2, 3, 4, 5), simulation type (control vs. detailed), and their higher-order interactions, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and the evaluation type × session interaction for each pair. We centered the session variable around Session 3.

Enjoyment. Participants underestimated their enjoyment as their conversations progressed. Consistent with our hypotheses, this misunderstanding was significantly less pronounced in the detailed-simulation condition than in the control condition. We found an effect of evaluation type, b = 0.69, SE = 0.05, t(120.14) = 12.91, p < .001, 95% CI = [0.58, 0.80], such that participants underestimated their enjoyment, and an effect of session, b = -0.07, SE = 0.02, t(101.69) = -3.75, p < .001, 95% CI = [-0.10, -0.03], such that predicted or actual enjoyment decreased over time. We found the hypothesized evaluation type × session interaction, b = 0.31, SE = 0.03, t(203.31) = 9.31, p < .001, 95% CI = [0.25, 0.38], indicating that predicted enjoyment declined more sharply than actual enjoyment. Importantly, this two-way evaluation type × session interaction was significantly weaker in the detailed-simulation condition, as indicated by a significant three-way interaction effect with simulation type (see Figure 5), b = -0.20, SE = 0.07, t(203.31) = -3.00, p = .003, 95% CI = [-0.33, -0.07]. Participants in the control condition predicted significantly sharper declines in enjoyment than did participants in the simulation condition, b = 0.22, SE = 0.05, t(99.81) = 4.43, p < .001, 95% CI = [0.12, 0.31], but changes in

experienced enjoyment did not differ significantly across conditions, b = 0.02, SE = 0.04, t(894.14) = 0.41, p = .680, 95% CI = [-0.06, 0.09]. (For all other effects, which are incidental to our primary hypotheses, see the Supplemental Material.)

To better understand these patterns, we next analyzed the control and detailed-simulation conditions separately. Participants in the control condition showed the hypothesized evaluation type × session interaction, b = 0.41, SE = 0.05, t(69.63) = 8.02, p < .001, 95% CI = [0.31, 0.52]: They predicted that their enjoyment would decline significantly (b = -0.33, SE = 0.04, t(50.76) = -8.55, p < .001, 95% CI = [-0.41, -0.25]), yet experienced significant increases in enjoyment as the conversation continued (b = 0.08, SE = 0.03, t(50.39) = 2.54, p = .014, 95% CI = [0.02, 0.15]). Whereas 86% of pairs expected declining enjoyment, only 34% of pairs experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 100) = 28.17$, p < .001 (see Supplemental Figure S5).

In contrast, participants in the detailed-simulation condition showed a significantly weaker interaction, b = 0.21, SE = 0.04, t(323.52) = 4.74, p < .001, 95% CI = [0.12, 0.30]: Although they too predicted that their enjoyment would decline (b = -0.11, SE = 0.04, t(50.67) = -3.16, p = .003, 95% CI = [-0.19, -0.04]), and experienced significant increases in enjoyment as the conversation continued (b = 0.10, SE = 0.03, t(49.67) = 3.00, p = .004, 95% CI = [0.03, 0.16]), the three-way evaluation type × session × simulation type interaction indicates that participants in the detailed-simulation condition were significantly less likely to underestimate enjoyment over time than participants in the control condition (see Figure 5). Whereas 76% of pairs in the detailed-simulation condition expected declining enjoyment, only 30% of pairs experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 100) =$

21.24, p < .001 (see Supplemental Figure S5; see Supplemental Material for session-by-session analyses).



Figure 5. Mean enjoyment over time in Experiment 4. Error bars represent ± 1 SE.

Conversation material. Participants overestimated how quickly they would run out of new material to discuss. Consistent with our hypotheses, this misunderstanding was significantly less pronounced in the detailed-simulation condition than in the control condition. We found an effect of evaluation type, b = 0.63, SE = 0.06, t(114.55) = 9.94, p < .001, 95% CI = [0.50, 0.75],

such that participants underestimated how much new material they would have to discuss, and an effect of session, b = -0.10, SE = 0.02, t(100.00) = -4.40, p < .001, 95% CI = [-0.14, -0.05], such that predicted or actual conversation material decreased over time. We again found the hypothesized evaluation type × session interaction, b = 0.23, SE = 0.04, t(219.53) = 6.08, p < .001, 95% CI = [0.16, 0.31], such that participants overestimated how quickly they would run out of new material to discuss. Importantly, this two-way evaluation type × session interaction was significantly weaker in the detailed-simulation condition, as indicated by a significant three-way interaction effect with simulation type (see Figure 6), b = -0.26, SE = 0.08, t(219.53) = -3.45, p < .001, 95% CI = [-0.41, -0.11]. Participants in the control condition predicted significantly sharper declines in conversation material than did participants in the simulation condition, b = 0.32, SE = 0.05, t(100.04) = 5.88, p < .001, 95% CI = [0.21, 0.43], but the trajectory of participants' experiences of conversation material did not differ significantly, b = 0.06, SE = 0.05, t(100.00) = 1.12, p = .264, 95% CI = [-0.05, 0.16]. (For all other effects, which are incidental to our primary hypotheses, see the Supplemental Material.)

To better understand these patterns, we next examined the control and detailed-simulation conditions separately. First, participants in the control condition showed the critical evaluation type × session interaction, b = 0.36, SE = 0.05, t(71.12) = 6.78, p < .001, 95% CI = [0.26, 0.47]: They predicted that they would have less new material to talk about as their conversations continued (b = -0.38, SE = 0.05, t(50.77) = -8.06, p < .001, 95% CI = [-0.47, -0.28]), yet experienced no significant changes over time (b = -0.01, SE = 0.04, t(50.55) = -0.33, p = .742, 95% CI = [-0.09, 0.07]). In contrast, participants in the detailed-simulation condition showed a non-significant interaction, b = 0.10, SE = 0.06, t(288.41) = 1.81, p = .072, 95% CI = [-0.009, 0.21]: They neither predicted (b = -0.05, SE = 0.04, t(50.07) = -1.36, p = .180, 95% CI = [-0.13,

0.03]), nor experienced (b = 0.05, SE = 0.04, t(50.53) = 1.08, p = .285, 95% CI = [-0.04, 0.13]),

significant changes in conversation material over time (see Figure 6).



Control Condition

Figure 6. Mean conversation material over time in Experiment 4. Error bars represent ± 1

SE.

Mediation. Mediational analyses found support for conversation material as a mediator, supporting our hypotheses. Using the same models as in Experiments 2-3, differences between predicted and experienced enjoyment were partially mediated by differences between predicted

and experienced conversation material in the control condition (indirect effect: b = 0.37, SE = 0.05, 95% CI = [0.26, 0.47]; direct effect: b = 0.44, SE = 0.05, 95% CI = [0.33, 0.54]), and in the detailed-simulation condition (indirect effect: b = 0.22, SE = 0.03, 95% CI = [0.15, 0.29]; direct effect: b = 0.59, SE = 0.03, 95% CI = [0.52, 0.65]). Differences between predicted and experienced changes in enjoyment were partially mediated by differences between predicted and experienced changes in conversation material in control condition (indirect effect: b = -0.20, SE = 0.06, 95% CI = [-0.33, -0.10]; direct effect: b = -0.21, SE = 0.05, 95% CI = [-0.30, -0.12]), but not in the detailed-simulation condition (indirect effect: b = -0.02, SE = 0.04, 95% CI = [-0.09, 0.05]; direct effect: b = -0.19, SE = 0.03, 95% CI = [-0.26, -0.12]), presumably because we found no significant differences between predicted and experienced changes in conversation material and experienced changes in conversation material in the detailed-simulation condition.

Secondary measures. After the conversation, participants in the detailed-simulation condition estimated spending about 58.20% of minutes 5-25 discussing topics that they had written down earlier. Time spent discussing these topics was not significantly associated with the participants' average enjoyment experiences, b = 0.001, SE = 0.003, t(97.35) = 0.25, p = .805, 95% CI = [-0.005, 0.01], nor with their average experiences of finding new material to discuss in minutes 5-25, b = -0.001, SE = 0.003, t(95.72) = -0.43, p = .672, 95% CI = [-0.01, 0.004].

We then analyzed the exploratory measures. Across both conditions, participants indicated that they had initially expected both individuals to sustain the conversation (27.50% "self" vs. 18.50% "other" vs. 54.00% "both"), $\chi^2(2, N = 200) = 40.87$, p < .001, and reported that both individuals had in fact sustained the conversation (19.50% "self" vs. 18.50% "other" vs. 62.00% "both"), $\chi^2(2, N = 200) = 73.99$, p < .001. These two sets of responses did not differ significantly, $\chi^2(2, N = 400) = 3.83$, p = .148.

Discussion

Experiment 4 makes three important contributions to our research. First, the control condition replicates the key finding of the earlier experiments: Participants expected their enjoyment to decline more rapidly than it actually did as a conversation progressed. This miscalibration was statistically mediated by conversation material, such that participants underestimated how much new material they would have to discuss over time. Second, we found causal evidence that underestimate their enjoyment over time. Prompting participants to simulate the conversation topics in detail, thus drawing their attention to new material they were likely to discuss, led to significantly more calibrated expectations about changes in enjoyment. People misunderstand the hedonic trajectory of conversation at least partly because they tend to imagine their conversations with insufficient detail, such that they do not naturally bring to mind topics of conversation that are likely to sustain their enjoyment as a conversation progresses. Third, this experiment suggests that detailed mental simulation could act as an intervention for calibrating people's beliefs about the trajectory of their enjoyment in conversation.

Although participants more accurately predicted the trajectory of their enjoyment when they were instructed to simulate the conversation in detail, these participants nonetheless underestimated their enjoyment to some degree over time. We see at least two possible explanations for this finding. First, the detailed-simulation manipulation was effective but may have been imperfect, such that participants' mental simulations in the detailed-simulation condition were more detailed than those of participants in the control condition, yet may still have been less detailed than the conversation itself. Imagining the content of 20 minutes of conversation in lifelike detail may require more effort than participants devoted to the task in this

HEDONIC TRAJECTORY OF CONVERSATION

experiment. If so, a more elaborate procedure for mentally simulating the content of a conversation, such as instructing participants to think about topics that they are likely to discuss and then asking them to "unpack" these topics by writing out sub-topics, or imagining how the conversation partner might respond, might further reduce differences between the predicted and actual hedonic trajectories of conversation. Alternatively, our findings might suggest that complementary mechanisms apart from conversation material also help to explain why participants misunderstand the hedonic trajectory of conversation. For example, participants might also overestimate how quickly they will become fatigued, or how quickly their partner will lose interest in the conversation, neither of which is likely to be altered by mentally simulating the topics of a conversation. Notably, outcomes such as feeling fatigued or losing interest could potentially follow from having little material to discuss, meaning that underestimation of conversation material could potentially give rise to other, related (mis)judgments that could also influence one's expected enjoyment of a conversation. We investigated several potential complementary mechanisms in Experiment 5.

Experiment 5: Allocating Time for Conversation

Experiment 5 had two goals. First, we tested one potential consequence of misunderstanding the hedonic trajectory of conversation: People may allocate less time for conversation than they have available to them, at least in part because they will expect their enjoyment to diminish as a conversation continues. We also sought to get an initial sense of whether such behavior is problematic. On the one hand, devoting less time to conversation could be problematic for relationship formation to the extent that people choose—perhaps unknowingly—to miss out on forging closer connections. On the other hand, whether this is problematic for people's *overall* well-being is less clear, as the net value of cutting conversations

short will depend on what people choose to do with that time instead. Therefore, to help address this issue, we gave participants a knowingly unenjoyable alternative to continued talking: sitting alone in silence without other distractions (which people find unpleasant and try to avoid: Wilson et al., 2014). If participants state that their explicit goal is to enjoy themselves during this study—and if they prefer to fulfill this goal by spending some time sitting in silence rather than continuing a conversation—this suggests that, at least in this particular context, people's misestimation of the hedonic trajectory of their conversation can lead them to devote too little time for conversation for their wellbeing.

To test this possibility, we instructed participants to speak for several minutes and then asked them how long they preferred to continue talking before ending their conversations. Then, we either instructed them to stop talking after that amount of time had passed (the "free-choice" condition) or we instructed them to *keep* talking for the full 30 minutes of the study session (the "keep-talking" condition). Participants knew that after ending their conversations, they would simply sit by themselves with nothing else to do. We hypothesized that, despite this knowingly-dismal alternative, many participants in the free-choice condition would prefer to end their conversations before 30 minutes had passed. As a result, we also hypothesized that participants in the free-choice condition would enjoy themselves less on average than those in the keep-talking condition who were required to speak for the full 30 minutes.

Our second goal in Experiment 5 was to assess how other dimensions of conversation change as two people continue talking, in order to enrich our understanding of the real-time dynamics of conversation and to test potential complementary mechanisms for the misprediction. Specifically, we measured outcomes that might also result from underestimating conversation material, including whether participants might overestimate how quickly they would grow tired during the conversation (Zelenski et al., 2013) and how quickly they or their partner would lose interest in talking (Epley & Schroeder, 2014). Further, to test whether participants might underestimate their enjoyment because they expected their discussions to become excessively intimate as they continued (Collins & Miller, 1994; Kardas, Kumar, & Epley, in press), we also measured the predicted and actual intimacy of the conversation.

Method

Participants. We planned to recruit 200 participants (50 pairs in each of two conditions). In total, 198 participants (99 pairs) from a university participant pool ($M_{age} = 20.19$; $SD_{age} = 2.13$; 70.20% female; 25.76% Caucasian) completed the study for \$20.00. Sensitivity power analyses performed after data collection indicated that this sample size provided about 80% power to detect a two-way activity type (free choice, keep talking) × session (1, 2, 3, 4, 5) interaction effect of size b = 0.11 for the experienced enjoyment measure. We excluded an additional two participants because they already knew one another. Retaining all participants produces no meaningful differences in the results (see Supplemental Material).

Procedure. We recruited up to 16 participants at a time. Similar to Experiment 3, the participants entered a computer lab and sat in designated seats in front of separate computers. To ensure that participants could not distract themselves with other activities, we collected their personal belongings at the beginning of the experimental session and disabled Internet browsing except for the survey software. We then asked participants to turn to the person seated next to them and instructed them to have unstructured, spoken conversations for five minutes. After five minutes, participants reported their Session 1 experiences in the survey. First, they completed a three-item enjoyment scale: "How much did you enjoy these last five minutes?", "How happy did you feel during these last five minutes?", and "How sad did you feel during these last five

minutes?" (reverse-scored; 1 = not at all; 7 = very). We expanded the enjoyment scale from the single item used in Experiments 2 and 3 to measure both positive and negative emotions that participants might experience. To test the primary hypothesized mechanism, we asked participants to complete a two-item conversation material scale: "How much did YOU have to say during these last five minutes?" and "How much did THE OTHER PERSON have to say during these last five minutes?" (1 = nothing at all; 7 = quite a bit). In addition, to assess other experiences potentially related to running out of conversation material, we asked: "How tiring were these last five minutes?", "How interested were YOU in talking to the other person during these last five minutes?", (1 = not at all; 7 = very). Finally, to test another potential mechanism, participants reported how intimate the conversation was: "How intimate was your conversation during these last five minutes?" (1 = not at all; 7 = very).

Next in the survey, participants read: "First, suppose we ask you to spend all of the next 25 minutes continuing to talk to the other person." Participants then predicted how much they would enjoy each upcoming five-minute interval on separate scales from 1 (*not at all*) to 7 (*very much*). They then predicted their own and their partner's conversation material, their own fatigue, their own and their partner's interest in talking, and the intimacy of the conversation for each five-minute interval.

We also collected participants' predictions of how they would feel if they did *not* continue talking with their partner. They read: "Now instead, suppose we ask you to spend all of the next 25 minutes keeping to yourself without chatting or browsing the Internet." Participants then predicted their enjoyment, happiness, sadness, and tiredness for each five-minute interval. We omitted the conversation material, fatigue, interest, and intimacy measures when participants

reported their predictions about keeping to themselves because these items were only relevant to conversation.

Then participants read that they would spend the next 25 minutes in one of three ways: (i) continuing to talk to the other person, (ii) keeping to themselves without chatting or browsing the Internet, or (iii) spending some time talking to the other person and the remaining time keeping to themselves. Each of these descriptions matched the instructions that participants later received before each five-minute session, meaning that participants were fully informed about each activity. Participants indicated how they preferred to spend the next 25 minutes and read that their preference would remain private (*Keep to myself for all 25 minutes* vs. *Continue talking to the other person for minutes 0-5, then keep to myself for minutes 5-25* vs. [...] vs. *Continue talking to the other person for all 25 minutes*].

On the following page, participants explained why they thought they had selected this preference by selecting one or more response options corresponding to the dependent measures. Participants who preferred to speak for fewer than 25 minutes selected one or more of the following options: "I thought that this would be most enjoyable," "I thought that this would make me feel happiest," "I thought that this would make me feel least sad," "I thought that this would be the least tiring," "I thought that I would lose interest in talking to the other person," "I thought that the other person would lose interest in talking to me," "I thought I would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would run out of things to say," "I thought the other person would be too superficial," or "Other (please specify)."

In contrast, those who preferred to speak throughout the remaining 25 minutes selected one or more of the following response options: "I thought that this would be most enjoyable," "I thought that this would make me feel happiest," "I thought that this would make me feel least sad," "I thought that this would be the least tiring," "I thought that I would remain interested in talking to the other person," "I thought that the other person would remain interested in talking to me," "I thought I would have plenty to say," "I thought the other person would have plenty to say," "I thought the conversation would be reasonably intimate," "I thought the conversation would be reasonably superficial," or "Other (please specify)." Although people do not have perfect insight into the causes of their behavior (Nisbett & Wilson, 1977), these measures allow us to begin testing whether people who want to maximize their enjoyment nonetheless prefer shorter conversations than would be optimal for their enjoyment.

After completing the survey, participants were then randomly assigned to either the *keep-talking* condition or the *free-choice* condition. In the keep-talking condition, pairs were assigned to speak for another 25 minutes. Before each five-minute session, these participants read in the survey, "During these next five minutes, you and the other person will continue talking to one another." After the experimenter instructed them to begin speaking, these pairs spoke for five minutes and then reported their experiences on the same measures described above. In the free-choice condition, we determined the duration of the conversation based on the amount of time that the participants themselves reported preferring to speak in the survey. To model a natural conversation, in which conversation ends when *either* person first makes their exit, the survey instructed each pair to stop talking after the shorter duration that either participant selected. For instance, if one participant preferred to speak for another 5 minutes and the other preferred to speak for another 10 minutes, each participant's survey instructed them to speak for the first five

minutes ("During these next five minutes, you and the other person will continue talking to one another"), but instructed them *not* to speak at the start of each subsequent session ("During these next five minutes, you and the other person will each keep to yourselves"). Thus, pairs in the free-choice condition spoke throughout the remaining 25 minutes only if *both* participants preferred to speak for the full study session. Participants did not, however, see each other's survey responses and were not informed that the duration of the conversation depended on their own or the other person's preferences. Thus, participants could not attribute the end of the conversation to either themselves or their conversation partner. They also were not told after the first session how many more sessions they would continue speaking before being instructed to stop talking.

Participants then completed the five remaining sessions, following the instructions in the survey to talk with the other person or to keep to themselves in each session. Participants who kept to themselves wore headphones with no sound playing, to keep them from listening to other ongoing conversations. They were not allowed to browse the Internet, consistent with the instructions they received before reporting their preferences in the survey. After each session, participants completed the dependent measures described earlier.

Finally, participants reported their demographic information, and were paid and debriefed.⁹

Results

We combined the enjoyment, happiness, and sadness (reverse-scored) items to form an enjoyment scale (each session, $\alpha s \ge .73$) and combined the two conversation material items to

⁹ We finished the study on March 13th, 2020, before COVID-19 shelter-in-place restrictions were enacted widely within the U.S., but we nonetheless asked the final 33 pairs whether concerns about the virus impacted any of their responses. No participants reported preferring shorter conversations to physically distance themselves from their conversation partner.

form a conversation material scale (each session, $\alpha s \ge .78$). For the enjoyment scale, we then performed mixed linear modeling with fixed-effects terms for evaluation type (predictions vs. experiences), session (1, 2, 3, 4, 5), activity type (free choice vs. keep talking), and their higherorder interactions, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and the evaluation type × session interaction for each pair. We centered the session variable around 3.5 (the median of the six sessions).

Enjoyment experiences. Supporting our hypotheses, participants in the keep-talking condition experienced significantly greater enjoyment across the six sessions (M = 5.88, SD = 0.62) than did participants in the free-choice condition (M = 5.05, SD = 0.90), t(155.08) = 6.68, p < .001, 95% CI_{difference} = [0.59, 1.08], d = 1.08. Importantly, even participants who reported trying to maximize their enjoyment preferred shorter conversations than would have been optimal for their enjoyment. Differences in experienced enjoyment remained significant when comparing all participants in the keep-talking condition against the subset of individuals in the free-choice condition: M = 5.31, SD = 0.98), t(130.36) = 4.17, p < .001, 95% CI_{difference} = [0.32, 0.90], d = 0.69, and when comparing all participants in the keep-talking condition against the subset of those individuals in the free-choice condition: M = 5.31, SD = 0.98), t(130.36) = 4.17, p < .001, 95% CI_{difference} = [0.32, 0.90], d = 0.69, and when comparing all participants in the keep-talking condition against the subset of those individuals in the free-choice condition: M = 5.31, SD = 0.98), t(130.36) = 4.17, p < .001, 95% CI_{difference} = [0.32, 0.90], d = 0.69, and when comparing all participants in the keep-talking condition against the subset of those individuals in the free-choice condition: M = 5.53, SD = 0.98), t(103.19) = 2.38, p = .019, 95% CI_{difference} = [0.06, 0.67], d = 0.49 (see Supplemental Table S4 for the reasons that participants selected to explain their preferences).¹⁰ These findings

¹⁰ Per the preregistered analysis plan, we also compared enjoyment experiences among all participants in the keep-talking condition versus the subset of participants in the free-choice condition who preferred to speak for fewer than the full 25 minutes (n = 80 individuals in the free-choice condition). Differences in enjoyment remained significant (Ms = 5.88 vs. 5.05, respectively; SDs = 0.62 vs. 1.04), t(146.86) = 6.47, p < .001, 95% CI_{difference} = [0.58, 1.08], d = 0.92.

are consistent with the possibility that individuals who want to maximize their enjoyment prefer shorter conversations than would allow them to do so, at least in contexts in which they will knowingly have little else to do after finishing their conversations.

These differences between the keep-talking and free-choice conditions in experienced enjoyment grew significantly over time (see Figure 7), b = -0.32, SE = 0.04, t(85.47) = -7.32, p < .001, 95% CI = [-0.41, -0.23]—as we would expect, given that more participants stopped talking in the free-choice condition as the sessions continued. Pairs in the keep-talking condition did not experience significant changes in enjoyment over time, b = 0.003, SE = 0.02, t(49.42) = 0.14, p = .889, 95% CI = [-0.04, 0.05], and experienced decreasing or increasing enjoyment at chance levels across the five sessions (42% vs. 58%, respectively), $\chi^2(1, N = 50) = 1.28$, p = .258. In contrast, pairs in the free-choice condition experienced significant decreases in enjoyment over time, b = -0.32, SE = 0.04, t(50.05) = -8.32, p < .001, 95% CI = [-0.40, -0.24], and were significantly more likely to experience decreasing than increasing enjoyment (88% vs. 12%, respectively), $\chi^2(1, N = 49) = 27.94$, p < .001 (see Supplemental Figure S6 for the observed slopes of experienced enjoyment by pair; see Supplemental Material for session-by-session analyses).

As hypothesized, these differences in enjoyment arose because pairs in the keep-talking condition had significantly longer conversations (M = 30.00 minutes, SD = 0.00 minutes) than did pairs in the free-choice condition (M = 13.57 minutes, SD = 7.29 minutes), t(97) = 15.94, p < .001, 95% CI_{difference} = [14.38, 18.47], d = 3.20. A mediational analysis found that differences in average enjoyment experiences between the keep-talking and free-choice conditions were fully mediated by differences in conversation duration (indirect effect: b = -1.08, SE = 0.25, 95% CI = [-1.58, -0.60]; direct effect: b = 0.25, SE = 0.27, 95% CI = [-0.29, 0.78]). Most pairs in the free-

choice condition (96%) had shorter conversations than required, $\chi^2(1, N = 49) = 41.33$, p < .001, yet pairs in the free-choice condition that engaged in longer conversations tended to experience significantly higher average enjoyment across the six sessions, r = .53, t(47) = 4.29, p < .001, 95% CI = [.29, .71].

Next, we sought to understand whether participants in the free-choice condition preferred shorter conversations partly because they misunderstood the hedonic trajectory of conversation. We conducted correlational analyses to examine this possibility. For each participant we computed the observed slope of predicted enjoyment across Sessions 2 through 6 separately for conversation and for keeping to oneself (see Supplemental Table S3 for descriptive statistics by session). Consistent with our hypothesis, participants who predicted a more negative hedonic trajectory for conversation than for keeping to oneself tended to prefer shorter conversations, r = .27, t(196) = 3.90, p < .001, 95% CI = [.13, .39]. However, their beliefs about their enjoyment of conversation were mistaken: Participants in the free-choice condition predicted significantly larger declines in enjoyment than participants in the keep-talking condition experienced, b = 0.22, SE = 0.03, t(99.15) = 6.75, p < .001, 95% CI = [0.15, 0.28] (see Supplemental Material for the other effects). These findings are consistent with the possibility that misunderstanding the hedonic trajectory of conversation might be one factor that led participants in the free-choice condition to prefer shorter conversations than would have been optimal for their enjoyment.



Figure 7. Mean enjoyment experiences over time in Experiment 5. Error bars represent ± 1 SE. Percentages denote the proportion of pairs in the free-choice condition that spoke in each session.

Enjoyment predictions versus experiences. Within the keep-talking condition, we replicated the finding that participants misunderstood the hedonic trajectory of conversation. Like the prior experiments, we fit mixed linear models to the data with fixed-effects terms for evaluation type (predictions, experiences), session (1, 2, 3, 4, 5, 6), and their interaction, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and the evaluation type × session interaction for each pair, separately for each dependent measure. For the enjoyment scale, we observed a significant evaluation type × session interaction, b = 0.20, SE = 0.02, t(125.99) = 8.04, p < .001, 95% CI = [0.15, 0.24]: Participants in the keep-talking condition expected their conversations to become less enjoyable over time (b = -0.19, SE = 0.02, t(50.66) = -9.06, p < .001, 95% CI = [-0.24, -0.15]) but did not experience significant changes in enjoyment (b = 0.003, SE = 0.02, t(49.42) = 0.14, p = .889, 95% CI = [-0.04, 0.05]). Whereas 90% of these pairs predicted declining enjoyment across the five sessions, only 42% of

pairs experienced declining enjoyment, $\chi^2(1, N = 100) = 25.67$, p < .001 (see Supplemental Figure S7).

Conversation material predictions versus experiences. In the keep-talking condition, we replicated the finding that participants expected to run out of material to discuss more quickly than they did, as indicated by a significant evaluation type × session interaction, b = 0.30, SE = 0.04, t(71.38) = 8.29, p < .001, 95% CI = [0.23, 0.37]. Participants expected to have less to talk about as their conversations continued (b = -0.34, SE = 0.03, t(50.81) = -10.47, p < .001, 95% CI = [-0.41, -0.28]) but did not experience significant changes in conversation material over time (b = -0.04, SE = 0.03, t(50.37) = -1.52, p = .135, 95% CI = [-0.09, 0.01]).

Mediating variables. Finally, within the keep-talking condition, we performed mediational analyses. Using the same models from Experiments 2-4, we found some support for the hypothesized mechanism: Differences between predicted and experienced enjoyment were partially mediated by differences between predicted and experienced conversation material (indirect effect: b = 0.29, SE = 0.04, 95% CI = [0.21, 0.37]; direct effect: b = 0.17, SE = 0.04, 95% CI = [0.09, 0.25]). Differences between predicted and experienced changes in enjoyment were also partially mediated by differences between predicted and experienced changes in conversation material (indirect effect: b = -0.06, SE = 0.02, 95% CI = [-0.10, -0.02]; direct effect: b = -0.14, SE = 0.02, 95% CI = [-0.18, -0.10]).

In the keep-talking condition, we then conducted exploratory analyses of the other possible mediators, all of which are shown in Figure 8. For the mediators that might follow from judgments of conversation material, participants overestimated how quickly the conversation would become tiring, b = -0.28, SE = 0.05, t(91.49) = -5.26, p < .001, 95% CI = [-0.38, -0.17], overestimated how quickly the other person would lose interest in talking to them, b = 0.34, SE = 0.05, t(91.49) = -5.26, p < .001, 95% CI = [-0.38, -0.17],

0.03, t(88.62) = 9.75, p < .001, 95% CI = [0.27, 0.41], and overestimated how quickly they would lose interest in talking to the other person, b = 0.27, SE = 0.04, t(87.52) = 7.30, p < .001, 95% CI = [0.20, 0.34]. In contrast, participants did not significantly misjudge changes in the intimacy of the conversation, b = -0.03, SE = 0.04, t(100.06) = -0.63, p = .528, 95% CI = [-0.12, 0.06] (see Supplemental Material for the other effects).

We also conducted mediational analyses separately for each of these exploratory measures. Differences between predicted and experienced enjoyment were partially mediated by differences between predicted and experienced tiredness (indirect effect: b = 0.18, SE = 0.03, 95% CI = [0.12, 0.24]; direct effect: b = 0.28, SE = 0.03, 95% CI = [0.22, 0.34]), and own interest (indirect effect: b = 0.31, SE = 0.04, 95% CI = [0.24, 0.38]; direct effect: b = 0.15, SE =0.04, 95% CI = [0.07, 0.22]), and were fully mediated by differences between predicted and experienced partner interest (indirect effect: b = 0.40, SE = 0.04, 95% CI = [0.32, 0.48]; direct effect: b = 0.06, SE = 0.03, 95% CI = [-0.02, 0.14]), but were not significantly mediated by differences between predicted and experienced intimacy (indirect effect: b = 0.02, SE = 0.01, 95% CI = [-0.0001, 0.04]; direct effect: b = 0.44, SE = 0.01, 95% CI = [0.42, 0.46]). Differences between predicted and experienced changes in enjoyment were partially mediated by differences between predicted and experienced changes in tiredness (indirect effect: b = -0.06, SE = 0.02, 95% CI = [-0.10, -0.03]; direct effect: b = -0.14, SE = 0.02, 95% CI = [-0.17, -0.11]), partner interest (indirect effect: b = -0.07, SE = 0.03, 95% CI = [-0.12, -0.02]; direct effect: b = -0.13, SE = 0.02, 95% CI = [-0.17, -0.09]), and own interest (indirect effect: b = -0.08, SE = 0.03, 95% CI = [-0.14, -0.02]; direct effect: b = -0.12, SE = 0.02, 95% CI = [-0.15, -0.08]), but not intimacy (indirect effect: b = -0.0003, SE = 0.002, 95% CI = [-0.006, 0.003]; direct effect: b = -0.20, SE = -0.200.01, 95% CI = [-0.21, -0.18]).





Figure 8. Mean predictions and experiences as conversation progressed in the keep-talking condition of Experiment 5. Error bars represent ±1 SE.

Discussion

Experiment 5 replicates the prior experiments and reveals a potential consequence for behavior and wellbeing: People prefer shorter conversations than would be ideal for their enjoyment, at least in a setting in which the alternative to talking was relatively unenjoyable. Participants who freely chose the length of their conversations enjoyed themselves significantly less than those assigned to "keep talking" throughout the experimental session. This finding held even among participants who indicated that they sought to maximize their enjoyment. We believe this finding is especially compelling because participants were fully informed that they would be asked to sit in silence upon ending their conversations. Thus, although it comes as no surprise that sitting in silence makes for a dull experience, it is perhaps more surprising that participants knowingly devoted considerable time to this form of solitude rather than continue speaking.

The findings of this experiment provide suggestive evidence that misunderstanding the hedonic trajectory of conversation can diminish well-being. Two features of the experimental design, however, may limit the generalizability of the results. First, participants were required to sit by themselves in silence after ending their conversations. Having little to do is unusual in everyday life, and it is possible that keeping to oneself would have been a more pleasant experience had we allowed participants to browse the Internet or occupy themselves with other activities that were more enjoyable than sitting in silence. Of course, participants were fully informed of the solo activity immediately before reporting their preferences, and so had we offered a more pleasant solo activity such as browsing the Internet, we suspect that participants likely would have preferred even *shorter* conversations than they did in this experiment. Second, Experiment 5 allows correlational, but not causal tests of whether misunderstanding the hedonic trajectory of conversation explains why participants preferred to end their conversations sooner

than necessary. In particular, participants who expected their enjoyment to diminish more rapidly in conversation than in solitude also tended to prefer shorter conversations. We did not manipulate the trajectory of participants' enjoyment predictions across conditions. For now, Experiment 5 reveals one setting in which participants devote too little time to conversation for their well-being, while providing suggestive evidence that misunderstanding the hedonic trajectory of conversation may be one source of this finding.

Experiment 5 also examines several reasons why people may underestimate their enjoyment of longer-lasting conversations. As in the prior experiments, we found evidence that participants underestimated how much material they would have to discuss as their conversations continued. We additionally found evidence of several other misjudgments that might stem from underestimation of conversation material: Participants expected to become tired more quickly than they actually did and overestimated how quickly both they and their conversation partner would lose interest in speaking. An exploratory factor analysis found that miscalibrated expectations about changes in these outcomes over time—that is, differences between predicted and experienced changes in conversation material, fatigue, one's own interest, and the partner's interest—loaded onto one factor (p = .105), suggesting the underestimation of conversation material is related to misjudgments of other aspects of conversation.

General Discussion

All close friendships begin with a simple conversation between strangers. The current research reveals that people misunderstand a critical element of this common experience. After enjoying a few minutes of initial conversation, participants imagined that further conversation would quickly grow dull—yet they experienced unchanging or increasing enjoyment in reality. This discrepancy between the predicted and actual hedonic trajectories of conversation emerged

in five laboratory experiments comprising 966 spoken conversations. The misunderstanding may also lead people to prefer shorter conversations than would be ideal for their own enjoyment, potentially posing a novel barrier to increasing one's momentary enjoyment and well-being.

Theoretical Contributions

These findings make several important contributions. First, our experiments go beyond prior research on people's experiences in conversation. Previous research has measured people's enjoyment experiences only once at the end of their interactions, providing little insight about how these experiences might change in real time (e.g., Aron et al., 1997; Epley & Schroeder, 2014; Huang et al., 2017; Kardas et al., 2021; Sandstrom et al., 2016; Sandstrom & Dunn, 2014). The current findings mark one of the first attempts to unpack the time course of conversation, seeking to understand what happens within a conversation and not just after it is over. We examine real-time experiences within a conversation using a novel paradigm in which participants engage in extended conversation with the same partner, revealing that people experience increases in enjoyment (Experiments 3 and 4), or no significant changes in enjoyment (Experiments 1, 2, and 5) in conversations lasting up to half an hour. These conversations also tend to become increasingly intimate over time, corroborating existing theory on relationship initiation (Altman & Taylor, 1973). Thus, our experiments add more nuanced data on the trajectory of people's experiences in conversations, and provide a paradigm for extending these findings in future research. Our paradigm may serve as an especially fruitful bridge between the typical outcomes measured in social interaction research (e.g., closeness, liking) and the typical outcomes measured in non-social hedonic contexts (e.g., activity enjoyment, stimulation). Hedonic adaptation, for example-the tendency for extended exposure to similar experiences to elicit decreasing degrees of pleasure—has traditionally been viewed by enjoyment scholars as

regrettably inevitable, only to be thwarted by consuming ever-newer stimuli ("This point cannot be overstated: *Every* desirable experience is transitory": Myers, 1992, p. 53; for a review, see Lyubomirsky, 2010). Our findings suggest that social stimuli—here, in terms of conversation partners—may represent one overarching moderator of hedonic adaptation because these stimuli create dynamic experiences that change in real time. Such a possibility has been speculated in abstract (O'Brien, 2020; O'Brien & Kassirer, 2019), but we offer a closer empirical test. Variety may be the "spice of life" not only in terms of literally consuming ever-newer stimuli (e.g., rotating through many new conversation partners), but also in terms of sticking with the same old stimuli (e.g., talking with the same conversation partner at length). In addition to known benefits of hedonic breadth, our findings uniquely highlight the unforeseen value of hedonic depth which may be especially found within social stimuli.

Second, our experiments advance research on people's *predictions* about conversation. Prior research typically measures people's predictions in a single measure of their expected enjoyment or liking for their conversation partner (Epley & Schroeder, 2014; Mallett, Wilson, & Gilbert, 2008; Schroeder, Lyons, & Epley, 2021; Zelenski et al., 2013). Our experiments add nuance to this research by measuring the predicted trajectory of enjoyment during conversation, revealing that people misunderstand the progression of their enjoyment over time. Notably, our findings use a somewhat conservative study design in which participants meet and speak with their conversation partner *before* predicting how the remainder of the conversation will unfold. Other research on hedonic forecasting, such as research on the affective forecasting of future emotional states following major life events (e.g., getting tenure, getting dumped), similarly highlights discrepancies between predictions and experiences; but by design, this other research assesses participants who lack the direct experience that may be necessary for accuracy. For example, participants in this literature mis-predict how happy they would be if they attained their dream job, but some error here is understandable given that they had never before had their dream job and so *must* rely on imperfect general theories (for a review, see Wilson & Gilbert, 2005). This lack of initial knowledge or experience can therefore be easily distorted by mere description—yet such a lack of initial knowledge or experience cannot explain our findings, because all conversation partners already met and enjoyed initial conversation *before* predicting their enjoyment. Our findings thus suggest that participants underestimate their enjoyment over time not because they mis-imagine an unknown conversation partner, but rather because they uniquely misunderstand how that enjoyable experience will *change* by virtue of continued interaction—a topic that has received considerably less attention in this literature.

Third, our experiments advance prior research on social interaction. Every interaction entails a series of decision points, including *engaging* others in conversation, *managing* an ongoing conversation, and *disengaging* from the conversation. Previous research has primarily examined psychological processes that can lead to errors at the first two decision points: For example, people tend to be reluctant to initially engage with strangers (Epley & Schroeder, 2014; Schroeder et al., 2021) and outgroup members (Mallett, Wilson, & Gilbert, 2008; Shelton & Richeson, 2005) because they perceive distant others to be less interested in talking than they are. In the midst of conversation, people are reluctant to reveal negative information about themselves (Kardas, Kumar, & Epley, 2021), to seek advice from others (Brooks, Gino, & Schweitzer, 2015), and to deliver open and honest feedback (Levine & Cohen, 2018) in part because they expect others to judge them more harshly than others would upon hearing these statements. However, little research has examined people's decisions to *dis*engage from conversation (Mastroianni, Gilbert, Cooney, & Wilson, 2021) or the social judgments that determine how much time people allocate for conversation to begin with. Our research examines the causes and consequences of such decisions, suggesting people prefer to end their conversations before reaping as much enjoyment from social interaction as they could.

Finally, previous research on relationships has typically examined either the determinants of people's initial liking for one another (e.g., Aron et al., 1997; DeBruine, 2005; Eastwick & Finkel, 2008; Li et al., 2013; Todorov, Pakrashi, & Oosterhof, 2009) or the social dynamics of ongoing relationships (e.g., Lavner & Bradbury, 2010; Oswald, Clark, & Kelly, 2004; Oriña, Wood, & Simpson, 2002). Relatively little research has examined how relationships develop, or barriers that might keep relationships from developing, after two strangers meet and take interest in one another but before they establish a relationship (Eastwick, Finkel, & Simpson, 2019; see also Clark, 2018; Clark, Beck & Aragon, 2018). Our experiments hint at the need for better understanding the juncture between meeting a stranger and establishing a stable friendship—a juncture that people may mismanage.

Limitations and Future Directions

One limitation of our research is that participants engaged in conversations in controlled laboratory settings that differ from the settings in which people have conversations in daily life. Although we did not constrain the content of participants' conversations in Experiments 2-5, we did constrain their duration by requiring participants to pause their conversations at fixed intervals to complete survey items. These breaks in the conversation may have disrupted hedonic adaptation, and so sustained participants' enjoyment over time, in ways that might not generalize to more naturalistic settings (Nelson & Meyvis, 2008). Notably, however, the two experiments with perhaps the shortest breaks between conversation sessions—Experiments 3 and 4, in which participants completed only two survey items between sessions—were also the only experiments in which participants experienced significant *increases* in enjoyment over time, highlighting the possibility that participants in Experiments 3 and 4 experienced increases in enjoyment *because* the shorter breaks did not disrupt the flow of their conversations. If so, this suggests that differences between predicted and actual changes in enjoyment would likely arise in uninterrupted conversations as well. Thus, future research should investigate whether people likewise misunderstand the hedonic trajectory of conversation (Experiments 1-5) in uninterrupted or longer-lasting conversations outside the lab, and whether people consequently set aside less time for their conversations in daily life than would maximize their enjoyment and well-being (Experiment 5).

A related aspect of our experiments is that participants generally discussed pleasant topics in their conversations. Future research could investigate whether conversations about unpleasant topics become increasingly *un*pleasant as they continue, and if so, whether participants might have more calibrated beliefs about the trajectory of their enjoyment for unpleasant conversations than they did for the pleasant conversations examined here.

Another area for future research is to better understand the mechanisms driving our findings. We found evidence through both mediation (Experiments 2-5) and moderation (Experiment 4) that people misunderstand the hedonic trajectory of conversation at least partly because they underestimate how much conversation material they will have to discuss over time. Because we used one-item and two-item self-report measures of conversation material, however, our research cannot determine which aspect of conversation material participants tended to misjudge. Participants may have expected more silences as the conversation progressed than they experienced, expected the conversation to be more repetitive over time than it was (O'Brien, 2019; Zhao & Epley, 2020), or expected to switch topics less often than they actually did. Each of these interpretations could help to explain why participants misunderstood the hedonic trajectory of their conversations. Future research could explore these possibilities by collecting more detailed judgments of conversation material and analyzing the content of the conversations.

Our experiments ruled out plausible alternative mechanisms to explain why participants misunderstood the hedonic trajectory of conversation, including changes in the awkwardness (Experiment 2) or intimacy (Experiment 5) of prolonged conversation. Apart from underestimation of conversation material, however, we did find evidence that participants also overestimated how quickly they would become tired during conversation and how quickly both they and their partner would lose interest in speaking. Underestimation of conversation material could be one underlying cause of these misjudgments (e.g., expecting to run out of material to discuss could lead participants to anticipate growing tired or to expect that they would lose interest in speaking). The interrelations among these variables, and their effects on predicted versus actual enjoyment, will need to be examined in future research. Apart from the mediators examined in our experiments, other complementary mechanisms could include overlooking the (sustained) hedonic benefits of presenting oneself positively to new acquaintances (Dunn, Biesanz, Human, & Finn, 2007) or overlooking mere-exposure effects that might enhance one's liking for a new acquaintance over time and hence one's enjoyment of the social interaction (Moreland & Zajonc, 1982; Reis et al., 2011; Zajonc, 2001).

It will also be useful for future research to explore whether the misunderstanding documented in our studies varies across relationship types. New acquaintances may expect to grow bored of their conversations partly because they have yet to discover the shared interests and experiences that would provide material to discuss. Friends and family, in contrast, may discover shared interests through repeated interactions, leading them to anticipate conversations

HEDONIC TRAJECTORY OF CONVERSATION

rich with material that are better calibrated to their actual conversations. If so, one mechanism underlying our findings—that people's mental simulations tend to omit topics that they would likely discuss with a new acquaintance—could help to explain why people underestimate the positivity of their conversations more with strangers than with close others (Epley & Schroeder, 2014; Ingram & Morris, 2007; Kardas et al., 2021; Sandstrom & Boothby, 2021).

Experiment 5 revealed a potential consequence of misunderstanding the hedonic trajectory of conversation: People may devote less time to conversation than would be ideal for their own enjoyment, at least in settings in which they have little else to do after finishing their conversations. Our theory suggests boundaries between settings in which the findings of Experiment 5 are likely versus unlikely to generalize. In settings that offer nonsocial activities that are at least somewhat less pleasant than talking, such as sitting by oneself or browsing the Internet—a description that fits many nonsocial activities (Kahneman et al., 2004)—people with the goal of enjoying themselves may freely choose to devote too little time to conversation for their own enjoyment. In such settings, misunderstanding the hedonic trajectory of conversation may lead people to devote less time to conversation than necessary, and any time devoted to the nonsocial activity should detract from the greater enjoyment that one might otherwise experience in conversation. In contrast, in settings that offer nonsocial activities that are equally pleasant or more pleasant than talking-and such settings may be relatively less abundant in everyday lifepeople with the goal of enjoying themselves may freely choose to devote little, if any time to social interaction, and such choices would be appropriate for their enjoyment goals.

Finally, misunderstanding the hedonic trajectory of conversation may have other consequences as well. For instance, people might seek out conversations in groups in lieu of oneon-one conversations in which they (mistakenly) expect to run out of new content to discuss. They might cut short their ongoing conversations (Mastroianni, Gilbert, Cooney, & Wilson, 2021) or hesitate to schedule repeated interactions over time with the same individual, potentially to the detriment of their social connection and well-being (Read & Loewenstein, 1995; Simonson, 1990). They might seek out shorter, dispersed interactions through social media (Kross et al., 2013) even when sustained spoken interaction with close others would be equally or more rewarding (Kumar & Epley, 2020).

Conclusion

Pleasant conversation is a gateway to stronger social connections and greater well-being. Nevertheless, our research suggests that people may miss opportunities to fully realize these benefits because they expect their conversations with new acquaintances to grow dull more quickly than they actually do. This misunderstanding may lead people to disengage prematurely from enjoyable social interactions, resulting in greater isolation than would be ideal for their well-being. Prolonging conversation with a new acquaintance—on a close-quartered flight or elsewhere—may be a surprisingly pleasant experience from take-off to touch-down.

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Supplemental Material For:

Keep Talking:

(Mis)Understanding the Hedonic Trajectory of Conversation

Supplemental Experiment S1

Method

Participants. We recruited 105 participants from the online Prolific participant pool $(M_{age} = 32.35; SD_{age} = 11.14; 60.95\%$ female; 70.48% Caucasian) to complete the study in exchange for \$0.50. An additional 15 participants were excluded for failing one or more of two attention checks.

Procedure. Participants imagined visiting the research lab for a study about social interaction. They were informed that in Phase 1 of the study, they would chat with another study participant they had never met before. In Phase 2, they would be instructed to either keep chatting with this person or keep to themselves and enjoy their solitude.

Participants imagined speaking with the other person for five minutes in Phase 1 and were then randomly assigned to one of two conditions. In the low-conversation material condition, participants read:

"You enjoy chatting with the other participant but discover that you have almost nothing in common with one another. If you keep chatting in Phase 2, you think that you and the other participant will quickly run out of things to talk about." In the high-conversation material condition, participants instead read:

"You enjoy chatting with the other participant and discover that you have very much in common with one another. If you keep chatting in Phase 2, you think that you and the other participant will continue to find many things to talk about."

Participants imagined that they were required by the experimenter to keep chatting with the other participant in Phase 2. They then completed a manipulation check: "Based on the description above, how much do you think you and the other participant will have to talk about during Phase 2?" (1 = nothing at all; 7 = very much). Participants then predicted their enjoyment: "Based on the description above, how much do you think you will enjoy your conversation with the other participant during Phase 2?" (1 = not at all; 7 = very much).

Next, participants imagined instead that they would be allowed to choose whether to keep chatting with the other participant or enjoy their solitude in Phase 2. They then completed two items about their interest in continuing the conversation versus enjoying their solitude: "Based on the description above, how interested would you be in continuing to chat with the other participant in Phase 2?" (1 = not at all; 7 = very), and "Based on the description above, how interested would you be in ending the conversation early and instead enjoying your solitude in Phase 2?" (1 = not at all; 7 = very).

Participants then completed two attention checks: "What information did we tell you about the other study participant?" (*I have ALMOST NOTHING in common with this person* vs. *I have VERY MUCH in common with this person* vs. *I am UNCERTAIN how much I have in common with this person*); and "Did you pay attention throughout the study?" (*yes* vs. *no*).

Finally, participants reported demographic information and received payment.

Results

The interest-in-chatting and interest-in-solitude (reverse-scored) items were highly correlated in the high-material condition ($\alpha = .86$) but not the low-material condition ($\alpha = .63$), so we analyzed these items separately.

The manipulation was effective: Participants expected to have significantly more to talk about in the high-conversation material condition (M = 6.10, SD = 1.04) than the lowconversation material condition (M = 2.33, SD = 1.07), t(103) = 18.21, p < .001, 95% CI_{difference} = [3.36, 4.18], d = 3.57. Supporting our primary hypotheses, participants also expected to enjoy the conversation significantly more in the high-conversation material condition (Ms = 6.04 vs. 2.42, respectively; SDs = 0.85 vs. 1.10), t(103) = 18.59, p < .001, 95% $CI_{difference} = [3.23, 4.01]$, d = 3.64, were significantly more interested in continuing the conversation with the other participant (Ms = 5.46 vs. 1.88, respectively; SDs = 1.49 vs. 1.05), t(103) = 14.40, p < .001, 95% $CI_{difference} = [3.09, 4.07]$, d = 2.82, and were significantly less interested in enjoying their solitude in Phase 2 of the study (Ms = 3.10 vs. 6.02, respectively; SDs = 1.67 vs. 1.27), t(103) = -10.14, p < .001, 95% $CI_{difference} = [-3.48, -2.34]$, d = -1.99.

We also conducted secondary analyses. Within the low-conversation material condition, participants' conversation material predictions correlated positively with their enjoyment predictions, r = .36, t(55) = 2.88, p = .006, 95% CI = [.11, .57], and with their interest in continuing the conversation in Phase 2, r = .45, t(55) = 3.71, p < .001, 95% CI = [.21, .63], but did not correlate significantly with their interest in enjoying their solitude in Phase 2, r = .21, t(55) = -1.62, p = .112, 95% CI = [-.45, .05]. Within the high-conversation material condition, participants' conversation material predictions likewise correlated positively with their interest in enjoyment predictions, r = .57, t(46) = 4.77, p < .001, 95% CI = [.35, .74], and with their interest in continuing the conversation in Phase 2, r = .33, t(46) = 2.35, p = .023, 95% CI = [.05, .56], but did not correlate significantly with their interest in enjoying their solitude in Phase 2, r = .24, t(46) = -1.68, p = .100, 95% CI = [-.49, .05]. This supplemental experiment provides consistent evidence that people expect to enjoy themselves more, and are more interested in prolonging an ongoing conversation, when they expect to have many things to talk about than when they expect to quickly run out of things to say.

Experiment 1 Pre-Test

Amazon Turk participants (N = 25; $M_{age} = 32.92$; $SD_{age} = 9.85$; 56.00% female; 80.00% Caucasian; \$0.80 pay) imagined a "getting to know you" study in which they discuss icebreakers with a new acquaintance. They rated 25 questions in random order (see Supplemental Table S1), via the following items: "How difficult would it be for you to answer this question?" (1 = not at all difficult; 7 = extremely difficult); "To somebody who doesn't know you, how interesting would your answer be?" (1 = not at all interesting; 7 = extremely interesting); and "As exactly phrased here, is this question clear enough for you to launch into your answer without seeking clarification?" (*yes* vs. *no*). We computed mean difficulty (M = 3.08) and interest (M = 4.08), and intended to choose 15 questions that did not differ from these means. For each question, nearly all participants (92%-100%) reported that they could respond without seeking clarification. This left 17 questions (ps > .050). We removed two of these questions for which we observed marginally significant differences in difficulty ratings.

Question	Difficulty	Difficulty Interest	
Question	M (SD)	M (SD)	Clarification
What is one of your favorite high school memories?	4.00 (1.87)	4.04 (1.74)	4%
What is your favorite hobby, and why?	2.52 (1.78)	4.48 (1.33)	8%
What is one thing you consider yourself to be very good at?	3.04 (1.67)	4.28 (1.17)	8%
What do you consider the most valuable thing you own? Why is it so valuable?	2.64 (1.50)	4.36 (1.25)	8%
What is your favorite way to procrastinate?	2.36 (1.29)	3.56 (1.83)	4%
What is your best personal characteristic, and why is this characteristic important?"	4.03 (1.59)	3.72 (1.43)	8%
What is your biggest pet peeve, and why?	3.76 (2.01)	3.92 (1.73)	4%
What is something interesting that most people don't know about you?	4.80 (1.73)	4.40 (1.29)	8%
What do you consider the most important event of your life so far?	3.40 (1.94)	4.68 (1.52)	0%

What do you consider your greatest achievement?	4.32 (1.55)	4.08 (1.41)	8%
What do you value most in life?	3.20 (2.22)	4.52 (1.71)	4%
What is the one thing you can't live without?	2.36 (1.75)	4.16 (1.65)	4%
What is your favorite food and why?	2.40 (1.71)	3.88 (1.64)	0%
What is your least favorite sport to play, and why?	2.52 (1.48)	2.72 (1.65)	8%
What is the best or most interesting class you have ever taken? Why?	3.16 (1.68)	4.20 (1.41)	8%
What is your favorite way to celebrate an accomplishment?	2.68 (1.82)	4.08 (1.61)	0%
What makes you laugh out loud? Give an example.	3.64 (1.85)	4.68 (1.18)	4%
What do you consider the most important quality in a friend? Why?	2.80 (1.50)	3.96 (1.31)	8%
What is your dream job, and why?	2.52 (1.50)	4.36 (1.50)	4%
Who was or is your favorite teacher and why?	3.20 (1.94)	3.08 (1.50)	8%

89

What is something you own that has sentimental value to you?	2.36 (1.78)	4.32 (1.63)	4%
When you were a child, what did you want to be when you grew up?	2.52 (1.85)	4.16 (1.52)	4%
What kind of music do you like? Name some specific songs or artists.	2.64 (1.55)	4.32 (1.60)	0%
What would your ideal romantic partner be like?	2.92 (1.63)	4.44 (1.61)	4%
What is your favorite winter activity? Why?	3.12 (1.88)	3.56 (1.42)	4%

Table S1. Pre-test ratings (bold questions were used as stimuli in Experiment 1).

Experiment 1

Preregistered Analyses

We performed general linear modeling with role (Predictor vs. Experiencer) as a between-participants factor and session (1, 2, 3, 4, 5) as a within-participants factor. There was no effect of Role, F(1, 98) = 0.72, p = .397, $\eta_p^2 = .01$, an effect of session, F(4, 392) = 7.85, p < .001, $\eta_p^2 = .07$, and an interaction, F(4, 392) = 20.19, p < .001, $\eta_p^2 = .17$ (Predictors: F(4, 196) = 19.66, p < .001, $\eta_p^2 = .29$; Experiencers: F(4, 196) = 4.25, p = .003, $\eta_p^2 = .08$).

Session-by-Session Analyses

We also tested for differences between Predictors and Experiencers in each session separately. As reported in the main text, Predictors and Experiencers incidentally differed at Session 1. Predictors made relatively calibrated enjoyment predictions for Session 2, t(217.08) =0.15, p = .885, 95% CI_{difference} = [-0.35, 0.41], d = 0.03, Session 3, t(229.42) = -0.86, p = .391, 95% CI_{difference} = [-0.57, 0.22], d = -0.20, and Session 4, t(188.57) = -1.88, p = .062, 95%CI_{difference} = [-0.81, 0.02], d = -0.44, but Predictors significantly underestimated enjoyment for Session 5, t(134.47) = -2.44, p = .016, 95% CI_{difference} = [-0.98, -0.10], d = -0.52, as evidenced in the significant role × session interaction effect.

Observed Slopes of Predicted and Experienced Enjoyment by Pair

We computed the observed slopes of predicted and experienced enjoyment for each pair separately. Whereas 74.00% of Predictors expected their enjoyment to decline across the five sessions, only 30.00% of Experiencers reported declining enjoyment, $\chi^2(1, N = 100) = 19.39$, p < .001 (see Figure S1).



Figure S1. Observed slopes of enjoyment across Role (Predictor vs. Experiencer) for each pair in

Experiment 1.

Exploratory Choice Data

Participants reported whether expected or experienced enjoyment increased, decreased, or stayed the same across the five sessions. Then they explained why and coded their responses (see Supplemental Table S2).

	Predictors			Experiencers		
	No	Increase	Decrease	No	Increase	Decrease
	change	(<i>n</i> = 30)	(<i>n</i> = 29)	change	(<i>n</i> = 50)	(<i>n</i> = 5)
	(<i>n</i> = 41)			(<i>n</i> = 45)		
Get to	54%	53%		56%	74%	
know the person	(44%)	(37%)	_	(38%)	(44%)	_
Get along		37%		33%		
better	39% (0%)	(13%)		(11%)	40% (8%)	
Less		50%			50%	
awkward	22% (7%)	(30%)		11% (9%)	(24%)	
Increasingl		33%		27%	44%	
y personal	24% (5%)	(20%)		(13%)	(22%)	
Impatience	7% (7%)		45% (28%)	2% (2%)		0% (0%)
Boredom	5% (2%)		59% (34%)	4% (2%)		0% (0%)

More	5% (0%)		31% (21%)	4% (2%)		20% (20%)
awkward	、 ,		· · ·	× /		
Conversatio n doesn't	49%		34% (14%)	36%		40% (40%)
change	(32%)			(22%)		
Other	7% (2%)	3% (0%)	10% (3%)	2% (0%)	6% (2%)	40% (40%)

Table S2. Proportion of Predictors and Experiencers who selected each explanation for their enjoyment trajectory. Numbers outside parentheses denote the proportion of participants who selected each explanation in the multiple-selection survey item, whereas numbers inside parentheses denote the proportion of participants who selected each explanation in the singleselection survey item that followed. Em-dashes ("—") denote response options that were not displayed for participants who selected each enjoyment trajectory.

Correlations Between Paired Participants for Enjoyment

We sought to estimate correlations between the enjoyment ratings of paired participants. Because members of each dyad were indistinguishable, we first organized the data in pairwise format, such that each pair of predicted or experienced enjoyment ratings was entered twice in the data sheet (Griffin & Gonzalez, 1995). In one entry, the first participant's enjoyment rating was entered as the predictor ("participant #1") and the second participant's enjoyment rating as the outcome ("participant #2"). In the other entry, the second participant's enjoyment rating was entered as the predictor ("participant #1") and the first participant's enjoyment rating as the outcome ("participant #2"). We organize the data in pairwise format when estimating correlations between paired participants in the following experiments as well.

We then estimated correlations in two ways. First, we performed mixed linear modeling, using the participant #2 rating as the outcome variable, the participant #1 rating as a fixed effect, and the participant #1 ID as a random intercept, separately for predictions (sessions 2-5) and experiences (sessions 1-5). Participants' enjoyment predictions were positively associated with one another, b = 0.20, SE = 0.05, t(397.70) = 4.02, p < .001, 95% CI = [0.10, 0.29]. However, participants' enjoyment experiences were not significantly associated with one another, b = 0.08, SE = 0.04, t(498.00) = 1.83, p = .068, 95% CI = [-0.01, 0.17].

Second, we computed zero-order correlations between participant #1 and participant #2 enjoyment ratings. Participants' enjoyment predictions (sessions 2-5) were positively correlated, r = .10, t(398) = 2.06, p = .040. However, participants' enjoyment experiences (sessions 1-5) were not significantly correlated, r = .07, t(498) = 1.61, p = .108.

Experiment 2

Session-by-Session Analyses

Participants did not significantly underestimate their enjoyment in Session 2, *paired* t(49.80) = -1.60, p = .117, 95% CI_{difference} = [-0.47, 0.05], d = -0.37, or Session 3, *paired* t(50.43) = -1.59, p = .119, 95% CI_{difference} = [-0.51, 0.06], d = -0.29, but significantly underestimated their enjoyment in Session 4, *paired* t(50.30) = -2.69, p = .010, 95% CI_{difference} = [-0.73, -0.11], d = -0.47, and in Session 5, *paired* t(50.57) = -3.50, p = .001, 95% CI_{difference} = [-0.98, -0.27], d = -0.54. Participants significantly underestimated how much they would have to talk about in Session 2, *paired* t(50.52) = -2.68, p = .010, 95% CI_{difference} = [-0.72, -0.10], d = -0.46, Session 3, *paired* t(50.57) = -2.86, p = .006, 95% CI_{difference} = [-0.76, -0.13], d = -0.46, Session 4, *paired*

t(50.55) = -3.00, p = .004, 95% CI_{difference} = [-0.84, -0.17], d = -0.48, and Session 5, *paired* t(50.63) = -4.66, p < .001, 95% CI_{difference} = [-1.08, -0.43], d = -0.74. Participants' awkwardness predictions were relatively calibrated to their experiences for each session: Session 2, *paired* t(50.68) = -0.33, p = .742, 95% CI_{difference} = [-0.71, 0.51], d = -0.05, Session 3, *paired* t(50.29) = -0.38, p = .703, 95% CI_{difference} = [-0.69, 0.47], d = -0.07, Session 4, *paired* t(50.40) = -0.41, p =.687, 95% CI_{difference} = [-0.73, 0.48], d = -0.07, and Session 5, *paired* t(50.47) = 0.86, p = .395, 95% CI_{difference} = [-0.34, 0.84], d = 0.14.

Preregistered Analyses

We performed general linear modeling with evaluation type (predictions vs. experiences) and session (1, 2, 3, 4, 5) as within-participants factors. For enjoyment, there was a main effect of evaluation type, F(1, 49) = 15.15, p < .001, $\eta_p^2 = .24$, a main effect of session, F(4, 196) = 7.67, p < .001, $\eta_p^2 = .14$, and an interaction, F(4, 196) = 6.94, p < .001, $\eta_p^2 = .12$ (predictions: F(1, 49) = 20.12, p < .001, $\eta_p^2 = .29$; experiences: F(4, 196) = 1.49, p = .206, $\eta_p^2 = .03$). For conversation material, there was a main effect of evaluation type, F(1, 49) = 23.12, p < .001, $\eta_p^2 = .29$; experiences: F(4, 196) = 1.49, p = .206, $\eta_p^2 = .03$). For conversation material, there was a main effect of evaluation type, F(1, 49) = 23.12, p < .001, $\eta_p^2 = .32$, a main effect of session, F(4, 196) = 3.45, p = .009, $\eta_p^2 = .07$, and an interaction, F(4, 196) = 7.68, p < .001, $\eta_p^2 = .14$ (predictions: F(4, 196) = 10.82, p < .001, $\eta_p^2 = .18$; experiences: F(4, 196) = 0.52, p = .724, $\eta_p^2 = .01$). For awkwardness, there was no main effect of evaluation type, F(1, 49) = 0.01, p = .929, $\eta_p^2 = .0002$, no main effect of session, F(4, 196) = 1.76, p = .139, $\eta_p^2 = .03$, and no interaction, F(4, 196) = 1.07, p = .374, $\eta_p^2 = .02$ (predictions: F(4, 196) = 1.98, p = .098, $\eta_p^2 = .04$; experiences: F(4, 196) = 1.33, p = .261, $\eta_p^2 = .03$).

Observed Slopes of Predicted and Experienced Enjoyment by Pair

We computed the observed slopes of predicted and experienced enjoyment for each pair separately. Whereas 70% of pairs expected their enjoyment to decline across the five sessions,

only 50% of pairs experienced declining enjoyment, $\chi^2(1, N = 100) = 4.17$, p = .041 (see Figure S2).



Figure S2. Observed slopes of predicted and experienced enjoyment for each pair in Experiment

2.

Analyses of Gender and Ethnicity

The extent to which pairs underestimated their enjoyment over time did not differ significantly between same-gender and mixed-gender pairs, b = 0.04, SE = 0.10, t(77.12) = 0.39, p = .699, 95% CI = [-0.16, 0.24], nor between same-ethnicity and mixed-ethnicity pairs, b = -0.01, SE = 0.10, t(76.82) = -0.08, p = .936, 95% CI = [-0.22, 0.20].

Main-Text Analyses Including All Participants

For enjoyment, there was a significant effect of evaluation type, b = 0.29, SE = 0.08, t(61.99) = 3.59, p < .001, 95% CI = [0.13, 0.44], an effect of session, b = -0.07, SE = 0.02, t(52.68) = -3.03, p = .004, 95% CI = [-0.11, -0.02], and an interaction, b = 0.14, SE = 0.05, t(87.83) = 2.87, p = .005, 95% CI = [0.05, 0.24] (predictions: b = -0.14, SE = 0.04, t(52.62) = - 3.97, p < .001, 95% CI = [-0.21, -0.07]; experiences: b = 0.004, SE = 0.03, t(52.33) = 0.11, p = .911, 95% CI = [-0.06, 0.07]). For conversation material, there was an effect of evaluation type, b = 0.41, SE = 0.09, t(55.58) = 4.69, p < .001, 95% CI = [0.24, 0.59], an effect of session, b = -0.07, SE = 0.03, t(51.99) = -2.18, p = .034, 95% CI = [-0.13, -0.01], and an interaction, b = 0.16, SE = 0.05, t(108.86) = 3.29, p = .001, 95% CI = [0.06, 0.25] (predictions: b = -0.15, SE = 0.04, t(52.55) = -3.75, p < .001, 95% CI = [-0.23, -0.09]; experiences: b = 0.01, SE = 0.04, t(52.64) = 0.25, p = .801, 95% CI = [-0.07, 0.09]). For awkwardness, there were no effects of evaluation type, b = 0.04, SE = 0.18, t(52.86) = 0.25, p = .805, 95% CI = [-0.19, 0.12], or Session, b = 0.04, SE = 0.04, t(153.06) = 1.06, p = .290, 95% CI = [-0.03, 0.11], and no interaction, b = -0.03, SE = 0.08, t(98.65) = -0.44, p = .663, 95% CI = [-0.19, 0.12] (predictions: b = 0.06, SE = 0.05, t(51.27) = 1.15, p = .254, 95% CI = [-0.04, 0.15]); experiences: b = 0.02, SE = 0.06, t(51.99) = 0.36, p = .721, 95% CI = [-0.10, 0.14]).

We found full mediation through conversation material (indirect effect: b = 0.20, SE = 0.04, 95% CI = [0.12, 0.29]; direct effect: b = 0.08, SE = 0.04, 95% CI = [-0.004, 0.17]) and partial mediation through changes in conversation material (indirect effect: b = -0.07, SE = 0.03, 95% CI = [-0.14, -0.03]; direct effect: b = -0.07, SE = 0.03, 95% CI = [-0.14, -0.01]), but non-significant mediation through awkwardness (indirect effect: b = -0.01, SE = 0.03, 95% CI = [-0.06, 0.05]; direct effect: b = 0.29, SE = 0.03, 95% CI = [0.24, 0.35]) and changes in awkwardness (indirect effect: b = 0.05, SE = 0.39, 95% CI = [-0.42, 1.38]; direct effect: b = -0.20, SE = 0.23, 95% CI = [-0.66, 0.27]).

Correlations Between Paired Participants for Enjoyment and Conversation Material

Using the same methods as in Experiment 1, we estimated correlations between the ratings of paired participants. We first performed mixed linear modeling, using the participant #2

rating as the outcome variable, the participant #1 rating as a fixed effect, and the participant #1 ID as a random intercept, separately for predictions (sessions 2-5) and experiences (sessions 1-5) for the enjoyment and conversation material measures. Participants' enjoyment predictions were positively associated with one another, b = 0.18, SE = 0.05, t(397.91) = 3.75, p < .001, 95% CI = [0.09, 0.28]. Participants' enjoyment experiences were not significantly associated with one another, b = 0.05, SE = 0.04, t(497.97) = 1.07, p = .287, 95% CI = [-0.04, 0.14]. Participants' conversation material predictions were not significantly associated with one another, b = 0.10, SE = 0.05, t(397.91) = 1.96, p = .0504, 95% CI = [-0.0001, 0.20], but their conversation material experiences were positively associated with one another, b = 0.24, SE = 0.04, t(494.13) = 5.44, p < .001, 95% CI = [0.15, 0.33].

We next computed correlations. Participants' enjoyment predictions were positively correlated, r = .24, t(398) = 4.88, p < .001, as were their enjoyment experiences, r = .15, t(498) = 3.43, p < .001. Participants' conversation material predictions were positively correlated, r = .20, t(398) = 4.09, p < .001, as were their conversation material experiences, r = .39, t(498) = 9.47, p < .001.

Supplemental Experiment S2

Method

Stimuli. We created a "low-material" stimulus set consisting of 15 audio recordings in which laboratory participants reported having relatively little material to discuss, and a "high-material" stimulus set consisting of 15 audio recordings in which laboratory participants reported having relatively ample material to discuss. To do this, we first screened the video recordings from Experiment 2 for sound quality. Among those in which both participants could be heard and understood, we selected the three pairs that reported the lowest average experiences of

conversation material, and the three pairs that reported the highest average experiences of conversation material, across the five conversation sessions. Average ratings of experienced conversation material were higher among the high-material pairs (M = 6.93) than among the low-material pairs (M = 4.34), as were average ratings of experienced enjoyment (Ms = 6.72 vs. 5.09, respectively). Selecting pairs that reported relatively low or high conversation material ensures that our stimuli vary in terms of experienced conversation material and enjoyment, thus allowing us to test whether listeners can discriminate relatively low-enjoyment sessions from high-enjoyment sessions, and relatively low-material sessions from high-material sessions.

Several of the videos lagged several seconds behind their audio or froze while the audio continued playing. We therefore removed the visuals to turn the video recordings into audio recordings. We then divided each audio recording into five segments, each corresponding to one conversation session, creating 15 high-material stimuli and 15 low-material stimuli. Each individual stimulus lasted between approximately 3 and 5 minutes.

Participants. We recruited 150 participants from the online Prolific participant pool $(M_{age} = 32.35; SD_{age} = 9.39; 42.67\%$ female; 60.00% Caucasian) to complete the study in exchange for \$1.50. An additional 26 participants were excluded for failing the attention check in which they were asked to recall the content of the second audio recording.

Procedure. Participants read that they would listen to audio recordings of two conversations from a research study conducted in our laboratory. Participants were asked to commit to paying attention throughout the study without browsing the web or leaving their computer. Participants made this commitment by selecting a response labeled, "I commit to paying attention throughout the study without browsing the web or leaving my computer." After making this commitment, participants read that the conversations they would listen to took place between strangers, and that they would listen to a different pair of strangers in each audio recording. Participants read that each audio recording would last 3-5 minutes and that they would listen to the recordings in randomized order.

Before listening to the recordings, participants read the two dependent measures that they would complete after listening: "Which pair of participants seemed to enjoy themselves more? That is, which pair seemed to find the conversation more interesting, engaging, and pleasurable?", and "Which pair of participants seemed to have more material to discuss? That is, which pair discussed more thoughts, feelings, perspectives, or ideas during the conversation?" We showed participants these measures before they listened to the recordings to ensure that participants would focus on these particular outcomes while listening. In the enjoyment measure, the terms "interesting," "engaging," and "pleasurable" reflect items in the enjoyment scale of Experiment 1. In the conversation material measure, the phrase "thoughts, feelings, perspectives, or ideas" reflects the definition of conversation material described in the main text.

After reading the dependent measures, participants were randomly assigned to either the low-material-first or the high-material-first counterbalance. In both counterbalances, participants were instructed to wear earphones or headphones and to turn up their computer volume. Participants clicked to the next page of the survey and listened to one audio recording, which lasted between approximately 3 and 5 minutes. This audio recording was randomly selected from the low-material or high-material stimulus set according to the counterbalance to which the participant had been assigned. After the audio finished playing, the page advanced automatically. The following page in the survey included a time-based attention check in which participants who did not press this button within 10 seconds were not permitted to continue the survey. We included

HEDONIC TRAJECTORY OF CONVERSATION

this attention check to ensure that participants who left their computers or browsed the web during the audio recording, and hence did not listen to the conversation, would also be likely to fail this attention check and so would not be allowed to finish the survey.

Participants who passed the attention check were permitted to continue the survey. These participants read that they would next listen to an audio recording from another conversation between two different individuals. Participants clicked to the next page and listened to the second audio recording, selected at random from the opposite stimulus set as the first recording. After the second audio recording finished playing, the page advanced automatically and participants again completed the same time-based attention check in which they were required to press a button labeled "CONTINUE" within 10 seconds.

Participants who passed this second attention check then responded to the dependent measures: "Which pair of participants seemed to enjoy themselves more? That is, which pair seemed to find the conversation more interesting, engaging, and pleasurable?" (-5 = the FIRST PAIR enjoyed themselves much more; 0 = both pairs enjoyed themselves equally; 5 = the SECOND PAIR enjoyed themselves much more), and "Which pair of participants seemed to have more material to discuss? That is, which pair discussed more thoughts, feelings, perspectives, or ideas during the conversation?" (-5 = the FIRST PAIR had much more material to discuss; 0 = both pairs had equal amounts of material to discuss; 5 = the SECOND PAIR had much more material to discuss). Participants then indicated in free-response format what the participants discussed in the second audio recording, and indicated whether they had trouble understanding the participants in either recording (*no* vs. yes (please explain)).

Finally, participants reported demographic information and received payment.
Results

101

In the high-material-first counterbalance, we reverse scored participants' enjoyment and conversation material ratings. Thus, in both counterbalances, higher ratings indicate that participants perceived the high-material speakers to enjoy themselves more, or to have more material to discuss, than the low-material speakers.

Participants perceived the speakers in the high-material recordings to enjoy themselves more than the speakers in the low-material recordings (M = 2.58, SD = 3.19), one-sample t(149) = 9.92, p < .001, 95% CI = [2.07, 3.09], d = 0.81. This finding did not differ significantly between participants who listened to the high-material recording first and those who listened to the low-material recording first, t(148) = -1.69, p = .093, 95% CI_{difference} = [-1.90, 0.15], d = -0.28. Whereas 76% of participants perceived the speakers to enjoy themselves more in the highmaterial recording than the low-material recording, only 16% of participants perceived the speakers to enjoy themselves more in the low-material recording than the high-material recording, and these percentages differed significantly, $\chi^2(1, N = 138) = 58.70$, p < .001.

Participants likewise perceived the speakers in the high-material recordings to have more material to discuss than the speakers in the low-material recordings (M = 1.91, SD = 3.63), onesample t(149) = 6.45, p < .001, 95% CI = [1.33, 2.50], d = 0.53. This finding did not differ significantly between participants who listened to the high-material recording first and those who listened to the low-material recording first, t(148) = -1.07, p = .286, 95% CI_{difference} = [-1.81, 0.54], d = -0.17. Whereas 67% of participants perceived the speakers to have more material to discuss in the high-material recording than the low-material recording, only 26% of participants perceived the speakers to have more material to discuss in the low-material recording than the low-material recording than the low-material recording than the high-material recording than the low-material recording than the high-material recording than the low-material recording than the low-material recording than the high-material recording than the low-material recording than the low-material recording than the high-material recording than the high-material recording than the high-material recording than the high-material recording and these percentages differed significantly, $\chi^2(1, N = 139) = 26.77$, p < .001.

Experiment 3

Session-by-Session Analyses

Participants in the single-partner condition significantly underestimated their enjoyment in each session: Session 2, *paired* t(840.25) = -4.53, p < .001, 95% CI_{difference} = [-0.25, -0.10], d =-0.30, Session 3, *paired* t(549.53) = -8.58, p < .001, 95% CI_{difference} = [-0.51, -0.32], d = -0.61, Session 4, *paired* t(332.78) = -9.17, p < .001, 95% CI_{difference} = [-0.68, -0.44], d = -0.67, and Session 5, *paired* t(239.40) = -9.98, p < .001, 95% CI_{difference} = [-0.91, -0.61], d = -0.72. Participants in the multiple-partner condition significantly underestimated their enjoyment in each session: Session 2, *paired* t(620.02) = -5.77, p < .001, 95% CI_{difference} = [-0.51, -0.24], d = -0.31, Session 4, *paired* t(457.68) = -7.98, p < .001, 95% CI_{difference} = [-0.78, -0.47], d = -0.57, and Session 5, *paired* t(290.47) = -9.87, p < .001, 95% CI_{difference} = [-1.07, -0.71], d = -0.77.

Participants in the single-partner condition significantly underestimated how much they would have to talk about in each session: Session 2, *paired* t(693.16) = -4.74, p < .001, 95% CI_{difference} = [-0.35, -0.14], d = -0.28, Session 3, *paired* t(473.92) = -7.55, p < .001, 95% CI_{difference} = [-0.62, -0.36], d = -0.49, Session 4, *paired* t(313.83) = -8.04, p < .001, 95% CI_{difference} = [-0.81, -0.49], d = -0.55, and Session 5, *paired* t(235.52) = -9.57, p < .001, 95% CI_{difference} = [-1.14, -0.75], d = -0.73. Participants in the multiple-partner condition significantly underestimated how much material they would have to talk about in each session: Session 2, *paired* t(611.33) = -4.41, p < .001, 95% CI_{difference} = [-0.41, -0.16], d = -0.25, Session 3, *paired* t(606.67) = -2.74, p = .006, 95% CI_{difference} = [-0.34, -0.06], d = -0.16, Session 4, *paired* t(450.76) = -3.79, p < .001, 95% CI_{difference} = [-0.48, -0.15], d = -0.27, and Session 5, *paired* t(287.53) = -4.84, p < .001, 95% CI_{difference} = [-0.48, -0.15], d = -0.27, and Session 5, *paired* t(287.53) = -4.84, p < .001, 95%

Preregistered Analyses

We performed general linear modeling with evaluation type (predictions vs. experiences) and partner type (single partner vs. multiple partners) as between-participants factors and session (1, 2, 3, 4, 5) as a within-participants factor. For enjoyment, there was a main effect of evaluation type, F(1, 393) = 208.12, p < .001, $\eta_p^2 = .35$, a main effect of session, F(4, 1572) = 16.90, p < .001, $\eta_p^2 = .04$, an evaluation type × session interaction, F(4, 1572) = 72.17, p < .001, $\eta_p^2 = .16$, and no three-way interaction, F(4, 390) = 1.37, p = .242 (prolonged-predictions: F(4, 792) = 36.03, p < .001, $\eta_p^2 = .15$; prolonged-experiences: F(4, 792) = 4.32, p = .002, $\eta_p^2 = .02$; multiple-predictions: F(4, 780) = 64.13, p < .001, $\eta_p^2 = .25$; multiple-experiences: F(4, 780) = 2.89, p = .022, $\eta_p^2 = .01$). For conversation material, there was a main effect of evaluation type, F(1, 393) = 103.69, p < .001, $\eta_p^2 = .21$, a main effect of session, F(4, 1572) = 35.67, p < .001, $\eta_p^2 = .08$, an evaluation type × session interaction, F(4, 1572) = 38.67, p < .001, $\eta_p^2 = .09$, and a three-way interaction, F(4, 390) = 7.10, p = < .001 (prolonged-predictions: F(4, 792) = 87.53, p < .001, $\eta_p^2 = .31$; prolonged-experiences: F(4, 792) = 1.64, p = .162, $\eta_p^2 = .01$; multiple-predictions: F(4, 792) = 87.53, p < .001, $\eta_p^2 = .25$; p < .001, $\eta_p^2 = .25$, p < .001, $\eta_p^2 = .01$, p = .003, $\eta_p^2 = .01$).

Observed Slopes of Predicted and Experienced Enjoyment by Participant

We computed the observed slopes of predicted and experienced enjoyment for each participant separately. In the single-partner condition, 59% of participants expected their enjoyment to decline across the five sessions, whereas only 40% of participants experienced declining enjoyment, $\chi^2(1, N = 398) = 15.29$, p < .001. In the multiple-partner condition, 69% of participants expected their enjoyment to decline across the five sessions, the five sessions, whereas only 40% of participants expected their enjoyment to decline across the five sessions, whereas only 40% of participants expected their enjoyment to decline across the five sessions, whereas only 49% of participants experienced declining enjoyment, $\chi^2(1, N = 392) = 16.90$, p < .001 (see Figure S3).



Figure S3. Observed slopes of predicted and experienced enjoyment across partner type (single partner vs. multiple partner) for each participant in Experiment 3.

Analyses of Gender and Ethnicity

In the single-partner condition, the extent to which pairs underestimated their enjoyment over time did not differ significantly between same-gender and mixed-gender pairs, b = 0.04, SE = 0.04, t(210.11) = 1.02, p = .309, 95% CI = [-0.04, 0.12], nor between same-ethnicity and mixed-ethnicity pairs, b = 0.04, SE = 0.05, t(210.02) = 0.80, p = .424, 95% CI = [-0.05, 0.13].

Main-Text Analyses Including All Participants

For enjoyment, there was an effect of evaluation type, b = 0.42, SE = 0.03, t(452.98) =13.20, p < .001, 95% CI = [0.35, 0.48], an effect of session, b = -0.06, SE = 0.01, t(427.91) = -5.34, p < .001, 95% CI = [-0.08, -0.04], an evaluation type × session interaction, b = 0.20, SE = 0.02, t(427.28) = 13.28, p < .001, 95% CI = [0.17, 0.23], and no three-way interaction, b = 0.03, SE = 0.03, t(427.40) = 0.89, p = .376, 95% CI = [-0.03, 0.09] (single-partner predictions: b = -0.14, SE = 0.02, t(204.72) = -6.58, p < .001, 95% CI = [-0.18, -0.10]; single-partner experiences: b = 0.04, SE = 0.02, t(204.70) = 2.71, p = .007, 95% CI = [0.01, 0.08]; multiple-partner predictions: b = -0.18, SE = 0.02, t(176.37) = -9.57, p < .001, 95% CI = [-0.21, -0.14]; multiplepartner experiences: b = 0.04, SE = 0.02, t(167.11) = 1.99, p = .048, 95% CI = [0.0003, 0.07]). For conversation material, there was an effect of evaluation type, b = 0.36, SE = 0.04, t(462.32)= 9.60, p < .001, 95% CI = [0.29, 0.44], an effect of session, b = -0.10, SE = 0.01, t(418.68) = -0.10, SE = 0.01, SE = 0.01,7.70, p < .001, 95% CI = [-0.13, -0.08], an evaluation type × session interaction, b = 0.17, SE = 0.02, t(448.49) = 9.92, p < .001, 95% CI = [0.13, 0.20], and a three-way interaction, b = -0.12, SE = 0.03, t(448.61) = -3.42, p < .001, 95% CI = [-0.18, -0.05] (single-partner predictions: b = -0.26, SE = 0.02, t(204.92) = -10.76, p < .001, 95% CI = [-0.30, -0.21]; single-partner experiences: b = -0.03, SE = 0.02, t(204.82) = -1.44, p = .152, 95% CI = [-0.07, 0.01]; multiplepartner predictions: b = -0.11, SE = 0.02, t(172.38) = -5.61, p < .001, 95% CI = [-0.15, -0.07]; multiple-partner experiences: b = -0.003, SE = 0.02, t(178.02) = -0.15, p = .882, 95% CI = [-0.05, 0.04]).

We found partial mediation through conversation material in the single-partner condition (indirect effect: b = 0.14, SE = 0.02, 95% CI = [0.11, 0.18]; direct effect: b = 0.23, SE = 0.02, 95% CI = [0.20, 0.27]) and the multiple-partner condition (indirect effect: b = 0.16, SE = 0.03, 95% CI = [0.10, 0.21]; direct effect: b = 0.30, SE = 0.03, 95% CI = [0.24, 0.36]). We likewise found partial mediation through changes in conversation material in the single-partner condition (indirect effect: b = -0.11, SE = 0.02, 95% CI = [-0.14, -0.08]; direct effect: b = -0.08, SE = 0.02, 95% CI = [-0.11, -0.05]) and the multiple-partner condition (indirect effect: b = -0.06, SE = 0.01, 95% CI = [-0.08, -0.03]; direct effect: b = -0.16, SE = 0.01, 95% CI = [-0.19, -0.13]).

Remainder of Main-Text Analyses: Enjoyment and Conversation Material Output

For enjoyment, we also observed an effect of partner type, b = -0.27, SE = 0.08, t(423.68) = -3.30, p = .001, 95% CI = [-0.42, -0.11], such that single-partner participants reported higher enjoyment; no evaluation type × partner type interaction, b = 0.06, SE = 0.06, t(437.0608) = 1.00, p = .316, 95% CI = [-0.06, 0.19]; and no Session × partner type interaction, b = -0.02, SE = 0.02, t(417.74) = -0.76, p = .448, 95% CI = [-0.06, 0.03]. For conversation material, there was no effect of partner type, b = -0.12, SE = 0.08, t(420.41) = -1.40, p = .162, 95% CI = [-0.28, 0.05]; an evaluation type × partner type interaction, b = -0.21, SE = 0.07, t(445.17) = -2.84, p = .005, 95% CI = [-0.36, -0.07], such that single-partner participants underestimated conversation material more than multiple-partner participants; and a Session × partner type interaction, b = 0.08, SE = 0.03, t(409.32) = 3.15, p = .002, 95% CI = [0.03, 0.14], such that conversation material declined more sharply for single-partner participants (note that this is driven by predictions).

Remainder of Main-Text Analyses: Other Output

Among single-partner participants, ratings of enjoyment showed an effect of evaluation type, b = 0.38, SE = 0.04, t(201.06) = 10.41, p < .001, 95% CI = [0.31, 0.46], such that participants generally underestimated enjoyment; and an effect of session, b = -0.05, SE = 0.02, t(199.06) = -3.18, p = .002, 95% CI = [-0.09, -0.02], such that enjoyment generally declined. Likewise, their ratings of conversation material showed an effect of evaluation type, b = 0.47, SE= 0.05, t(199.91) = 9.08, p < .001, 95% CI = [0.36, 0.57], such that they generally underestimated conversation material, and an effect of session, b = -0.15, SE = 0.02, t(199.03) =-7.61, p < .001, 95% CI = [-0.18, -0.11], such that conversation material generally declined. Among multiple-partner participants, ratings of enjoyment showed the same effect of evaluation type, b = 0.45, SE = 0.05, t(243.68) = 9.05, p < .001, 95% CI = [0.35, 0.54], and the same effect of session, b = -0.07, SE = 0.01, t(176.31) = -4.65, p < .001, 95% CI = [-0.10, -0.04]. Likewise, their ratings of conversation material showed the same effect of evaluation type, b = 0.25, SE =0.05, t(240.36) = 4.77, p < .001, 95% CI = [0.35, 0.54], and the same effect of session, b = -0.07, SE = 0.01, t(176.31) = -4.65, p < .001, 95% CI = [-0.10, -0.04]. Likewise, their ratings of conversation material showed the same effect of evaluation type, b = 0.25, SE =0.05, t(240.36) = 4.77, p < .001, 95% CI = [0.35, 0.54], and the same effect of session, b = -0.06, SE = 0.02, t(179.08) = -3.28, p = .001, 95% CI = [-0.10, -0.04].

Correlations Between Paired Participants for Enjoyment and Conversation Material

Using the same methods as in the prior experiments, we estimated correlations between the ratings of paired participants. We first performed mixed linear modeling, using the participant #2 rating as the outcome variable, the participant #1 rating as a fixed effect, and both participants' IDs as random intercepts, separately for predictions (sessions 2-5) and experiences (sessions 1-5) in each condition. In the single-partner condition, participants' enjoyment predictions were positively associated with one another, b = 0.10, SE = 0.04, t(793.93) = 2.97, p= .003, 95% CI = [0.04, 0.17], as were their enjoyment experiences, b = 0.09, SE = 0.03, t(993.00) = 2.88, p = .004, 95% CI = [0.03, 0.15]. In the single-partner condition, participants'
conversation material predictions were positively associated with one another, b = 0.22, SE = 0.03, t(793.14) = 6.45, p < .001, 95% CI = [0.15, 0.29], as were their conversation material experiences, b = 0.06, SE = 0.03, t(993.00) = 1.98, p = .048, 95% CI = [0.001, 0.12]. In the multiple-partner condition, participants' enjoyment predictions were not significantly associated with one another, b = 0.02, SE = 0.02, t(583.57) = 1.46, p = .145, 95% CI = [-0.01, 0.05], but their enjoyment experiences were positively associated with one another, b = 0.26, SE = 0.03, t(825.02) = 8.75, p < .001, 95% CI = [0.20, 0.32]. In the multiple-partner condition, participants' conversation material predictions were positively associated with one another, b = 0.05, SE = 0.02, t(202.21) = 3.08, p = .002, 95% CI = [0.02, 0.08], as were their conversation material experiences, b = 0.20, SE = 0.03, t(720.18) = 6.97, p < .001, 95% CI = [0.15, 0.26].

We next computed correlations. In the single-partner condition, participants' enjoyment predictions were positively correlated, r = .13, t(794) = 3.61, p < .001, as were their enjoyment experiences, r = .07, t(993) = 2.22, p = .026. In the single-partner condition, participants' conversation material predictions were positively correlated, r = .13, t(794) = 3.62, p < .001, but their conversation material experiences were not significantly correlated, r = .05, t(993) = 1.56, p = .120. In the multiple-partner condition, participants' enjoyment predictions were not significantly correlated, r = .05, t(993) = 1.56, p = .120. In the multiple-partner condition, participants' enjoyment predictions were not significantly correlated, r = .01, t(770) = 0.14, p = .885, but their enjoyment experiences were positively correlated, r = .26, t(964) = 8.35, p < .001. In the multiple-partner condition, participants' conversation material predictions were not significantly correlated, r = .02, t(770) = -0.45, p = .650, but their conversation material predictions were not significantly correlated, r = .21, t(964) = 6.53, p < .001.

Experiment 4 Pre-Test

Method

Participants. We recruited 102 participants from the online Prolific participant pool $(M_{age} = 31.42; SD_{age} = 11.69; 59.80\%$ female; 60.78% Caucasian) to complete the study in exchange for \$0.60. An additional 8 participants were excluded for failing one or more of two attention checks.

Procedure. Participants imagined visiting a research lab for a 25-minute conversation with another person who they had not met before. They imagined that after speaking with the person for five minutes, the study questionnaire had asked them to rate their enjoyment from 1 (*not at all enjoyable*) to 7 (*very enjoyable*). They were informed that they had rated their enjoyment 5.5 out of 7 for these first five minutes.

Participants then read that they would speak with the other person for another 20 minutes, and could discuss any topics they wanted during this time. Participants were then randomly assigned to one of two conditions. Pairs in the detailed-simulation condition completed the detailed-simulation task:

> "Please think about how the next 20 minutes of your conversation are likely to unfold. Specifically, think about the topics that you and your study partner may talk about. In the spaces below, write down a few topics that you think you will discuss with your study partner throughout the conversation. Again, please spend some time thinking in detail about how you believe the rest of the conversation will go."

These participants wrote down topics that they expected to discuss in each five-minute interval (minutes 5-10, minutes 10-15, minutes 15-20, minutes 20-25). They then rated how easy or difficult they found it to think of these topics ($1 = really \ easy$; $2 = mostly \ easy$; 3 = mostly *difficult*; $4 = really \ difficult$) and were informed that they were allowed, but not required to

discuss these topics during the conversation. Participants in the control condition did not complete this task. Participants in both conditions then reported two sets of predictions: "How enjoyable do you think you would find these next 20 minutes of conversation? (Again, you rated your enjoyment 5.5 out of 7 for the first five minutes.)" (1 = not at all enjoyable; 7 = very*enjoyable*), and "How much new material do you think you and the other person would have to talk about during these next 20 minutes of conversation? That is, new material that you had not already discussed with one another?" (1 = no new material; 7 = very much new material). Participants reported these predictions for each five-minute interval (minutes 5-10; minutes 10-15; minutes 15-20; minutes 20-25). Participants in the detailed-simulation condition viewed the topics that they expected to discuss in each five-minute interval next to the scales where they reported these predictions.

Participants then indicated how long they preferred to continue speaking with the other person, on a sliding scale from 0 to 20 minutes: "If you wanted to enjoy yourself as much as possible, how many of these next 20 minutes would you talk with the other person before ending your conversation? (You could do anything you wanted after ending your conversation.)" Participants then reported the extent to which they imagined the conversation in detail while reporting predictions: "Please think about the predictions you just reported for minutes 5-25 of the conversation? That is, to what extent did you imagine concrete details such as the topics you would discuss, statements you and your study partner would make, and words that you and your study partner would use during the conversation?" (1 = not at all; 7 = very much).

Participants then completed two attention checks: "Who did we ask you to imagine speaking with?" (*a close friend* vs. *a person who I haven't met before* vs. *a family member* vs. *a*

coworker), and "We asked you to imagine that you and the other person would discuss..." (*five discussion questions assigned to us by the researcher* vs. *any topics we wanted* vs. *social and political topics, only* vs. *our hobbies and interests, only*). Finally, participants reported demographic information and were debriefed.

Results

Participants in the detailed-simulation condition (M = 4.91, SD = 1.38) reported imagining the conversation in significantly more detail than did participants in the control condition (M = 3.75, SD = 1.89), t(100) = -3.48, p < .001, 95% CI_{difference} = [-1.83, -0.50], d = -0.69. Participants in the detailed-simulation condition indicated that writing down topics that they expected to discuss was relatively more easy than difficult (M = 1.83, SD = 0.64), onesample t(45) = -7.11, p < .001, 95% CI = [1.64, 2.02], d = -1.05.

Predictions. For each prediction measure, we fit a mixed linear model to the data with fixed-effects terms for session (2, 3, 4, 5), simulation type (control vs. detailed simulation), and the session × simulation type interaction, a random-intercept term for participant number, and random-slope terms for session for each participant. We centered the session variable around 3.5 (the median of Sessions 2 through 5). We did not include ratings from the first session (minutes 0-5) in the models because participants were assigned an enjoyment rating, but not a conversation material rating, for minutes 0-5 through the survey.

For enjoyment, we found an effect of session, b = -0.12, SE = 0.05, t(101.98) = -2.19, 95% CI = [-0.22, -0.01], indicating that participants predicted declining enjoyment, and a nonsignificant effect of simulation type, b = 0.03, SE = 0.17, t(101.99) = 0.16, p = .871, 95% CI = [-0.30, 0.36]. Importantly, we also found a significant session × simulation type interaction, b =0.40, SE = 0.11, t(101.98) = 3.69, p < .001 (see Figure S4), indicating that participants in the control condition (b = -0.31, SE = 0.07, t(104.00) = -4.33, p < .001, 95% CI = [-0.46, -0.17]) expected significantly sharper declines in enjoyment than did participants in the detailedsimulation condition (b = 0.08, SE = 0.08, t(104.00) = 1.01, p = .317, 95% CI = [-0.08, 0.24]).

For conversation material, we found an effect of session, b = -0.14, SE = 0.06, t(102.00) = -2.35, p = .021, 95% CI = [-0.24, -0.02], indicating that participants predicted declining conversation material, and a non-significant effect of simulation type, b = 0.18, SE = 0.24, t(102.00) = 0.74, p = .460, 95% CI = [-0.29, 0.65]. Importantly, we again found a significant session × simulation type interaction, b = 0.57, SE = 0.11, t(102.00) = 4.97, p < .001, 95% CI = [0.34, 0.80] (see Figure S4), indicating that participants in the control condition (b = -0.42, SE = 0.08, t(104.00) = -5.40, p < .001, 95% CI = [-0.58, -0.27]) expected significantly sharper declines in conversation material than did participants in the detailed-simulation condition (b = 0.15, SE = 0.09, t(104.00) = 1.75, p = .083, 95% CI = [-0.02, 0.32]).

Predicted Enjoyment





Predicted Conversation Material

Figure S4. Predicted enjoyment and conversation material over time in the pre-test for Experiment 4. Error bars represent ± 1 SE.

Preferred duration of conversation. Participants who predicted higher average enjoyment for minutes 5-25 tended to prefer longer conversations in the detailed-simulation condition, r = .33, t(44) = 2.32, p = .025, 95% CI = [.04, .57], and in the control condition, r = .45, t(54) = 3.71, p < .001, 95% CI = [.21, .64]. However, participants in the detailed-simulation and control conditions did not differ significantly in the average number of minutes that they preferred to continue speaking (Ms = 12.11 vs. 12.00 minutes, respectively; SDs = 5.25 vs. 5.55 minutes), t(100) = -0.10, p = .920, 95% CI_{difference} = [-2.25, 2.03], d = -0.02, likely because predicted enjoyment did not differ significantly across conditions for minutes 10-15, t(196.99) = 1.44, p = .150, 95% CI = [-0.10, 0.66], d = 0.28, minutes 15-20, t(168.37) = -1.90, p = .060, 95% CI = [-0.86, 0.02], d = -0.37, or minutes 20-25, t(118.03) = -1.89, p = .061, 95% CI = [-1.08, 0.03], d = -0.37.

Experiment 4

Session-by-Session Analyses

Participants in the control condition significantly underestimated how much they would enjoy themselves during each five-minute interval: minutes 5-10, *paired t*(50.08) = -2.61, *p* = .012, 95% CI_{difference} = [-0.63, -0.08], *d* = -0.48, minutes 10-15, *paired t*(50.20) = -5.57, *p* < .001, 95% CI_{difference} = [-1.08, -0.51], *d* = -1.08, minutes 15-20, *paired t*(50.45) = -7.72, *p* < .001, 95% CI_{difference} = [-1.61, -0.95], *d* = -1.27, and minutes 20-25, *paired t*(50.59) = -8.94, *p* < .001, 95% CI_{difference} = [-1.97, -1.25], *d* = -1.36. Participants in the detailed-simulation condition significantly underestimated how much they would enjoy themselves during each five-minute interval: minutes 5-10, *paired t*(49.97) = -3.92, *p* < .001, 95% CI_{difference} = [-0.82, -0.27], *d* = -0.67, minutes 10-15, *paired t*(50.17) = -4.71, *p* < .001, 95% CI_{difference} = [-0.93, -0.37], *d* = -0.79, minutes 15-20, *paired t*(49.94) = -4.84, *p* < .001, 95% CI_{difference} = [-0.95, -0.39], *d* = -1.00, and minutes 20-25, *paired t*(50.15) = -6.86, *p* < .001, 95% CI_{difference} = [-1.29, -0.71], *d* = -1.25.

Participants in the control condition significantly underestimated how much new material they would have to discuss during each five-minute interval: minutes 5-10, *paired t*(50.37) = - 3.00, p = .004, 95% CI_{difference} = [-0.72, -0.14], d = -0.49, minutes 10-15, *paired t*(50.33) = -3.33, p = .002, 95% CI_{difference} = [-0.86, -0.21], d = -0.54, minutes 15-20, *paired t*(50.67) = -5.75, p < .001, 95% CI_{difference} = [-1.38, -0.67], d = -0.92, and minutes 20-25, *paired t*(50.70) = -8.21, p < .001, 95% CI_{difference} = [-1.89, -1.15], d = -1.19. Participants in the detailed-simulation condition significantly underestimated how much new material they would discuss during minutes 5-10, *paired t*(50.30) = -5.87, p < .001, 95% CI_{difference} = [-0.88, -0.18], d = -0.96, minutes 10-15, *paired t*(50.39) = -3.00, p = .004, 95% CI_{difference} = [-0.88, -0.18], d = -0.50, and minutes 20-25, *paired t*(50.45) = -4.83, p < .001, 95% CI_{difference} = [-1.21, -0.50], d = -0.74, but did not significantly underestimate conversation material for minutes 15-20, *paired t*(50.50) = -1.94, p = .058, 95% CI_{difference} = [-0.69, 0.01], d = -0.32.

Preregistered Analyses

We also analyzed our data using the preregistered mixed linear models, which used different random-effects terms. The results of these analyses did not differ meaningfully from the ones in the main text.

For each measure, we fit a mixed linear model to the data with fixed-effects terms for evaluation type (predictions vs. experiences), session (1, 2, 3, 4, 5), simulation type (control vs. detailed simulation), and their higher-order interactions, random intercepts for participants nested within pairs, and a random-slope term for session. We centered the session variable around Session 3.

Enjoyment. We found an effect of evaluation type, b = 0.69, SE = 0.03, t(1599.98) = 21.81, p < .001, 95% CI = [0.63, 0.75], such that participants underestimated their enjoyment, and an effect of session, b = -0.07, SE = 0.02, t(162.92) = -3.75, p < .001, 95% CI = [-0.10, -0.03], such that predicted or actual enjoyment decreased over time, an evaluation type × session interaction, b = 0.31, SE = 0.02, t(1599.98) = 14.00, p < .001, 95% CI = [0.27, 0.36], such that predicted enjoyment declined more sharply than actual enjoyment, and a three-way interaction with simulation type, b = -0.20, SE = 0.04, t(1599.98) = -4.52, p < .001, 95% CI = [-0.29, -0.11]. Participants predicted sharper declines in the control condition than the detailed-simulation condition, b = 0.22, SE = 0.05, t(123.04) = 4.40, p < .001, 95% CI = [0.12, 0.32], but the trajectory of their experiences did not differ, b = 0.02, SE = 0.04, t(100.93) = 0.42, p = .678, 95% CI = [-0.06, 0.09].

Participants in the control condition showed the evaluation type × session interaction, b = 0.41, SE = 0.03, t(799.98) = 13.08, p < .001, 95% CI = [0.35, 0.48]: They predicted declining enjoyment (b = -0.33, SE = 0.03, t(102.76) = -11.36, p < .001, 95% CI = [-0.39, -0.27]), yet

experienced increasing enjoyment (b = 0.08, SE = 0.03, t(102.76) = 2.83, p = .006, 95% CI = [0.02, 0.14]). Participants underestimated enjoyment in minutes 5-10, *paired* t(504.45) = -3.62, p < .001, 95% CI_{difference} = [-0.55, -0.16], d = -0.48, minutes 10-15, *paired* t(504.45) = -8.12, p < .001, 95% CI_{difference} = [-0.99, -0.60], d = -1.08, minutes 15-20, *paired* t(504.45) = -13.06, p < .001, 95% CI_{difference} = [-1.47, -1.09], d = -1.27, and minutes 20-25, *paired* t(504.45) = -16.39, p < .001, 95% CI_{difference} = [-1.80, -1.42], d = -1.36.

Participants in the detailed-simulation condition showed a weaker interaction, b = 0.21, SE = 0.03, t(800.00) = 6.71, p < .001, 95% CI = [0.15, 0.27]. They predicted that their enjoyment would decline (b = -0.11, SE = 0.03, t(92.26) = -3.68, p < .001, 95% CI = [-0.18, -0.05]), and experienced increasing enjoyment as the conversation continued (b = 0.10, SE = 0.03, t(92.26) = 3.16, p = .002, 95% CI = [0.04, 0.16]). They underestimated enjoyment, with the magnitude of underestimation stayed relatively more constant from minutes 5-10, *paired* t(502.55) = -5.67, p <.001, 95% CI_{difference} = [-0.73, -0.36], d = -0.67, to minutes 10-15, *paired* t(502.55) = -6.82, p <.001, 95% CI_{difference} = [-0.84, -0.47], d = -0.79, to minutes 15-20, *paired* t(502.55) = -6.98, p <.001, 95% CI_{difference} = [-0.86, -0.48], d = -1.00, to minutes 20-25, *paired* t(502.55) = -10.42, p <.001, 95% CI_{difference} = [-1.19, -0.81], d = -1.25.

Conversation material. We found an effect of evaluation type, b = 0.63, SE = 0.04, t(1599.99) = 14.78, p < .001, 95% CI = [0.55, 0.71], such that participants underestimated conversation material, an effect of session, b = -0.10, SE = 0.02, t(195.72) = -4.41, p < .001, 95% CI = [-0.14, -0.05], such that conversation material decreased, an evaluation type × session interaction, b = 0.23, SE = 0.03, t(1599.99) = 7.71, p < .001, 95% CI = [0.17, 0.29], such that participants overestimated declines in conversation material, and a three-way interaction with simulation type, b = -0.26, SE = 0.06, t(1599.99) = -4.38, p < .001, 95% CI = [-0.38, -0.15].

Participants in the control condition predicted significantly sharper declines, b = 0.32, SE = 0.06, t(176.76) = 5.68, p < .001, 95% CI = [0.21, 0.43], but the trajectory of experiences did not differ, b = 0.06, SE = 0.05, t(99.85) = 1.12, p = .264, 95% CI = [-0.05, 0.16].

In the control condition, there was an evaluation type × session interaction, b = 0.36, SE = 0.04, t(800.00) = 9.43, p < .001, 95% CI = [0.29, 0.44]: They predicted declining conversation material (b = -0.38, SE = 0.04, t(89.38) = -9.64, p < .001, 95% CI = [-0.45, -0.30]), yet experienced no significant changes (b = -0.01, SE = 0.04, t(89.38) = -0.34, p = .736, 95% CI = [-0.09, 0.06]). They underestimated conversation material in minutes 5-10, *paired* t(504.85) = -3.78, p < .001, 95% CI_{difference} = [-0.66, -0.21], d = -0.49, minutes 10-15, *paired* t(504.85) = -4.71, p < .001, 95% CI_{difference} = [-0.76, -0.31], d = -0.54, minutes 15-20, *paired* t(504.85) = -9.00, p < .001, 95% CI_{difference} = [-1.25, -0.80], d = -0.92, and minutes 20-25, *paired* t(504.85) = -13.35, p < .001, 95% CI_{difference} = [-1.75, -1.30], d = -1.19.

In the detailed-simulation condition, there was an evaluation type × session interaction, b = 0.10, SE = 0.05, t(800.00) = 2.17, p = .030, 95% CI = [0.01, 0.19], although participants neither predicted, (b = -0.05, SE = 0.04, t(113.02) = -1.36, p = .177, 95% CI = [-0.13, 0.02]), nor experienced (b = 0.05, SE = 0.04, t(113.02) = 1.17, p = .246, 95% CI = [-0.03, 0.13]), significant changes in conversation material. They tended to underestimate conversation material, but the magnitude of underestimation did not change significantly from minutes 5-10, *paired* t(505.36) =-7.80, p < .001, 95% CI_{difference} = [-1.31, -0.78], d = -0.96, to minutes 10-15, *paired* t(505.36) =-3.94, p < .001, 95% CI_{difference} = [-0.79, -0.27], d = -0.50, to minutes 15-20, *paired* t(505.36) =-2.52, p = .012, 95% CI_{difference} = [-0.60, -0.08], d = -0.32, to minutes 20-25, *paired* t(505.36) =-6.37, p < .001, 95% CI_{difference} = [-1.12, -0.59], d = -0.74.

Observed Slopes of Predicted and Experienced Enjoyment by Pair

We computed the observed slopes of predicted and experienced enjoyment for each pair separately. In the control condition, 86% of pairs expected their enjoyment to decline across the five sessions, whereas only 34% of pairs experienced declining enjoyment, $\chi^2(1, N = 100) =$ 28.17, *p* < .001. In the detailed-simulation condition, 76% of pairs expected their enjoyment to decline across the five sessions, whereas only 30% of pairs experienced declining enjoyment, $\chi^2(1, N = 100) = 21.24$, *p* < .001 (see Figure S5).



Control Condition

Figure S5. Observed slopes of predicted and experienced enjoyment across simulation type (control vs. detailed simulation) for each pair in Experiment 4.

Analyses of Gender and Ethnicity

The extent to which pairs underestimated their enjoyment over time did not differ significantly between same-gender and mixed-gender pairs in the control condition, b = -0.05, SE = 0.10, t(69.82) = -0.51, p = .613, 95% CI = [-0.26, 0.15], or the detailed-simulation condition, b = -0.05, SE = 0.09, t(450.32) = -0.55, p = .585, 95% CI = [-0.23, 0.13], nor between same-ethnicity and mixed-ethnicity pairs in the control condition, b = -0.14, SE = 0.12, t(71.10) = -1.20, p = .236, 95% CI = [-0.38, 0.09], or the detailed-simulation condition, b = -0.06, SE = 0.11, t(343.18) = -0.54, p = .587, 95% CI = [-0.28, 0.16]. Differences between the control and detailed-simulation conditions in the predicted versus actual slopes of enjoyment also did not differ significantly between same-gender and mixed-gender, pairs, b = 0.002, SE = 0.14, t(205.57) = 0.01, p = .989, 95% CI = [-0.27, 0.27], nor between same-ethnicity and mixed-ethnicity pairs, b = 0.08, SE = 0.16, t(209.99) = 0.51, p = .612, 95% CI = [-0.24, 0.40].

Remainder of Main-Text Analyses: Enjoyment & Conversation Material

For enjoyment, the effect of simulation type was non-significant, b = 0.19, SE = 0.14, t(100.02) = 1.39, p = .167, 95% CI = [-0.08, 0.47]. The evaluation type × simulation type interaction was significant, b = -0.24, SE = 0.11, t(120.14) = -2.20, p = .030, 95% CI = [-0.45, -0.03], indicating that participants underestimated enjoyment more in the control condition than the detailed-simulation condition. The session × simulation type interaction was significant, b = 0.12, SE = 0.04, t(101.69) = 3.30, p = .001, 95% CI = [0.05, 0.19], indicating that enjoyment ratings declined more in the control condition than the detailed-simulation condition.

For conversation material, the effect of simulation type was non-significant, b = 0.19, SE = 0.13, t(100.00) = 1.51, p = .135, 95% CI = [-0.06, 0.45], as was the evaluation type × simulation type interaction, b = -0.15, SE = 0.13, t(114.55) = -1.17, p = .244, 95% CI = [-0.40, 0.10]. The session × simulation type interaction was significant, b = 0.19, SE = 0.05, t(100.00) = 4.23, p < .001, 95% CI = [0.10, 0.28], indicating that conversation material ratings declined more in the control condition than the detailed-simulation condition.

Remainder of Main-Text Analyses: Control & Detailed-simulation conditions

We continued analyzing enjoyment ratings, separately in the control and detailedsimulation conditions. In the control condition, the effect of evaluation type was significant, b = 0.81, SE = 0.09, t(54.48) = 9.21, p < .001, 95% CI = [0.64, 0.98], indicating that participants underestimated enjoyment. The effect of session was significant, b = -0.12, SE = 0.02, t(50.55) = -5.11, p < .001, 95% CI = [-0.17, -0.08], indicating that enjoyment ratings declined over time. In the detailed-simulation condition, the effect of evaluation type was significant, b = 0.57, SE = 0.06, t(243.57) = 9.04, p < .001, 95% CI = [0.45, 0.70], indicating that participants underestimated enjoyment. The effect of session was non-significant, b = -0.008, SE = 0.03, t(55.18) = -0.31, p = .760, 95% CI = [0.12, 0.30].

We then continued analyzing conversation material ratings, separately in the control and detailed-simulation conditions. In the control condition, the effect of evaluation type was significant, b = 0.70, SE = 0.10, t(52.46) = 7.26, p < .001, 95% CI = [0.51, 0.90], indicating that participants underestimated conversation material. The effect of session was significant, b = -0.20, SE = 0.03, t(50.08) = -5.79, p < .001, 95% CI = [-0.26, -0.13], indicating that conversation material ratings declined over time. In the detailed-simulation condition, the effect of evaluation type was significant, b = 0.55, SE = 0.08, t(70.98) = 6.91, p < .001, 95% CI = [0.40, 0.71], indicating that participants underestimated conversation material. The effect of session was non-significant, b = -0.004, SE = 0.03, t(51.23) = -0.13, p = .899, 95% CI = [-0.06, 0.06].

Main-Text Analyses Including All Participants

We reanalyzed the data including all 103 pairs. The results did not differ meaningfully from the main text. Note that the three pairs excluded from the analyses in the main text were each in the control condition. Therefore, the results presented below for the control condition are identical to those in the main text.

Enjoyment. We found an effect of evaluation type, b = 0.70, SE = 0.05, t(121.88) = 12.79, p < .001, 95% CI = [0.59, 0.81], such that participants underestimated enjoyment, an effect of session, b = -0.07, SE = 0.02, t(104.69) = -3.92, p < .001, 95% CI = [-0.11, -0.04], such that enjoyment decreased over time, an evaluation type × session interaction, b = 0.32, SE = 0.03, t(186.70) = 9.19, p < .001, 95% CI = [0.25, 0.39], such that predicted enjoyment declined more sharply than actual enjoyment, and a three-way evaluation type × session × simulation type interaction, b = -0.19, SE = 0.07, t(186.70) = -2.78, p = .006, 95% CI = [-0.33, -0.06]. Participants predicted sharper declines in the control condition than the detailed-simulation condition, b = 0.20, SE = 0.05, t(103.00) = 3.82, p < .001, 95% CI = [0.10, 0.31], but the trajectory of experiences did not differ significantly, b = 0.01, SE = 0.04, t(915.67) = 0.25, p = .801, 95% CI = [-0.06, 0.08].

In the control condition, there was an evaluation type × session interaction, b = 0.41, SE = 0.05, t(69.63) = 8.02, p < .001, 95% CI = [0.31, 0.52]: Participants predicted declining enjoyment (b = -0.33, SE = 0.04, t(50.76) = -8.55, p < .001, 95% CI = [-0.41, -0.25]), yet experienced increasing enjoyment (b = 0.08, SE = 0.03, t(50.39) = 2.54, p = .014, 95% CI = [0.02, 0.15]). They significantly underestimated enjoyment in minutes 5-10, *paired* t(50.08) = -2.61, p = .012, 95% CI_{difference} = [-0.63, -0.08], d = -0.48, minutes 10-15, *paired* t(50.20) = -5.57, p < .001, 95% CI_{difference} = [-1.08, -0.51], d = -1.08, minutes 15-20, *paired* t(50.45) = -7.72, p < -0.01 .001, 95% CI_{difference} = [-1.61, -0.95], *d* = -1.27, and minutes 20-25, *paired t*(50.59) = -8.94, *p* < .001, 95% CI_{difference} = [-1.97, -1.25], *d* = -1.36.

In the detailed-simulation condition, there was a weaker evaluation type × session interaction, b = 0.22, SE = 0.05, t(145.45) = 4.71, p < .001, 95% CI = [0.13, 0.32]: Participants predicted declining enjoyment (b = -0.13, SE = 0.04, t(53.74) = -3.20, p = .002, 95% CI = [-0.21, -0.05]), and experienced increasing enjoyment (b = 0.09, SE = 0.03, t(52.40) = 2.88, p = .006, 95% CI = [0.03, 0.16]). They underestimated enjoyment, with the magnitude of underestimation remaining relatively more constant from minutes 5-10, *paired* t(52.83) = -3.86, p < .001, 95% CI_{difference} = [-0.80, -0.25], d = -0.65, to minutes 10-15, *paired* t(53.43) = -4.97, p < .001, 95% CI_{difference} = [-0.98, -0.42], d = -0.85, to minutes 15-20, *paired* t(53.22) = -4.81, p < .001, 95% CI_{difference} = [-0.97, -0.40], d = -0.79, to minutes 20-25, *paired* t(53.46) = -6.51, p < .001, 95% CI_{difference} = [-1.35, -0.72], d = -1.02.

Conversation material. We found an effect of evaluation type, b = 0.63, SE = 0.06, t(118.72) = 10.09, p < .001, 95% CI = [0.51, 0.76], such that participants underestimated conversation material, an effect of session, b = -0.11, SE = 0.02, t(103.00) = -4.70, p < .001, 95% CI = [-0.16, -0.06], such that conversation material declined, an evaluation type × session interaction, b = 0.24, SE = 0.04, t(221.41) = 6.26, p < .001, 95% CI = [0.16, 0.31], such that participants overestimated declines in conversation material, and a three-way evaluation type × session × simulation type interaction, b = -0.25, SE = 0.08, t(221.41) = -3.25, p = .001, 95% CI = [-0.40, -0.10]. Participants predicted sharper declines in the control condition than the detailed-simulation condition, b = 0.30, SE = 0.06, t(103.03) = 5.12, p < .001, 95% CI = [0.18, 0.41], yet experienced changes did not differ significantly, b = 0.05, SE = 0.05, t(103.00) = 0.88, p = .381, 95% CI = [-0.06, 0.15].

In the control condition, there was an evaluation type × session interaction, b = 0.36, SE = 0.05, t(71.12) = 6.78, p < .001, 95% CI = [0.26, 0.47]: Participants declining conversation material (b = -0.38, SE = 0.05, t(50.77) = -8.06, p < .001, 95% CI = [-0.47, -0.28]), yet experienced no significant changes (b = -0.01, SE = 0.04, t(50.55) = -0.33, p = .742, 95% CI = [-0.09, 0.07]). They significantly underestimated conversation material in minutes 5-10, *paired* t(50.37) = -3.00, p = .004, 95% CI_{difference} = [-0.72, -0.14], d = -0.49, minutes 10-15, *paired* t(50.33) = -3.33, p = .002, 95% CI_{difference} = [-0.86, -0.21], d = -0.54, minutes 15-20, *paired* t(50.67) = -5.75, p < .001, 95% CI_{difference} = [-1.38, -0.67], d = -0.92, and minutes 20-25, *paired* t(50.70) = -8.21, p < .001, 95% CI_{difference} = [-1.89, -1.15], d = -1.19.

In the detailed-simulation condition, there was a significantly weaker interaction, b = 0.12, SE = 0.05, t(516.91) = 2.12, p = .035, 95% CI = [0.01, 0.22], although participants neither predicted (b = -0.08, SE = 0.04, t(56.28) = -1.91, p = .062, 95% CI = [-0.17, 0.004]), nor experienced (b = 0.03, SE = 0.04, t(52.13) = 0.78, p = .439, 95% CI = [-0.05, 0.12]), significant changes. They underestimated conversation material, with the magnitude of underestimation staying relatively constant from minutes 5-10, *paired* t(53.13) = -5.78, p < .001, 95% CI_{difference} = [-1.37, -0.67], d = -1.11, to minutes 10-15, *paired* t(53.17) = -3.22, p = .002, 95% CI_{difference} = [-0.90, -0.21], d = -0.70, to minutes 15-20, *paired* t(53.24) = -1.99, p = .052, 95% CI_{difference} = [-0.69, 0.002], d = -0.40, to minutes 20-25, *paired* t(53.48) = -5.09, p < .001, 95% CI_{difference} = [-1.27, -0.55], d = -0.88.

Mediation. Conversation material partially mediated differences between predicted and actual enjoyment in the control condition (indirect effect: b = 0.37, SE = 0.05, 95% CI = [0.26, 0.47]; direct effect: b = 0.44, SE = 0.05, 95% CI = [0.33, 0.54]), and the detailed-simulation condition, (indirect effect: b = 0.23, SE = 0.03, 95% CI = [0.17, 0.30]; direct effect: b = 0.36, SE

= 0.03, 95% CI = [0.29, 0.42]). Changes in conversation material partially mediated differences between predicted and actual changes in enjoyment in the control condition, (indirect effect: b =-0.20, SE = 0.06, 95% CI = [-0.33, -0.10]; direct effect: b = -0.21, SE = 0.05, 95% CI = [-0.30, -0.12]), and in the detailed-simulation condition, (indirect effect: b = -0.07, SE = 0.03, 95% CI = [-0.14, -0.004]; direct effect: b = -0.15, SE = 0.03, 95% CI = [-0.21, -0.09]).

Secondary measures. Participants in the detailed-simulation condition estimated spending 57.26% of minutes 5-25 discussing topics written down earlier. Time spent discussing these topics was not significantly associated with average enjoyment, b = 0.003, SE = 0.003, t(103.01) = 0.76, p = .451, 95% CI = [-0.004, 0.01], or with their average conversation material in minutes 5-25, b = 0.0001, SE = 0.003, t(101.75) = 0.03, p = .977, 95% CI = [-0.006, 0.006].

Participants indicated that they initially expected both individuals to drive the conversation (27.67% "self" vs. 18.45% "other" vs. 53.88% "both"), $\chi^2(2, N = 206) = 41.78, p < .001$, and reported that both individuals drove the conversation (19.90% "self" vs. 18.45% "other" vs. 61.65% "both"), $\chi^2(2, N = 206) = 74.40, p < .001$. These two sets of responses did not differ significantly, $\chi^2(2, N = 412) = 3.69, p = .158$.

Correlations Between Paired Participants for Enjoyment and Conversation Material

Using the same methods as in the prior experiments, we estimated correlations between the ratings of paired participants. We first performed mixed linear modeling, using the participant #2 rating as the outcome variable, the participant #1 rating as a fixed effect, and the participant #1 ID as a random intercept, separately for predictions (sessions 2-5) and experiences (sessions 1-5) in each condition. In the control condition, participants' enjoyment predictions were positively associated with one another, b = 0.34, SE = 0.05, t(395.08) = 7.32, p < .001, 95% CI = [0.25, 0.44], as were their enjoyment experiences, b = 0.20, SE = 0.04, t(497.73) = 4.44, p < .001, 95% CI = [0.11, 0.28]. In the control condition, participants' conversation material predictions were positively associated with one another, b = 0.24, SE = 0.05, t(397.99) = 4.83, p < .001, 95% CI = [0.14, 0.33], as were their conversation material experiences, b = 0.24, SE = 0.04, t(496.85) = 5.59, p < .001, 95% CI = [0.16, 0.33]. In the detailed-simulation condition, participants' enjoyment predictions were not significantly associated with one another, b = 0.04, SE = 0.05, t(397.98) = 0.86, p = .389, 95% CI = [-0.06, 0.14], nor were their enjoyment experiences, b = 0.02, SE = 0.04, t(498.00) = 0.54, p = .592, 95% CI = [-0.06, 0.11]. In the detailed-simulation condition, participants' conversation material predictions were not significantly associated with one another, b = -0.06, SE = 0.05, t(397.96) = -1.20, p = .230, 95% CI = [-0.16, 0.04], nor were their conversation material experiences, b = -0.04, SE = 0.04, t(497.99) = -0.83, p = .406, 95% CI = [-0.13, 0.05].

We next computed correlations. In the control condition, participants' enjoyment predictions were positively correlated, r = .20, t(398) = 3.97, p < .001, as were their enjoyment experiences, r = .26, t(498) = 6.13, p < .001. In the control condition, participants' conversation material predictions were positively correlated, r = .24, t(398) = 4.99, p < .001, as were their conversation material experiences, r = .33, t(498) = 7.82, p < .001. In the detailed-simulation condition, participants' enjoyment predictions were not significantly correlated, r = -.04, t(398) =-0.75, p = .452, nor were their enjoyment experiences, r = .07, t(498) = 1.46, p = .146. In the detailed-simulation condition, participants' conversation material predictions were negatively correlated, r = -.11, t(398) = -2.23, p = .027, but their conversation material experiences were not significantly correlated, r = .003, t(498) = 0.06, p = .952.

Experiment 5

Session-by-Session Analyses

Enjoyment experiences did not differ significantly across conditions for the initial five minutes in which all participants were assigned to speak, t(161.57) = 0.22, p = .826, 95% CI = [-0.30, 0.37], d = 0.06, or for minutes 5-10 immediately after the manipulation, t(212.17) = 1.86, p = .065, 95% CI = [-0.02, 0.67], d = 0.39, but participants in the keep-talking condition experienced significantly greater enjoyment in each five-minute session throughout minutes 10-30, $ts \ge 4.05$, ps < .001, $ds \ge 0.73$.

Participants in the keep-talking did not significantly underestimate their enjoyment in minutes 5-10, *paired t*(379.35) = -1.59, *p* = .112, 95% Cl_{difference} = [-0.34, 0.04], *d* = -0.24, but significantly underestimated their enjoyment in each of the following sessions: minutes 10-15, *paired t*(527.39) = -3.89, *p* < .001, 95% Cl_{difference} = [-0.58, -0.19], *d* = -0.56, minutes 15-20, *paired t*(422.55) = -4.66, *p* < .001, 95% Cl_{difference} = [-0.67, -0.27], *d* = -0.61, minutes 20-25, *paired t*(230.68) = -6.61, *p* < .001, 95% Cl_{difference} = [-0.92, -0.49], *d* = -0.92, and minutes 25-30, *paired t*(114.08) = -9.23, *p* < .001, 95% Cl_{difference} = [-1.25, -0.81], *d* = -1.33. Participants in the keep-talking condition had well-calibrated beliefs about how much they would have to talk about in minutes 5-10, *paired t*(328.17) = -0.19, *p* = .850, 95% Cl_{difference} = [-0.27, 0.23], *d* = -0.03, but significantly underestimated conversation material in each of the remaining sessions: minutes 10-15, *paired t*(360.70) = -3.33, *p* = .001, 95% Cl_{difference} = [-1.08, -0.50], *d* = -0.96, minutes 25-20, *paired t*(140.54) = -6.40, *p* < .001, 95% Cl_{difference} = [-1.34, -0.71], *d* = -0.94, and minutes 25-30, *paired t*(84.95) = -8.27, *p* < .001, 95% Cl_{difference} = [-1.80, -1.10], *d* = -1.45.

Free-Choice Enjoyment Predictions vs. Keep-Talking Enjoyment Experiences

For the enjoyment scale, we fit a mixed linear model to the data with fixed-effects terms for evaluation type (free-choice predictions, keep-talking experiences), session (1, 2, 3, 4, 5, 6),

and their interaction, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and their interaction for each pair. We found an effect of evaluation type (b = 0.58, SE = 0.14, t(93.15) = 4.11, p < .001, 95% CI = [0.30, 0.86]), such that participants in the free-choice condition underestimated enjoyment in conversation, an effect of session (b = -0.11, SE = 0.02, t(99.15) = -6.55, p < .001, 95% CI = [-0.14, -0.07]), such that predicted or experienced enjoyment decreased over time, and an evaluation type × session interaction (b = 0.22, SE = 0.03, t(99.15) = 6.75, p < .001, 95% CI = [0.15, 0.28]), such that participants in the free-choice condition expected a more negative trajectory of enjoyment in conversation than those in the keep-talking condition experienced.

Keep-Talking Condition: Remaining Mixed Linear Model Effects

In the keep-talking condition, we fit mixed linear models to the data with fixed-effects terms for evaluation type (predictions, experiences), session (1, 2, 3, 4, 5, 6), and their interaction, a random-intercept term for pair number, and random-slope terms for evaluation type, session, and their interaction for each pair, separately for each dependent measure.

For the enjoyment scale, participants overestimated how quickly enjoyment would diminish: There was an effect of evaluation type (b = 0.46, SE = 0.05, t(53.84) = 8.78, p < .001, 95% CI = [0.35, 0.56]), an effect of session (b = -0.10, SE = 0.02, t(50.25) = -5.78, p < .001, 95% CI = [-0.13, -0.06]), and an evaluation type × session interaction (b = 0.20, SE = 0.02, t(125.99)= 8.04, p < .001, 95% CI = [0.15, 0.24]). Participants overestimated how quickly conversation material would decline: There was an effect of evaluation type (b = 0.62, SE = 0.09, t(51.27) =7.23, p < .001, 95% CI = [0.45, 0.79]), an effect of session (b = -0.19, SE = 0.02, t(50.21) = -8.30, p < .001, 95% CI = [-0.24, 0.14]), and an evaluation type × session interaction (b = 0.30, SE = 0.04, t(71.38) = 8.29, p < .001, 95% CI = [0.23, 0.37]). Participants overestimated how quickly conversation would become tiring: There was an effect of evaluation type (b = -0.66, SE = 0.11, t(56.17) = -6.17, p < .001, 95% CI = [-0.87, -0.44]), an effect of session (b = 0.22, SE = (0.03, t(50.10) = 7.97, p < .001, 95% CI = (0.17, 0.28), and an evaluation type × session interaction (b = -0.28, SE = 0.05, t(91.49) = -5.26, p < .001, 95% CI = [-0.38, -0.17]). Participants overestimated how quickly they would lose interest: There was an effect of evaluation type (b = 0.66, SE = 0.07, t(55.03) = 8.79, p < .001, 95% CI = [0.51, 0.80]), an effect of session (b = -0.11, SE = 0.02, t(51.26) = -5.52, p < .001, 95% CI = [-0.15, -0.07]), and an evaluation type × session interaction (b = 0.27, SE = 0.04, t(87.52) = 7.30, p < .001, 95% CI = [0.20, 0.34]). Participants overestimated how guickly the other person would lose interest: There was an effect of evaluation type (b = 0.94, SE = 0.09, t(50.92) = 10.55, p < .001, 95% CI = [0.76, 1.11]), an effect of session (b = -0.13, SE = 0.02, t(50.07) = -5.90, p < .001, 95% CI = [-0.18, -0.09]), and an evaluation type \times session interaction (b = 0.34, SE = 0.03, t(88.62) = 9.75, p < 0.09]) .001, 95% CI = [0.27, 0.41]). Participants more accurately anticipated increases in intimacy: There was a non-significant effect of evaluation type (b = 0.17, SE = 0.09, t(57.59) = 1.95, p = 1.95, p.056, 95% CI = [-0.004, 0.35]), a significant effect of session (b = 0.17, SE = 0.02, t(50.64) =6.98, p < .001, 95% CI = [0.12, 0.21]), and a non-significant evaluation type × session interaction (b = -0.03, SE = 0.04, t(100.06) = -0.63, p = .528, 95% CI = [-0.12, 0.06]).

Preregistered Mediational Analyses

As preregistered, we also performed within-pairs mediational analyses for each conversation session separately. Within the keep-talking condition, conversation material partially mediated differences between predicted and actual enjoyment in Session 3 (indirect effect: b = -0.10, SE = 0.05, 95% CI = [-0.19, -0.02]; direct effect: b = -0.29, SE = 0.07, 95% CI = [-0.43, -0.14]), Session 4, (indirect effect: b = -0.28, SE = 0.09, 95% CI = [-0.48, -0.12]; direct

effect: b = -0.20, SE = 0.09, 95% CI = [-0.38, -0.01]), Session 5, (indirect effect: b = -0.25, SE = 0.11, 95% CI = [-0.48, -0.06]; direct effect: b = -0.46, SE = 0.10, 95% CI = [-0.66, -0.25]), and Session 6, (indirect effect: b = -0.46, SE = 0.16, 95% CI = [-0.78, -0.18]; direct effect: b = -0.56, SE = 0.13, 95% CI = [-0.83, -0.30]), but not in Session 2, (indirect effect: b = -0.01, SE = 0.04, 95% CI = [-0.10, 0.07]; direct effect: b = -0.14, SE = 0.06, 95% CI = [-0.27, -0.02]).

We next analyzed one's own and the partner's conversation material separately. For one's own conversation material, we did not find significant mediation for Session 2 (indirect effect: b = 0.03, SE = 0.04, 95% CI = [-0.05, 0.12]; direct effect: b = -0.18, SE = 0.07, 95% CI = [-0.31, -0.05]) or Session 3 (indirect effect: b = -0.03, SE = 0.03, 95% CI = [-0.11, 0.01]; direct effect: b = -0.35, SE = 0.07, 95% CI = [-0.48, -0.22]), but found partial mediation in Session 4 (indirect effect: b = -0.19, SE = 0.07, 95% CI = [-0.34, -0.06]; direct effect: b = -0.29, SE = 0.09, 95% CI = [-0.46, -0.11]), Session 5 (indirect effect: b = -0.20, SE = 0.10, 95% CI = [-0.43, -0.11]) 0.04]; direct effect: b = -0.50, SE = 0.10, 95% CI = [-0.71, -0.30]), and Session 6 (indirect effect: b = -0.30, SE = 0.15, 95% CI = [-0.62, -0.05]; direct effect: b = -0.73, SE = 0.13, 95% CI = [-(0.98, -0.47]). For the partner's conversation material, we found non-significant mediation in Session 2 (indirect effect: b = -0.05, SE = 0.04, 95% CI = [-0.14, 0.02]; direct effect: b = -0.11, SE = 0.07, 95% CI = [-0.24, 0.03]), but partial mediation in Session 3 (indirect effect: b = -0.13, SE = 0.05, 95% CI = [-0.24, -0.03]; direct effect: b = -0.25, SE = 0.08, 95% CI = [-0.42, -0.08]), Session 4 (indirect effect: b = -0.23, SE = 0.10, 95% CI = [-0.43, -0.06]; direct effect: b = -0.24, SE = 0.10, 95% CI = [-0.44, -0.05]), Session 5 (indirect effect: b = -0.25, SE = 0.10, 95% CI = [-0.45, -0.07]; direct effect: b = -0.45, SE = 0.10, 95% CI = [-0.66, -0.25]), and Session 6 (indirect effect: b = -0.43, SE = 0.13, 95% CI = [-0.72, -0.20]; direct effect: b = -0.60, SE = 0.12, 95% CI = [-0.85, -0.35]).

We then analyzed the other measures. For tiredness, we found non-significant mediation in Session 2 (indirect effect: b = -0.04, SE = 0.04, 95% CI = [-0.12, 0.04]; direct effect: b = -0.11, SE = 0.07, 95% CI = [-0.24, 0.03]), but partial mediation in Session 3 (indirect effect: b = -0.10, SE = 0.05, 95% CI = [-0.22, -0.02]; direct effect: b = -0.28, SE = 0.07, 95% CI = [-0.42, -0.14]), Session 4 (indirect effect: b = -0.19, SE = 0.08, 95% CI = [-0.37, -0.07]; direct effect: b = -0.29, SE = 0.09, 95% CI = [-0.46, -0.11]), Session 5 (indirect effect: b = -0.30, SE = 0.10, 95% CI = [-(0.53, -0.13); direct effect: b = -0.40, SE = 0.09, 95% CI = [-0.58, -0.21]), and Session 6 (indirect effect: b = -0.32, SE = 0.10, 95% CI = [-0.54, -0.14]; direct effect: b = -0.71, SE = 0.10, 95% CI = [-0.91, -0.51]). For one's own interest, we found full mediation in Session 2 (indirect effect: b) = -0.15, SE = 0.05, 95% CI = [-0.24, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.06, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, SE = 0.00, 95% CI = [-0.13, -0.05]; direct effect: b = -0.01, SE = 0.00, b = 00.12]), full mediation in Session 3 (indirect effect: b = -0.26, SE = 0.05, 95% CI = [-0.37, -0.15]; direct effect: b = -0.13, SE = 0.07, 95% CI = [-0.27, 0.01]), full mediation in Session 4 (indirect effect: b = -0.34, SE = 0.10, 95% CI = [-0.54, -0.16]; direct effect: b = -0.14, SE = 0.07, 95% CI = [-0.28, 0.01]), partial mediation in Session 5 (indirect effect: b = -0.36, SE = 0.16, 95% CI = [-0.28, 0.01]) (0.71, -0.12]; direct effect: b = -0.34, SE = 0.11, 95% CI = [-0.56, -0.11]), and partial mediation in Session 6 (indirect effect: b = -0.50, SE = 0.17, 95% CI = [-0.87, -0.20]; direct effect: b = -0.53, SE = 0.13, 95% CI = [-0.80, -0.27]). For the other person's interest, we found full mediation in Session 2 (indirect effect: b = -0.12, SE = 0.05, 95% CI = [-0.23, -0.04]; direct effect: b = -0.03, SE = 0.08, 95% CI = [-0.19, 0.13]), full mediation in Session 3 (indirect effect: b = -0.23, SE =0.06, 95% CI = [-0.36, -0.12]; direct effect: b = -0.15, SE = 0.08, 95% CI = [-0.31, 0.01]), full mediation in Session 4 (indirect effect: b = -0.36, SE = 0.12, 95% CI = [-0.59, -0.11]; direct effect: b = -0.12, SE = 0.12, 95% CI = [-0.35, 0.11]), full mediation in Session 5 (indirect effect: b = -0.47, SE = 0.14, 95% CI = [-0.77, -0.12]; direct effect: b = -0.23, SE = 0.13, 95% CI = [-

0.50, 0.04]), and partial mediation in Session 6 (indirect effect: b = -0.54, SE = 0.19, 95% CI = [-0.90, -0.19]; direct effect: b = -0.48, SE = 0.16, 95% CI = [-0.81, -0.16]). For intimacy, we found non-significant mediation in Session 2 (indirect effect: b = -0.02, SE = 0.04, 95% CI = [-0.10, 0.05]; direct effect: b = -0.14, SE = 0.08, 95% CI = [-0.31, 0.03]), Session 3 (indirect effect: b = -0.004, SE = 0.03, 95% CI = [-0.06, 0.07]; direct effect: b = -0.38, SE = 0.08, 95% CI = [-0.53, -0.022]), Session 4 (indirect effect: b = -0.001, SE = 0.02, 95% CI = [-0.05, 0.05]; direct effect: b = -0.47, SE = 0.08, 95% CI = [-0.64, -0.31]), Session 5 (indirect effect: b = -0.01, SE = 0.02, 95% CI = [-0.86, -0.53]), and Session 6 (indirect effect: b = -0.001, SE = 0.08, 95% CI = [-0.86, -0.53]), and Session 6 (indirect effect: b = -0.001, SE = 0.03, 0.03]; direct effect: b = -1.03, SE = 0.08, 95% CI = [-1.20, -0.86]).

Finally, we conducted simultaneous mediational analyses with evaluation type (prediction vs. experience) as the independent variable, the enjoyment scale as the dependent variable, and the conversation material scale, tiredness, one's own interest, the other person's interest, and intimacy as simultaneous mediators in parallel. For Session 2, we found full mediation (direct effect: b = 0.04, SE = 0.07, 95% CI = [-0.10, 0.18]), with non-significant indirect effects for the conversation material scale (b = -0.02, SE = 0.03, 95% CI = [-0.08, 0.02]), tiredness (b = -0.03, SE = 0.03, 95% CI = [-0.08, 0.02]), the other person's interest, (b = -0.05, SE = 0.05, 95% CI = [-0.16, 0.02]), and intimacy, (b = -0.02, SE = 0.03, 95% CI = [-0.08, 0.02]), but a significant indirect effect for one's own interest (b = -0.03, SE = 0.08, 95% CI = [-0.17, -0.001]). For Session 3, we found full mediation (direct effect: b = -0.03, SE = 0.08, 95% CI = [-0.17, -0.001]), with non-significant indirect effects for the conversation material scale (b = -0.03, SE = 0.08, 95% CI = [-0.17, -0.001]). For Session 3, we found full mediation (direct effect: b = -0.03, SE = 0.08, 95% CI = [-0.17, -0.001]), with non-significant indirect effects for the conversation material scale (b = 0.04, SE = 0.05, 95% CI = [-0.05, 0.04]), the other person's interest (b = -0.13, SE = 0.10, 95% CI = [-0.34, 0.07]), and intimacy (b = -0.02, SE = 0.03, 95% CI = [-0.08, 0.04]), but significant indirect

effects for tiredness (b = -0.08, SE = 0.04, 95% CI = [-0.16, -0.01]) and one's own interest (b = -0.17, SE = 0.07, 95% CI = [-0.32, -0.03]). For Session 4, we found full mediation, with nonsignificant indirect effects for the conversation material scale (b = -0.04, SE = 0.09, 95% CI = [-(0.20, 0.15]), tiredness (b = -0.05, SE = 0.06, 95% CI = [-0.17, 0.05]), the other person's interest (b = -0.05, SE = 0.15, 95% CI = [-0.37, 0.24]), and intimacy (b = -0.002, SE = 0.02, 95% CI = [-0.37, 0.24])0.05, 0.04]), but a significant indirect effect for one's own interest (b = -0.28, SE = 0.11, 95% CI = [-0.50, -0.07]). For Session 5, we found full mediation (direct effect: b = -0.16, SE = 0.13, 95% CI = [-0.43, 0.11], with non-significant indirect effects for the conversation material scale (b = -0.06, SE = 0.13, 95% CI = [-0.32, 0.19]), one's own interest (b = -0.14, SE = 0.19, 95\% CI = [-(0.62, 0.12), the other person's interest (b = -0.15, SE = 0.22, 95% CI = [-0.51, 0.34]), and intimacy (b = -0.003, SE = 0.02, 95% CI = [-0.04, 0.03]), but a significant indirect effect for tiredness (b = -0.19, SE = 0.09, 95% CI = [-0.37, -0.003]). For Session 6, we found partial mediation (direct effect: b = -0.35, SE = 0.14, 95% CI = [-0.64, -0.07]), with non-significant indirect effects for the conversation material scale (b = -0.13, SE = 0.17, 95% CI = [-0.51, 0.18]), the other person's interest (b = 0.05, SE = 0.23, 95% CI = [-0.38, 0.50]), and intimacy (b = -0.001, SE = 0.02, 95% CI = [-0.03, 0.03]), but significant indirect effects for tiredness (b = -0.24, SE = 0.08, 95% CI = [-0.40, -0.09]) and one's own interest (b = -0.35, SE = 0.18, 95\% CI = [-0.73, -0.03]).

Observed Slopes of Experienced Enjoyment by Pair

We computed the observed slope of experienced enjoyment for each pair separately. Whereas 88% of pairs in the free-choice condition reported declining enjoyment across the five sessions, only 40% of pairs in the keep-talking condition reported declining enjoyment, $\chi^2(1, N = 100) = 25.00$, p < .001 (see Figure S6).



Figure S6. Observed slopes of experienced enjoyment across activity type (free choice vs. conversation) for each pair in Experiment 5.

Observed Slopes of Predicted and Experienced Enjoyment by Pair

In the keep-talking condition, we computed the observed slopes of predicted and experienced enjoyment for each pair separately. Whereas 90% of pairs expected their enjoyment to decline across the five sessions, only 42% of pairs experienced declining enjoyment, $\chi^2(1, N = 100) = 25.67$, p < .001 (see Figure S7).



Figure S7. Observed slopes of predicted and experienced enjoyment for each pair in the keeptalking condition of Experiment 5.

Analyses of Gender and Ethnicity

In the keep-talking condition, the extent to which pairs underestimated their enjoyment over time did not differ significantly between same-gender and mixed-gender pairs, b = 0.01, SE = 0.05, t(124.17) = 0.15, p = .884, 95% CI = [-0.09, 0.11], nor between same-ethnicity and mixed-ethnicity pairs, b = -0.10, SE = 0.05, t(155.90) = -1.95, p = .053, 95% CI = [-0.20, 0.001].

Main-Text Analyses Including All Participants

Average enjoyment was greater in the keep-talking condition (M = 5.88, SD = 0.61) than the free-choice condition (M = 5.05, SD = 0.90), t(156.72) = 6.74, p < .001, 95% CI_{difference} = [0.59, 1.08], d = 1.09. This difference held among participants in the free-choice condition who spoke for exactly the number of minutes that they preferred (n = 55 individuals, M = 5.31, SD =0.98), t(123.77) = 4.21, p < .001, 95% CI_{difference} = [0.32, 0.89], d = 0.70, and among the subset of these participants who also reported that they selected this duration to maximize their enjoyment (n = 38 individuals, M = 5.53, SD = 0.98), t(102.81) = 2.39, p = .019, 95% CI_{difference} = [0.06, 0.67], d = 0.50. These differences in enjoyment grew significantly over time, b = -0.33, SE = 0.04, t(85.36) = -7.55, p < .001, 95% CI = [-0.42, -0.25]. Pairs in the keep-talking condition did not experience significant changes, b = 0.01, SE = 0.02, t(50.45) = 0.60, p = .553, 95% CI = [-0.03, 0.06], and were equally likely to experience decreasing or increasing enjoyment (41% vs. 59%, respectively), $\chi^2(1, N = 51) = 1.59$, p = .208. Pairs in the free-choice condition experienced decreasing enjoyment, b = -0.32, SE = 0.04, t(50.05) = -8.32, p < .001, 95% CI = [-0.40, -0.24], and were more likely to experience decreasing than increasing enjoyment (88% vs. 12%, respectively), $\chi^2(1, N = 49) = 27.94$, p < .001. Whereas enjoyment experiences did not differ significantly in Session 1, t(161.58) = -0.03, p = .977, 95% CI_{difference} = [-0.34, 0.33], d = -0.01, or in Session 2, t(212.52) = 1.85, p = .066, 95% CI_{difference} = [-0.02, 0.66], d = 0.39, participants in the keep-talking condition experienced significantly greater enjoyment in Sessions 3 through 6, ts > 4.09, ps < .001, ds > 0.74.

Pairs spoke for longer in the keep-talking condition (M = 30.00 minutes, SD = 0.00 minutes) than the free-choice condition (M = 13.57 minutes, SD = 7.29 minutes), t(98) = 16.10, p < .001, 95% CI_{difference} = [14.40, 18.45], d = 3.22. Duration fully mediated the influence of conversation (prolonged vs. free choice) on average enjoyment (indirect effect: b = -1.08, SE = 0.25, 95% CI = [-1.60, -0.61]; direct effect: b = 0.24, SE = 0.27, 95% CI = [-0.28, 0.77]). Most participants in the free-choice condition (82%) preferred to exit early, $\chi^2(1, N = 98) = 39.22$, p < .001, yet duration correlated positively with enjoyment, r = .53, t(47) = 4.29, p < .001, 95% CI = [.29, .71].

In the free-choice condition, participants who predicted a more negative slope of enjoyment for conversation (vs. solitude) preferred shorter conversations, r = .27, t(198) = 3.96, p < .001, 95% CI = [.14, .39]. Participants in the free-choice condition predicted a more negative trajectory than those in the keep-talking condition experienced, b = 0.22, SE = 0.03, t(99.15) = 6.75, p < .001, 95% CI = [0.15, 0.28].

In the keep-talking condition, we observed an evaluation type × session interaction for enjoyment, b = 0.20, SE = 0.02, t(138.89) = 8.11, p < .001, 95% CI = [0.15, 0.24]: Participants expected decreasing enjoyment (b = -0.18, SE = 0.02, t(51.68) = -7.88, p < .001, 95% CI = [-0.23, -0.14]) but experienced no significant changes (b = 0.01, SE = 0.02, t(51.60) = 0.61, p =.546, 95% CI = [-0.03, 0.06]). Whereas 88% of these pairs predicted declining enjoyment across the five sessions, only 41% of pairs experienced declining enjoyment, $\chi^2(1, N = 102) = 24.73$, p< .001. Participants did not underestimate enjoyment in minutes 5-10, *paired* t(392.01) = -1.44, p= .150, 95% CI_{difference} = [-0.33, 0.05], d = -0.21, but significantly underestimated enjoyment in minutes 10-15, *paired* t(550.83) = -3.84, p < .001, 95% CI_{difference} = [-0.57, -0.18], d = -0.56, minutes 15-20, *paired* t(446.27) = -4.83, p < .001, 95% CI_{difference} = [-0.69, -0.29], d = -0.63, minutes 20-25, *paired* t(243.50) = -6.55, p < .001, 95% CI_{difference} = [-0.90, -0.48], d = -0.90, and minutes 25-30, *paired* t(118.82) = -9.31, p < .001, 95% CI_{difference} = [-1.24, -0.81], d = -1.31.

For conversation material, we likewise observed an evaluation type × session interaction, b = 0.29, SE = 0.04, t(72.12) = 8.15, p < .001, 95% CI = [0.22, 0.37]: Participants expected diminishing conversation material, b = -0.34, SE = 0.03, t(51.82) = -10.31, p < .001, 95% CI = [-0.40, -0.27], but did not experience significant changes, b = -0.04, SE = 0.03, t(51.32) = -1.60, p= .116, 95% CI = [-0.09, 0.01]. Participants had calibrated beliefs about conversation material for minutes 5-10, paired t(339.20) = -0.39, p = .695, 95% CI_{difference} = [-0.30, 0.20], d = -0.06, but underestimated conversation material for minutes 10-15, *paired* t(377.83) = -3.58, p < .001, 95% $CI_{difference} = [-0.74, -0.22]$, d = -0.57, minutes 15-20, *paired* t(255.70) = -5.56, p < .001, 95% $CI_{difference} = [-1.09, -0.52]$, d = -0.88, minutes 20-25, *paired* t(146.14) = -6.37, p < .001, 95% $CI_{difference} = [-1.31, -0.69]$, d = -0.99, and minutes 25-30, *paired* t(87.50) = -8.26, p < .001, 95% $CI_{difference} = [-1.77, -1.08]$, d = -1.33.

Using the same models from Experiments 2-4, we found support for the hypothesized mechanism: conversation material partially mediated differences between predicted and actual enjoyment (indirect effect: b = 0.28, SE = 0.04, 95% CI = [0.20, 0.35]; direct effect: b = 0.18, SE = 0.04, 95% CI = [0.10, 0.25]). Changes in conversation material partially mediated differences between predicted and actual changes in enjoyment (indirect effect: b = -0.05, SE = 0.02, 95% CI = [-0.10, -0.02]; direct effect: b = -0.14, SE = 0.02, 95% CI = [-0.18, -0.11]).

In the keep-talking condition, participants underestimated their own (b = 0.26, SE = 0.04, t(88.61) = 7.27, p < .001, 95% CI = [0.19, 0.34]) and the other person's interest (b = 0.33, SE = 0.03, t(87.56) = 9.66, p < .001, 95% CI = [0.27, 0.40]) as conversation progressed, and overestimated changes in fatigue (b = -0.28, SE = 0.05, t(92.21) = -5.46, p < .001, 95% CI = [-0.39, -0.18]), but more accurately predicted changes in intimacy (b = -0.03, SE = 0.04, t(318.89) = -0.75, p = .451, 95% CI = [-0.11, 0.05]).

We also conducted mediational analyses for these exploratory measures. In separate mediational analyses, differences between predicted and actual enjoyment were partially mediated by tiredness (indirect effect: b = 0.18, SE = 0.03, 95% CI = [0.12, 0.24]; direct effect: b = 0.28, SE = 0.03, 95% CI = [0.22, 0.33]), and one's own interest (indirect effect: b = 0.31, SE = 0.04, 95% CI = [0.24, 0.38]; direct effect: b = 0.14, SE = 0.04, 95% CI = [0.07, 0.21]), fully mediated by partner interest (indirect effect: b = 0.40, SE = 0.04, 95% CI = [0.32, 0.48]; direct

effect: b = 0.05, SE = 0.04, 95% CI = [-0.03, 0.14]), and partially mediated by intimacy (indirect effect: b = 0.01, SE = 0.01, 95% CI = [0.002, 0.03]; direct effect: b = 0.44, SE = 0.01, 95% CI = [0.43, 0.45]). In separate mediational analyses, differences between predicted and actual changes in enjoyment were partially mediated by changes in tiredness (indirect effect: b = -0.05, SE = 0.02, 95% CI = [-0.09, -0.02]; direct effect: b = -0.14, SE = 0.02, 95% CI = [-0.17, -0.11]), changes in partner interest (indirect effect: b = -0.07, SE = 0.02, 95% CI = [-0.11, -0.03]; direct effect: b = -0.13, SE = 0.02, 95% CI = [-0.17, -0.09]), and changes in one's own interest (indirect effect: b = -0.08, SE = 0.03, 95% CI = [-0.13, -0.03]; direct effect: b = -0.12, SE = 0.02, 95% CI = [-0.15, -0.09]), but not by changes in intimacy (indirect effect: b = -0.001, SE = 0.004, 95% CI = [-0.01, 0.005]; direct effect: b = -0.20, SE = 0.01, 95% CI = [-0.21, -0.18]).

Correlations Between Paired Participants for Enjoyment and Conversation Material

Using the same methods as in the prior experiments, we estimated correlations between the ratings of paired participants. We first performed mixed linear modeling, using the participant #2 rating as the outcome variable, the participant #1 rating as a fixed effect, and the participant #1 ID as a random intercept, separately for predictions (sessions 2-6) and experiences (sessions 1-6) in each condition. In the free-choice condition, we analyzed participants' experiences only for sessions in which they engaged in conversation.

In the keep-talking condition, participants' enjoyment predictions were positively associated with one another, b = 0.30, SE = 0.04, t(497.14) = 6.99, p < .001, 95% CI = [0.21, 0.38], as were their enjoyment experiences, b = 0.28, SE = 0.04, t(597.98) = 7.22, p < .001, 95% CI = [0.21, 0.36]. In the keep-talking condition, participants' conversation material predictions were positively associated with one another, b = 0.41, SE = 0.04, t(496.55) = 10.00, p < .001, 95% CI = [0.33, 0.49], as were their conversation material experiences, b = 0.22, SE = 0.04, t(597.97) = 5.63, p < .001, 95% CI = [0.15, 0.30]. In the free-choice condition, participants' enjoyment predictions were positively associated with one another, b = 0.51, SE = 0.04, t(481.17) = 12.96, p < .001, 95% CI = [0.43, 0.58], as were their enjoyment experiences, b =0.13, SE = 0.06, t(263.90) = 2.16, p = .032, 95% CI = [0.01, 0.25]. In the free-choice condition, participants' conversation material predictions were positively associated with one another, b =0.47, SE = 0.04, t(476.44) = 11.77, p < .001, 95% CI = [0.39, 0.55], but their conversation material experiences were not significantly associated, b = 0.05, SE = 0.06, t(263.98) = 0.84, p =.404, 95% CI = [-0.07, 0.17].

We next computed correlations. In the keep-talking condition, participants' enjoyment predictions were positively correlated, r = .20, t(498) = 4.57, p < .001, as were their enjoyment experiences, r = .30, t(598) = 7.66, p < .001. In the keep-talking condition, participants' conversation material predictions were positively correlated, r = .33, t(498) = 7.86, p < .001, as were their conversation material experiences, r = .20, t(598) = 5.08, p < .001. In the free-choice condition, participants' enjoyment predictions were positively correlated, r = .33, t(488) = 7.74, p < .001, as were their enjoyment experiences, r = .23, t(264) = 3.77, p < .001. In the free-choice condition, participants' conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material predictions were positively correlated, r = .21, t(488) = 4.64, p < .001, as were their conversation material experiences, r = .14, t(264) = 2.32, p = .021.

				Predi	ctions		Experiences								
		Enior	Tining	Own	Partner	Matarial	Intinesou		Enior	Tinin a	Own	Partner	Matarial	Intingon	
	п	ылоу	Titting	interest	interest	Waterial	intimacy	n	Епјбу	Tiring	interest	interest	Material	Intimacy	
\$1								50	5.79	2.71	5.38	5.13	5.60	3.52	
51			—	_		—		50	(0.57)	(1.07)	(0.81)	(0.84)	(0.68)	(1.04)	
52	50	5.81	2.79	5.40	5.00	5.45	3.50	50	5.96	2.61	5.66	5.43	5.48	3.86	
52		(0.66)	(1.10)	(0.88)	(0.93)	(0.88)	(1.02)		(0.63)	(1.06)	(0.79)	(0.87)	(0.86)	(1.26)	
62	50	5.59	3.12	5.20	4.66	5.09	3.72	50	5.97	2.59	5.70	5.51	5.54	4.10	
83		(0.71)	(1.13)	(0.90)	(0.96)	(0.90)	(0.94)		(0.65)	(1.12)	(0.82)	(0.82)	(0.76)	(1.17)	
6.4	50	5.36	3.62	4.85	4.28	4.67	4.00	00	5.83	2.79	5.63	5.46	5.46	4.23	
54	50	(0.74)	(1.17)	(0.96)	(0.90)	(0.99)	(0.85)	50	(0.81)	(1.22)	(0.95)	(0.98)	(0.82)	(1.16)	
	50	5.12	4.00	4.53	3.98	4.32	4.15	50	5.82	2.92	5.58	5.43	5.34	4.21	
85	50	(0.77)	(1.25)	(0.98)	(0.94)	(1.06)	(0.85)		(0.76)	(1.31)	(0.90)	(1.03)	(0.95)	(1.20)	
S6	-	4.89	4.40	4.24	3.71	3.97	4.32	50	5.92	3.07	5.59	5.42	5.42	4.34	
	50	(0.79)	(1.33)	(1.01)	(0.98)	(1.15)	(0.99)	50	(0.76)	(1.34)	(0.95)	(1.00)	(0.95)	(1.27)	

Keep-Talking Condition, Predictions and Experiences for Conversation

Keep-Talking Condition, Predictions and Experiences for Solitude

				Predi	ctions		Experiences								
	n	Enjoy	Tiring	Own	Partner	Material	Intimacy	n	Enjoy	Tiring	Own	Partner	Material	Intimacy	
				interest	Interest						Interest				
S 1	_	—	—	—	—	—	—		_	—	—	—	—	—	
S2	50	4.66	2.50	_		_			_	_			_	_	
	50	(1.23)	(1.33)								_	_	_		
\$3	50	4.36	2.73	_	_	—	—		_	_	_	_	_	_	
55		(1.19)	(1.40)												
S 4	50	4.02	3.06	_			_				_	_	_		
51	50	(1.20)	(1.48)							_		_	_		
85	50	3.74	3.31				_		_	_		_			
35	50	(1.24)	(1.48)			—									
S6	50	3.55	3.64				_		_	_					
	20	(1.24)	(1.56)												

				Predi	ctions	Experiences								
	п	Enjoy	Tiring	Own	Partner Material	Intimacy	n	Eniov	Tiring	Own	Partner	Material	Intimacy	
			Thing	interest	interest	Witterful			5 2	Thing	interest	interest	material	minuey
<u>S1</u>	_							49	5.75	2.61	5.33	5.08	5.59	3.46
51			_	_	_			<u>, , , , , , , , , , , , , , , , , , , </u>	(0.63)	(1.04)	(0.90)	(0.84)	(0.82)	(0.88)
62	49	5.67	2.76	5.29	4.96	5.25	3.52	35	6.00	2.31	5.71	5.47	5.64	4.10
52		(0.66)	(1.14)	(0.96)	(0.88)	(0.86)	(0.84)		(0.60)	(1.13)	(0.72)	(0.74)	(0.70)	(0.92)
62	49	5.49	3.12	5.11	4.72	5.02	3.83	27	5.98	2.24	5.76	5.56	5.55	4.24
55		(0.78)	(1.22)	(0.99)	(0.94)	(0.90)	(0.74)		(0.59)	(0.92)	(0.69)	(0.70)	(0.75)	(1.03)
64	40	5.23	3.64	4.79	4.39	4.70	4.12	14	6.19	2.19	5.90	5.79	5.80	4.38
54	49	(0.91)	(1.29)	(1.09)	(0.94)	(0.96)	(0.82)		(0.39)	(0.98)	(0.42)	(0.66)	(0.51)	(1.11)
0.5	40	4.95	4.07	4.44	4.10	4.38	4.32	6	6.31	1.98	6.24	6.13	6.18	4.32
30	49	(1.02)	(1.37)	(1.20)	(1.00)	(1.13)	(0.92)		(0.29)	(0.89)	(0.39)	(0.55)	(0.57)	(1.50)
S6	40	4.73	4.44	4.17	3.84	4.09	4.42	2	6.37	1.50	6.45	6.30	6.09	3.58
	49	(1.07)	(1.45)	(1.24)	(1.08)	(1.25)	(0.98)	2	(0.02)	(0.71)	(0.07)	(0.28)	(0.34)	(0.46)

Free-Choice Condition, Predictions and Experiences for Conversation

Free-Choice Condition, Predictions and Experiences for Solitude

				Predi	ctions		Experiences							
	n	Enjoy	Tiring	Own	Partner	Material	Intimacy	n	Enjoy	Tiring	Own	Partner	Material	Intimacy
				interest	interest				5.2	C	interest	interest		2
S 1	—	_	—		_		—	—	_	—	_	_	—	_
S2	49	4.81	2.36	_		_	_	14	4.73	2.51				
		(1.16)	(1.09)						(1.24)	(1.26)	_			
83	49	4.59	2.54	—	_		_	22	4.29	2.86	_	_	—	—
		(1.14)	(1.17)						(1.33)	(1.69)				
S4	49	4.36	2.79	_	_	—	—	35	4.37	3.12	—	_	—	—
		(1.14)	(1.18)						(1.23)	(1.49)				
S5	49	4.14	3.03	_	_	_	—	43	4.28	3.11	_	_	—	_
		(1.15)	(1.22)						(1.22)	(1.53)				
S6	49	3.92	3.30		_	—	_	47	4.16	3.49		_	_	
		(1.17)	(1.22)						(1.14)	(1.44)				

Table S3. Mean predictions and experiences by activity type (keep talking vs. free choice) and experienced activity (conversation vs. solitude; Experiment 4). S1 through S6 denote Sessions 1 through 6. Numbers inside parentheses denote standard deviations. Em-dashes ("—") denote sessions for which participants did not report predicted or actual evaluations on a given measure.

	Enjoyment	Happiness	Sadness	Tiring	Own interest	Partner interest	Own material	Partner material	Intimate	Superficial	Other
Prefer to talk 25 minutes (n = 18)	94%	50%	22%	44%	78%	56%	50%	61%	28%	0%	33%
Prefer to talk < 25 minutes (n = 80)	71%	31%	13%	58%	40%	55%	71%	50%	1%	35%	9%

Free-Choice Condition

Keep-talking condition

	Enjoyment	Happiness	Sadness	Tiring	Own interest	Partner interest	Own material	Partner material	Intimate	Superficial	Other
Prefer to talk 25 minutes (n = 16)	88%	50%	25%	19%	81%	50%	69%	50%	38%	0%	31%
Prefer to talk < 25 minutes (n = 84)	70%	32%	15%	68%	32%	52%	71%	52%	0%	26%	11%

Table S4. The percentage of participants who selected each response option to explain their preference for talking versus solitude. Participants were allowed to select multiple response

options (Experiment 5).
References

Griffin, D., & Gonzalez, R. (1995). Correlational analysis of dyad-level data in the exchangeable case. *Psychological Bulletin*, *118*, 430-439.