“Remember Me, Will You?”:

Overusing Material Gifts for Interpersonal Memory Management

Abstract (173/175)

Six experiments (N = 2,350) uncover a prevalent giver-recipient preference discrepancy: gift-givers prefer giving material gifts (vs. experiential gifts) more than gift-recipients prefer to receive them. The experiments reveal congruent evidence that a mnemonic gifting strategy underlies this preference discrepancy. Givers are more likely than recipients to consider the memory consequences of gift options, as givers intuitively use material gifts as interpersonal mnemonic devices to facilitate the recipient’s retrieval of giver-related memories. As such, this preference discrepancy occurs in various stages of developing relationships but is mitigated in very close relationships. In addition, two theoretical moderators are identified: the preference discrepancy disappears when the gift would be associated with an unpleasant occasion (instead of a pleasant one), and when the giver and recipient expect an incidental increase in future interactions. This research reveals an interpersonal memory-management motive that underlies the miscalibrated gift choices, and bridges prior findings on material and experiential gifts. These findings also offer insights for consumers and marketers to mitigate miscalibrated choices and their perverse economic and relationship consequences.

Keywords: gift giving, material versus experiential gifts, mnemonic gifting strategy, interpersonal mnemonic device, miscalibrated gift choices

"Remember Me, Will You?": Overusing Material Gifts for Interpersonal Memory Management

Gift giving plays an important role in the development of social relationships. Consumers often select gifts to deepen their connections with the recipients (Chan & Mogilner, 2017; Mauss, 1925; Ruth et al., 1999). One way to achieve this goal, from the gift-giver's perspective, is by gifting a physically salient material object that will easily grab the recipient's attention, jog the recipient's memory, and evoke positive reminiscences about the giver. As such, givers often gravitate toward material gifts that are intended to be kept in their recipients' possession. From the recipient's perspective, however, things might look different: Many of you can probably find something in your cabinet, closet, or garage, that once was a gift from someone and has been collecting dust ever since—material gifts have become sweet burdens, literally.

These anecdotal observations inspired the following question: Are more material gifts given than wanted? It is critical to understand whether—and why—givers and their recipients have discrepant preferences, given the substantial economic and welfare consequences of gift giving (Dunn et al., 2011; Schwartz, 1967; Waldfogel, 1993). We investigate these questions in six experiments (N = 2,350). We find that the giver's likelihood of choosing a material (vs. experiential) gift exceeds the recipient's likelihood of wanting to receive such a gift—a giver-recipient preference discrepancy that has not been demonstrated previously. We observe this discrepancy in various developing relationships including budding and moderately close relationships.

Moreover, we examine if this preference discrepancy between givers and recipients in part arises from an interpersonal memory management strategy involving the use of relationship mnemonics. We find evidence for this mnemonic gifting strategy: givers, relative to recipients, are more likely to consider how a gift influences the recipient's memory of the

giver. As a result, material gifts, which facilitate the recipient's retrieval of giver-related memories, are favored more strongly by giver than by recipients. These studies present the first evidence of the interpersonal use of mnemonic devices and offer a novel contribution to the growing literatures on gift giving and interpersonal consumer behaviors.

Material Goods as Interpersonal Mnemonics

An external mnemonic device acts as an intermediary between a person and an associated memory. According to the associated network model of memory (Srull, 1981; Tulving & Thomson, 1973), the physical objects in our immediate surroundings, such as a framed photo of a family gathering, a straw hat brought back from a beach holiday, or a brightly-colored vase gifted by a friend, provide perceptible cues that prompt the retrieval of memories of the people and events associated with the objects. Moreover, each time a consumer engages with the mnemonic device and retrieves the memories, the mere act of retrieving the memories promotes memory retention in the long run (Bellezza, 1981; Bugelski, 1970). Because memories decay over time, their preservation increasingly relies on incidental cues for retrieval (Oberauer & Lewandowsky, 2008).

There is a well-documented link between *intrapersonal* memory management and material objects: people adroitly use external mnemonic devices—usually, physically salient material objects—to forestall the decay of their own memories and facilitate future memory recall. For example, people intuitively employ salient physical objects to remind themselves of important goals (Rogers & Milkman, 2016) and to preserve cherished memories (Bellezza, 1996; Harris, 1980; Zauberman et al., 2008). These intrapersonal memory management strategies have been shown to influence how individual consumers decide between material and experiential purchases: Material purchases are intended to result in salient possession consequences, whereas experiential purchases are intended to result in rich consumption consequences (Gilovich et al., 2015a; Van Boven & Gilovich, 2003). Consistent with the

intrapersonal memory management strategy, consumers tend to prefer material purchases over experiential purchases when they wish to commemorate positive personal events (Goodman et al., 2016), and material purchases indeed outperform experiential purchases when consumers wish to create frequent, momentary personal happiness in the future (Weidman & Dunn, 2016).

However, little is known about *interpersonal* memory management strategies—even though external mnemonic devices certainly appear in social contexts, especially in gift choices. If consumers intuitively use material goods to facilitate desirable memory outcomes for their future selves, then they may also use material gifts to facilitate desirable interpersonal memory outcomes with their recipients.

The Mnemonic Gifting Strategy

Many givers select a gift with the hope that it will strengthen their relationship with the recipient (Chan & Mogilner, 2017; Mauss, 1925; Ruth et al., 1999). By fostering relationships with others, givers satisfy a need to belong and accumulate social capital (Baumeister & Leary, 1995; Portes, 1998). This goal can be aided by giving a gift that induces desirable mnemonic effects—ideally, a gift that will remind the recipient of the giver's goodwill and make the recipient think of the giver favorably in the future. Indeed, givers often seek good mnemonic gifts. For example, the Google search entry "remember me gifts" returns more than four million results, and common search questions include "What is a good memorial gift?"

Between material and experiential gift options, material gifts are arguably more effective at aiding memory retrieval. As discussed previously, material goods (e.g., a hardcopy book, yoga mat, or painting) are more effective external mnemonic devices than similar experiential goods (e.g., an audiobook, yoga classes, or a live art show). Material gifts leave perceptible retrieval cues that prompt the recipient to reminisce about the giver from

time to time. By contrast, the mnemonic effects of experiential gifts are more uncertain and less promising—when will the recipient voluntarily recall the experience, how will the gifted experience be recalled, and will the recalled experience remind the recipient of the giver? As such, when givers seek to advance a developing relationship with a gift, the foreseeable mnemonic effects of material gifts often render them more attractive than experiential gifts.

Both previous research and anecdotal data lend support to this postulation. Gift sales data show that physically salient material objects are more popular as gifts than any alternative category, including perishable and fast-consumable goods, virtual products, and experiences given in the form of designated gift cards or vouchers (Statista, 2018; also see the pilot studies in Chan & Mogilner, 2017 and Goodman & Lim, 2018). Using surveys and interviews, ethnographic researchers found that material objects are often selected as gifts to symbolize and commemorate the giver's goodwill (Mauss, 1925), as if material gifts can "keep the spirit of the giver and the relationship alive" (Ruth et al., 1999). Not surprisingly, most "remember-me gifts" listed in the top Google search results are material gifts. In fact, material gifts perennially dominate the marketplace, and their superior mnemonic characteristics arguably contribute to their dominance.

This mnemonic gifting strategy, however, may not be well received by recipients. First, deepened giver-related memories in the recipient's mind will bring more benefits to the giver than to the recipient. More specifically, when a gift prompts the recipient to think of the giver fondly, this increases the recipient's goodwill toward the giver and enhances the giver's social capital (Bourdieu, 1985; Lin, 2001). In contrast, it does not affect the giver's goodwill toward the recipient, nor the recipient's social capital. In other words, a giver can expect a potential gain in social capital from the gift's mnemonic effects, but the recipient cannot.

Due to these asymmetric incentives that givers and recipients face, givers are more likely than recipients to consider the memory consequences of gifts. Indeed, there is copious

evidence that both givers and recipients hold egocentric perspectives that influence their judgments and decisions (e.g., Flynn & Adams, 2009; Galak et al., 2016; Yang & Urminsky, 2018; Zhang & Epley, 2009). Recipients tend to consider a wider range of factors that will affect their actual satisfaction with gifts; many of these factors reflect the gift's future benefits for the recipients themselves (Yang & Urminsky, 2018; Zhang & Epley, 2009, 2012). By contrast, givers tend to adopt a narrower focus on the attributes that are salient in their own evaluation process and inadequately consider the influence of various alternative factors that may affect the recipient's satisfaction (Choi et al., 2006).

Thus, we propose that givers are more likely than recipients to consider the memory consequences of gifts. As such, the superior mnemonic effects of material gifts (relative to experiential gifts) will appear more attractive to givers than to recipients. Consequently, we expect that givers prefer giving material gifts (instead of experiential gifts) more than recipients prefer receiving them. This preference discrepancy is our main hypothesis. We test it in six experiments, in which we also examine its underlying mechanisms.

These predictions should certainly be qualified and moderated by several important factors that influence the giver's motivation to induce memory consequences. First, the proposed preference discrepancy should be mitigated if the gift will be associated with negative emotions instead of positive emotions, typically because of the emotional valence of the gifting occasion (e.g., if the gift was to console the recipient for a sad event versus to celebrate a happy event). Our rationale is based on the associative network model of memory (Srull, 1981; Tulving & Thomson, 1973), which suggests that when a retrieval cue prompts a memory of a stimulus, other nodes of memory that are organically linked to the stimulus are activated spontaneously, and the emotions associated with these linked nodes taint each other. The giver and the gifting occasion are two primary nodes associated with a gift. When a gift reminds the recipient of the giver, the emotions evoked by the gifting occasion can

intermingle with the emotions that are evoked by the giver (Gawronski & Bodenhausen, 2006; Skowronski et al., 1998). Notably, people can anticipate these spillover effects of emotion and often act in ways that optimize their interpersonal consequences (e.g., Rosen & Tesser, 1970). Thus, if givers intuitively expect that incidentally associated emotions will affect the recipient's feelings about them, then givers should no longer prefer a material gift when the gifting occasion is unpleasant to the same extent.

Second, our theorization thus far is built on the premise that mnemonic gifts create asymmetrical incentives for givers versus recipients. While this is arguably true in most developing relationships, it may not readily apply to relationships that are very close (at the end of the relationship closeness spectrum, e.g., close siblings or long-time best friends; Clark & Reis, 1988; Kelley et al., 1983). Very close relationships are distinct from developing relationships in important aspects including strong emotional connections (Baumeister & Leary, 1995; Clark & Reis, 1988), ongoing chains of mutual influence (Kelley et al., 1983), and unconditionally reciprocal support between relationship partners (Clark, 1983). It is therefore conceivable that the primary payoffs of gifts no longer center on gains in social capital in these relationships. Instead, we surmise that both givers and recipients may relish reminiscing about and feeling connected with the other. More specifically, the giver's desire to give relationship mnemonics may be matched by the recipient's desire to "keep the giver around"—a sentiment that may not be reciprocated in a developing relationship. Thus, we expect that the preference discrepancy to be mitigated in very close relationships.

Third, expected changes in the frequency of future interactions should also influence the preference discrepancy. Social interactions create new memories for relationship partners and strengthen a developing relationship (Berscheid et al., 1989; Kelley et al. 1983). While material gifts signal the giver's symbolic presence as a mnemonic device, in-person

interactions increase the giver's actual presence and deepen the recipient's impression. Therefore, more frequent interactions between the giver and the recipient should reduce the giver's motivation to select material gifts, at least for memory management purposes. Thus, we predict that an expected incidental increase in future interactions should attenuate the giver's preference for material gifts and mitigate the giver-recipient preference discrepancy. Admittedly, this is not a common situation, but critical to the mechanism.

This is the first research examining interpersonal memory management as a cause of miscalibrated gift choices, and first to directly compare givers' and recipients' preferences for material and experiential gifts. This research offers three major extensions to the existing literature on material and experiential gifts. First, as described previously, the use of material goods for memory enhancement has been examined only in the intrapersonal context (Goodman et al., 2016; Weidman & Dunn, 2016), whereas we turn to examine the interpersonal context. Second, Goodman and Lim (2018) found that the giver's preference for experiential gifts changes as a function of their social distance with the recipient, such that the giver is less likely to choose an experiential gift for an unfamiliar (vs. familiar) recipient because their preferences are less known to the giver. While Goodman and Lim identified knowledge as a cause for the giver's choice of material gifts in some relationships, they focused on the giver's choice, only; they did not compare the giver's preferences with the recipient's preferences, leaving questions open about whether there is a preference discrepancy (in either close or distant relationships) and how other factors might contribute to it. Our research addresses these questions by directly comparing the giver's and recipient's preferences and documenting a preference discrepancy. Moreover, we uncover a novel cause—interpersonal memory management—that drives miscalibrated gift choices. Third, Chan and Mogilner (2017) examined the consequences of material and experiential gifts and found that experiential gifts are better at fostering social bonds (also see Chun & Hiang,

2016). These authors postulated that (but did not test whether) givers may somehow overlook this advantage. In the current research, we empirically test this postulation, and find an explanation for it. More importantly, this research bridges the different perspectives offered in disparate prior studies to facilitate an advanced understanding of consumer behaviors over material and experiential gifts, an area with substantial marketing and consumer welfare implications.

Overview of Studies

In six studies, we test the proposed giver-recipient preference discrepancy in various developing relationships by comparing the giver's preference with the recipient's preference vis-à-vis. Study 1a establishes the giver-recipient preference discrepancy for a material (vs. experiential) gift in real, incentive-compatible gift choices. Study 1b replicates this effect with gift ideas that participants generated themselves, and validates the preference discrepancy with separate analyses on the intended possession and consumption consequences of the gifts. Study 2 finds that the preference discrepancy arises primarily because givers are more likely to consider the gift's giver-related memory consequences than recipients. Study 3 shows that the preference discrepancy is attenuated when a gifting occasion is unpleasant, which deters both givers and recipients from choosing material gifts. Study 4 finds that the preference discrepancy does not occur in very close relationships, in which givers and recipients both have a strong desire for material gifts as relationship mnemonics. Last, Study 5 shows that an expected incidental increase in social presence mitigates the preference discrepancy by reducing the giver's motivation for memory management. These studies involved diverse gifting occasions: a thank-you gift (Study 1), gifts at important life events (Studies 1b and 3), gifts to celebrate birthdays (Studies 2 and 5), and Christmas gifts (Study 4).

In all studies, we determined our sample size to be at least 100 per cell. We increased the planned sample size when the experiment used new stimuli (Study 2) and when the experiment involved a predicted interaction (Studies 4 and 5), and we relaxed this criterion only when participant availability was limited (Study 3). We report all details about sample size determination and exclusion in Table S1 in the web appendix, and we present additional details about the original stimuli and data analyses in the web appendix. All procedures and results are reported in the manuscript or the web appendix. We share our data on OSF: https://osf.io/c2hq5/?view_only=61aed6e11d1f437ca28769e6d4af8b66.

STUDIES 1A AND 1B: PREFERENCE DISCREPANCY

Studies 1a and 1b both had 2 (perspective: giver vs. recipient) between-subjects conditions. Study 1a involved an actual social interaction followed by a gift choice and was incentive-compatible such that participants' gift choices led to real-life gifting consequences. Study 1b used a hypothetical scenario in which participants were asked to generate a gift idea with a real person that that they would like to bond with.

Study 1a Method

We planned for 210 participants and recruited 224 participants from a large freshmen subject pool at a public university in Singapore to participate in a consumer decision study in the lab, and we paid each participant about $3.60 (SGD $5). We obtained 216 valid responses (M_{age} = 22, 62% female) after a standardized screening procedure.

Participants were asked to provide a personal email and were grouped into unacquainted pairs upon arriving at the lab. Each pair of participants sat in a room and completed an abridged version of the Relationship Closeness Induction Task (RCIT; Sedikides et al., 1999). After that, they were seated in separate rooms. Participants were asked to rate the closeness of the relationship with their partner and their interest in advancing that relationship (both 9-point scales: 1 = not at all, 5 = moderately, 9 =

extremely). The RCIT task induced a moderate level of closeness between partners ($M_{\text{closeness}}$ = 5.40, SD = 2.08) and high interest in advancing their relationship (M_{interest} = 6.40, SD = 1.85), $t(215) = 11.3$, $p < .001$, compared to the mid-point of 5. Because participants were newly admitted freshmen, this experimental session represented a real opportunity for them to develop a new friendship.

We then randomly assigned one participant in each pair to the giver condition and the other to the recipient condition. All participants were asked to complete a 15-minute filler task. Then, givers were informed that they had an opportunity to give their partner a small surprise gift and were presented with a choice between a material gift and an experiential gift. For the material gift, we selected a 4’’× 5’’ mini-postcard, and for the compatible experiential gift, we selected a 5-minute mini-movie with exclusive online access. Both gifts featured the three minion protagonists from the *Despicable Me* movie series. A pretest (N = 68, M_{age} = 33, 36% female) validated these two gifts are primarily material versus experiential. The pretest also found that the mini-postcard was expected to yield stronger mnemonic effects than the mini-movie, and that the two gifts were perceived as similar on a list of gift characteristics that have been discussed as relevant for giver-recipient preference discrepancies, such as desirability, feasibility, reactions, satisfaction, and perceived thoughtfulness (see details in web appendix).

Givers were told that their chosen gift would be given immediately after the study. Meanwhile, recipients were informed that their partner would give them a small gift and were asked to indicate which of the two options they would prefer to receive, with the understanding that they ultimately would receive whichever option that the giver chose.

After the choice, all participants filled out a generic screening question and reported their gender and age. Finally, the recipients received either the postcard or the private link for the movie, as chosen by the givers. Participants were debriefed and paid.

Study 1a Results

Givers were more likely than recipients to choose the material gift (givers: 66.4% vs. recipients: 48.6%), $\chi^2(1, N = 216) = 6.94$, $p = .009$, $\eta = .18$. The discrepancy was not affected or moderated by gender, age, or perceived closeness.

Study 1b Method

We planned for at least 250 participants, received 280 participants from MTurk, paid them $.70 each, and obtained 276 valid responses (M_{age} = 38, 57% female) after the screening procedure. We randomly assigned participants to the two conditions. We pre-registered this study (see a masked record for peer review in the web appendix).

All participants were first asked to think about a same-sex acquaintance of whom they had a favorable impression and with whom they would like to be friends. Then, participants briefly described a life outcome that their acquaintance would consider worthy of celebration and a life outcome that they themselves would consider worthy of celebration. Participants listed similar events for the acquaintance and for themselves—getting a degree, a career promotion, reaching a fitness goal, and becoming a homeowner, among others. Next, participants evaluated the closeness of their relationship with the acquaintance and the extent to which they were interested in advancing that relationship (both on 7-point scales: 1 = not at all, 4 = moderately, 7 = extremely). Participants reported moderately close relationships with the listed acquaintance ($M_{closeness}$ = 3.5, SD = 1.9) and high interest in bonding ($M_{interest}$ = 5.2, SD = 1.2), $t(148) = 11.9$, $p < .001$, compared to the mid-point of 4. These ratings did not differ between the giver and recipient conditions, ps > .250.

Then, participants in the giver condition were asked to imagine that the listed acquaintance had attained the desired achievement, while participants in the recipient condition were asked to imagine that they themselves had attained the desired achievement. The givers were asked to describe a gift that they would like to give the acquaintance, while

the recipients were asked to describe a gift that they would like to receive from the acquaintance.

After participants briefly described the gift they had in mind, they were presented with the definitions of material and experiential purchases per Van Boven and Gilovich (2003) and were asked to indicate whether the gift they described was primarily material (1) or primarily experiential (2). Importantly, while some gifts can be categorized as typically material gifts or typically experiential gifts based on a bipolar material-experiential scale, many gifts have both possession and consumption consequences and cannot be easily mapped onto the bipolar scale. In light of related critiques about this scale (see Dunn & Weidman, 2015; Guevarra & Howell, 2015; Schmitt et al., 2015), we developed separate coding scales for the intended possession and consumption consequences of a gift (see section I in the web appendix). Because possession and consumption are conceptually orthogonal, a preference for material gifts could reflect a stronger intention to cause possession consequences (consistent with the mnemonic gifting strategy), a weaker intention to cause consumption consequences, or both. Therefore, the separate coding of the intended possession and consumption consequences enables us to interpret our findings more accurately.

Last, participants were asked whether they planned to share the use of the gift with their acquaintance, to estimate its market value, and to report their gender and age.

Study 1b Results

Gift preferences. Givers were more likely than recipients to list a material gift (givers: 49.6% vs. recipients: 33.3%), $b_{\text{perspective}} = .68$, $SE = .25$, Wald = 7.47, $p = .006$, consistent with our hypothesis. Givers and recipients differed in both their anticipation of gift sharing and the cost of the gift, but neither factor explained the giver-recipient preference discrepancy. Specifically, more recipients than givers anticipated that the gift would be

shared (givers: 38.3% vs. recipients: 52.6%), $\chi^2(1, N = 276) = 5.69$, $p = .021$, and the gift cost was marginally higher among givers than among recipients (log-transformed due to highly skewed data: skewness = 4.52 and 6.25): $M_{giver} = 3.86$, $SD = 1.03$ vs. $M_{recipient} = 3.61$, $SD = 1.27$), $t(271) = 1.84$, $p = .066$. The giver-recipient preference discrepancy persisted when controlling for planned sharing and the gift cost, $b_{perspective} = -.66$, $SE = .17$, $p < .001$. Gender, age, and self-reported closeness did not contribute to or moderate the preference discrepancy.

Coding of gifts. We asked two hypothesis-blind and condition-blind coders to rate the gift descriptions on separate scales for intended possession consequences (IPC: "To what extent is this gift intended for the recipient's possession? For example, the giver may intend that the recipient derives utility from the mere possession of this item, which may be kept for at least a while to remind the recipient of a person or an event"; 1 = not at all, 3 = moderately, 5 = extremely) and intended consumption consequences (ICC: "To what extent is this gift intended for the recipient's consumption? For example, the giver may intend that the recipient derives utility from the consumption of the item, which may take place relatively soon and can give rise to an elaborate experience"; 1 = not at all, 3 = moderately, 5 = extremely). Examples of gifts with high IPC and high ICC included smartphones and mugs; gifts with high IPC and low ICC (i.e., typical material gifts) included home decorations and souvenirs; gifts with low IPC and high ICC (i.e., typical experiential gifts) included leisure activities and event tickets; and gifts with low IPC and low ICC included fresh-cut bouquets and electronic greeting cards.

The two coders' ratings were highly correlated on each scale, $r_{IPC} = .91$, $p < .001$ and $r_{ICC} = .94$, $p < .001$, and thus were averaged for analyses. We validated that the IPC and ICC scores aligned closely with the material-experiential bipolar scale such that there was a strong negative correlation between the IPC and ICC scores, $r = -.81$, $p < .001$. More importantly, these coded results validated our main findings on the bipolar material-experiential scale: The

givers' gift choices, relative to the recipients' gift choices, reflected stronger intentions to cause possession consequences (M_{giver} = 2.88, SD = 1.45 vs. $M_{recipient}$ = 2.14, SD = 1.33), $t(272.71) = 4.38$, $p < .001$, $d = .53$, and weaker intentions to cause consumption consequences (M_{giver} = 3.85, SD = 1.39 vs. $M_{recipient}$ = 4.22, SD = 1.28), $t(273) = -2.29$, $p = .023$, $d = -.28$, albeit with about half the effect size. Therefore, the preference discrepancy between givers and recipients revealed primarily the givers' stronger intention (than recipients') to cause possession consequences, consistent with the mnemonic gifting strategy. The givers' weaker intention to cause consumption consequences could be either a secondary explanation or a concomitant consequence of the mnemonic gifting strategy due to the strong negative correlation between possession and consumption consequences.

Discussion

Study 1a documented the proposed preference discrepancy in an incentive-compatible design. Between givers and recipients who were interested in forming a new friendship, givers were more likely to choose the material gift than were recipients. Although we pretested that the material and experiential gifts were similar and comparable on important dimensions, the two gifts nonetheless could differ on other dimensions. To address this concern, we conducted Study 1b. Study 1b replicated the giver-recipient preference discrepancy with gift ideas that were generated freely by givers and recipients themselves. Moreover, we disentangled the gifts' intended possession consequences from their intended consumption consequences, and found that the giver-recipient preference discrepancy was primarily explained by givers' stronger intention to induce possession consequences with a gift.

STUDY 2: MEDIATION BY MEMORY-RELATED THOUGHTS

In Study 2, we aimed to examine the mechanism of the giver-recipient preference discrepancy. We measured the extent to which participants considered the memory

consequences of the gift options as a mediator. This study was pre-registered (https://aspredicted.org/blind.php?x=e6mc52).

Method

We planned for at least 350 participants, received 371 participants on Prolific and obtained 356 valid responses (M_{age} = 37, 52% female, 2% non-binary) after the screening procedure. Participants were randomly assigned to 2 (perspective: giver vs. recipient) between-subjects conditions. Participants were first asked to list a friend with whom they would like to get closer and were asked to rate their current closeness with the listed friend. Participants rated the friend to be moderately close ($M_{closeness}$ = 4.88 out of 9, SD = 1.74), and perceived closeness did not differ between givers and recipients, $t < 1$, $p = .98$.

Participants read a scenario about preparing a birthday gift for the listed friend (in the giver condition) or receiving a birthday gift from the listed friend (in the recipient condition). Participants read that the gift recipient [the friend/the participant] "recently mentioned soreness in the neck and shoulders from working at the desk for long hours" and that the giver [the participant/the friend] found two gift options based on this information. Both options received high customer ratings, cost about the same, and the recipient does not have either of them. One is a premium digital massage roller: targeted at relieving the neck and shoulder muscles, it has a smart and visually attractive design, is made of premium-quality materials, and comes with a 5-year warranty. The other is a membership voucher at a nearby local spa: it comes with five sessions of pre-paid professional neck and shoulder massage with a 5-year expiration date; the spa belongs to a popular franchise and offers convenient and flexible booking. Participants in the giver condition were asked to indicate which of the two gifts they preferred to choose for the friend, whereas participants in the recipient condition were asked to indicate which of the two gifts they preferred to receive from the friend.

Next, we included process measures to assess participants' considerations of giver-related memory consequences. We reminded each participant of their gift choice and asked them to rate the extent to which they had the following thought when choosing between the gifts (1 = not at all; 7 = definitely): "I thought of how much this gift will make the friend think of me in the future" (giver condition) or "I thought of how much I will think of the friend in the future because of the gift" (recipient condition). We also included an implicit measure of the accessibility of memory-related concepts using a word-scramble task: We asked participants to complete six word scrambles, four of which were memory-related (e.g., "reminder" "remember") and then compared the success rate between conditions. This measure did not reveal meaningful differences between givers and recipients because very few participants succeeded, Mann-Whitney U Test $p = .867$. Thus, we report full details for this measure in the web appendix.

After that, we included other ratings: (1) the bonding outcome of each gift: "This gift will facilitate bonding between me and the friend," "This gift will be conducive to building a social connection between me and the friend," and "This gift will help strengthen the relationship between me and the friend," all on 7-point scales (1 = not at all; 7 = very much); (2) the extent to which each gift is material and is experiential: "This gift is primarily a material gift (i.e., intended to be kept for the recipient's possession)" and "This gift is primarily an experiential gift (i.e., intended for the recipient's consumption)," both on 5-point scales (1 = strongly disagree; 5 = strongly agree); and (3) ten other gift characteristics that prior research has discussed as relevant to the giver-recipient preference discrepancy of gifts: the extent to which each gift will be positively received (Yang & Urminsky, 2018), will be satisfying for the recipient, will be deemed thoughtful (Zhang & Epley, 2012), and is appropriate, risky (Goodman & Lim, 2018), an easy choice, flexible, typical, feasible, and

desirable (Baskin et al., 2014, all on 7-point scales (1 = not at all; 7 = very much). Last, participants filled out their gender and age.

Results

Gift preferences. Consistent with our hypothesis, givers were more likely than recipients to choose the material gift (givers: 62.6% vs. recipients: 49.7%), χ^2 (1, N = 356) = 5.97, p = .015, η = .13.

Considerations of giver-related memory consequences. Givers were more likely than recipients to consider giver-related memory consequences (M_{giver} = 3.54, SD = 1.98 vs. $M_{recipient}$ = 3.10, SD = 1.90), t(354) = 2.15, p = .033. Considerations of memory consequences significantly predicted the gift choice, $b_{thought}$ = -.25, SE = .06, Wald = 17.58, p < .001, and when we included considerations of memory consequences in the regression, the coefficient of perspective (giver vs. recipient) decreased from $b_{perspective}$ = -.52, SE = .22, Wald = 5.94, p = .015 to $b_{perspective}$ = -.44, SE =.22, Wald = 4.00, p = .045. A mediation model showed that the giver-recipient preference discrepancy was mediated by considerations of memory consequences, indirect effect = .11, SE = .06, $CI_{95\%}$ = [.01, .24], Figure 1.

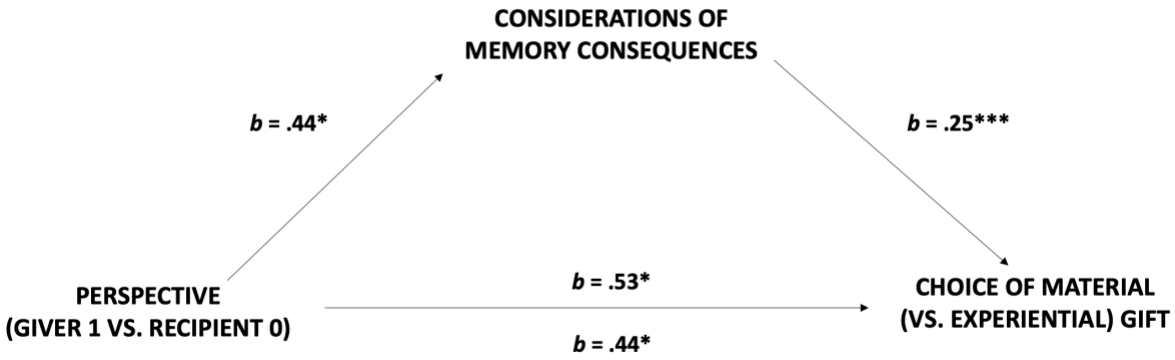

Figure 1. Considerations of giver-related memory consequences mediated the giver-recipient preference discrepancy (* p < .05, *** p < .001).

Expected bonding outcomes. In each condition, we subtracted the expected bonding outcome of the massage roller from that of the massage voucher (ΔM). Both givers and recipients thought the material gift was more conducive to bonding than the experiential gift

(i.e., $\Delta M > 0$), but givers rated the material gift as directionally *more* conducive than did recipients ($\Delta M_{giver} = 0.84$, $SD = 1.98$ vs. $\Delta M_{recipient} = 0.61$, $SD = 1.52$), $t(354) = 1.23$, $p = .195$. This factor did not mediate the giver-recipient preference discrepancy, indirect effect = .17, $SE = .14$, $CI_{95\%} = [-.08, .47]$. Nonetheless, we found a significant serial mediation pathway with considerations of memory consequences as a proximate mediator and the superiority of the material gift for bonding as a distal mediator, indirect effect = .33, $SE = .17$, $CI_{95\%} = [.02, .67]$. In other words, the givers' (relative to the recipients') greater likelihood to consider memory consequences led the givers to overestimate the superiority of the material gift for bonding, which in part led a disproportionate number of givers (relative to recipients) to choose the material gift.

Gift perceptions (material vs. experiential). Confirming the validity of the gift stimuli, across all participants, the massage roller was deemed more material than experiential ($\Delta M = 1.04$, $SD = 2.23$), pairwise $t(355) = 8.84$, $p < .001$, and the voucher was deemed more experiential than material ($\Delta M = -2.51$, $SD = 1.82$), pairwise $t(355) = -25.99$, $p < .001$. These scores did not differ between givers and recipients, ps > .250.

Other gift characteristics. Prior studies found that giver-recipient preference discrepancies tend to arise because givers and recipients have systematically different perceptions of certain gift characteristics (e.g., Givi & Galak, 2017; Zhang & Epley, 2012). We assessed if each previously identified gift characteristic potentially contributed to the giver-recipient preference discrepancy. We did so by first calculating the difference in how the two gifts were rated by each participant and then comparing these differences between givers and recipients. We found that givers and recipients perceived similar differences between the two gifts on all ten characteristics (Table S3, web appendix), and none of the differences mediated the preference discrepancy. Therefore, known differences in

characteristics between material and experiential gift options cannot meaningfully explain the giver-recipient preference discrepancy.

Discussion

In Study 2, we tested the proposed mechanism via mediation analysis. The results supported that the giver-recipient preference discrepancy was explained by givers' (relative to recipients') greater considerations of giver-related memory consequences. These considerations also led givers to overestimate how conducive the material (vs. experiential) gift would be for bonding. However, this overestimation alone could not explain the preference discrepancy, and it only explains part of the distal path of the serial mediation. Thus, this overestimation may reflect how the mnemonic strategy spurred motivated reasoning about bonding consequences as a by-product.

STUDY 3: MATERIAL GIFTS ARE ESCHEWED ON UNPLEASANT OCCASIONS

In this study, we tested a theoretical moderator: the emotional valence of the gifting occasion. We theorized that the giver-recipient preference discrepancy should be mitigated when the gifting occasion evokes negative emotions—in which case a material gift could facilitate negative emotion transfer between the event and the giver in the recipient's memory retrieval. Another purpose of this study was to increase the generalizability of our findings by replicating the giver-recipient preference discrepancy with a list of real gift options, which naturally vary in their intended possession and consumption consequences. Therefore, instead of using pre-selected pairs of prototypical material and experiential gifts, we selected 20 common gift items from a popular e-commerce store and had them coded on the IPC and ICC scales as in Study 1b.

Method

We recruited 183 participants (M_{age} = 23, 52% female) from a large freshmen subject pool at a private university in South Korea to participate in a consumer decision study in the

lab, and we paid each participant about $3.00 (KW 3000). This study had a 2 (perspective: giver vs. recipient) × 2 (gifting occasion: pleasant vs. unpleasant) between-subjects design.

Participants read a scenario in which either they or a friend named JW (a common gender-neutral name) had recently received a dream job offer (pleasant gifting occasion) or had failed to get the dream job offer after a good effort (unpleasant gifting occasion). We randomly assigned participants to one of the four conditions. In the giver conditions, participants read, "JW is one of your high school friends. You and JW have a lot in common; JW attends the same university and studies the same major as you. JW is expected to graduate soon, has applied for a dream job, and recently completed the job interview. Someone just told you that *JW received the job offer [JW failed to receive the job offer]."* In the recipient conditions, participants read a similar scenario in which they themselves received the dream job offer or failed to receive it. After reading the scenario, participants were asked to indicate their view of the occasion (1 = it was very unfortunate; 7 = it was very fortunate) as a manipulation check for the valence of the gifting occasion. As intended, participants viewed getting the job offer (M = 5.27, SD = 1.44) as a more pleasant occasion than failing to get the job offer (M = 2.62, SD = 1.16), $F(1, 179) = 275.20$, $p < .001$.

Next, participants were asked to imagine that they planned to give a gift to JW (or that JW planned to give a gift to the participant) either to celebrate the job seeker's outcome (pleasant-occasion condition) or console the job seeker about the outcome (unpleasant-occasion condition). In all scenarios, participants were considering a gift from a popular e-commerce store. Participants were presented with 20 common gift items (e.g., earphones, branded hand cream, bar voucher, massage voucher) along with pictures and short descriptions (see translated stimuli in the web appendix), and were asked to choose one gift that they would like to give to (or receive from) JW. All gift options cost about $20 and were pretested as similarly likable, ps > .250, with a similar group of participants (N = 58, M_{age} =

23.5, 54% female). Two independent, hypothesis-blind, and condition-blind coders rated the gift items on the IPC and ICC scales. We averaged their ratings for each gift item, r_{IPC} = .91, p < .001, and r_{ICC} = .91, p < .001.

Results

Intended possession consequences. In the pleasant-occasion conditions, we replicated the giver-recipient preference discrepancy: the givers (relative to the recipients) chose gifts with stronger intended possession consequences (M_{giver} = 2.20, SD = 1.12 vs. $M_{recipient}$ = 1.50, SD = .78), $t(91) = 3.42$, p = .001, d = .74, Figure 2. By contrast, in the unpleasant-occasion conditions, the preference discrepancy disappeared (M_{giver} = 1.41, SD = .72 vs. $M_{recipient}$ = 1.48, SD = .72), t < 1, p = .69. This mitigation effect was validated in a significant two-way interaction between the perspective (giver vs. recipient) and occasion valence, $F(1, 179) = 8.80$, p = .003, η^2_p = .05. Specifically, the givers' preferences for gifts with stronger intended possession consequences was significantly attenuated by the unpleasant occasion (giver: $M_{pleasant}$ = 2.20, SD = 1.13 vs. $M_{unpleasant}$ = 1.41, SD = .72), $t(81.88) = -4.06$, p < .001, d = .83, whereas the recipients' preferences for these gifts was not affected by occasion valence (recipient: $M_{pleasant}$ = 1.50, SD = .78, vs. $M_{unpleasant}$ = 1.48, SD = .72), t < 1, p = .89.

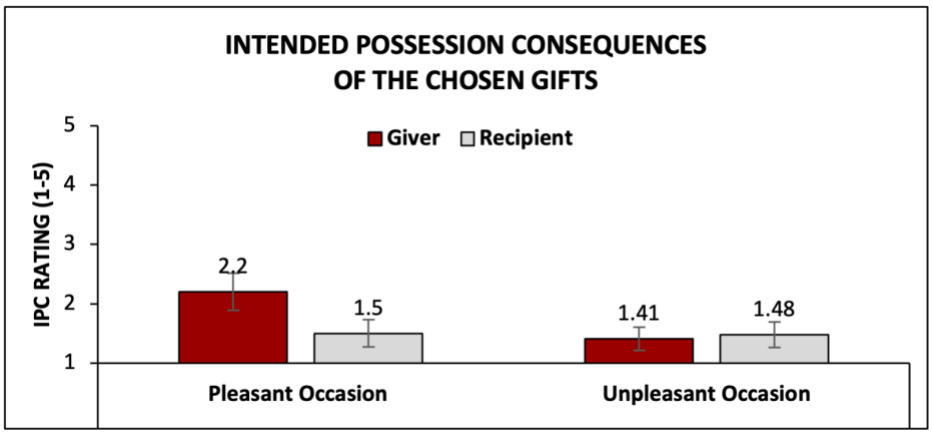

Figure 2. When the gift would be associated with a pleasant occasion (left bars), the givers (relative to the recipients) chose gifts with stronger intended possession consequences. When the occasion was unpleasant (right bars), however, the discrepancy was attenuated. Error bars represent 95% confidence intervals.

Intended consumption consequences. We also analyzed the intended consumption consequences of the chosen gifts. We found a similar yet weaker pattern. In the pleasant-occasion conditions, the givers (relative to the recipients) chose gifts with weaker intended consumption consequences (M_{giver} = 3.95, *SD* = 1.00 vs. $M_{recipient}$ = 4.53, *SD* = .71), $t(91) = -3.22$, $p = .002$, $d = .61$; this discrepancy disappeared in the unpleasant-occasion conditions (M_{giver} = 4.60, *SD* = .74 vs. $M_{recipient}$ = 4.62, *SD* = .64), $t < 1$, $p = .89$. The perspective and occasion valence had a significant interaction effect on the intended consumption consequences of the chosen gifts, $F(1, 179) = 5.78$, $p = .017$, $\eta^2_p = .03$. All effects involving ICC were smaller than the analogous effects involving IPC.

Main effects of occasion valence. It bears noting that the occasion valence had main effects on gift choices as well. In the unpleasant-occasion condition (relative to the pleasant-occasion condition), both givers and recipients chose gifts with weaker intended possession consequences ($M_{unpleasant}$ = 1.44, *SD* = .72 vs. $M_{pleasant}$ = 1.87, *SD* = 1.03), $F(1, 179) = 9.91$, $p = .002$, $\eta_p^2 = .05$, suggesting that consumers tend to avoid material gifts when those gifts will remind recipients of an unpleasant memory. At the same time, in the unpleasant-occasion condition (relative to the pleasant-occasion condition), both givers and recipients chose gifts with stronger intended consumption consequences ($M_{unpleasant}$ = 4.60, *SD* = .69 vs. $M_{pleasant}$ = 4.22, *SD* = .92), $F(1, 179) = 9.64$, $p = .002$, $\eta_p^2 = .05$. While these main effects were informative, they could not explain the observed interactions.

Discussion

The valence of the gifting occasion moderated the preference discrepancy such that an unpleasant gifting occasion diminished both givers' and recipients' preferences for material gifts. In particular, when an unpleasant occasion was involved, givers had weaker preferences for material gifts compared with when a pleasant occasion was involved. Importantly,

analyses of the intended possession consequences of the chosen gifts revealed that the mnemonic gifting strategy accounted for the givers' preference change. When the gift—and by association, the giver—would be recalled in connection with negative emotions, givers no longer chose gifts with more possession consequences than the recipients wanted. These results also extended our findings to a setting that better resembled a real-life gift selection process.

The results of Study 3, together with the results of Study 1b, also revealed that the choice between material and experiential gifts may be predicted by multiple gifting strategies. We have focused on the mnemonic gifting strategy, but another possibility is *experience dilution*: If a gifting occasion is pleasant, such that the occasion itself is a positive experience for the recipient, then the giver may avoid experiential gifts partly to prevent diluting the recipient's experience of the occasion (see also Zauberman et al., 2008). Meanwhile, for an unpleasant gifting occasion, the giver may apply the opposite intuition to distract and cheer up the recipient with a pleasant consumption experience. Our analyses of the intended consumption consequences revealed results that support the experience dilution strategy. However, based on the larger effect sizes from intended possession consequences than from intended consumption consequences, we argue that the mnemonic gifting strategy (focusing on retrieval cues) contributes more than the experience-dilution strategy (focusing on the positivity of the experience) to the giver-recipient preference discrepancy.

Although the moderation results are consistent with the mnemonic gifting strategy, we acknowledge that this moderation is open to another explanation: When the gifting occasion is sad, givers may shift their focus from their own relationship interest to recipients' well-being out of sympathy, which may have affected their preference as well. To establish causal evidence for the mnemonic gifting strategy, we examine another two theoretical moderators in Studies 4 and 5, which uniquely support the mnemonic account.

STUDY 4: ATTENUATED EFFECT IN VERY CLOSE RELATIONSHIPS

In Study 4, we tested another boundary condition of the preference discrepancy by manipulating whether the giver-recipient relationship was in an early stage or already very close. We included two scenario replicas for each relationship stage to increase the generalizability of these tests. We theorized that the giver-recipient preference discrepancy should be attenuated in very close relationships (e.g., close siblings or long-time best friends), in which the giver's desire to be reminisced about by the recipient may be matched by the recipient's desire to reminisce about the giver.

Method

We planned for 600 participants, received 635 participants from Prolific for a short decision-making study, and obtained 621 valid responses (M_{age} = 33, 45.7% female) after the screening procedure. Study 4 had 2 (perspective: giver vs. recipient) × 2 (relationship stage: early stage vs. very close) between-subjects conditions. We pre-registered this study (https://aspredicted.org/blind.php?x=eg4xv7).

Participants were asked to indicate their gender. Then, participants were asked to imagine that Christmas was coming, and they were preparing to give and expecting to receive a few gifts in upcoming festive social gatherings. We randomly assigned participants to the giver and recipient conditions. In the giver conditions, participants were asked to imagine that they were preparing a gift for a same-sex person named Sam. In the recipient conditions, participants were asked to imagine that Sam was preparing a gift for them.

We also randomly assigned participants to two relationship-stage conditions. Within each condition, participants were randomly assigned to one of two scenarios. In the early-stage conditions, the scenarios described Sam as either a new friend or a cousin's partner who the participant would meet for the first time. In the very-close conditions, the scenarios

described Sam as either a best friend or a close sibling (see original wording in the web appendix).

We included a manipulation check on perceived social closeness as a result of the relationship-stage manipulation: "How close did you feel toward Sam in the scenario?" on a 9-point scale (1 = not at all, 9 = very close). As intended, social closeness significantly differed between the early-stage and very-close conditions ($M_{\text{early-stage}}$ = 5.34, *SD* = 1.66 vs. $M_{\text{very-close}}$ = 7.00, *SD* = 1.68), $t(619) = -12.36$, $p < .001$. Within each relationship-stage condition, the relationship was rated as similarly close across the two scenarios (early-stage: $M_{\text{scenario1}}$ = 5.52, *SD* = 1.49, vs. $M_{\text{scenario2}}$ = 5.17, *SD* = 1.80, $t(309) = -1.83$, $p = .068$; very-close: $M_{\text{scenario1}}$ = 7.06, *SD* = 1.69 vs. $M_{\text{scenario2}}$ = 6.94, *SD* = 1.68; $t(308) = .61$, $p = .544$). Therefore, we collapsed the scenario replicas, as planned in the pre-registration.

Then, participants read that the gift recipient [Sam/the participant] was a fan of classical music, had a big collection of classical music recordings including vinyl, CD, and digital albums, and that the gift giver [the participant/Sam] found a highly rated recording that was available in two formats for the same price (USD $10). The two options were a CD album and a digital album with an enhanced soundtrack (gifted as a small paper card with a unique access code inside). Both could be gift-wrapped. Participants were asked to make a binary choice between the CD album and the digital album. Then, we measured (1) the expected mnemonic effects of each gift on three items: "How often can this gift remind the recipient of the giver in the future?"; "How easily will the recipient think of the giver in the future because of this gift?"; and "How much can this gift make the recipient think of the giver in the future?" (1 = just a little, 7 = definitely), (2) the extent to which each gift was material and was experiential, using the same scales as in Study 2, (3) seven other gift characteristics, similar to those in Study 2 (positive reception, satisfaction, happiness, thoughtfulness, appropriateness, risk, and easy choice), and (4) age. (Although we pre-

registered more exploratory variables, we included only the above measures to shorten the survey. This is the only deviation from all pre-registrations.)

Results

Gift preferences. In the early-stage conditions, givers were more likely than recipients to choose the material gift (givers: 54.4% vs. recipients: 41.0%), $b_{perspective}$ = -.54, *SE* = .23, *p* = .019. This discrepancy was mitigated in the very-close conditions (givers: 50.6% vs. recipients: 53.9%), $b_{perspective}$ = -.13, *SE* = .23, *p* = .566, Figure 3. A binary logistic regression revealed a main effect of the perspective, $b_{perspective}$= 1.21, *SE* = .51, *p* = .018, no main effect of the relationship stage, b_{stage} = .82, *SE* = .51, *p* = .110, and a significant interaction, $b_{interaction}$ = .67, *SE* = .32, *p* = .038. The givers' choices did not differ between the early-stage and very-close conditions, b_{stage} = .15, *SE* = .23, *p* = .515, but more recipients chose the material gift in the very-close condition than in the early-stage condition, b_{stage} = .52, *SE* = .23, *p* = .022.

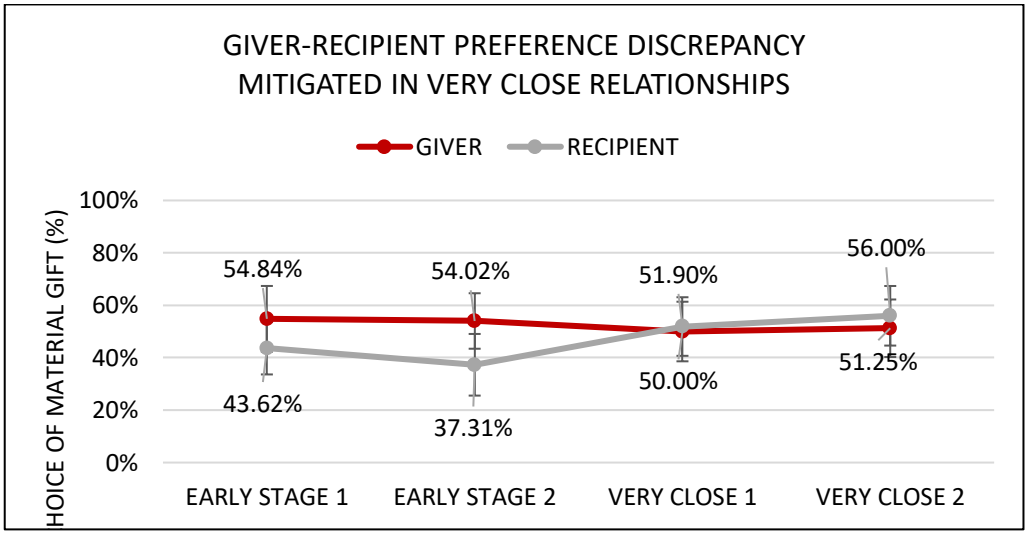

Figure 3. The discrepancy in the proportion of givers and recipients who chose the material gift (CD album) over the experiential gift (digital album) varied as a function of the stage of the giver-recipient relationship. Error bars represent 95% confidence intervals.

Expected mnemonic effects of each gift. The CD album was perceived to have a stronger mnemonic effects than the digital album (M_{CD} = 5.07, *SD* = 1.15 vs. $M_{digital}$ = 4.08, *SD* = 1.48), pairwise *t*(620) = 12.95, *p* < .001. This difference was not affected by the

perspective or relationship stage. We found no significant main effects or interactions in a two-way ANOVA on the difference in the expected mnemonic effects, with the perspective and relationship stage as between-subjects factors, $F(1, 617) < 1.92$, ps $> .167$.

Gift perceptions (material vs. experiential). Confirming the validity of the gift stimuli, the CD album was rated as a more material gift whereas the digital album was rated as a more experiential gift ($M_{CD} = 1.95$, $SD = 1.08$ vs. $M_{digital} = 3.57$, $SD = 1.14$), pairwise $t(620) = -27.20$, $p < .001$. This difference also did not vary between givers and recipients, $p = .75$.

Other gift characteristics. As in Study 2, we calculated a difference score between the two gifts for each characteristic. In the early-stage conditions, givers and recipients perceived similar differences between the two gifts on all seven characteristics (Table S4, web appendix), and none of the differences mediated the giver-recipient preference discrepancy. We did not find any significant differences in the very-close conditions, either.

Discussion

Study 4 established the giver-recipient relationship stage as another boundary condition of the preference discrepancy. As theorized, the discrepancy did not occur in very close relationships, in which the giver's interest in relationship mnemonics was reciprocated by the recipient. Notably, this difference emerged because givers made similar gift choices regardless of the relationship stage, whereas recipients were more likely to choose the material gift in a very close relationship than in an early-stage relationship.

At first glance, these results may appear at odds with a prior study (Goodman & Lim, 2018) in which givers were more likely to give experiential gifts to closer friends than to distant friends. However, a closer examination of these findings suggests they are largely orthogonal and theoretically compatible. In the aforementioned study, the increased preference for experiential gifts in closer (vs. distant) relationships was driven by increased

knowledge about the recipient's preference, which decreases the perceived social risk of giving an experiential gift. Indeed, we agree that experiential gifts can evoke greater concerns about social risk than material gifts, so our study held constant the giver's knowledge about the recipient's preferences and used a pair of gifts that contained identical content and differed only in their material versus experiential form. As a result, the perceived social risk associated with each gift did not differ between givers and recipients (Table S4 in the web appendix), and the givers' likelihood of choosing the experiential gift increased directionally but not significantly in the very-close condition relative to the early-stage condition.

Finally, it is noteworthy that we did not find perceived closeness to moderate the preference discrepancy in any previous studies, all of which involved developing relationships with varying levels of closeness. These findings imply that the moderating effect of relationship closeness is not continuous. Instead, the giver-recipient preference discrepancy is attenuated only when the relationship is *very* close, and most social relationships are not (yet) at such high levels of closeness and interdependence (Clark & Reis, 1988).

STUDY 5: EXPECTED CHANGES IN SOCIAL PRESENCE

In Study 5, we tested a theoretically critical moderator: an expected incidental increase in future interactions. We expected that the preference discrepancy would be mitigated when giver and recipient expect more frequent interactions in the future by attenuating the giver's desire to acquire a symbolic presence with a material gift. In addition, we explored how an expected decrease in social presence could influence the preference discrepancy. The giver, anticipating less frequent interactions, should still be motivated to gain a symbolic presence in the recipient's surroundings (i.e., no significant change from the baseline condition). For the recipient, however, the change in social presence gives rise to two possibilities: first, the recipient could be relatively nonchalant about the change in the

giver's social presence, so their gift preference may be unchanged and the giver-recipient preference discrepancy would persist. Alternatively, the expectation of less frequent interactions with the giver might increase the recipient's desire to preserve the giver's presence in their surroundings via a material gift, so the recipient's preference for the material gift might align with the giver's desire to give a material gift, attenuating the preference discrepancy. We tested these two contrasting possibilities.

Method

We planned for 700 participants, received 708 participants from Prolific for a short decision-making study, and obtained 698 valid responses (M_{age} = 30, 43% female) after the screening procedure. Study 5 had 2 (perspective: giver vs. recipient) × 3 (future social presence: baseline vs. increased vs. decreased) between-subjects design. We pre-registered this study (https://aspredicted.org/blind.php?x=39kq8t).

Participants were first asked to indicate their gender and imagine a same-sex friend named Joey, whom they had known for some time. We randomly assigned participants to the six conditions. We first describe the three social-presence conditions from the giver's perspective. In the baseline condition, participants read, "Suppose Joey lives in the same city as you, but in a different neighborhood. You occasionally hang out and have a good time together. You appreciate this friend and would like to maintain your friendship in the future." In the increased-presence condition, participants read, "Suppose Joey has been living in a different state from you for two years and will be relocated back to your town soon. In just a week, Joey will be moving back to your part of town, close to your neighborhood. You expect to see him/her often and you are excited about hanging out with Joey regularly again after he/she moves back." In the decreased-presence condition, participants read, "Suppose Joey currently lives in the same neighborhood as you. You often hang out and have a good time together. In just a week, Joey will be moving away to another town in a different state,

so the two of you won't be able to hang out as often in the future. You both will miss hanging out together and hope to keep in touch with each other." The recipient conditions were similar to the giver conditions except that participants imagined they were moving back to (or out of) Joey's town in the increased- and the decreased-presence conditions, respectively.

We included a manipulation check about future social presence: "How much do you expect to meet up with Joey in person in the near future?" (1 = not at all, 5 = very frequently). As intended, participants expected to meet up with Joey in the near future more often in the increased-presence conditions than in the baseline conditions (M_{baseline} = 3.61, *SD* =.81 vs. $M_{\text{increased-presence}}$ = 3.84, *SD* = .77), $t(466) = -3.14$, $p = .002$, and less often in the decreased-presence conditions than in the baseline conditions ($M_{\text{decreased-presence}}$ = 2.76, *SD* = .97), $t(466) = 10.22$, $p < .001$. This measure did not differ between givers and recipients in any of the social-presence conditions.

Further, participants read about an upcoming birthday gift choice. Participants read that the recipient [Joey/the participant] likes reading and keeps a bookshelf in the living room and uses a reading tablet for ebooks and audiobooks as well. The giver [the participant/Joey] found a new fiction book that comes in both hard copy ("with a well-designed, attention-grabbing cover that will occupy a salient spot on his/her bookshelf") and audiobook ("combines a digital book with a complete audiobook track by a top-rated narrator, and is thus more convenient and flexible for tablet reading on the go") versions. Both versions are available at the same price and can be delivered to the recipient directly. A pretest with the same population ($N = 61$) validated that these two gifts were indeed considered as typical material versus experiential gifts, pairwise $t(60) = 11.43$, $p < .001$ (see web appendix).

Participants were then asked to make a binary choice for their preferred gift to give/receive. After that, we included process measures. First, we explored participants' intention to induce giver-related and occasion-related mnemonic effects, separately: "When

choosing between the gifts, how much did you intend the gift to be a reminder [of you for Joey/of Joey for you] in the future?" (1 = not at all, 7 = very much) and "When choosing between the gifts, how much did you intend the gift to be a reminder of [Joey's/your] birthday in the future?" (1 = not at all, 7 = very much). Second and more importantly, to examine whether participants actually considered giver-related memory consequences (similar to our mediator in Study 2), we asked participants to write down the reasons for their gift choice in an open text box (minimum of 20 characters) and had hypothesis-blind and condition-blind research assistants code the thoughts.

We also measured the expected mnemonic effects of each gift using the same three scales as in Study 4, along with six other gift characteristics (positively received, satisfying, thoughtful, appropriate, risky, easy choice). Last, participants filled out their perceived closeness with Joey (1 = not close at all, 9 = extremely close) and age.

Results

Gift preferences. In the baseline conditions, we replicated the giver-recipient preference discrepancy: givers were more likely than recipients to choose the material gift (givers: 86.4% vs. recipients: 75.2%, Figure 4), $b_{\text{perspective}} = -.74$, $SE = .34$, $p = .031$. This discrepancy was not observed in the increased-presence conditions (givers: 76.1% vs. recipients: 81.4%), $b_{\text{perspective}} = .32$, $SE = .33$, $p = .32$, or in the decreased-presence conditions (givers: 84.3% vs. recipients: 84.8%), $b_{\text{perspective}} = .04$, $SE = .36$, $p = .91$.

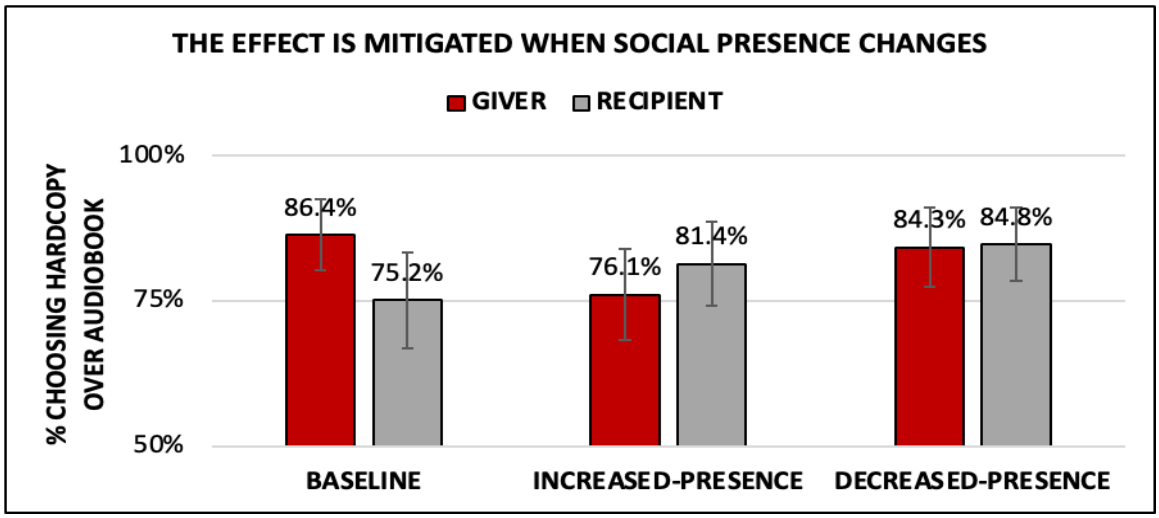

Figure 4. In the baseline conditions, givers were more likely than recipients to choose the material gift over the experiential gift. This preference discrepancy was not observed in the increased-presence or decreased-presence conditions. Error bars represent 95% confidence intervals.

Moderation between the baseline and increased-presence conditions. Next, we subjected the baseline and increased-presence conditions to a factorial model in binary logistic regression to test the proposed moderation, a critical test of our mechanism. We found a main effect of the perspective, $b_{perspective}$ = -.68, *SE* = .34, *p* = .044, a main effect of social presence, $b_{presence}$ = -1.64, *SE* = .75, *p* = .028, and, more importantly, the predicted interaction between the perspective and social presence, $b_{interaction}$ = 1.00, *SE* = .47, *p* = .033. Specifically, givers were less likely to choose the material gift in the increased-presence condition (76.1%) than in the baseline condition (86.4%), *b* = .69, *SE* = .34, *p* = .041, while recipients had similar choices in both conditions (81.4% vs. 75.2%), *b* = -.37, *SE* = .33, *p* = .264 (Figure 4).

Moderation between the baseline and decreased-presence conditions. We also subjected the baseline and decreased-presence conditions to a factorial model in binary logistic regression. In this exploratory analysis, we found no main effect of the perspective, $b_{perspective}$ = .04, *SE* = .36, *p* < .250, a marginally significant main effect of social presence, $b_{presence}$ = .61, *SE* = .33, *p* = .068, and a directional (but non-significant) interaction, $b_{interaction}$

= -.72, *SE* = .50, *p* = .145. Recipients were more likely to choose the material gift in the decreased-presence condition (84.8%) than in the baseline condition (75.2%), *b* = -.30, *SE* = .17, *p* = .068, while givers were similarly likely in both conditions (84.3% vs. 86.4%), *b* = .09, *SE* = .19, *p* = .645 (Figure 4).

Intention to induce giver-related mnemonic effects. In the baseline conditions, givers had stronger intentions than recipients to induce giver-related mnemonic effects (M_{giver} = 4.50, *SD* = 1.87 vs. $M_{recipient}$ = 3.93, *SD* = 1.98), *t*(233) = 2.24, *p* = .026. This difference disappeared in the increased-presence conditions (M_{giver} = 4.18, *SD* = 1.77 vs. $M_{recipient}$ = 4.34, *SD* = 1.86), *t*(228) < 1, *p* = .51, and the decreased-presence conditions (M_{giver} = 4.86, *SD* = 1.77 vs. $M_{recipient}$ = 4.88, *SD* = 1.92), *t*(231) < 1, *p* = .94. Not surprisingly, the social-presence manipulation had a main effect whereby expecting more interactions decreased the intentions to induce giver-related mnemonic effects, *F*(2, 695) = 6.03, *p* < .001; this manipulation also interacted with the perspective (giver vs. recipient) in ways similar to those on gift choice (interaction *F*(1, 416) = 3.50, *p* = .039 in the baseline and increased-presence conditions; interaction *F*(1, 464) = 3.56, *p* = .096 in the baseline and decreased-presence conditions). However, these intentions did not mediate the preference discrepancy in simple or moderated mediations.

Intention to induce occasion-related mnemonic effects. Givers indicated a stronger intention than recipients to induce occasion-related mnemonic effects, *F*(1, 692) = 26.6, *p* = .036. This discrepancy occurred in all three conditions: the baseline conditions (M_{giver} = 4.36, *SD* = 1.75 vs. $M_{recipient}$ = 3.39, *SD* = 1.92), *t*(233) = 4.05, *p* < .001, the increased-presence conditions (M_{giver} = 4.21, *SD* = 1.60 vs. $M_{recipient}$ = 3.67, *SD* = 2.00), *t*(228) = 2.26, *p* = .025, and the decreased-presence conditions (M_{giver} = 4.24, *SD* = 1.76 vs. $M_{recipient}$ = 3.65, *SD* = 2.04), *t*(231) = 2.38, *p* = .018. Unlike the intention to induce giver-related mnemonic effects, the intention to induce occasion-related mnemonic effects was not influenced by the

social-presence manipulation, $F(2, 695) < 1$, $p = .97$. The intention to induce occasion-related mnemonic effects did not mediate the preference discrepancy in simple or moderated mediation models.

Coded thought listings. The research assistants first read through all the listings to identify the most frequent reasons for the gift choices. This resulted in four non-exclusive considerations: 1) giver-related mnemonic effects (i.e., the extent to which the gift will prompt the recipient to retrieve memories about the giver; occasion-related mnemonic effects were mentioned too infrequently to be a category), 2) context-independent idiosyncratic (i.e., personal) preferences, 3) functionality (e.g., usefulness, convenience, long-term value), and 4) hedonic value (e.g., a pleasant sensory experience when using the gift; see examples in Table S5, web appendix).

Then, the two research assistants independently coded the thought listings on these four items. When the ratings for any item had low internal reliability ($\alpha < .70$), we asked the coders to discuss the discrepancies and recode the responses. We averaged their ratings once the two coders reached high internal reliability ($\alpha \geq .70$). We obtained four averaged ratings for each text response, each with a value between 0 and 1 (1 = yes, .5 = ambiguous, 0 = no).

***1. Giver-related memory consequences*.** In the baseline conditions, givers were more likely than recipients to mention memory consequences ($M_{giver} = .29$, $SD = .44$ vs. $M_{recipient} = .15$, $SD = .35$, Table 1), Mann-Whitney U Test $p = .006$, but this consideration was similarly prevalent among givers and recipients in the increased-presence conditions ($M_{giver} = .16$, $SD = .37$ vs. $M_{recipient} = .15$, $SD = .36$), Mann-Whitney U Test $p = .397$, and in the decreased-presence conditions ($M_{giver} = .36$, $SD = .45$ vs. $M_{recipient} = .31$, $SD = .44$), Mann-Whitney U Test $p = .803$. Indeed, the social-presence manipulation systematically influenced the likelihood of mentioning memory consequences, Kruskal-Wallis Test = 25.69, $p < .001$, such that the likelihood in the baseline conditions ($M_{baseline} = .22$, $SD = .41$) was higher than

in the increased-presence conditions ($M_{\text{increased-presence}}$ = .16, *SD* = .36), Mann-Whitney U Test *p* = .003, but lower than in the decreased-presence conditions ($M_{\text{decreased-presence}}$ = .33, *SD* = .45), Mann-Whitney U Test *p* = .037. These results were highly consistent with our manipulation check (frequency of future social interactions).

Table 1. Coded scores for mentions of memory consequences in thought listings.

Social Presence	Perspective	N	Score
Baseline	Giver	126	*M* = .29 (.44)
	Recipient	109	*M* = .15 (.35)
Increased Presence	Giver	117	*M* = .16 (.37)
	Recipient	113	*M* = .15 (.36)
Decreased Presence	Giver	107	*M* = .36 (.45)
	Recipient	124	*M* = .31 (.44)

More importantly, considerations of memory consequences mediated the effect of the perspective (giver vs. recipient) on the gift choice (material vs. experiential) in the baseline conditions, indirect effect = 3.93, *SE* = 1.40, 95% CI = [1.10, 6.57]. This mediation supports our hypothesis that the giver-recipient preference discrepancy occurs because givers are more likely than recipients to consider how gifts may induce giver-related mnemonic effects.

We also found significant moderated mediation between the baseline conditions and the increased-presence conditions (Process Model 15: index = -.83, *SE* = .37, 95% CI = [-1.56, -.10]); specifically, the mediation was mitigated in the increased-presence conditions (indirect effect = 1.38, *SE* = .62, 95% CI = [.17, 2.60]) relative to the baseline conditions. We found no significant moderated mediation between the baseline conditions and the decreased-presence conditions (index = -2.12, *SE* = 1.18, 95% CI = [-3.84, .30]) due to the insignificant moderation effect. However, the mediation was directionally mitigated in the decreased-presence conditions (indirect effect = .27, *SE* = .97, 95% CI = [.02, 3.83]) relative to the baseline conditions. In sum, the expected change in social presence influenced the extent to which the difference between givers' and recipients' considerations of memory consequences translated into their gift choices.

***2. Idiosyncratic preferences*.** This item reflects egocentric biases, which are known to accompany giver-recipient preference discrepancies (e.g., Flynn & Adams, 2009; Zhang & Epley, 2009). Consistent with prior findings, recipients were more likely than givers to mention personal preferences as a reason for the gift choice across all social-presence conditions (M_{giver} = .25, *SD* = .39 vs. $M_{recipient}$ = .59, *SD* = .45), Mann-Whitney U Test $p < .001$. This discrepancy was significant in each social-presence condition, *p*s < .001, and the social-presence manipulation did not influence these considerations, Kruskal-Wallis Test = 1.83, $p = .400$. Considerations of personal preferences did not mediate the preference discrepancy in the baseline conditions, indirect effect = .26, *SE* = .80, 95% CI = [-.63, 1.42]. Thus, the differential considerations of idiosyncratic preferences could not explain the giver-recipient preference-discrepancy for material versus experiential gifts in the present context.

***3. Functionality*.** Across the social-presence conditions, givers were marginally more likely than recipients to mention functionality as a reason for the gift choice (M_{giver} = .59, *SD* = .45 vs. $M_{recipient}$ = .47, *SD* = .48), Mann-Whitney U Test $p = .055$, and the social-presence manipulation did not influence these considerations, Kruskal-Wallis Test = .94, $p = .624$. Considerations of functionality did not mediate the effect of the perspective on the gift choice in the baseline conditions, indirect effect = .18, *SE* = 1.08, 95% CI = [-.63, 3.55].

***4. Hedonic value*.** Across the social-presence conditions, givers and recipients were similarly likely to mention hedonic value as a reason for the gift choice (M_{giver} = .51, *SD* = .49 vs. $M_{recipient}$ = .46, *SD* = .49), Mann-Whitney U Test $p = .142$, and the social-presence manipulation did not influence these considerations, Kruskal-Wallis Test = 1.92, $p = .383$. Considerations of hedonic value did not mediate the effect of the perspective on the gift choice in the baseline conditions, indirect effect = .52, *SE* = 1.60, 95% CI = [-.72, 5.50].

Expected mnemonic effects of gifts. The hardcopy book was perceived to have stronger mnemonic effects than the audiobook (M_{book} = 5.31, *SD* = 1.14 vs. $M_{audiobook}$ = 3.59,

SD = 1.41), pairwise $t(697) = 30.1$, $p < .001$. This difference was not affected by the perspective or social presence manipulation, Fs < 1, ps > .250.

Other gift characteristics. We calculated a difference score between the two gifts for each characteristic as in Studies 2 and 4 and did not find meaningful results that could explain our findings. (We display these results in Table S6 in the web appendix). Last, perceived closeness (*M* = 6.60 out of 9, *SD* = 1.56) was similar across all conditions and did not affect any of the above results.

Discussion

Study 5 revealed several additional insights. First, in the baseline conditions, we replicated the preference discrepancy and found that actual considerations of the gift's memory consequences mediated the preference discrepancy, consistent with the mediation results in Study 2. Meanwhile, the ratings of the intention to induce giver-related memory consequences did not capture a significant mechanism, possibly due to the measure's higher susceptibility to social desirability biases.

Second, as predicted, the preference discrepancy disappeared in the increased-presence conditions. The anticipation of more frequent giver-recipient interactions attenuated the giver's desire to gain symbolic presence with a gift. Consequently, givers were no more likely than recipients to choose the material gift. A moderated mediation supported this prediction and corroborated the proposed mechanism. Notably, this predicted moderation is distinct from the moderation in Study 4, in which the preference discrepancy was mitigated in very close relationships because of an *increase in the recipients' preferences for material gifts*. In Study 5, the preference discrepancy was mitigated by anticipation of increased interactions by *decreasing the givers' preferences for material gifts*.

Third, in the decreased-presence conditions, the preference discrepancy was directionally mitigated. We speculate that the anticipated decrease in interactions boosted

recipients' desires to receive a gift that would generate giver-related memories. This speculation is supported by the finding that the intention to induce giver-related mnemonic effects was significantly higher among recipients in the decreased-presence conditions than in the baseline conditions, contrast estimate = .95, $p < .001$. As a result, in the decreased-presence conditions, givers and recipients were similarly likely to consider the memory consequences of gifts, and similarly likely to choose the material gift.

Results from this study also showed that the mnemonic gifting strategy primarily reflects givers' considerations of giver-related, instead of occasion-related, mnemonic effects. In fact, very few givers and recipients mentioned occasion-related mnemonic effects in their thought listings, even though givers, according to the intention ratings, reported being keener than recipients to induce occasion-related mnemonic effects. These reported intentions are in fact consistent with a generic "ought" norm associated with occasion-related mnemonic effects (e.g., "a gift ought to commemorate an important event for the recipient"). It is conceivable that givers were more pressured than recipients to conform to such norms when asked about their intentions, but clearly, occasion-related mnemonic effects were not a primary reason for their gift choice.

Last, even though memory consequences were not the most salient criterion on participants' minds (28% of participants averaged across all conditions), among mentions of functionality (51%), hedonic value (49%), and idiosyncratic preferences (42%), this previously overlooked cause was the *only* criterion that uniquely explained the giver-recipient preference discrepancy. This novel mechanism has substantial theoretical and practical implications, which we discuss next.

GENERAL DISCUSSION

Six studies document a giver-recipient preference discrepancy and identify a unique mnemonic gifting strategy underlying it. In various developing relationships, givers gravitate

toward material gifts because they are more likely than recipients to consider the memory consequences of the gift options. We demonstrate the giver-recipient preference discrepancy in a wide range of developing relationships (e.g., new friends, acquaintances, high school friends, friends) and across diverse gifting occasions (e.g., thank-you gift, important life events, birthdays, Christmas). This preference discrepancy is attenuated by situational factors: an unpleasant (instead of pleasant) gifting occasion, a very close (instead of developing) relationship between the giver and recipient (e.g., close siblings, long-time best friends), and an expected incidental increase in future interactions between the giver and recipient. These boundary conditions corroborate the proposed mechanism. Taken together, this research presents the first evidence for the mnemonic gifting strategy that accounts for the giver-recipient preference discrepancy between material and experiential gifts.

Although the current research focuses on the mnemonic gifting strategy as a mechanism for giver-recipient preference discrepancy, it does not mean that it is the only mechanism at play. A burgeoning gift-giving literature has uncovered a host of gift characteristics that give rise to giver-recipient preference discrepancies, often because the characteristics are perceived differently by givers and recipients (e.g., Baskin et al., 2014; Yang & Urminsky, 2018; see review in Galak et al., 2016). Within pre-selected pairs of material and experiential gifts, we measured the most notable variables (e.g., positively received, satisfying, thoughtful, appropriate, a risky choice, an easy choice, flexible, typical, feasible, desirable) in some main studies and in other pre-tests and post-tests (see details in the web appendix). We did not find support for differential perceptions of these characteristics as an explanation the observed preference discrepancy. For example, material gifts could be chosen simply because they are perceived as less risky than experiential gifts when the givers know little about the recipients (Goodman & Lim, 2018), which could influence gift choice especially in distant relationships (see Goodman & Lim, 2018).

However, in our studies where preference information is held constant between the material and experiential gifts (e.g., Studies 2, 4 and 5), we still observed the preference discrepancy, which is more parsimoniously explained by the mnemonic account.

Nonetheless, we acknowledge that other mechanisms may also contribute to the observed preference discrepancy. In particular, while we identified congruent evidence for the mnemonic gifting strategy (Studies 2–5), we also found preliminary evidence in Studies 1b and 3 that a secondary "experience dilution" strategy may complement the primary mnemonic gifting strategy to drive the preference discrepancy between material and experiential gifts. Both strategies reflect givers' proactive efforts toward interpersonal memory management, a previously overlooked motive. Future research may further examine how different interpersonal memory management strategies affect gift choices and, more broadly, other consumer behaviors with interpersonal and social consequences.

This research makes several notable contributions. First, it identifies a novel cause of miscalibrated gift choices. Many recent studies portray gift-givers as somewhat myopic and unconcerned with long-term consequences (for a review, see Galak et al., 2016). For example, givers, relative to recipients, attach more importance to the element of surprise at the time of the gift exchange (Gino & Flynn, 2011), prefer gifts that induce more affective reactions (Yang & Urminsky, 2018), and focus more on the effort put into the gift than the future benefits for the recipient (Zhang & Epley, 2009). The mnemonic gifting strategy identified here stems not from a myopic focus but rather from a keen intent to manage and maximize a gift's long-term interpersonal consequences. Despite givers' foresightedness in considering long-term memory consequences, miscalibrated gift choices emerge nonetheless because givers overly prioritize the mnemonic effects of gifts.

Second, this research bridges the disparate perspectives offered in previous studies on how consumers choose and appreciate material versus experiential gifts (Chan & Mogilner,

2017; Chun & Hiang, 2016; Goodman & Lim, 2018). We identify an important explanation for why givers fail to anticipate that experiential gifts are more effective than material gifts at fostering social bonds (Chan & Mogilner, 2017; see also Chun & Hiang, 2016): Givers are drawn to the mnemonic effects of material gifts. Although the perspective gap between givers and recipients is difficult to eliminate, it is, fortunately, mitigated in very close relationships (see also Goodman & Lim, 2018) and by several situational factors.

A third contribution regards the theoretical and empirical conceptualization of material and experiential purchases. The bipolar material-experiential distinction has received criticism since it was first proposed (e.g., Dunn & Weidman, 2015; Guevarra & Howell, 2015; Schmitt et al., 2015; cf. Gilovich et al., 2015a). Some have argued that the distinction is innately confounded and that not all purchases fall into these binary categories. We circumvented these concerns with pre-selected pairs of prototypical material and experiential gifts that were otherwise similar or even identical. More importantly, we also directly tackled the validity of the bipolar conceptualization in Studies 1b and 3 by separating the scales and differentiating between the intended possession and consumption consequences, in line with the original definitions of material and experiential purchases (Van Boven & Gilovich, 2003). We found that intended possession and consumption consequences are somewhat orthogonal (*r*s = -.23 ~ -.53; see full details in the web appendix) instead of hydraulic to each other, as presumed in the bipolar distinction. These more refined measures helped validate our main findings in the context of a problematic bipolar conceptualization, and this approach may also help future researchers to disambiguate whether a focal finding arises from the "material" dimension or the "experiential" dimension.

More broadly, this research joins growing evidence that intuitions about memory can backfire. Memory is fundamentally modulated by the physical world (Sutton, 2003), but ostensibly reliable ways to preserve memory, such as writing or photo-taking, often weaken

key aspects of memory (Henkel, 2014; Schooler & Engstler-Schooler, 1990; He & Kivetz, 2021). Our findings show that the givers' choice of material gifts as interpersonal mnemonic devices is not welcomed by recipients. Future research may find it beneficial to examine the actual mnemonic effects of gifts and the various aspects of their relationship consequences. For instance, do material gifts indeed keep the recipients' memory about the giver more alive? Specifically, do material gifts increase the giver's social capital in measurable ways, such as inducing larger reciprocal favors? Alternatively, do material gifts induce a sense of indebtedness that hampers the giver-recipient relationship in the long run? These questions also have significant marketing and consumer welfare implications.

This research opens several avenues for future research. First, it would be interesting to explore how changes in the mnemonic properties of material and experiential gifts would influence the preference discrepancy. For example, material gifts vary in expected visibility; we predict a weaker preference discrepancy for material gifts that are expected to be kept out of sight most of the time (e.g., a special gardening tool, or a skiing hat for an infrequent skier) than for material gifts that are expected to occupy a salient visual spot in the recipient's immediate surroundings. Conversely, if an experiential gift is accompanied by a material memento (e.g., a keepsake corkscrew inscribed with the giver's name and message at the end of the recipient's wine tour), our theorization suggests that givers and recipients may find the experiential gift similarly attractive.

Second, recent studies show that when choosing between sentimental gifts (i.e., emotionally laden items associated with important memories, such as a picture at graduation) and gifts with superficial attributes that match the preferences of the recipient, givers do not prefer sentimental gifts as much as recipients because givers perceive sentimental gifts as riskier than "preference-matching" gifts (Givi & Galak, 2017). While the sentimental value of a gift is relevant to the mnemonic effects of a gift, the tradeoff between sentimental and

preference-matching gifts cannot be easily mapped onto our focal comparison between material and experiential gifts. Moreover, our data showed that perceived risk could not explain our main findings. Rather, we conjecture that sentimental value may compound a material gift's expected mnemonic effect by connecting the gift with existing positive memories and evoking stronger emotional responses upon memory retrieval. As a result, the preference discrepancy that we observed may increase when sentimental value is added to both material and experiential gifts (e.g., if the book had a special meaning to the giver and the recipient in Study 5). Future research may further examine this relationship.

Third, the preference discrepancy may also be affected by the primary goals of gift-giving. We primarily examined gift choices when relationship bonding goals are present. When these goals are absent, such as when a gift is prompted as a quid pro quo for a previous favor with little relationship implications for the giver and the recipient, it is conceivable that givers would not use material gifts as relationship mnemonics and the preference discrepancy may be attenuated. These questions have direct implications for gift marketing and await more research in the future.

Finally, the managerial implications should also be noted. For marketers, understanding the differential preferences for material versus experiential gifts may inform savvier product marketing strategies that strike a balance between the giver's purchase intention and the recipient's long-term satisfaction. For managers of customer relationships, this research suggests caution over common gift designs. While companies often give away logoed material gifts to improve clients' impressions of the brand and to ingratiate clients, the efforts may be futile and wasteful if clients do not welcome the material gifts and put away or even discard them. Individual consumers can also benefit from an awareness of the limits of interpersonal mnemonic devices. We hope that consumers can learn to give material gifts more selectively—then, fewer gifts may become long-term tenants of recipients' garages.

The gift market is economically substantial, so reducing the giver-recipient preference discrepancy at the micro level can, hopefully, improve market efficiency at the macro level.

REFERENCES

Baskin, E., Wakslak, C. J., Trope, Y., & Novemsky, N. (2014). Why feasibility matters more to gift receivers than to givers: A construal-level approach to gift giving. *Journal of Consumer Research, 41*(1), 169–182. https://doi.org/10.1086/675737.

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.

Bellezza, F. (1996). Mnemonic methods to enhance storage and retrieval. In E. L. Bjork & R. A. Bjork (Eds.), *Memory: Handbook of Perception and Cognition* (pp. 345–380). San Diego, CA: Academic Press.

Bellezza, F. S. (1981). Mnemonic devices: Classification, characteristics, and criteria. *Review of Educational Research, 51*(2), 247–275. https://doi.org/10.2307/1170198.

Berscheid, E., Snyder, M. & Omoto, A. M. (1989), "The relationship closeness inventory: Assessing the closeness of interpersonal relationships." *Journal of Personality and Social Psychology* 57, no. 5, 792.

Bourdieu, P. (1985). The forms of social capital. In J. G. Richardson (Ed.), Handbook of theory and research for the sociology of education (pp. 241-258). New York: Greenwood

Bugelski, B. (1970). Words and things and images. *American Psychologist, 25*(11), 1002–1012. https://doi.org/10.1037/h0030150.

Chan, C., & Mogilner, C. (2017). Experiential gifts foster stronger social relationships than material gifts. *Journal of Consumer Research, 43*(6), 913–931. https://doi.org/10.1093/jcr/ucw067.

Choi, J., Kim, B. K., Choi, I., & Yi, Y. (2006). Variety-seeking tendency in choice for others: Interpersonal and intrapersonal causes. *Journal of Consumer Research, 32*(4), 590–595. https://doi.org/10.1086/500490.

Chun, H. H., & Hiang, Y. W. (2016). Free drink or free mug? Managing service experience with experiential vs. material complimentary gifts. *Service Science, 8*(2), 184-202. https://doi.org/10.1287/serv.2016.0138.

Clark, M. S. (1983). Reactions to aid in communal and exchange relationships. In J. D. Fisher, A. Nadler, & B. M. DePaulo (Eds.), New directions in helping (Vol. 1, pp. 281-304). San Diego, CA: Academic Press.

Clark, M. S., & Reis, H. T. (1988). Interpersonal processes in close relationships. *Annual review of psychology* 39, no. 1, 609-672.

Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you happy, then you probably aren't spending it right. *Journal of Consumer Psychology, 21*(2), 115–125. https://doi.org/10.1016/j.jcps.2011.02.002.

Dunn, E. W., & Weidman, A. C. (2015). Building a science of spending: Lessons from the past and directions for the future. *Journal of Consumer Psychology*, *25*(1), 172-178. https://doi.org/10.1016/j.jcps.2014.08.003.

Flynn, F. J., & Adams, G. S. (2009). Money can't buy love: Asymmetric beliefs about gift price and feelings of appreciation. *Journal of Experimental Social Psychology*, *45*(2), 404–409. https://doi.org/10.1016/j.jesp.2008.11.003.

Galak, J., Givi, J., & Williams, E. F. (2016). Why certain gifts are great to give but not to get: A framework for understanding errors in gift giving. *Current Directions in Psychological Science*, *25*(6), 380-385.

Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: an integrative review of implicit and explicit attitude change. *Psychological bulletin* 132, no. 5, 692.

Gino, F., & Flynn, F. J. (2011). Give them what they want: The benefits of explicitness in gift exchange. *Journal of Experimental Social Psychology, 47*(5), 915–922. https://doi.org/10.1016/j.jesp.2011.03.015.

Gilovich, T., Kumar, A., & Jampol, L. (2015). A wonderful life: Experiential consumption and the pursuit of happiness. *Journal of Consumer Psychology*, *25*(1), 152-165. https://doi.org/10.1016/j.jcps.2014.08.004.

Givi, J., & Galak, J. (2017). "Sentimental value and gift giving: Givers' fears of getting it wrong prevents them from getting it right." *Journal of Consumer Psychology 27*(4), 473-479.

Goodman, J. K., & Lim, S. (2018). When consumers prefer to give material gifts instead of experiences: The role of social distance. *Journal of Consumer Research*, *45*(2), 365-382. https://doi.org/10.1093/jcr/ucy010.

Goodman, J. K., Malkoc, S. A., & Stephenson, B. L. (2016). Celebrate or commemorate? A material purchase advantage when honoring special life events. *Journal of the Association for Consumer Research*, *1*(4), 497-508. http://doi.org/10.1086/688352.

Guevarra, D. A., & Howell, R. T. (2015). To have in order to do: Exploring the effects of consuming experiential products on well-being. *Journal of Consumer Psychology*, *25*(1), 28-41. https://doi.org/10.1016/j.jcps.2014.06.006.

Harris, J. E. (1980). Memory aids people use: Two interview studies. *Memory & Cognition, 8*(1), 31–38. https://doi.org/10.3758/bf03197549.

He, D., & Kivetz, R. (2021). Being in the moment: The effects of ephemeral communication in social media. Working Paper.

Henkel, L. A. (2014). Point-and-shoot memories: The influence of taking photos on memory for a museum tour. *Psychological Science*, *25*(2), 396-402. https://doi.org/10.1177/0956797613504438.

Kelley, H. H., Berscheid, E. Christensen, A., Harvey, J. H., Huston, T. L., Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (1983), "Analyzing close relationships." *Close Relationships* 20, 67.

Lin, N. (2001). Social capital: A theory of social structure and action. London: Cambridge University Press.

Mauss, M. (1925). The gift, trans. I. Cunnison. *Cohen & West, London*.

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*, *24*(1), 1–24. https://doi.org/10.1146/annurev.soc.24.1.1

Oberauer, K., & Lewandowsky, S. (2008). Forgetting in immediate serial recall: Decay, temporal distinctiveness, or interference? *Psychological Review* 115, no. 3, 544.

Rogers, T., & Milkman, K. L. (2016). Reminders through association. *Psychological Science*, *27*(7), 973–986. https://doi.org/10.1177/0956797616643071.

Rosen, S., & Tesser, A. (1970). On reluctance to communicate undesirable information: The MUM effect. *Sociometry,* 253-263.

Ruth, J. A., Otnes, C. C., & Brunel, F. F. (1999). Gift receipt and the reformulation of interpersonal relationships. *Journal of Consumer Research, 25*(4), 385–402. https://doi.org/10.1086/209546.

Schmitt, B., Brakus, J. J., & Zarantonello, L. (2015). From experiential psychology to consumer experience. *Journal of Consumer Psychology, 25*(1), 166-171. https://doi.org/10.1016/j.jcps.2014.09.001.

Schwartz, B. (1967). The social psychology of the gift. *American Journal of Sociology, 73*(1), 1–11. https://doi.org/10.1086/224432.

Sedikides, C., Campbell, W. K., Reader, G. D., & Elliot, A. J. (1999). The relationship closeness induction task. *Representative Research in Social Psychology, 23*, 1–4.

Schooler, J. W., & Engstler-Schooler, T. Y. (1990). Verbal overshadowing of visual memories: Some things are better left unsaid. *Cognitive Psychology, 22*(1), 36-71. https://doi.org/10.1016/0010-0285(90)90003-M.

Skowronski, J. J., Carlston, D. E., Mae, L. & Crawford, M. T. (1998). Spontaneous trait transference: Communicators take on the qualities they describe in others. *Journal of personality and social psychology* 74, no. 4, 837.

Srull, T. K. (1981). Person memory: Some tests of associative storage and retrieval models. *Journal of Experimental Psychology: Human Learning and Memory, 7*(6), 440–463. https://doi.org/10.1037/0278-7393.7.6.440.

Statista. (2018). Holiday gifts to be bought by consumers from 2012 to 2018, by item. Retrieved from https://www.statista.com/statistics/246589/holiday-gifts-to-be-bought-by-consumers-by-item

Sutton, J. (2003). Constructive Memory and Distributed Cognition: Towards an Interdisciplinary Framework. Retrieved from https://philpapers.org/

Tulving, E., & Thomson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. *Psychological Review, 80*(5), 352–373. https://doi.org/10.1037/h0020071.

Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology, 85*(6), 1193–1202. https://doi.org/10.1037/0022-3514.85.6.1193.

Waldfogel, J. (1993). The Deadweight Loss of Christmas. *American Economic Review, 83*(5), 1328-1336. https://doi.org/10.1257/aer.90.1.319.

Weidman, A. C., & Dunn, E. W. (2016). The unsung benefits of material things: Material purchases provide more frequent momentary happiness than experiential

purchases. *Social Psychological and Personality Science, 7*(4), 390-399. https://doi.org/10.1177/1948550615619761.

Yang, A. X., & Urminsky, O. (2018). The smile-seeking hypothesis: How immediate affective reactions motivate and reward gift giving. *Psychological Science, 29*(8), 1221–1233. https://doi.org/10.1177/0956797618761373.

Zauberman, G., Ratner, R. K., & Kim, B. K. (2008). Memories as assets: Strategic memory protection in choice over time. *Journal of Consumer Research, 35*(5), 715–728. https://doi.org/10.1086/592943.

Zhang, Y., & Epley, N. (2009). Self-centered social exchange: Differential use of costs versus benefits in prosocial reciprocity. *Journal of Personality and Social Psychology, 97*(5), 796–810. https://doi.org/10.1037/a0016233.

Zhang, Y., & Epley, N. (2012). Exaggerated, mispredicted, and misplaced: When “it's the thought that counts” in gift exchanges. *Journal of Experimental Psychology: General, 141*(4), 667. https://doi.org/10.1037/a0029223.