Psychological Distance Moderates the Amplification of Shared Experience

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Abstract
Sharing an experience with another person can amplify that experience. Here, we propose for the first time that amplification is moderated by the psychological distance between co-experiencers. We predicted that experiences would be amplified for co-experiencers who are psychologically proximate but not for co-experiencers who are psychologically distant. In two studies we manipulated both (a) whether or not a pleasant experience was shared and (b) the psychological distance between co-experiencers, via social distance (Study 1) and spatial distance (Study 2). In Study 1, co-experiencers either were unacquainted (i.e., strangers, socially distant) or became acquainted in the laboratory (i.e., socially proximate). In Study 2, co-experiencers were either in different rooms (i.e., spatially distant) or in the same room (i.e., spatially proximate). In both studies, the pleasant experience was amplified when shared compared with when not shared, but only when co-experiencers were psychologically proximate (vs. distant) to one another.

Keywords
shared experience, experience amplification, joint attention, psychological distance

Amplification of Shared Experience
Recent research has demonstrated that experiences can be enhanced when people are merely engaging in the same activity at the same time, without communicating with one another. Pleasant chocolate tasted better when eaten simultaneously with a familiar partner compared with when that partner was present but not sharing the experience of eating the chocolate (Boothby et al., 2014), pleasant images were better liked when viewed with a friend compared with when viewed alone (Boothby, Smith, Clark, & Bargh, under review), and participants’ happiness increased more when they watched happy videos and images with a classmate compared with when they watched them alone (Shteynberg, Hirsh, Apfelbaum, et al., 2014).

Yet not all experiences are more pleasant when shared. Whereas engaging in positive activities with others improves those experiences, engaging in negative experiences together renders them even more disagreeable: unpleasant chocolate tasted worse when consumed simultaneously with someone else compared with when a partner was present but otherwise engaged (Boothby et al., 2014), viewing sad videos and images together with a classmate increased participants’ unhappiness compared with when they watched them alone (Shteynberg, Hirsh, Apfelbaum, et al., 2014), and the experience of submerging one’s hand in an ice bath was more painful when done simultaneously with a friend than when

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that friend was present but did not share in the experience (Martin et al., 2015). The research clearly demonstrates that positive experiences get better and negative experiences get worse when shared, and this applies equally to people’s subjective states (e.g., mood, pain) and their evaluations of stimuli (e.g., chocolate, images). We call this the amplification effect.

Researchers have proposed that this amplification effect occurs, at least in part, because engaging in activities together increases people’s attention to co-experienced stimuli, intensifying their impact (Shteynberg, 2010; Shteynberg, Hirsh, Apfelbaum, et al., 2014). Indeed, people’s attention is naturally drawn to the focus of another person’s attention (e.g., Friesen & Kingstone, 1998; Friesen, Moore, & Kingstone, 2005; Langton & Bruce, 1999; Samson, Appler, Braithwaite, Andrews, & Bodley Scott, 2010), and research utilizing a diverse array of methodologies has consistently shown that stimuli experienced with others receive a greater allocation of cognitive resources than stimuli that are not experienced with others (Carr & Walton, 2014; Eskenazi, Doerrfeld, Logan, Knoblich, & Sebanz, 2013; He, Lever, & Humphreys, 2011; Shteynberg, 2010; Shteynberg & Apfelbaum, 2013; for a review, see Shteynberg, 2015). Additionally, simultaneous engagement in an activity can increase the extent to which people think about and empathize with their co-experiencer, resulting in experiencing the stimuli not only directly but also vicariously, which has been shown to increase the intensity of an experience (e.g., Martin et al., 2015; see also Boothby et al., 2014). The evidence clearly demonstrates that doing things together with others can change our experiences. Critically, however, that is not always the case.

**Psychological Distance Between Co-Experiencers**

Sharing experiences is especially likely to influence people when they are with *some* kinds of partners but not with others: the amplification effect has been shown to occur for co-experiencers who are in the same in-group, but not for those who belong to an out-group (Shteynberg, 2010; Shteynberg & Apfelbaum, 2013; Shteynberg, Hirsh, Galinsky, & Knight, 2014); for co-experiencers who are securely attached to one another, but not for those who are avoidantly attached (Hurter, Paloyelis, Williams, & Fotopoulou, 2014); and for close friends, but not for strangers (Boothby et al., under review; Martin et al., 2015). In-group members, who tend to share common goals and values; securely attached partners, who are deeply intimate and reliant on one another; and close friends, who share camaraderie and a common history, are all examples of people whom we would classify as psychologically close to one another.

We propose, therefore, that the psychological distance between oneself and one’s co-experiencer is an important, though as of yet unexplored, determinant of whether or not engaging in the same activity at the same time as another person will cause an experience to be amplified. Psychological distance ought to be an important moderator of shared experience effects because, as previous research has demonstrated, variations in psychological distance can produce differences in the extent to which contextual features of an experience are integrated into one’s evaluation of that experience (Rim, Uleman, & Trope, 2009). Specifically, events that are psychologically proximate are more concrete and contextualized, whereas events that are psychologically distant are more abstract and decontextualized (CLT; Liberman & Trope, 2014; Trope & Liberman, 2010). For instance, individuals categorize objects that are temporally distant in fewer, broader categories than events that are temporally near (Liberman, Sagristano, & Trope, 2002), and events that are spatially distant are assessed according to their more abstract, global features compared with events that are spatially close (Fujita, Henderson, Eng, Trope, & Liberman, 2006).

In the present work we propose that in a social situation the actions of another person constitute an important contextual feature of one’s experience, and the extent to which those actions will impact one’s own experience depends on how psychologically close or distant the co-experiencer is. Specifically, we propose that the attention and behavior of a psychologically close partner (such as whether or not they are engaged in the same experience as oneself) will have a greater impact on one’s own experience than the attention and behavior of someone who is psychologically distant. This prediction is consistent with recent research demonstrating that experiences that are shared with a member of one’s in-group receive more elaborate processing than experiences that are shared with a member of one’s out-group (e.g., Shteynberg, Hirsh, Galinsky, & Knight, 2014), but, importantly, it is novel in uniting the findings of prior shared experience findings under the umbrella of psychological distance. This new framework for conceptualizing shared experience represents an important conceptual advance; it both integrates extant research from many different labs on shared experience and it is generative for future research because any context that increases psychological closeness or distance ought to yield similar effects on shared experiences.

**Research Overview**

In two studies, we test the amplification of shared experience while introducing new experimental conditions that altered the psychological distance between co-experiencers. In both studies, all participants engaged in two different chocolate tasting experiences: one *shared* (i.e., eating chocolate at the same time as another person) and one *unshared* (i.e., eating chocolate while another person was looking at artwork instead of eating chocolate). This *sharing* factor was manipulated within-subjects.

Additionally, we manipulated psychological distance between co-experiencers via social and spatial distance, as these
dimensions of distance are related conceptually and have been used interchangeably (see Trope & Liberman, 2010). For instance, choosing to sit farther away from another person is interpreted as social distancing from that person (e.g., Macrae, Bodenhausen, Milne, & Jetten, 1994; Mooney, Cohn, & Swift, 1992). In Study 1, we varied the social distance between co-experiencers; participants either remained unacquainted for the duration of the study (socially distant condition) or got acquainted with one another upon entering the lab (socially proximate condition) through an ice-breaker task during which they asked and answered a series of questions about one another. In Study 2, we manipulated the psychological distance of co-experiencers by varying the spatial distance between them; participants either completed the chocolate tasting activities while in different rooms (spatially distant condition) or while in the same room (spatially proximate condition). The psychological distance between participants was always manipulated between-subjects (see Figure 1 for an overview of both study designs).

Across both studies, we predicted that when co-experiencers were psychologically proximate, their experiences would be more likely to be contextualized and therefore more likely to be influenced by contextual details such as the actions of their co-experiencer (i.e., whether or not that person is sharing their experience); on the other hand, we predicted that when co-experiencers were psychologically distant, their experiences would be decontextualized and therefore less likely to be influenced by the actions of their co-experiencer. Specifically, we hypothesized that co-experiencers who are socially or spatially proximate ought to enjoy a positive experience significantly more when it is shared compared with when it is unshared, whereas the enjoyment of co-experiencers who are socially or spatially distant ought to be unaffected by whether or not their co-experiencer shares in the experience.

A second goal of the present work (addressed in Study 1) was to provide evidence as to the directionality of the amplification effect reported in Boothby et al. (2014). In Boothby et al. (2014), the taste of chocolate was amplified when co-experiencers ate it simultaneously compared with when one person looked at artwork instead of tasting chocolate. Those results left open the possibility that (a) shared experiences are amplified, (b) unshared experiences are de-amplified, or (c) both effects contribute to the difference between conditions. In the present work, we therefore added a condition to Study 1 in which participants tasted chocolate alone (i.e., with no other person present) to explore whether sharing an experience with another person amplifies it and/or whether being with someone who is not also engaging in the experience diminishes it, relative to when one is completely alone.

We aimed for our sample sizes to be comparable with those reported in Boothby et al. (2014), which first demonstrated the amplification effect that we directly replicate in both of the present studies. Given the average effect size (Cohen’s $d = 0.51$) reported in Boothby et al. (2014), as well as the average effect size (Cohen’s $d = 0.50$) reported in several additional studies that recently investigated the impact of sharing (versus not sharing/being alone during) laboratory-based experiences (Eskenazi et al., 2013, Studies 1 and 2; Shteynberg, Hirsh, Apfelbaum, et al., 2014, Studies 1-5), we have determined that the present two studies were sufficiently powered (power = 86.9%) to detect the simple effects of primary interest (the effect of the within-subjects factor at each level of the between-subjects factor). Furthermore, the magnitude of the interaction effects and the simple effects were comparable (moderate to large) across the two present studies, suggesting that although we manipulated psychological distance in two methodologically distinct ways, its effect on how participants evaluated shared versus unshared experiences.
experiences is reliable from one experimental paradigm to the next.

Study I

In Study 1, we employed a 2 × 2 mixed design to examine whether participants’ experience of eating chocolate changed as a function of (a) whether the experience of eating the chocolate was shared versus unshared (just as in Boothby et al., 2014) (sharing factor) and (b) whether the co-experiencers were briefly acquainted with one another versus remained strangers (social distance factor). The sharing factor was within-subjects and included a condition in which participants tasted a piece of chocolate while their co-experiencer simultaneously tasted the same piece of chocolate (shared condition) and a condition in which participants tasted a piece of chocolate while their co-experiencer looked at artwork (unshared condition). The social distance factor was between-subjects; half of participants engaged in a brief “getting to know you” task designed to increase the psychological closeness of their co-experiencer (socially proximate condition) whereas the other half did not complete this task and remained strangers with their co-experiencer (socially distant condition). An additional control group (the “alone” condition) was run to clarify questions unanswered by the factorial design; here, participants tasted and rated chocolate by themselves.

Method

Participants. Participants were 44 females recruited at Harvard University to participate in a study on “Sensory Experiences and Person Perception.” Ages ranged from 16 to 25 (M = 19, SD = 3.12) and the sample was ethnically diverse (39% Caucasian/White, 36% Asian/Asian American, 9% Latina/Hispanic, 2% Black/African American, and 14% Other). Participants were compensated either with $5 cash or course credit. No participants were excluded from analyses.

Procedure. Participants arrived at the laboratory alone and waited in the lobby for the study to begin. A confederate, posing as another participant, was waiting in the lobby when the participant arrived. The experimenter met the participant and the confederate in the lobby and escorted them to a room where they completed informed consent forms.

Manipulating social distance via acquaintanceship. Participants who were assigned randomly to the psychologically proximate condition engaged in a task designed to help them briefly “get to know” the confederate. This task was modeled after a relationship closeness induction created by Sedikides, Campbell, Reader, and Elliot (1999). The participant and the confederate were each given a sheet of paper containing three lists of questions (see Appendix A for the complete list of questions). Each subsequent list of questions was more interpersonally intimate than the list preceding it. For example, List 1 contained demographic questions such as “What is your first name?” and “Where are you from?” List 2 contained questions such as “What are some of your hobbies?” and “What is one habit you’d like to break?” List 3 contained questions related to more personal topics, such as “What is one of your biggest fears?” and “What is your happiest early childhood memory?” The participant and the confederate took turns asking each other the questions in each list. They were told to get through as many questions as they could in 10 min, during which time the experimenter left the room to afford them privacy. The confederate’s answers to the questions in the task were scripted and memorized so that they were identical across experimental sessions, and designed to be relatively generic (see Appendix B for the script of confederate responses).

Participants who were assigned randomly to the psychologically distant condition did not engage in the aforementioned task. Thus, they did not spend any time getting to know the confederate during the study session and instead remained complete strangers with the confederate throughout.

Manipulating whether the experience was shared versus unshared. Next, all participants in the study were told that they would engage in several different activities during their study session. Specifically, they would taste two chocolates (Chocolate A and Chocolate B) and view two paintings (Artwork A and Artwork B). Participants were informed that they would complete these activities in an order determined randomly for each person. Although participants believed they would do all four activities, in actuality they only did two. They tasted chocolate twice, once while the confederate was doing the same thing (i.e., also tasting a piece of the same chocolate; the shared condition), and once while the confederate was doing something different (i.e., viewing artwork; the unshared condition); the order of the shared and unshared conditions was counterbalanced across participants. Unbeknownst to the participants, the two chocolates were identical, derived from the same bar of 70% dark chocolate, was pre-tested to assure it was pleasant-tasting.

To determine which activity participants would do first, the participant and confederate each drew a card from a cup. The drawing was rigged so the participant would either draw the same activity as the confederate or a different one. All participants drew either Chocolate A or Chocolate B, and the confederate either reported drawing the same activity as the participant or a different activity. Rigging the drawing let us determine a priori (according to random assignment) whether the participant and confederate would have a shared experience first or an unshared experience first. Also, it allowed us to disguise that our actual focus was on whether or not the participant and confederate were engaging in the same activity simultaneously or different activities.

In the shared condition, the participant and the confederate were each given a small piece of chocolate (about the size of
a Hershey’s Kiss) as well as a clipboard with two response sheets attached to it, turned face down. After delivering a brief set of instructions about the activity, the experimenter left the room and the participants were given 1 min to taste the chocolate. When 1 min had passed, a timer sounded softly to indicate that they should flip over their clipboards and begin answering several questions about their experience. They were given 2 min to provide their answers to these questions. After 2 min had passed, the experimenter re-entered the room and cleared their activity materials out of the way.

In the unshared condition, the participant was given a small piece of chocolate, and the confederate was given a small packet of artwork; both were given a clipboard with response sheets attached to it, turned face down. After delivering a set of instructions about each activity, the experimenter left the room and the participant and the confederate were given 1 min to engage in their respective activities (i.e., taste the chocolate and/or view the artwork). A timer sounded after 1 min prompting them to turn over their clipboards and begin answering the questions about their experience. After 2 min had passed, the experimenter re-entered the room and cleared their activity materials out of the way.

We went to some lengths to ensure that the participant and confederate would not communicate or share their responses with the confederate during the activities. First, the participant and the confederate sat side-by-side at a table, facing forward. This allowed them to be aware of the other’s presence without enabling them to communicate (i.e., visually, verbally, or by seeing one another’s ratings). The confederate was trained to act in a stoic manner, simply engaging in the tasks silently while looking straight ahead. In addition, the clipboards that their response sheets were attached to could be pivoted to make sure their answers were private. The clipboards that their response sheets were attached to could be pivoted to make sure their answers were private. The forms themselves were designed to be nearly impossible to see at a distance greater than 12 inches. All text was Times New Roman font, size 10, and the response scales were depicted as a series of small boxes with labeled endpoints, such that it would be very difficult to gauge which box the confederate had checked. As a further precaution, the confederate always responded to all questions using the mid-point of the scale. Last, the experimental sessions were monitored via a live audio-visual feed by the supervisors of the study to ensure that the participant and the confederate did not communicate with one another.

After completing both the shared and unshared experiences, the experimenter told the participant and the confederate that they would take a short break during which they would fill out some questionnaires in separate rooms (in reality, at this point the experiment was over). Finally, participants completed a short demographic survey and were debriefed.

**Alone control group.** To explore the question of whether shared experiences are amplified and unshared experiences are de-amplified, in comparison with being alone, we recruited 21 participants to complete the study alone ($M_{age}$ = 20, $SD_{age}$ = 1.72; 40% Caucasian/White, 34% Asian/Asian American, 11% Latino/Hispanic, 1% Black/African American, and 14% Other). Data from these participants were to be used for exploratory purposes and were collected during the same span of time and using the same facilities as the data collected from participants who completed the study with a confederate. This was done to keep the procedures as consistent as possible between the study sessions of subjects who participated alone and those who participated with a confederate.

Participants arrived at the lab alone and, after completing the informed consent, were told they would engage in four different activities in a randomly assigned order. All of the following procedures were identical to those described in the previous section, except there was no confederate present: Participants drew cards from the rigged cup to determine which activity they would do first and second; they tasted both Chocolate A and Chocolate B, in a randomly assigned order, and after tasting each chocolate they answered several questions about the chocolate and their experiences in that moment; finally, they completed a short demographic survey and were debriefed.

**Measures**

**Chocolate ratings.** Participants answered several questions about the chocolates they tasted, as well as their experiences while eating the chocolates. Each question was answered twice, once during the shared experience and once during the unshared experience. The questions included two items designed to measure the extent to which participants enjoyed the chocolate itself (“How much do you like this chocolate?” and “How flavorful is this chocolate?”), which were aggregated to form a composite item we called *chocolate enjoyment* (Cronbach’s α = .72). We also included two items designed to measure the extent to which participants enjoyed their momentary experiences (“How do you feel right now?” and “How absorbed are you in the experience of eating the chocolate?”), which were aggregated to form a composite item we called *experience enjoyment* (Cronbach’s α = .73). Additionally, two exploratory items were included (“How intense is this chocolate?” and “How much would you be willing to pay for a bar of this chocolate?”). All items were rated on an 11-point scale ranging from 0 (not at all) to 10 (very much/a lot), with the exception of the “How do you feel right now?” item which was rated on a scale ranging from 0 (not at all good) to 10 (very good) and the “willingness to pay” item which was on an 11-point scale ranging from $0 to $10.

**Interpersonal closeness.** All participants also answered six questions assessing their impressions of the confederate. Just as before, each item was answered twice, once during the shared experience and once during the unshared experience. The questions were as follows: “Do you feel like you...
and the other participant are on the same wavelength?” “To what extent do you feel like you ‘get’ the other participant?” “How much do you like the other participant?” and “How much do you trust the other participant?” on scales from 0 (not at all) to 10 (a lot). Participants also responded to the items “How close do you feel to the other participant?” and “How similar do you feel to the other participant?” on scales ranging from 0 (not at all) to 10 (very). These six items were aggregated (Cronbach’s α = .94) to form a composite item designed to assess participants’ feelings of interpersonal closeness to the confederate. Subjects who participated in the study alone did not complete any of the interpersonal closeness items.

Results

Chocolate ratings. Two 2 × 2 mixed factorial analyses of variance (ANOVAs) revealed a significant social distance by sharing interaction for how much participants reported enjoying the chocolate, $F(1, 42) = 8.74, p = .005, \eta^2 = .17$ (see Figure 2) as well as how much participants reported enjoying the experience, $F(1, 42) = 9.75, p = .003, \eta^2 = .19$ (see Figure 3).

Tests for simple effects indicated that participants in the socially proximate condition rated the chocolate as more enjoyable when the tasting experience was shared (i.e., the confederate was also tasting the chocolate; $M_{\text{shared}} = 8.40, SD = 1.35$) compared with when it was unshared (i.e., the confederate was looking at artwork; $M_{\text{unshared}} = 6.73, SD = 2.14$), $F(1, 21) = 19.28, p < .001, d = 0.93, 95\% \text{ CI} [.90, 2.44]$. Additionally, these participants rated the overall experience as more enjoyable when it was shared ($M_{\text{shared}} = 7.45, SD = 1.29$) compared with when it was unshared ($M_{\text{unshared}} = 6.53, SD = 1.49$), $F(1, 21) = 9.19, p = .004, d = 0.66, 95\% \text{ CI} [0.31, 1.53]$.

Importantly, these effects did not emerge in the socially distant condition. Specifically, participants’ ratings of how much they enjoyed the chocolate did not differ depending on whether the experience was shared versus unshared ($M_{\text{shared}} = 7.70, SD = 1.27, M_{\text{unshared}} = 7.63, SD = 1.79$), $F(1, 21) = 9.33, p = .004, d = 0.33, 95\% \text{ CI} [0.19, 0.94]$; this effect did not emerge when participants were

Figure 2. Participants who were acquainted with the confederate (i.e., socially proximate) enjoyed the chocolate more when the experience was shared versus unshared. On the other hand, the ratings of participants who were unacquainted with the confederate (i.e., socially distant) did not differ depending on whether the experience was shared versus unshared. Note. Error bars represent 95% confidence intervals.

Figure 3. Participants who were acquainted with the confederate (i.e., socially proximate) enjoyed the overall experience more when it was shared versus unshared. On the other hand, the ratings of participants who were unacquainted with the confederate (i.e., socially distant) did not differ depending on whether the experience was shared versus unshared. Note. Error bars represent 95% confidence intervals.

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unacquainted with the confederate (M_{shared} = 3.07, SD = 1.71, M_{unshared} = 3.27, SD = 1.54), F(1, 21) = 1.21, p = .278, d = 0.33, 95% CI [-0.58, 0.71]. There was no significant social distance by sharing interaction for how intense participants rated the chocolate F(1, 42) = 0.14, p = .709, η² = .003.

Interpersonal closeness. A 2 × 2 factorial ANOVA indicated that while there was no significant social distance by sharing interaction for interpersonal closeness, there were two significant main effects that are consistent with our hypotheses. First, as expected, there was a main effect of social distance, F(1, 42) = 12.38, p = .001, η² = .28, such that those participants who were assigned randomly to the socially proximate condition reported feeling higher levels of interpersonal closeness to the confederate than did participants who were randomly assigned to the socially distant condition (M_{acquainted} = 6.15, SD = 1.59, M_{unacquainted} = 4.48, SD = 1.55). Second, there was a main effect of sharing the activity, F(1, 42) = 12.52, p = .001, η² = .23, such that participants reported higher levels of interpersonal closeness to the confederate when the confederate was sharing the experience of tasting the chocolate with them compared with when the confederate was not sharing the experience of tasting the chocolate with them (M_{shared} = 5.54, SD = 1.69, M_{unshared} = 5.09, SD = 1.92).

Amplification versus de-amplification. We also addressed the question of whether shared experiences were amplified and unshared experiences were de-amplified, compared with being alone. Analyses were conducted only on participants who were socially proximate to one another (i.e., who had become acquainted), as the hypothesis tests reported above demonstrate that it is only for co-experiencers who are socially proximate that significant differences emerge depending on whether an experience is shared versus unshared.

Results indicate that participants enjoyed the chocolate more (i.e., thought the chocolate was more likeable and flavorful) when they were sharing the tasting experience with a socially proximate other (M_{shared} = 8.40, SD = 1.35) compared with when they were tasting the chocolate alone (M_{alone} = 7.27, SD = 1.39), t(41) = 2.69, p = .010, d = 0.89, 95% CI [0.28, 1.97]. Additionally, participants indicated that they enjoyed the chocolate less when the tasting experience was not shared with a socially proximate other (M_{unshared} = 6.73, SD = 2.14) compared with when tasting it while completely alone (M_{alone} = 7.27, SD = 1.39), t(41) = .99, p = .330, d = −0.30, 95% CI [−0.57, 1.67]; this difference did not reach statistical significance, but the magnitude of the effect is moderate by traditional standards and in the hypothesized direction.

The same pattern of results was obtained for how much participants reported enjoying the overall experience (i.e., feeling good and feeling absorbed in the experience), such that participants enjoyed the experience most when it was shared with a socially proximate other (M_{shared} = 7.45, SD = 1.29), followed by when they were alone (M_{alone} = 6.93, SD = 1.56), and enjoyed it the least when it was not shared with a socially proximate other (M_{unshared} = 6.53, SD = 1.49). However, none of these means differed significantly from one another (p = .243, for shared compared with alone, and p = 0.261 for unshared compared with alone), although again, the effects were moderate and in the hypothesized directions (d = .36 for shared compared with alone, and d = −0.26 for unshared compared with alone); see Figure 4.

Figure 4. Participants’ enjoyment of the chocolate was amplified when shared and de-amplified when unshared with a socially proximate co-experiencer, compared with being alone.

Note. Error bars represent 95% confidence intervals.
Discussion

The results from Study 1 indicate that whether or not people’s enjoyment of a shared experience is amplified depends on whether their co-experiencer is psychologically proximate (vs. distant). Participants in the socially proximate condition became minimally acquainted with their co-experiencer prior to engaging in a shared and unshared tasting experience, and participants in the socially distant condition did not get acquainted. We found that when co-experiencers were socially proximate, participants enjoyed the chocolate and their overall tasting experience to a greater extent when it was shared compared with when it was unshared. On the other hand, when co-experiencers were socially distant (i.e., unacquainted), the experience of tasting chocolate was equally pleasant to participants regardless of what their partner was doing.

Additionally, compared with the chocolate participants tasted alone, participants enjoyed chocolate they tasted with a socially proximate partner significantly more, and chocolate they tasted while their socially proximate partner was instead looking at artwork less. Stimuli experienced with others have been shown to receive a greater allocation of cognitive resources than stimuli that are not experienced with others (e.g., see Shteynberg, 2015). This is in part because people’s attention is naturally drawn to stimuli others are attending to (e.g., Friesen et al., 2005; Samson et al., 2010). It is for this reason that we would expect shared pleasant experiences to become more pleasant, and also why unshared pleasant experiences should become less pleasant, compared with being alone. In Study 1, participants’ attention was likely drawn to the chocolate to a greater extent when a socially proximate other was sharing the experience. However, when a socially proximate other was looking at artwork instead, participants were likely somewhat distracted by what the confederate was doing and this divided attention may have reduced the extent to which participants were attending to the chocolate.

Study 1 thus provides insight into when experiences are amplified versus de-amplified compared with when one is alone and demonstrates that one moderator of this effect is the psychological distance between co-experiencers; co-experiencers must be socially proximate in order for the amplification effect to be turned on. These results are consistent with prior research demonstrating that experiences shared with socially close others—for example, friends (Martin et al.) and in-group members (Shteynberg, Hirsh, Apfelbaum, et al., 2014)—are amplified but experiences shared with socially distant others—for example, strangers (Martin et al.) or out-group members (Shteynberg, Hirsh, Apfelbaum, et al., 2014)—are not.

That said, it is important to note that social proximity is not the only way co-experiencers can be psychologically close to one another. Construal level theory maintains that changes in social distance should have a psychological impact analogous to changes in other kinds of distance due to a common underlying psychological construct (Liberman & Trope, 2014). Indeed, research has shown that different forms of distance have comparable psychological effects (e.g., Fiedler, Jung, Wänke, & Alexopoulous, 2012; Maglio, Trope, & Liberman, 2013a, 2013b). Based on this evidence for the interchangeability of various kinds of psychological distance, in Study 2 we manipulated psychological distance in a different way—by varying the spatial distance between co-experiencers.

Study 2

In Study 2, we employed a 2 × 2 mixed design to examine whether participants’ experience of eating chocolate changed as a function of (a) whether the experience of eating the chocolate was shared versus unshared (sharing factor, just as in Study 1) and (b) whether or not one’s co-experiencer was physically present during the activities (spatial distance factor). The sharing factor was virtually identical to the one described in Study 1, and it was again within-subjects. The spatial distance factor was between-subjects; half of all participants completed the chocolate tasting activities while in the same room as the confederate (spatially proximate condition) and the other half completed the activities while the confederate was completing the activities in a different room (spatially distant condition). It is important to note that in the spatially distant condition, participants had full knowledge that the confederate was engaging in the chocolate tasting activities with them simultaneously. This condition was built to mimic real-world scenarios, such as when viewers simultaneously watch a live sports game in the privacy of their own homes, where co-experiencers both have knowledge that they are sharing an experience with one another, but none-the-less are physically separated while engaging in the experience itself.

Method

Participants. Participants were 40 students (48% female) recruited at Yale University to participate in a study on “Sensory Experiences and Person Perception.” Ages ranged from 18 to 24 ($M_{age} = 19.5, SD = 1.35$) and the sample was ethnically diverse (42% Caucasian/White, 22% Asian/Asian American, 10% Latino/Hispanic, 8% Black/African American, and 15% Other). One participant did not provide demographic information. Participants were compensated either with $5 cash or course credit. No participants were excluded from the following analyses.

Procedure. As in Study 1, participants arrived at the laboratory alone and waited in the lobby for the study to begin. A confederate posing as another participant was waiting in the lobby when the participant arrived. The experimenter met the participant and the confederate in the lobby and escorted them to a room where they completed the informed consent.
Holding social proximity constant across all participants. Results from Study 1 indicated that at least a minimal amount of social proximity (via briefly getting acquainted) is necessary in order for experiences to differ depending on whether they are shared or unshared. Therefore, all participants in Study 2 spent 10 min completing the “getting to know you task” described in Study 1, allowing each participant to become acquainted with the confederate at the beginning of the study session.

Manipulating whether the experience was shared versus unshared. After completing the “getting to know you” task, all participants engaged in two chocolate tasting activities, one that was shared and one that was unshared, using identical procedures to those of Study 1.

Manipulating psychological distance via spatial proximity. Half of the participants completed the aforementioned chocolate tasting activities in the same room with the confederate (spatially proximate condition); this protocol was identical to that which was described in Study 1. The other half of our participants completed the chocolate tasting activities in one room while the confederate completed them in a different room (spatially distant condition). The rooms were located across the hall (approximately 15 feet) from one another. Just as in Study 1, all participants and confederates began the study in the same room, where they were given instructions from the experimenter and drew a card from the rigged cup determining which activity each would complete first.

Then, for those assigned to the spatially distant condition, the participant and confederate were moved into separate rooms where each individual completed his or her assigned activity behind closed doors with no visual or audio access to the other participant. For example, if the participant and the confederate drew cards indicating that they would both taste chocolate B first (i.e., have a shared experience first), they were given instructions about that activity while in the same room with one another, and then they were escorted to separate rooms where they were given 1 min to taste the chocolate and 2 min to evaluate the chocolate (following the same procedures as in Study 1) while the confederate presumably did the same. Afterward, they returned to the same room for the next set of instructions. For the next activity, the participant would be assigned to taste Chocolate A and the confederate would be assigned to look at Artwork B (the unshared experience). Just as before, they would be given instructions about each activity while still in the same room, and then they were escorted to separate rooms where the participant tasted and evaluated Chocolate A while the confederate presumably viewed and evaluated Artwork B. After completing the second activity, participants remained in separate rooms and filled out a set of questionnaires related to personal preferences and demographics. Finally, they were told the study was over and were debriefed.

We chose to provide the instructions for each activity while the participant and the confederate were still in the same room together because it ensured that the participant would have full knowledge of what the confederate would be doing while they were in separate rooms. Thus, when the activity was shared, the participant knew that while he or she was eating the chocolate, the confederate also was eating the same chocolate, and when the activity was unshared, the participant knew that while he or she was eating chocolate, the confederate was looking at artwork.

Measures

Chocolate ratings. All participants completed the same six evaluation items described in Study 1. Each item was answered twice, once during the shared experience and once during the unshared experience. Just as in Study 1, two items (“How much do you like this chocolate?” and “How flavorful is this chocolate?”) were aggregated to form a composite item that we called chocolate enjoyment (Cronbach’s α = .62). Likewise, two items (“How do you feel right now?” and “How absorbed are you in the experience of eating the chocolate?”) were aggregated to form another composite item that we called experience enjoyment (Cronbach’s α = .79). Finally, the same two exploratory items were included (“How intense is this chocolate?” and “How much would you be willing to pay for a bar of this chocolate?”). All items were rated on an 11-point scale ranging from 0 (not at all) to 10 (very much/a lot), except for the “How do you feel right now?” item which was rated on a scale ranging from 0 (not at all good) to 10 (very good) and the “willingness to pay” item which was on an 11-point scale ranging from $0 to $10.

Interpersonal closeness. Participants responded to the same six items that were described in Study 1, once after the shared experience and once after the unshared experience. These items were aggregated to form a composite measure that we called interpersonal closeness (Cronbach’s α = .89). Although we did not expect to see differences in interpersonal closeness between participants in the spatially proximate versus distant conditions (as all participants got acquainted with one another prior to engaging in the shared and unshared experiences), we included these questions to keep the procedure of Study 2 consistent with that of Study 1.

Results

Chocolate ratings. Two 2 × 2 mixed factorial ANOVAs revealed a significant spatial distance by sharing interaction for how much participants reported enjoying the chocolate, $F(1, 38) = 16.19, p < .001, η² = .29$ (see Figure 5), as well as how much participants reported enjoying the experience, $F(1, 38) = 6.02, p = .019, η² = .14$ (see Figure 6).

Tests for simple effects indicated that when participants were in close spatial proximity to the confederate, they rated
the chocolate as more enjoyable when the tasting experience was shared (i.e., the confederate was also tasting the chocolate; $M_{shared} = 7.73, SD = 1.58$) compared with when it was unshared (i.e., the confederate was looking at artwork; $M_{unshared} = 5.86, SD = 1.37$). This amplification effect did not emerge when the participant and the confederate were spatially distant. Specifically, when the confederate was in a different room, participants’ ratings of how much they enjoyed the chocolate did not differ depending on whether the confederate was also eating the chocolate or looking at artwork ($M_{shared} = 7.31, SD = 1.64, M_{unshared} = 7.61, SD = 1.20$), $F(1, 19) = 0.62, p = .435, d = 0.21, 95\% CI [−0.47, 1.07]$.

It is clear from the significant spatial distance by sharing interaction that the spatial distance of a co-experiencer influences how participants evaluate stimuli that are shared versus unshared. However, additional tests for simple effects concerning how spatial distance influences participants’ enjoyment of the overall experience (rather than their enjoyment of the chocolate itself, as reported above) departed from our typical pattern of results. Mainly, regardless of whether participants were spatially distant or proximate to the confederate, their enjoyment of the experience (how good they felt and how absorbed they were) did not differ significantly depending on whether the experience was shared versus unshared—spatially proximate condition: $M_{shared} = 6.91, SD = 1.61, M_{unshared} = 6.46, SD = 1.71$, $F(1, 19) = 2.44, p = .127, d = 0.39, 95\% CI [−0.13, 1.03]$; spatially distant condition: $M_{shared} = 6.40, SD = 1.64, M_{unshared} = 6.95, SD = 1.44$, $F(1, 19) = 3.64, p = .064, d = 0.35, 95\% CI [−0.03, 1.13]$). Although these simple effects did not reach statistical significance, this should not obscure the fact that the omnibus $F$ test does indicate that participants’ evaluations of a shared compared with an unshared experience do differ as a function of spatial distance, and that in the spatially proximate condition, the effects were in the hypothesized direction and moderate in magnitude.

We additionally note a marginally significant spatial distance by sharing interaction for how intense participants rated the chocolate, $F(1, 38) = 4.15, p = .049, \eta^2 = .09$. Consistent with our patterns of results, when participants were in close spatial proximity to the confederate they reported that the chocolate was more intense when the experience of eating it was shared ($M_{shared} = 7.13, SD = 1.74$) compared with when it was unshared ($M_{unshared} = 5.48, SD = 2.60$), $F(1, 19) = 10.04, p = .003, d = 0.76, 95\% CI [−0.59, 2.74]$. This effect did not emerge when participants and the confederate were in the spatially distant condition ($M_{shared} = 6.75, SD = 1.91, M_{unshared} = 6.60, SD = 1.75$), $F(1, 19) = .83, p = .775, d = 0.08, 95\% CI [−0.90, 1.20]$. There was no significant spatial distance by sharing interaction for how much participants were willing to pay for the chocolate ($p = .256, \eta^2 = .03$).

**Interpersonal closeness.** A $2 \times 2$ factorial ANOVA indicated that there was no significant interaction, nor were there any significant main effects for the interpersonal closeness variable (all $ps > .44$, all $\eta^2$ values < .02). These null results are unsurprising given that all of our participants engaged in the “getting to know you” task with the confederate prior to the chocolate...
tasting activities; this made it unlikely that any of the groups should differ on how interpersonally close they felt to the confederate given they were all acquainted with him or her.

Discussion

The results of Study 2 corroborate evidence from Study 1 showing that psychological distance moderates the amplification effect. Chocolate that was tasted simultaneously with someone who was spatially proximate (i.e., in the same room) was more enjoyable (i.e., better liked and more flavorful) when the experience of tasting it was shared versus unshared. In contrast, when co-experiencers were spatially distant from one another (i.e., in different rooms), their enjoyment of the chocolate they tasted did not differ depending on whether the tasting experience was shared or unshared.

General Discussion

The current findings reveal when people may be more—or less—likely to be impacted by what the people around them are doing. As hypothesized, the psychological distance between co-experiencers, whether social or spatial, was shown to influence the extent to which sharing (vs. not sharing) a chocolate tasting experience influenced people’s evaluations both of the chocolate they tasted and of their overall experience while tasting the chocolate. When a co-experiencer was psychologically close, a shared experience was amplified compared to an unshared experience. When a co-experiencer was psychologically distant, however, the chocolate tasting experience was equally pleasant regardless of what one’s partner was doing. This overall pattern of results is consistent with our rationale that the contextual features of one’s experience (e.g., another person’s behavior) are integrated into one’s evaluation of that experience to a greater extent during episodes of psychological closeness (vs. distance).

We additionally note that the data from both studies considered together suggest that social distance may be more fundamental and critical than spatial distance when it comes to shared experience amplification. Some degree of social closeness seems to be a necessary condition of the amplification effect, whereas spatial distance may be secondary (a stranger’s behavior when in the same room did not affect participants’ experiences in Study 1, requiring us to acquaint all participants in Study 2). This is unsurprising given the plethora of extant shared experience studies that manipulate the social relationship between co-experiencers (reviewed here) and the dearth of shared experience studies that instead manipulate other forms of psychological distance.

By uniting the distinct literatures on shared experience, on the one hand, and psychological distance, on the other, new insights have been gained in both areas of research. Introducing the concept of psychological distance between co-experiencers helps to weave a common thread through a broad array of research showing that shared experiences are amplified with certain kinds of partners but not others (Boothby et al., under review; Hurter et al., 2014; Martin et al., 2015; Shteynberg, 2010; Shteynberg & Apfelbaum, 2013; Shteynberg, Hirsh, Galinsky, & Knight, 2014). Importantly, the psychological distance variable maps quite well onto the specific kinds of partners with whom shared experiences are already known to be amplified (i.e., close friends, in-group members) and those with whom they are not (i.e., strangers, out-group members).

Additionally, conceptualizing psychological distance as a key moderator of the effects of shared experience generates novel hypotheses concerning the other kinds of people, situations, and mindsets we would expect to impact people’s experiences. Whenever shared experiences are made to feel psychologically close they ought to be amplified, and whenever they are rendered psychologically distant they ought to be dampened or de-amplified instead. The specific ways in which we manipulated the psychological distance between co-experiencers in the present studies are by no means meant to be an exhaustive catalogue of the possible ways this can be accomplished. Furthermore, the manipulations we used, such as situating co-experiencers near to (vs. far from) one another, may not be strictly sufficient in and of themselves to render participants psychologically close to (or distant from) one another. For instance, although participants in the spatially distant condition in Study 2 were located in different rooms, had we connected those rooms via live video feed, the manipulation of physical distance may not have caused co-experiencers to seem quite so psychologically distant.

Of particular relevance to this point is that many shared experience studies have been successfully executed online using Amazon Mechanical Turk (e.g., Shteynberg, Hirsh, Galinsky, & Knight, 2014, Studies 3-4; Shteynberg, Hirsh, Apfelbaum, et al., 2014, Studies 3-5). Participants in these studies are physically alone but they are falsely told they are participating together with a fellow online participant who is an in-group member, and this belief (rather than the presence of an actual co-experiencer) is sufficient to enhance shared experiences. Critically, the sham co-experiencer is represented by an avatar that is either conspicuously placed on the participant’s computer screen during the purportedly shared experience, serving as a constant reminder that someone similar is sharing in the experience, or expected to be a future interaction partner, with whom the participant will share their opinions later in the study. Thus, while co-experiencers were physically distant, visual reminders or the anticipation of future interaction might have actually increased how psychologically close participants felt to their partner. What is important across those studies and the present ones is therefore not necessarily that co-experiencers are in close physical proximity, or that they are recent acquaintances, but rather whether or not they have been rendered psychologically close, and perhaps therefore relevant, to one another. With the increasing number of social interactions occurring across distant physical locations (Derfler, 2000; Horrigan, 2008), it is becoming ever more important to better understand when and how these kinds of
technologically mediated long-distance interactions affect people, and whether and when they impact people analogously
to being in one another’s physical presence.

Further, we note that physical distance may more clearly
imply psychological distance with respect to certain kinds
of sensory experiences (e.g., taste, smell) as compared with
others (e.g., vision, sound). For example, while the techno-
logical zeitgeist of the present day has made it possible to
remotely co-experience a range of audio-visual stimuli such
as sports matches, concerts, and even live-streamed confer-
ences, shared experiences of things like flavors and aromas
seem most likely to occur in person. Thus, the present stud-
ies may have used a type of sensory experience that is espe-
cially reliant on the physical co-presence of co-experiencers
in order for shared experience effects to emerge. It would be
interesting for future research to explore and compare shared
experience effects across different sensory domains.

Connecting shared experience to the concept of psychologi-
cal distance additionally suggests a novel extension of psycho-
logical distance influences. Prior research has shown that
different types of psychological distance are interchangeable in
terms of the influence they exert on people’s evaluations of a
single object. For instance, Bar-Anan, Liberman, Trope, and
Algom (2007) demonstrated that manipulating how spatially
distant an object appears influences how temporally distant that
same object seems. What we have proposed and demonstrated
here, instead, is that people’s judgments of one thing can
change depending on their construal of something else. That is,
the psychological distance of a co-experiencer influenced the
way people experienced the chocolate they tasted. Consistent
with what we know about construal level theory (Trope &
Liberman, 2010), we propose that when the tasting experience
was shared with someone who was psychologically close, the
chocolate itself was experienced more concretely, with greater
richness and vividness (e.g., Libby & Eibach, 2002), resulting
in enhanced enjoyment. Technicolor faded to monochrome
with a psychologically distant partner.

In sum, the present research points to some fundamental
conditions that cause the behavior of other people to affect
us. It is clear that certain people have a greater ability to
impact us than do others, and a parsimonious explanation
for what separates these two categories of people is the psy-
chological distance between us and them. As people go
from strangers to friends, far to near, or past to present,
experiences that are shared are amplified, and the way we
experience the world around us is transformed.

Appendix A

Questions Used in the “Getting to Know You” Task

Here is a list of questions we’d like you to discuss together. Take turns asking each other these questions over the next 10 min.
Try to answer as many questions as you can before the time is up!

List 1
1. What is your first name?
2. Where are you from?
3. What brought you to the Cambridge area?
4. What is a food you really enjoy?

List 2
1. What are some of your hobbies?
2. What would you like to do with your life in the next 5 years?
3. What is something you have always wanted to do but probably never will be able to do?
4. If you could travel anywhere in the world, where would you go and why?
5. What is one strange thing that has happened to you recently?
6. What is one of your most embarrassing moments?
7. What is one thing happening in your life that makes you stressed out?
8. If you could change anything that happened to you in high school, what would that be?
9. What is one habit you’d like to break?

List 3
1. If you could have one wish granted, what would that be?
2. Is it difficult or easy for you to meet people? Why?
3. Describe the last time you felt lonely.
4. What is one emotional experience you’ve had with a good friend?
5. What is one of your biggest fears?
6. What is your happiest early childhood memory?
7. What is one skill you would like to learn?
8. What is one thing about yourself that most people would consider surprising?
9. What is one recent accomplishment that you are proud of?
10. If you could have any career in the world, what would it be?

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Appendix B

Confederate’s Scripted Responses During the “Getting to Know You” Task

List 1
1. Confederate would say their first name.
2. I was born in Boston, but I’ve lived in San Francisco most of my life.
3. I’m doing a summer program at Harvard.
4. I really like Mexican food, especially burritos.

List 2
1. I really like going to museums, listening to music, and reading.
2. I’m originally from California and I really like it there, so I’d love to move back and find a job. I don’t need to make a ton of money, but I’d like to make enough to travel.
3. I’ve always wanted to go skydiving, but I don’t think I’d have the courage to.
4. I would love to go to Rome because there is so much history, and it looks really beautiful.
5. One day I was sitting in Starbucks doing some reading, and the woman next to me started to freak out and have a panic attack or something. She started like moaning and shaking and then just collapsed onto the ground, knocking over all her things. All her papers, her laptop, and her chair were sprawled across the floor. I was so startled because she kind of fell over onto my things. Luckily, someone ended up calling 911, and I think she was okay.

List 3
1. I would want to have unlimited money for travel so I could see more of the world.
2. I would say I’ve always been fairly introverted, so meeting new people isn’t the easiest thing for me, but I think I’ve definitely gotten better at it as I’ve grown older. The thing is I love making new friends, but the awkward process of first meeting those new friends is so difficult sometimes!
3. Probably when I moved to Cambridge and left all my friends behind. That’s always hard to do, even though we talk and text and stuff. It’s just not the same.
4. Last year, I had some family issues and I was an emotional train-wreck. One of my best friends really helped me get through that tough time, and I feel like we really grew closer after that.
5. I’m very afraid of heights.
6. I remember the first I went to Disney Land with my whole family was really fun.
7. I’ve always wanted to be better with computers, so I would definitely learn some computer programming skills.
8. I can’t stand soda, especially sprite.
9. I played the piano when I was younger and really loved it, and I recently picked up lessons again.
10. I would be an architect because I really love being creative and learning about the styles of different buildings.

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Notes
1. Additional tests for simple effects indicate that there were no differences between groups within each level of the sharing factor. That is, there were no significant differences between how much participants enjoyed the chocolate or the experience depending on whether it was shared with a socially distant versus proximate other—chocolate enjoyment: F(1, 42) = 3.07, p = .087, d = .53, 95% confidence interval [CI] [−.11, 1.49]; experience enjoyment: F(1, 42) = 2.56, p = .117, d = .48, 95% CI [−.19, 1.72]. There were also no significant differences between how much participants enjoyed the chocolate or the experience when it was not shared with a socially distant versus proximate other—chocolate enjoyment: F(1, 42) = 2.27, p = .140, d = .46, 95% CI [−.31, 2.10]; experience enjoyment: F(1, 42) = 1.59, p = .213, d = .38, 95% CI [−.35, 1.51]. This points to the importance of understanding these findings in terms of moderation (i.e., across the repeated measures sharing factor) rather than as a simple main effect across the between-subjects psychological distance factor. That is, what one’s co-experiencer is or is not doing (within a single session) only impacts one’s own experience when he or she is psychologically close.
2. Additional tests for simple effects indicate that participants reported liking the chocolate significantly less when the confederate was in the same room and not sharing the experience with them (i.e., the confederate was looking at artwork) compared...
with when the confederate was in a different room and not sharing the experience with them, \( F(1, 38) = 18.44, p < .001, \eta^2 = .33, d = 1.39, 95\% CI [0.93, 2.58]. \) No other tests for simple effects within each level of the sharing factor reached statistical significance. That is, there were no significant differences between how much participants enjoyed the experience when it was not shared with a spatially distant versus proximate other, \( F(1, 38) = .94, p = .336, \eta^2 = .03, d = 0.31, 95\% CI [−0.53, 1.50]. \) And there were no significant differences between how much participants enjoyed the chocolate or the experience depending on whether it was shared with a spatially distant versus proximate other (chocolate enjoyment: \( F(1, 38) = .67, p = .423, \eta^2 = .02, d = 0.25, 95\% CI [−0.62, 1.45]; \) experience enjoyment: \( F(1, 38) = .99, p = .325, \eta^2 = .03, d = 0.31, 95\% CI [−0.53, 1.55]. \)

**References**


