

© 2021 American Psychological Association ISSN: 0022-3514 2022, Vol. 123, No. 4, 717-740 https://doi.org/10.1037/pspi0000379

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

Michael Kardas¹, Juliana Schroeder², and Ed O'Brien³

¹ Kellogg School of Management, Northwestern University

² Haas School of Business, University of California, Berkeley
³ Booth School of Business, University of Chicago

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.

Keywords: change, conversation, social interaction, enjoyment, accuracy

Supplemental materials: https://doi.org/10.1037/pspi0000379.supp

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. 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 et al., 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 et al., 1997; Diener & Seligman, 2002; Kahneman et al., 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.

Michael Kardas played lead role in conceptualization and formal analysis and equal role in methodology, writing of original draft, and writing of review and editing. Juliana Schroeder played lead role in conceptualization, supporting role in formal analysis and equal role in methodology, writing of original draft, and writing of review and editing. Ed O'Brien played lead role in conceptualization, supporting role in formal analysis and equal role in methodology, writing of original draft, and writing of review and editing.

Correspondence concerning this article should be addressed to Michael Kardas, Kellogg School of Management, Northwestern University, 2211 Campus Drive, Evanston, IL 60208, United States. Email: michael.kardas@kellogg.northwestern.edu

This article was published Online First December 23, 2021. Michael Kardas D https://orcid.org/0000-0003-3486-1557 Juliana Schroeder D https://orcid.org/0000-0002-0538-0730 Ed O'Brien D https://orcid.org/0000-0002-4481-8408

This research was supported by the Willard Graham Faculty Research Fund and the Charles E. Merrill Faculty Research Fund at the University of Chicago Booth School of Business and the Barbara and Gerson Bakar Faculty Fellowship at the University of California, Berkeley Haas School of Business. The Center for Decision Research (CDR) lab at Chicago Booth and X-Lab at Berkeley Haas collected data. We thank Jennifer Abel, William Chopik, Fengshuo Zhang, Linda Hagen, Nicholas Epley, Jane L. Risen, Emma Levine, Abby Scholer, and Wendy Mendes for especially helpful feedback.

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 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 et al., 1999; Mellers & McGraw, 2001), 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 et al., 2016; Sprecher et al., 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; Kahneman et al., 2004; Mellers et al., 1999; Mellers & McGraw, 2001).

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 et al., 2011, 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 et al., 2005; Epley et al., 2004; Huang et al., 2017; Sinclair et al., 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 et al., 2011; Reis & Gable, 2015; 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 et al., 2008; Ruan et al., 2020; 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., postinteraction closeness: Aron et al., 1997; postinteraction happiness: Epley & Schroeder, 2014; postinteraction 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 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 longer-lasting 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 Materials for the full method and results) establishes 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

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

anticipate conversation material. In this experiment (N = 105), participants imagined meeting a new acquaintance as part of a research study, enjoying the first 5 min 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 (on a 1–7 Likert scale: M = 6.04 vs. 2.42, respectively; SD = 0.85 vs. 1.10; p < .001) and were significantly more interested in continuing to chat with the person (M = 5.46 vs. 1.88; SD = 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 et al., 2011; Kahneman & Snell, 1992; Read & Loewenstein, 1995; Snell et al., 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 positive aspects of the experience are less 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 et al., 2014). As a result, people expect others to generate less-nuanced thoughts, feelings, and opinions than others actually do (Haslam et al., 2005; Heath, 1999; Jones & Nisbett, 1971; Pronin, 2008; Pronin et al., 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 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 2–5 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 720

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 Materials are at https://osf.io/pgzqs/. 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 et al., 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 Materials.

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 pretested to be similarly interesting and easy to answer (see Supplemental Materials 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 fun did you find this get-to-know-you session?", "How engaged did you feel during 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

 $^{^{2}}$ 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.

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 several options to explain why (I would get to know the other participant better vs. We would begin to get along better vs. The conversation would become less awkward vs. We would discuss increasingly personal information vs. Other). Those who expected their enjoyment to decrease selected from a different set of options (I would become impatient and simply want to finish the study vs. I would become bored while discussing so many questions vs. The conversation would become increasingly awkward vs. The conversation would not change much from round to round vs. 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, $\alpha \ge .98$). 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 Materials 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

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], 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],

Figure 1

```
Mean Enjoyment as Conversation Progressed in Experiment 1
```



Note. Error bars represent ±1 SE.

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 Materials 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, $\chi^2(2, N = 100) = 2.66, p = .264$, whereas Experiencers were significantly more likely to report that their enjoyment increased (50.00%) or stayed the same (45.00%) than decreased (5.00%), $\gamma^2(2, N = 100) = 36.50, p < .001$. These retrospective judgments of the trajectory of enjoyment differed significantly between Predictors and Experiencers, $\chi^2(2, N =$ 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, $\chi^2(1, N = 100) = 19.39$, 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

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 Materials.

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 Materials).

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-toface conversation for 3 min. They were instructed to talk about anything they preferred and to continue speaking until they heard a timer beep at the end of 3 min. After the experimenter left the room, the participants began their conversation. At the end of the 3-min 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 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 3 min, 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 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 Session 1 experiences and Sessions 2 through 5 predictions. The experiences. Anchoring both trajectories on Session 1 allows us to compare predicted and actual changes in the conversation relative to the same initial experience.

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 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. 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 (p < .001), suggesting that the laboratory participants likely interpreted these items as we intended as well. We also 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 Materials for details).

⁵ Participants also completed an exploratory item (added to the survey after the first 18 pairs): "Did these get-to-know-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.

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 Materials for session-by-session analyses).

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].

Figure 2

```
Mean Enjoyment as Conversation Progressed in Experiment 2
```



Note. Error bars represent ±1 SE.

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 nonsignificant effect of Evaluation type, b = 0.02, SE = 0.18, t(50.81) = 0.09, p = .929, 95% CI [-0.21, 0.11], a nonsignificant 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

Predicted and	d Experienced	Enjoyment,	Conversation 1	Material,	and	Awkward	ness by	v Session	in I	Experiment	2
---------------	---------------	------------	----------------	-----------	-----	---------	---------	-----------	------	------------	---

		Predictions		Experiences				
Session	Enjoyment	Conversation material	Awkwardness	Enjoyment	Conversation material	Awkwardness		
1	_	_		5.97 (0.88)	5.91 (1.06)	2.69 (1.43)		
2	5.76 (0.86)	5.59 (0.97)	2.87 (1.32)	5.97 (0.82)	6.00 (0.82)	2.97 (1.77)		
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)		
4	5.49 (1.06)	5.36 (1.16)	2.90 (1.38)	5.91 (0.88)	5.87 (1.12)	3.02 (1.71)		
5	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. Numbers outside parentheses denote means; numbers inside parentheses denote standard deviations.

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 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 et al., 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 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) \times 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 already knew their conversation partner 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 Materials). In addition, we removed another six participants from all analyses because we could not analyze their data (four with duplicate IDs and two whose surveys crashed during the study).

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 3 min. After 3 min, 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

⁶ The sample includes 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.

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

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 Materials.)

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, as we observed a significant 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 these participants predicted declining enjoyment across the five sessions, only 40% experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 398) = 15.29$, p < .001

Figure 3

Mean Enjoyment Over Time in Experiment 3



Note. Error bars represent ±1 SE.

(see Supplemental Figure S3; see Supplemental Materials 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% experienced declining enjoyment. These proportions differed significantly, $\chi^2(1, N = 392) = 16.90$, p < .001 (see Supplemental Figure S3).

Conversation Material

Participants underestimated how much material they would have to talk about as their conversations progressed—particularly in the

⁷ Participants then completed one exploratory item: "Did these get-toknow-you sessions feel like five distinct conversations or like one continuous conversation?" (*5 distinct* vs. *1 continuous*). Most participants in the singlepartner condition (89.45%) felt they had one continuous conversation, $\chi^2(1, N = 199) = 123.86, p < .001$, while few participants in the multiplepartner 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).

Table 2

Nean Enjoyment and Conversation Material Across Partner Type (Single vs. Multiple)									
	Single-partner condition				Multiple-partner condition				
	Predictions		Experiences			Predictions	Experiences		
Session	Enjoyment	Conversation material	Enjoyment	Conversation material	Enjoyment	Conversation material	Enjoyment	Conversation material	
1	_	_	5.79 (1.00)	5.95 (0.92)	_	_	5.66 (0.97)	5.79 (1.10)	
2	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)	
3	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)	
4	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)	
5	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)	

Note. Numbers outside parentheses denote means; numbers inside parentheses denote standard deviations.

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 \times 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-

Figure 4 Mean Conversation Material Over Time in Experiment 3



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 Materials.)

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

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 multiplepartner 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 min 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 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 three pairs based on criteria in our preregistration: one pair because the participants could not see or hear each other for much of the conversation, and two 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 Materials).

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 5 min of spoken, unstructured conversation. These conversations took place in private video conferencing rooms to ensure that the participants. After 5 min, 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

⁸ Note that one possible concern is that participants might have trouble simulating the conversation. A pretest (N = 102; see Supplemental Materials) suggested participants are indeed able to simulate a conversation in detail: In the pretest, 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).

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 min. Pairs were assigned to one of two conditions. Pairs in the detailedsimulation 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 5-min 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 5-min 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 5-min 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 min, 10.5 min, 16 min, and 21.5 min 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 min to allow up to 30 s for the participants to complete survey items before resuming their conversations.

After finishing their conversations, participants in the detailedsimulation 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, experiences), Session (1, 2, 3, 4, 5), Simulation type (control, 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 \times 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 \times 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 detailed-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 Materials.)

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

Figure 5 *Mean Enjoyment Over Time in Experiment 4*



Note. Error bars represent ±1 SE.

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 \times Session \times 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 Materials for session-by-session analyses).

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 detailed-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 Materials.)

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,

Figure 6





Note. Error bars represent ±1 SE.

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 nonsignificant 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).

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 detailedsimulation 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 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 underestimation of conversation material is one mechanism that helps to explain why participants 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 min of conversation in lifelike detail may require more effort than participants devoted to the task in this 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 subtopics, 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 well-being.

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 min 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 min 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 keeptalking condition who were required to speak for the full 30 min.

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 et al., 2021b), 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 Materials).

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 5 min. After 5 min, 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?" (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?," and "How interested was THE OTHER PERSON in talking to you 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 atall; 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 their enjoyment, happiness, and sadness for each upcoming 5-min interval on the same scales described earlier. 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 5-min 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 5-min 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 min in one of three ways: (a) continuing to talk to the other person, (b) keeping to themselves without chatting or browsing the internet, or (c) 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 5-min session, meaning that participants were fully informed about each activity. Participants indicated how they preferred to spend the next 25 min and read that their preference would remain private (*Keep to myself for all 25 min vs. Continue talking to the other person for minutes 0–5, then keep to myself for minutes 5–25* vs. Continue talking to the other person for minutes 0–10, then keep to myself for minutes 10–25 vs. [...] vs. Continue talking to the other person for all 25 min). 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 min 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 I would run out of things to say," "I thought the other person would lose interest in talking to me," "I thought I would run out of things to say," "I thought the conversation would become too intimate," "I thought the conversation would be too superficial," or "Other (please specify)."

In contrast, those who preferred to speak throughout the remaining 25 min 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 min. Before each 5-min 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 5 min 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 min and the other preferred to speak for another 10 min, each participant's survey instructed them to speak for the first 5 min ("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 min 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 (reversescored) items to form an enjoyment scale (each session, $\alpha \ge .73$) and combined the two conversation material items to form a conversation material scale (each session, $\alpha \ge .78$). For the enjoyment scale, we then performed mixed linear modeling with fixedeffects terms for Evaluation type (predictions, experiences), Session (1, 2, 3, 4, 5), Activity type (free choice, keep talking), 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 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 who spoke for exactly the number of minutes they preferred (n = 55 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 who also reported trying to maximize their enjoyment (n = 38 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 are consistent

⁹ We finished the study on March 13, 2020, before Coronavirus disease (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.

¹⁰ Per the preregistered analysis plan, we also compared enjoyment experiences for 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 min (n = 80 individuals in the free-choice condition). Differences in enjoyment remained significant (M = 5.88 vs. 5.05, respectively; SD = 0.62 vs. 1.04), t(146.86) = 6.47, p < .001, 95% CI_{difference} [0.58, 1.08], d = 0.92.

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 Materials for sessionby-session analyses).

As hypothesized, these differences in enjoyment arose because pairs in the keep-talking condition had significantly longer conversations (M = 30.00 min, SD = 0.00 min) than did pairs in the freechoice condition, M = 13.57 min, SD = 7.29 min), 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 freechoice 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

Figure 7

Mean Enjoyment Experiences Over Time in Experiment 5



Note. Error bars represent ± 1 *SE.* Percentages denote the proportion of pairs in the free-choice condition that spoke in each session.

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 Materials 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 freechoice condition to prefer shorter conversations than would have been optimal for their enjoyment.

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 \times Session interaction for each pair, separately for each dependent measure. For the enjoyment scale, we observed a significant Evaluation type \times 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 = 0.03, 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,

Figure 8

Mean Predictions and Experiences as Conversation Progressed in the Keep-Talking Condition of Experiment 5



Note. Error bars represent ± 1 SE.

Figure 8 (continued)



SE = 0.04, t(100.06) = -0.63, p = .528, 95% CI [-0.12, 0.06] (see Supplemental Materials 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 = 0.01, 95% CI [-0.21, -0.18]).

Discussion

Experiment 5 replicates the prior experiments and reveals a potential consequence for behavior and well-being: 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., 2021a; Sandstrom & Dunn, 2014; Sandstrom et al., 2016). The current findings mark one of the first attempts to unpack the time course of enjoyment in 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 nonsocial 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, 2021; 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 et al., 2008; Schroeder et al., 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 (see Wilson & Gilbert, 2005, for a review). 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 misimagine 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 et al., 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 et al., 2021a), to seek advice from others (Brooks et al., 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 disengage from conversation (Mastroianni et al., 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 et al., 2009) or the social dynamics of ongoing relationships (e.g., Lavner & Bradbury, 2010; Oriña et al., 2002; Oswald et al., 2004). 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 et al., 2019; see also Clark, 2018; Clark et al., 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 oneitem 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, 2021), or expected to switch topics less often than they actually did. Each of these interpretations could help to explain why participants misunderto

stood 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 et al., 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 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., 2021a; 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 life—people 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 one-on-one conversations in which they (mistakenly) expect to run out of new content to discuss. They might cut short their ongoing conversations (Mastroianni et al., 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, 2021).

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 closequartered flight or elsewhere—may be a surprisingly pleasant experience from take-off to touch-down.

References

- Altman, I., & Taylor, D. A. (1973). Social penetration: The development of interpersonal relationships. Rinehart and Winston.
- Aron, A., Melinat, E., Aron, E. N., Vallone, R. D., & Bator, R. J. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin*, 23(4), 363–377. https://doi.org/10.1177/0146167297234003
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice Hall.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. https://doi.org/10.1037/0033-2909.117 .3,497
- Brooks, A. W., Gino, F., & Schweitzer, M. E. (2015). Smart people ask for (my) advice: Seeking advice boosts perceptions of competence. *Management Science*, 61(6), 1421–1435. https://doi.org/10.1287/mnsc.2014.2054
- Carmichael, C. L., Reis, H. T., & Duberstein, P. R. (2015). In your 20s it's quantity, in your 30s it's quality: The prognostic value of social activity across 30 years of adulthood. *Psychology and Aging*, 30(1), 95–105. https://doi.org/10.1037/pag0000014
- Clark, H. H., & Brennan, S. E. (1991). Grounding in communication. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (Vol. 13, pp. 127–149). American Psychological Association. https://doi.org/10.1037/10096-006
- Clark, M. S. (2018). What is good and what is missing in relationship theory and research. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 28–39). Cambridge University Press.
- Clark, M. S., Beck, L. A., & Aragón, O. R. (2018). Relationship initiation: Bridging the gap between initial attraction and well-functioning

communal relationships. In B. H. Fiese, M. Celano, K. Deater-Deckard, E. N. Jouriles, & M. A. Whisman (Eds.), *APA handbook of contemporary family psychology* (Vol. 1, pp. 409–425). American Psychological Association.

- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A metaanalytic review. *Psychological Bulletin*, 116(3), 457–475. https://doi.org/ 10.1037/0033-2909.116.3.457
- DeBruine, L. M. (2005). Trustworthy but not lust-worthy: Context-specific effects of facial resemblance. *Proceedings of the Royal Society of London, Series B: Biological Sciences*, 272(1566), 919–922. https://doi.org/10.1098/rspb.2004.3003
- Diener, E., & Seligman, M. E. (2002). Very happy people. *Psychological Science*, 13(1), 81–84. https://doi.org/10.1111/1467-9280.00415
- Dunn, E. W., Biesanz, J. C., Human, L. J., & Finn, S. (2007). Misunderstanding the affective consequences of everyday social interactions: The hidden benefits of putting one's best face forward. *Journal of Personality* and Social Psychology, 92(6), 990–1005. https://doi.org/10.1037/0022-3514.92.6.990
- Eastwick, P. W., & Finkel, E. J. (2008). Speed-dating: A powerful and flexible paradigm for studying romantic relationship initiation. In *Handbook of relationship initiation* (pp. 217–234).
- Eastwick, P. W., Finkel, E. J., & Simpson, J. A. (2019). Relationship trajectories: A meta-theoretical framework and theoretical applications. *Psychological Inquiry*, 30(1), 1–28. https://doi.org/10.1080/1047840X .2019.1577072
- Echterhoff, G., Higgins, E. T., & Groll, S. (2005). Audience-tuning effects on memory: The role of shared reality. *Journal of Personality and Social Psychology*, 89(3), 257–276. https://doi.org/10.1037/0022-3514.89.3.257
- Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology*, 87(3), 327–339. https://doi.org/10.1037/0022-3514.87 .3.327
- Epley, N., & Schroeder, J. (2014). Mistakenly seeking solitude. Journal of Experimental Psychology: General, 143(5), 1980–1999. https://doi.org/10 .1037/a0037323
- Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), Well-being: The foundations of hedonic psychology (pp. 302–329). Sage Publications.
- Galak, J., Kruger, J., & Loewenstein, G. (2011). Is variety the spice of life? It all depends on the rate of consumption. *Judgment and Decision Making*, *6*, 230–238.
- Garrod, S., & Pickering, M. J. (2004). Why is conversation so easy? *Trends* in Cognitive Sciences, 8(1), 8–11. https://doi.org/10.1016/j.tics.2003.10.016
- Gilbert, D. T., & Wilson, T. D. (2007). Prospection: Experiencing the future. *Science*, *317*(5843), 1351–1354. https://doi.org/10.1126/science.1144161
- Green, P., & MacLeod, C. J. (2016). SIMR: An R package for power analysis of generalized linear mixed models by simulation. *Methods in Ecology and Evolution*, 7(4), 493–498. https://doi.org/10.1111/2041-210X.12504
- Griffin, D., & Gonzalez, R. (1995). Correlational analysis of dyad-level data in the exchangeable case. *Psychological Bulletin*, 118(3), 430–439. https://doi.org/10.1037/0033-2909.118.3.430
- Habbert, R., & Schroeder, J. (2020). To build efficacy, eat the frog first: People misunderstand how the difficulty-ordering of tasks influences efficacy. *Journal of Experimental Social Psychology*, 91, Article 104032. https://doi.org/10.1016/j.jesp.2020.104032
- Haslam, N., Bain, P., Douge, L., Lee, M., & Bastian, B. (2005). More human than you: Attributing humanness to self and others. *Journal of Personality* and Social Psychology, 89(6), 937–950. https://doi.org/10.1037/0022-3514.89.6.937
- Heath, C. (1999). On the social psychology of agency relationships: Lay theories of motivation overemphasize extrinsic incentives. *Organizational Behavior and Human Decision Processes*, 78(1), 25–62. https://doi.org/10 .1006/obhd.1999.2826

- Hsee, C. K., & Ruan, B. (2016). The Pandora effect: The power and peril of curiosity. *Psychological Science*, 27(5), 659–666. https://doi.org/10.1177/ 0956797616631733
- Huang, K., Yeomans, M., Brooks, A. W., Minson, J., & Gino, F. (2017). It doesn't hurt to ask: Question-asking increases liking. *Journal of Per*sonality and Social Psychology, 113(3), 430–452. https://doi.org/10.1037/ pspi0000097
- Ingram, P., & Morris, M. W. (2007). Do people mix at mixers? Structure, homophily, and the "life of the party." *Administrative Science Quarterly*, 52(4), 558–585. https://doi.org/10.2189/asqu.52.4.558
- Jaworski, A. (2000). Silence and small talk. In J. Coupland (Ed.), Small talk (pp. 110–132). Pearson Education.
- Jones, E. E., & Nisbett, R. E. (1971). The actor and the observer: Divergent perceptions of the causes of behavior. General Learning Press.
- Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science*, 306(5702), 1776–1780. https://doi.org/10 .1126/science.1103572
- Kahneman, D., & Snell, J. (1992). Predicting a changing taste: Do people know what they will like? *Journal of Behavioral Decision Making*, 5(3), 187–200. https://doi.org/10.1002/bdm.3960050304
- Kardas, M., & Epley, N. (2021). People are insensitive to social forces that promote common ground during conversation [Manuscript in preparation].
- Kardas, M., Kumar, A. & Epley, N. (2021a). Let it go: How exaggerating the reputational costs of revealing secrets discourages transparency in relationships [Manuscript under review].
- Kardas, M., Kumar, A., & Epley, N. (2021b). Overly shallow?: Miscalibrated expectations create a barrier to deeper conversation. *Journal of Personality and Social Psychology*. Advance online publication. https:// doi.org/10.1037/pspa0000281
- Kardas, M., & O'Brien, E. (2018). Easier seen than done: Merely watching others perform can foster an illusion of skill acquisition. *Psychological Science*, 29(4), 521–536. https://doi.org/10.1177/0956797617740646
- Keil, F. C. (2003). Folkscience: Coarse interpretations of a complex reality. *Trends in Cognitive Sciences*, 7(8), 368–373. https://doi.org/10.1016/ S1364-6613(03)00158-X
- Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science*, 330(6006), 932–932. https://doi.org/10.1126/ science.1192439
- Klein, N., & O'Brien, E. (2018). People use less information than they think to make up their minds. *Proceedings of the National Academy of Sciences* of the United States of America, 115(52), 13222–13227. https://doi.org/10 .1073/pnas.1805327115
- Koudenburg, N., Postmes, T., & Gordijn, E. H. (2011). Disrupting the flow: How brief silences in group conversations affect social needs. *Journal of Experimental Social Psychology*, 47(2), 512–515. https://doi.org/10.1016/ j.jesp.2010.12.006
- Koudenburg, N., Postmes, T., & Gordijn, E. H. (2013). Conversational flow promotes solidarity. *PLOS ONE*, 8(11), Article e78363. https://doi.org/10 .1371/journal.pone.0078363
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., Shablack, H., Jonides, J., Ybarra, O., & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. *PLOS ONE*, 8(8), Article e69841. https://doi.org/10.1371/journal.pone.0069841
- Kumar, A., & Epley, N. (2021). It's surprisingly nice to hear you: Misunderstanding the impact of communication media can lead to suboptimal choices of how to connect with others. *Journal of Experimental Psychology: General*, 150(3), 595–607. https://doi.org/10.1037/xge0000962
- Lavner, J. A., & Bradbury, T. N. (2010). Patterns of change in marital satisfaction over the newlywed years. *Journal of Marriage and Family*, 72(5), 1171–1187. https://doi.org/10.1111/j.1741-3737.2010.00757.x
- Levine, E. E., & Cohen, T. R. (2018). You can handle the truth: Mispredicting the consequences of honest communication. *Journal of Experimental*

Psychology: General, 147(9), 1400–1429. https://doi.org/10.1037/xge 0000488

- Li, N. P., Yong, J. C., Tov, W., Sng, O., Fletcher, G. J., Valentine, K. A., Jiang, Y. F., & Balliet, D. (2013). Mate preferences do predict attraction and choices in the early stages of mate selection. *Journal of Personality* and Social Psychology, 105(5), 757–776. https://doi.org/10.1037/a0033777
- Lyubomirsky, S. (2010). Hedonic adaptation to positive and negative experiences. In S. Folk (Ed.), Oxford handbook of stress, health, and coping (pp. 200–224). Oxford University Press. https://doi.org/10.1093/ oxfordhb/9780195375343.013.0011
- Mallett, R. K., Wilson, T. D., & Gilbert, D. T. (2008). Expect the unexpected: Failure to anticipate similarities leads to an intergroup forecasting error. *Journal of Personality and Social Psychology*, 94(2), 265–277. https:// doi.org/10.1037/0022-3514.94.2.94.2.265
- Mastroianni, A. M., Gilbert, D. T., Cooney, G., & Wilson, T. D. (2021). Do conversations end when people want them to? *Proceedings of the National Academy of Sciences*, *118*(10), Article e2011809118. https://doi.org/10 .1073/pnas.2011809118
- Mellers, B., Schwartz, A., & Ritov, I. (1999). Emotion-based choice. Journal of Experimental Psychology: General, 128(3), 332–345. https://doi.org/10 .1037/0096-3445.128.3.332
- Mellers, B. A., & McGraw, A. P. (2001). Anticipated emotions as guides to choice. *Current Directions in Psychological Science*, 10(6), 210–214. https://doi.org/10.1111/1467-8721.00151
- Milek, A., Butler, E. A., Tackman, A. M., Kaplan, D. M., Raison, C. L., Sbarra, D. A., Vazire, S., & Mehl, M. R. (2018). "Eavesdropping on happiness" revisited: A pooled, multisample replication of the association between life satisfaction and observed daily conversation quantity and quality. *Psychological Science*, 29(9), 1451–1462. https://doi.org/10.1177/ 0956797618774252
- Mitchell, V. W., Schlegelmilch, B. B., & Mone, S. D. (2016). Why should I attend? The value of business networking events. *Industrial Marketing Management*, 52(1), 100–108. https://doi.org/10.1016/j.indmarman.2015 .05.014
- Montoya, A. K., & Hayes, A. F. (2017). Two-condition within-participant statistical mediation analysis: A path-analytic framework. *Psychological Methods*, 22(1), 6–27. https://doi.org/10.1037/met0000086
- Moreland, R. L., & Zajonc, R. B. (1982). Exposure effects in person perception: Familiarity, similarity, and attraction. *Journal of Experimental Social Psychology*, 18(5), 395–415. https://doi.org/10.1016/0022-1031(82) 90062-2
- Myers, D. G. (1992). *The pursuit of happiness: Who is happy—And why*. William Morrow.
- Nelson, L. D., & Meyvis, T. (2008). Interrupted consumption: Disrupting adaptation to hedonic experiences. *Journal of Marketing Research*, 45(6), 654–664. https://doi.org/10.1509/jmkr.45.6.654
- Newman, H. M. (1982). The sounds of silence in communicative encounters. *Communication Quarterly*, 30(2), 142–149. https://doi.org/10.1080/ 01463378209369441
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84(3), 231–259. https://doi.org/10.1037/0033-295X.84.3.231
- O'Brien, E. (2019). Enjoy it again: Repeat experiences are less repetitive than people think. *Journal of Personality and Social Psychology*, *116*(4), 519–540. https://doi.org/10.1037/pspa0000147
- O'Brien, E. (2021). A mind stretched: The psychology of repeat consumption. *Consumer Psychology Review*, 4(1), 42–58. https://doi.org/10.1002/ arcp.1062
- O'Brien, E., & Kassirer, S. (2019). People are slow to adapt to the warm glow of giving. *Psychological Science*, 30(2), 193–204. https://doi.org/10.1177/ 0956797618814145
- Oriña, M. M., Wood, W., & Simpson, J. A. (2002). Strategies of influence in close relationships. *Journal of Experimental Social Psychology*, 38(5), 459–472. https://doi.org/10.1016/S0022-1031(02)00015-X

- Oswald, D. L., Clark, E. M., & Kelly, C. M. (2004). Friendship maintenance: An analysis of individual and dyad behaviors. *Journal of Social and Clinical Psychology*, 23(3), 413–441. https://doi.org/10.1521/jscp.23.3 .413.35460
- Planalp, S., & Tracy, K. (1980). Not to change the topic but ... : A cognitive approach to the management of conversation. *Annals of the International Communication Association*, 4(1), 237–258. https://doi.org/10.1080/ 23808985.1980.11923805
- Pronin, E. (2008). How we see ourselves and how we see others. *Science*, 320(5880), 1177–1180. https://doi.org/10.1126/science.1154199
- Pronin, E., Kruger, J., Savitsky, K., & Ross, L. (2001). You don't know me, but I know you: The illusion of asymmetric insight. *Journal of Personality* and Social Psychology, 81(4), 639–656. https://doi.org/10.1037/0022-3514.81.4.639
- Read, D., & Loewenstein, G. (1995). Diversification bias: Explaining the discrepancy in variety seeking between combined and separated choices. *Journal of Experimental Psychology: Applied*, 1(1), 34–49. https://doi.org/ 10.1037/1076-898X.1.1.34
- Reis, H. T. (2012). Perceived partner responsiveness as an organizing theme for the study of relationships and well-being. In L. Campbell & T. J. Loving (Eds.), *Interdisciplinary research on close relationships: The case for integration* (pp. 27–52). American Psychological Association. https:// doi.org/10.1037/13486-002
- Reis, H. T., & Gable, S. L. (2015). Responsiveness. Current Opinion in Psychology, 1, 67–71. https://doi.org/10.1016/j.copsyc.2015.01.001
- Reis, H. T., Maniaci, M. R., Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, *101*(3), 557–570. https:// doi.org/10.1037/a0022885
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck (Ed.), *Handbook of personal relationships* (Vol. 24, pp. 367– 389). Wiley.
- Ruan, Y., Reis, H. T., Clark, M. S., Hirsch, J. L., & Bink, B. D. (2020). Can I tell you how I feel? Perceived partner responsiveness encourages emotional expression. *Emotion*, 20(3), 329–342. https://doi.org/10.1037/ emo0000650
- Sandstrom, G. M., & Boothby, E. J. (2021). Why do people avoid talking to strangers? A mini meta-analysis of predicted fears and actual experiences talking to a stranger. *Self and Identity*, 20(1), 47–71. https://doi.org/10 .1080/15298868.2020.1816568
- Sandstrom, G. M., & Dunn, E. W. (2014). Social interactions and well-being: The surprising power of weak ties. *Personality and Social Psychology Bulletin*, 40(7), 910–922. https://doi.org/10.1177/0146167214529799
- Sandstrom, G. M., Tseng, V. W. S., Costa, J., Okeke, F., Choudhury, T., & Dunn, E. W. (2016). Talking less during social interactions predicts enjoyment: A mobile sensing pilot study. *PLOS ONE*, *11*(7), Article e0158834. https://doi.org/10.1371/journal.pone.0158834
- Schkade, D. A., & Kahneman, D. (1998). Does living in California make people happy? A focusing illusion in judgments of life satisfaction. *Psychological Science*, 9(5), 340–346. https://doi.org/10.1111/1467-9280.00066
- Schroeder, J., Lyons, D., & Epley, N. (2021). Hello, stranger? Pleasant conversations are preceded by concerns about starting one. *Journal of Experimental Psychology: General*. Advance online publication. https:// doi.org/10.1037/xge0001118
- Selig, J. P., & Preacher, K. J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. http://quantpsy.org/
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology*, 88(1), 91–107. https://doi.org/10.1037/0022-3514.88.1.91
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2018). False-positive citations. *Perspectives on Psychological Science*, 13(2), 255–259. https:// doi.org/10.1177/1745691617698146

- Simonson, I. (1990). The effect of purchase quantity and timing on varietyseeking behavior. *Journal of Marketing Research*, 27(2), 150–162. https:// doi.org/10.1177/002224379002700203
- Sinclair, S., Lowery, B. S., Hardin, C. D., & Colangelo, A. (2005). Social tuning of automatic racial attitudes: The role of affiliative motivation. *Journal of Personality and Social Psychology*, 89(4), 583–592. https:// doi.org/10.1037/0022-3514.89.4.583
- Snell, J., Gibbs, B. J., & Varey, C. (1995). Intuitive hedonics: Consumer beliefs about the dynamics of liking. *Journal of Consumer Psychology*, 4(1), 33–60. https://doi.org/10.1207/s15327663jcp0401_02
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89(6), 845–851. https://doi.org/10.1037/0022-3514.89.6.845
- Sprecher, S., Wenzel, A., & Harvey, J. (Eds.). (2018). Handbook of relationship initiation. Psychology Press. https://doi.org/10.4324/ 9780429020513
- Stivers, T., Enfield, N. J., Brown, P., Englert, C., Hayashi, M., Heinemann, T., Hoymann, G., Rossano, F., de Ruiter, J. P., Yoon, K.-E., & Levinson, S. C. (2009). Universals and cultural variation in turn-taking in conversation. *Proceedings of the National Academy of Sciences of the United States of America*, 106(26), 10587–10592. https://doi.org/10.1073/ pnas.0903616106
- Todorov, A., Pakrashi, M., & Oosterhof, N. N. (2009). Evaluating faces on trustworthiness after minimal time exposure. *Social Cognition*, 27(6), 813–833. https://doi.org/10.1521/soco.2009.27.6.813
- Waytz, A., Schroeder, J., & Epley, N. (2014). The lesser minds problem. In P. Bain, J. Vaes, & J. P. Leyens (Eds.), *Humanness and dehumanization* (pp. 49–67). Psychology Press.

- Wiemann, J. M. (1977). Explication and test of a model of communicative competence. *Human Communication Research*, 3(3), 195–213. https:// doi.org/10.1111/j.1468-2958.1977.tb00518.x
- Wilson, T. D., & Gilbert, D. T. (2005). Affective forecasting: Knowing what to want. *Current Directions in Psychological Science*, 14(3), 131–134. https://doi.org/10.1111/j.0963-7214.2005.00355.x
- Wilson, T. D., Reinhard, D. A., Westgate, E. C., Gilbert, D. T., Ellerbeck, N., Hahn, C., Brown, C. L., & Shaked, A. (2014). Social psychology. Just think: The challenges of the disengaged mind. *Science*, 345(6192), 75–77. https://doi.org/10.1126/science.1250830
- Wilson, T. D., Wheatley, T., Meyers, J. M., Gilbert, D. T., & Axsom, D. (2000). Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 78(5), 821–836. https:// doi.org/10.1037/0022-3514.78.5.821
- Zajonc, R. B. (2001). Mere exposure: A gateway to the subliminal. *Current Directions in Psychological Science*, 10(6), 224–228. https://doi.org/10 .1111/1467-8721.00154
- Zelenski, J. M., Whelan, D. C., Nealis, L. J., Besner, C. M., Santoro, M. S., & Wynn, J. E. (2013). Personality and affective forecasting: Trait introverts underpredict the hedonic benefits of acting extraverted. *Journal of Personality and Social Psychology*, *104*(6), 1092–1108. https://doi.org/10.1037/ a0032281
- Zhao, X., & Epley, N. (2021). Kind words do not become tired words: Undervaluing the positive impact of frequent compliments. *Self and Identity*, 20(1), 25–46. https://doi.org/10.1080/15298868.2020.1761438

Received January 1, 2021

Revision received September 7, 2021

Accepted September 10, 2021