### **Social Hedonic Editing:**

# People Prefer to Experience Events at the Same Time as Others

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In press, Social Psychological and Personality Science

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Manuscript word count: 4,991

SOCIAL HEDONIC EDITING

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Abstract

Previous research testing the hedonic editing hypothesis examined preferences for the timing of events that happen to the self—asking, for example, whether people prefer to experience two positive or two negative events on the same or different day(s). Here, we examine preferences for the timing of events that happen to the self and to others—*social* hedonic editing. Across five studies (N = 2,522), we find people prefer to experience a positive or negative event on the same day that (vs. a different day than) another person experiences a similar positive or negative event. Studies 1–2 document this "preference for integration" in interpersonal (i.e., for the self and others), but not intrapersonal (i.e., for the self) contexts; Studies 3–4 suggest people prefer integration because it increases interpersonal connection; and Study 5 highlights a boundary condition. People do not prefer integration for very emotionally impactful events.

Keywords: hedonic editing, social decision making, interpersonal connection, event timing

People frequently coordinate the timing of events with others. For example, deliveries of gifts for multiple people can be scheduled to arrive at the same or different time(s); on a family group chat, siblings might announce a promotion and a pregnancy, respectively, on the same or different day(s); a soon-to-be-married couple can hold their bachelor and bachelorette parties on the same or different weekend(s).

While these decisions reflect interpersonal preferences for event timing (i.e., events that happen to the self and to others), previous research has largely focused on intrapersonal preferences (i.e., events that happen to the self). For example, people prefer event sequences that improve (Loewenstein & Prelec, 1993; Ross & Simonson, 1991); retrospective evaluations of experiences depend on the timing of the individual moments that comprise them (Kahneman et al., 1993; Redelmeier & Kahneman, 1996); and framing experiences as "firsts" or "lasts" can amplify their affective impact (LeBoeuf et al., 2014; O'Brien & Ellsworth, 2012).

Arguably the most prominent such theory, however, is the "hedonic editing hypothesis" (Thaler, 1985), which broadly asks whether people prefer multiple events (e.g., winning lotteries, incurring fines) to be temporally integrated or segregated (i.e., occur at the same time or different times). Because the prospect theory gain and loss functions are concave and convex, respectively (Kahneman & Tversky, 1979), the hedonic editing hypothesis suggests people should segregate gains (to avoid diminishing marginal sensitivity) and integrate losses (to take advantage of diminishing marginal sensitivity). Yet the prevailing evidence reveals people prefer segregating both positive and negative events (Linville & Fischer, 1991; Thaler & Johnson, 1990).

But what about events that happen to the self *and to others*? One possibility is that people simply treat an event that happens to the self and another event that happens to a friend as if both events happened to the self. This would be consistent with research demonstrating that

interpersonal closeness causes cognitive overlap between the self and others (Aron et al., 1991). Consequently, people believe they share traits (Goldstein & Cialdini, 2007), information (Wegner et al., 1991), and even resources (Tu et al., 2015) with close others. Thus, people might prefer segregating events that happen to the self and to others, just as they prefer segregating events that happen to the self. In this research, however, we explore the alternative possibility that people actually prefer integrating such events.

# **Social Hedonic Editing**

Why might people prefer events that happen to the self and to others to occur at the same time? We propose that people anticipate integration increases social connection. For example, when two friends each win or each lose \$100 on the same day (vs. on separate days), they will feel more psychologically close to each other. And given that connection is a fundamental human desire (Baumeister & Leary, 1995; Maner et al., 2007; Schachter, 1959), people should not only prefer integration, but also expect it to make them happier.

Consistent with this notion, past research has found that experiencing or attending to an event with others (vs. alone) can yield a number of positive consequences—for example, by amplifying positive affective reactions (Boothby et al., 2014), intensifying emotions (Shteynberg et al. 2014; Shteynberg, 2015), enriching retrospective evaluations (Ramanathan & McGill, 2007), and increasing enjoyment (Raghunathan & Corfman, 2006). If people intuit these consequences and actively seek out shared experience and collective attention as a result, then it is further possible that they believe these benefits can manifest even when different events that happen to different people are merely temporally integrated.

### **The Present Research**

The above theorizing yields three predictions. First, for events that happen to the self and to others (i.e., for *social* hedonic editing), people will prefer integration (vs. segregation), both overall (Study 1) and relative to identical events that happen to the self (Study 2). Second, we propose the preference for integration is driven by the anticipated increase in interpersonal connection that results. Thus, the desire to connect should moderate this preference when manipulated (Study 3) and mediate it when measured (Study 4). Third, we identify a boundary condition consistent with the renewable resources model (Linville & Fischer, 1991), which suggests people segregate events when their co-occurrence would overwhelm their capacity to fully savor gains and buffer losses. We reason that if people indeed maintain limited emotional resources—and treat the experiences of close others as their own (Aron et al., 1991)—they may not wish to experience emotionally impactful events at the same time as others (Study 5).

We conducted five studies (N = 2,522). Sample sizes were set a priori ( $\geq 100$  per cell) and provided adequate power ( $\beta s \geq .85$ ) according to post-hoc analyses of sample and effect sizes in G\*Power ( $\alpha = .05$ ; Faul et al., 2007). We report every variable tested and did not exclude any observations for any reason. Data, stimuli, and code are publicly available (<a href="https://osf.io/32bgz/?view\_only=607e03fd9dd746a785d54c068d79971e">https://osf.io/32bgz/?view\_only=607e03fd9dd746a785d54c068d79971e</a>).

# Study 1: Integration for the Self and Others

In Study 1 (preregistered: <a href="https://aspredicted.org/blind.php?x=dj3pu5">https://aspredicted.org/blind.php?x=dj3pu5</a>), participants indicated their preferences for the timing of two actual events (e.g., personal video messages from a local celebrity—one for the self and one for a friend). We predicted participants would prefer these events to occur on the same day (i.e., integration), rather than on different days (i.e., segregation).

#### Method

One hundred University of California, Los Angeles (UCLA), students ( $M_{age} = 23.71$ ; 68 women, 32 men) entered a lottery for "a personal video message from the head coach of UCLA's men's basketball team, Mick Cronin." Participants learned that the coach would record himself saying: "Hey, [winner]. Hope you're having a great day and staying safe. Just wanted to thank you for supporting research at UCLA. You're a baller. Go Bruins!" They also read that the winner would be able to choose a friend to receive a separate, similar message.

Next, participants submitted names and email addresses for both themselves and a friend and indicated, "in the event that you are selected to win," whether they wanted the personal video messages to be delivered on "the same day" or "different days." We randomly selected a winner and made arrangements for recording and delivery of the videos.<sup>2</sup>

#### Results

As predicted, the majority of participants (88%; 95% CI = [80%, 93%]) scheduled the personal video messages for "the same day" (vs. "different days"), reflecting an overall preference for integration,  $\chi^2(1) = 57.76$ , p < .001,  $log\ likelihood\ ratio = 65.24$ .

Study 1 thus provides initial evidence for our account. This preference for integration, however, seems to stand in contrast to the preference for segregation in intrapersonal contexts documented by previous work (Linville & Fischer, 1991; Thaler & Johnson, 1990). We therefore designed the next study to directly compare interpersonal to intrapersonal preferences with scenarios originally developed to test the hedonic editing hypothesis.

<sup>&</sup>lt;sup>1</sup> After describing the prize and raffle to participants, we allowed them to indicate: "I am not interested in receiving personal video messages from Coach Cronin for myself and a friend." Participants who responded affirmatively to this screening question did not view the event timing measure and skipped directly to the conclusion. We collected data until we obtained 100 valid observations (requiring 204 total responses to the screening question).

<sup>&</sup>lt;sup>2</sup> See https://youtu.be/B2naOpffyEI and https://youtu.be/OgvrwpAFHKI for the personal video messages.

## **Study 2: (Social) Hedonic Editing**

In Studies 2a–c, we adapted several classic tests of the hedonic editing hypothesis.

Participants considered either a pair of events that happened to the self (self-self condition) or the same pair of events that happened to the self and a friend (self-other condition). Participants indicated whether they preferred these events to happen on the same or different day(s). We predicted that participants in the self-other condition would prefer integration (vs. segregation), both overall and more so than participants in the self-self condition.

#### Method

For Study 2a, we opened an MTurk HIT for 300 assignments; 304 workers ( $M_{\rm age} = 37.60$ ; 143 women, 161 men) participated. For Study 2b, we opened an MTurk HIT for 300 assignments; 308 workers ( $M_{\rm age} = 35.68$ ; 132 women, 176 men) participated. For Study 2c, we opened an MTurk HIT for 800 assignments; 804 workers ( $M_{\rm age} = 37.21$ ; 379 women, 425 men) participated.

Studies 2a–b employed a single-factor (condition: self-self vs. self-other), between-subjects design. In the self-self condition, participants reviewed one of the following three pairs of events—one positive and two negative<sup>3</sup>—adapted from Thaler and Johnson (1990, Table 2, p. 649):

- (1) Lotteries. "You win \$50 in an office lottery" and "You win \$100 in an office lottery"
- (2) Taxes. "You receive a letter from the federal income tax authority saying that due to an arithmetical mistake \$200 must be paid" and "You receive a letter from the state income tax authority saying that due to an arithmetical mistake \$100 must be paid"
- (3) Fines. "You receive a \$40 parking ticket" and "You receive a bill for \$50 from the county clerk's office because a form was filled in improperly"

<sup>&</sup>lt;sup>3</sup> Given this imbalance, we did not analyze valence as a separate factor in Studies 2a–b. We manipulate and test valence in all subsequent studies.

In the self-other condition, participants first listed a friend. We then presented participants with one of the same three pairs of events described in the self-self condition, except we assigned one event to the participant (e.g., "You win \$50 in an office lottery") and one event to the friend (e.g., "[Friend] wins \$100 in an office lottery"). We counterbalanced, within each pair of events, which event we assigned to whom. In Study 2a, participants answered: "Would you be happier if these events occurred on the same day or two weeks apart?" In Study 2b, they answered: "Would you prefer these events to occur on the same day or on different days?"

In Study 2c, in addition to manipulating condition (self-self vs. self-other), we also manipulated event valence (positive vs. negative) and magnitude (small vs. medium) in a between-subjects design. In the self-self condition, participants read one of the following four pairs of events, adapted from Linville and Fischer (1991, Appendix, p. 22):

- (1) Positive/small. "You find a \$10 bill in the pocket of an old pair of pants that were about to be thrown out" and "You receive a \$10 refund from a local store that discovered an overcharge"
- (2) Positive/medium. "You win a \$500 prize from a local store" and "You win \$400 in a lottery sponsored by a local charity"
- (3) Negative/small. "You lose a pair of headphones that were just bought for \$10" and "You lose a \$10 bill"
- (4) Negative/medium. "You lose a non-refundable airline ticket worth \$500" and "You accidentally damage your smartphone. The repairs will cost \$400"

In the self-other condition, participants identified a friend. We then presented one of the same four pairs of events described in the self-self condition. However, within each pair of events, we assigned one event to the participant and one event to the friend. We counterbalanced, which event we assigned to whom. All participants then answered: "Would you be happier if these events occurred on the same day or two weeks apart?"

### Results

In Study 2a, the majority of participants in the self-other condition (69%, 95% CI = [61%, 76%]; Table 1) believed integrating (vs. segregating) the events would make them happier. This preference for integration was greater in the self-other condition than in the self-self condition (50%, 95% CI = [42%, 58%]),  $\chi^2(1) = 10.63$ , p = .001,  $\Phi_c = 0.19$ . In Study 2b, the majority of participants in the self-other condition (67%, 95% CI = [59%, 74%]) preferred integrating the events. This preference for integration was greater in the self-other condition than in the self-self condition (50%, 95% CI = [42%, 58%]),  $\chi^2(1) = 9.36$ , p = .002,  $\Phi_c = 0.17$ .

In Study 2c, the majority of participants in the self-other condition (65%, 95% CI = [60%, 70%]) believed integrating the events would make them happier. This preference for integration was greater in the self-other condition than in the self-self condition (42%, 95% CI = [37%, 47%]),  $\chi^2(1) = 44.04$ , p < .001,  $\Phi_c = 0.23$ . A logistic regression of the preference for integration on condition, valence, magnitude, and all possible interactions revealed a significant effect of condition, b = .64, z = 2.13, p = .033, valence, b = 1.90, z = 6.15, p < .001, and a valence × magnitude interaction, b = -1.30, z = 2.39, p = .017. Decomposition revealed a simple effect of magnitude for positive events,  $\chi^2(1) = 11.30$ , p < .001, such that participants preferred integration more for small events (self-self: 89%, 95% CI = [81%, 94%]; self-other: 72%, 95% CI = [63%, 80%]) than for medium events (self-self: 83%, 95% CI = [74%, 89%]; self-other: 43%, 95% CI = [40%, 53%]), but no simple effect of magnitude for negative events,  $\chi^2(1) = 0.00$ , p = .961.

Notably, while previous research documented a preference for segregation with these same basic scenarios, we replicate this pattern only in Study 2c, where the minority of participants in the self-self condition (42%, 95% CI = [37%, 47%]) believed integrating the

events would make them happier. It is possible that minor differences in stimuli account for this discrepancy.<sup>4</sup> Critically, however, across all scenarios participants preferred and expected to be happier with integration (vs. segregation) in the self-other conditions, both overall and more so than in the self-self conditions.

Table 1. Participants exhibited an overall preference for integrating events (i.e., experiencing them on the same day, rather than on different days) in the self-other condition. This preference for integration (vs. segregation) was also greater in the self-other condition than in the self-self condition

	Study 2a: Happ day" (vs. "dif		
Scenario	Self-other	Self-self	Sig.
Lotteries	74%	47%	$\chi^2(1) = 7.41, p = .007$
Taxes	77%	65%	$\chi^2(1) = 1.82, p = .177$
Fines	53%	39%	$\chi^2(1) = 2.06, p = .151$
Average	69%	50%	$\chi^2(3) = 11.29, p = .010$

Study 2b: Choice of "same day" (vs. "different days")

Scenario	Self-other	Self-self	Difference
Lotteries	65%	44%	$\chi^2(1) = 4.79, p = .209$
Taxes	76%	62%	$\chi^2(1) = 2.43, p = .119$
Fines	59%	43%	$\chi^2(1) = 2.57, p = .109$
Average	67%	50%	$\chi^2(3) = 9.79, p = .020$

Study 2c: Happier with "same day" (vs. "different days")

<u>-</u>	day (vs. different days)		<u> </u>
Scenario	Self-other	Self-self	Difference
Win \$500/\$400	83%	43%	$\chi^2(1) = 30.42, p < .001$
Win \$10/\$10	89%	72%	$\chi^2(1) = 8.14, p = .004$
Lose \$500/\$400	47%	24%	$\chi^2(1) = 11.37, p < .001$
Lose \$10/\$10	42%	28%	$\chi^2(1) = 4.53, p = .033$
Average	65%	42%	$\chi^2(4) = 54.45, p < .001$

<sup>&</sup>lt;sup>4</sup> For example, Thaler and Johnson (1990) offered a "no difference" option and asked participants to estimate the happiness of fictional characters.

## **Study 3: Desire to Connect Moderates the Preference for Integration**

Study 3 tests a theoretically derived moderator. Specifically, if integration increases interpersonal connection, then people should not prefer it for disliked others. Therefore, in Study 3, we asked participants to identify someone whom they liked or disliked, predicting attenuation of the effect when paired with a disliked counterpart.

### Method

We opened an MTurk HIT for 200 assignments; 202 workers ( $M_{age} = 34.92$ ; 84 women, 118 men) participated.

Study 3 employed a 2 (liking: like vs. dislike; between-subjects) × 2 (valence: positive vs. negative; within-subjects), mixed design. Participants first listed someone whom they either liked or disliked. Then, as a manipulation check, they indicated how much they liked this person ("Not at all" = 1; "Very much" = 7).

Participants subsequently reviewed six events—three positive (e.g., first class flight upgrade), three negative (e.g., missed flight)—in random order (Table 2). For each event, participants imagined that the event happened to them and that the same event happened to the identified other (e.g., "Suppose that you and [other person] both [got upgraded to first class on/missed] separate flights in separate airports") and determined if they would prefer the events to occur on the same or different day(s).

### Results

Confirming the manipulation, participants liked the identified other more in the "like" condition (M = 6.16, 95% CI = [5.98, 6.34]) than in the "dislike" condition (M = 1.67, 95% CI = [1.44, 1.91]), t(200) = 30.00, p < .001, d = 1.80.

We next fit a logistic regression of the preference for integration on liking, valence, and their interaction, using robust standard errors clustered at the participant level (McNeish & Kelley, 2019). The majority of participants in the "like" condition (68%, 95% CI = [63%, 73%]) preferred integrating (vs. segregating) the events, and this preference for integration was greater in the "like" condition than in the "dislike" condition (26%, 95% CI = [20%, 31%]),  $\chi^2(1)$  = 90.09, p < .001, odds ratio = 5.57. We did not observe a main effect of valence,  $\chi^2(1)$  = .16, p = .692, or interaction,  $\chi^2(1)$  = .64, p = .423.

Table 2. A preference for integration for liked but not disliked others

	Choice of "same day" (vs. "different days")		
	Like	Dislike	
Event	condition	condition	Difference
Received promotions at work	68%	25%	$\chi^2(1) = 35.57, p < .001$
Received tax refunds	60%	28%	$\chi^2(1) = 20.88, p < .001$
Upgraded to first class on flights	81%	24%	$\chi^2(1) = 57.52, p < .001$
Were sick and missed work	63%	21%	$\chi^2(1) = 34.42, p < .001$
Ended up in bad seats at a movie	63%	25%	$\chi^2(1) = 28.61, p < .001$
Missed flights	73%	34%	$\chi^2(1) = 29.83, p < .001$
Overall	68%	26%	$\chi^2(6) = 101.65, p < .001$

Study 3 finds that people prefer integration only with liked others. With evidence for a theoretically-derived moderator, we designed Study 4 to further test the underlying process through mediation.

### **Study 4: Desire to Connect Mediates the Preference for Integration**

In Study 4 (preregistered: <a href="https://aspredicted.org/blind.php?x=7vr2kq">https://aspredicted.org/blind.php?x=7vr2kq</a>), participants imagined someone with either the same or opposite political beliefs as themselves. We expected that when paired with someone maintaining opposite political beliefs, participants would no longer desire social connection and therefore no longer desire integration. We further predicted that measures of the former would mediate the effect of political beliefs on the latter.

### Method

We opened an MTurk HIT for 400 assignments; 404 workers ( $M_{age} = 39.97$ ; 170 women, 234 men) participated.

Study 4 employed a 2 (political beliefs: same vs. opposite) × 2 (valence: positive vs. negative), between-subjects design. In the "same" condition, participants described someone, "Person X," who "voted for the same candidate that you voted for in the last presidential election" and "holds the exact same position as you on every major political issue." In the "opposite" condition, participants described someone, "Person X," who "voted for the opponent of the candidate that you voted for in the last presidential election" and "holds the exact opposite position as you on every major political issue."

Participants then rated their desire for social connection (1 = "I definitely want to feel distant and disconnected from Person X"; 4 = "I don't care"; 7 = "I definitely want to feel close and connected to Person X") and reviewed one of two events from Study 3 (e.g., first class flight upgrade vs. missed flight). We asked: "Would you prefer these events to occur on the same day or on different days?" (1 = "Definitely different days"; 4 = "I don't care"; 7 = "Definitely the same day").

## Results

An ANOVA of the preference for integration on political beliefs condition, valence, and their interaction revealed a main effect of political beliefs condition,  $\chi^2(1) = 25.78$ , p < .001, d = 0.50, such that participants preferred integrating (vs. segregating) events more in the "same" (M = 4.51, 95% CI = [4.35, 4.67]; Table 3) condition than in the "opposite" condition (M = 3.91, 95% CI = [3.75, 4.08]). Moreover, the preference for integration significantly differed from the scale midpoint ("I don't care") in the "same" condition, t(198) = 6.41, p < .001, but not in the

"opposite" condition, t(204) = 1.06, p = .292. We did not observe a main effect of valence,  $\chi^2(1) = .88$ , p = .348, or interaction,  $\chi^2(1) = 1.20$ , p = .274.

An ANOVA of the desire to connect on political beliefs condition, valence, and their interaction revealed a main effect of political beliefs condition,  $\chi^2(1) = 383.39$ , p < .001, d = 1.40, such that participants desired connection more in the "same" condition (M = 5.68, 95% CI = [5.52, 5.84]) than in the "opposite" condition (M = 2.86, 95% CI = [2.63, 3.10]). Moreover, the desire for connection significantly differed from the scale midpoint ("I don't care") in both the "same" condition, t(198) = 21.10, p < .001, and in the "opposite" condition, t(204) = 9.65, p < .001. We did not observe a main effect of valence,  $\chi^2(1) = .02$ , p = .900, or interaction,  $\chi^2(1) = 1.36$ , p = .244.

Table 3. Participants neither desired social connection nor preferred integration when paired with someone who held opposing political beliefs (e.g., someone who "holds the exact opposite position as you on every major political issue"). The desire for social connection (or lack thereof) mediated the effect of political beliefs on the preference for integration (95% confidence intervals in brackets)

	Political beli	efs condition	
Dependent variable	Same	Opposite	Difference
Preference for integration	4.51 [4.35, 4.67]	3.91 [3.75, 4.08]	$\chi^2(1) = 25.78, p < .001$
Desire to connect	5.68 [5.52, 5.84]	2.86 [2.63, 3.10]	$\chi^2(1) = 383.39, p < .001$

Finally, we conducted a mediation analysis with 20,000 bootstrapped resamples. The desire to connect fully mediated the effect of political beliefs condition on the preference for integration (indirect effect = .71, SE = .11, bias-corrected 95% CI = [.489, .933]).

Studies 3–4 provide corroborating evidence for our proposed mechanism. Because the preference integration is driven by the anticipated increase in interpersonal connection that results, the desire to connect both moderates (when manipulated) and mediates (when measured).

### Study 5: Very Emotionally Impactful Events as a Boundary Condition

We designed Study 5 to test a boundary condition: event magnitude. In Study 5a, we manipulated the *objective* magnitude of events by presenting six different monetary gains or losses; in Study 5b, we manipulated the *subjective* magnitude of events by sampling 12 scenarios. In both studies, participants indicated whether they would prefer to experience these events on the same or different day(s) as a friend. Because events with greater objective and subjective magnitude are more likely to be emotionally impactful, we predicted preferences for integration would be inversely correlated with magnitude.

### Method

For Study 5a, we opened an MTurk HIT for 200 assignments; 200 workers ( $M_{age} = 35.45$ ; 109 women, 88 men, 3 undisclosed) participated. For Study 5b, we opened an MTurk HIT for 200 assignments; 200 workers ( $M_{age} = 35.87$ ; 121 women, 79 men) participated.

Study 5a employed a 2 (valence: positive vs. negative; between-participants) × 6 (magnitude: \$10 vs. \$100 ... \$1,000,000; within-participants) mixed design. Study 5b employed a 2 (valence: positive vs. negative; between-participants) × 6 (event; within-participants), mixed design. In both studies, participants first identified a friend.

In Study 5a, participants read: "Suppose that you and [friend] each have an investment account. For each of the following, would you prefer that these events happened on the same day or different days? Imagine that you and your friend each [gained/lost] [amount]." Then, for each amount (in ascending order), participants indicated whether they would prefer to experience the events on the "same day" or "different days" as their friend.

In Study 5b, participants reviewed six events—either six positive (e.g., a great haircut) or six negative (e.g., a speeding ticket)—in random order (Figure 2). For each event, they read:

"Imagine that you and [friend] each: [Event]." Participants indicated whether they would prefer to experience each pair of events on the "same day" or "different days" as their friend. Finally, they rated the emotional impact of each event ("No emotional impact" = 1; "Maximum emotional impact" = 9).

#### Results

In Study 5a, we fit a logistic regression of the preference for integration on valence, amount, and their interaction, using cluster-robust standard errors. We coded magnitude linearly (e.g., "\$10" = 1, "100" = 2, ... "\$1,000,000" = 6) because mental representations of number lines are logarithmic, rather than linear (Dehaene, 2003). Consistent with the proposed boundary condition, we observed a main effect of amount, b = -.24, z = -5.13, p < .001,  $odds\ ratio = .75$  (Figure 1).<sup>5</sup> That is, the preference for integration decreased as objective magnitude (i.e., amount) increased. We also observed a main effect of valence, b = 1.36, z = 5.44, p < .001,  $odds\ ratio = 2.38$ , such that participants preferred integration more for positive events (80%, 95% CI = [74%, 86%]) than for negative events (51%, 95% CI = [44%, 59%]). We did not observe an interaction, b = .13, z = 1.38, p = .167.

In Study 5b, we fit a logistic regression of the preference for integration on valence, emotional impact (mean-centered), and their interaction, using cluster-robust standard errors. We again observed a main effect of impact, b = -.14, z = -4.99, p < .001,  $odds\ ratio = .83$  (Figure 2). The preference for integration decreased as subjective magnitude (i.e., emotional impact) increased. We also observed a main effect of valence, b = .55, z = 3.18, p = .001,  $odds\ ratio = 1.73$ , such that participants preferred integration more for positive events (57%, 95% CI = [52%,

<sup>&</sup>lt;sup>5</sup> We observe qualitatively similar and statistically significant results when coding magnitude exactly as presented to participants (e.g., "10" = 10, "100" = 100, ... "1,000,000" = 1,000,000).

63%]) than for negative events (44%, 95% CI = [38%, 50%]).<sup>6</sup> We observed a directional valence × emotional impact interaction, b = .09, z = 1.70, p = .089.

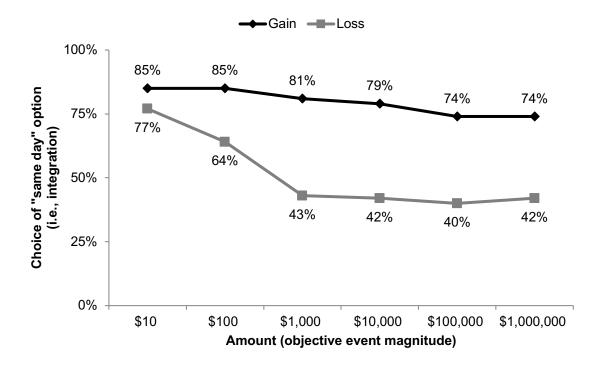


Figure 1. Objective event magnitude (i.e., amount) is negatively associated with the preference for integration

The patterns in Figures 1–2 pose an interesting question: Does this boundary condition depend on event valence? We explored this possibility by performing a random-effects integrative data analysis (IDA) of Studies 5a–b (Curran & Husson, 2009). Pecifically, we pooled the data and fit a random-effects logistic regression of the preference for integration on valence, magnitude, study, and all possible interactions. We observed only a main effect of

<sup>&</sup>lt;sup>6</sup> We caution against drawing meaningful conclusions from this difference because we did not equalize objective magnitudes between valence conditions (as in Study 5a).

<sup>&</sup>lt;sup>7</sup> We employed a random-effects IDA because the events tested in Studies 5a–b were themselves "randomly drawn from some larger population" (e.g., all possible gains and losses; Curran & Husson, 2009, p. 93). Moreover, to reconcile the objective and subjective measures, we retained the linear rankings from Study 5a (e.g., "\$10" = 1, "\$1,000,000" = 6) and converted each participant's emotional impact ratings to similarly linear rankings in Study 5b. For example, for each participant, the highest emotional impact rating was coded that as 6; the lowest was coded as 1.

magnitude, b = -.49, z = -7.14, p < .001, odds ratio = .61 and a valence × magnitude interaction, b = .21, z = 2.34, p = .019, odds ratio = 1.24.

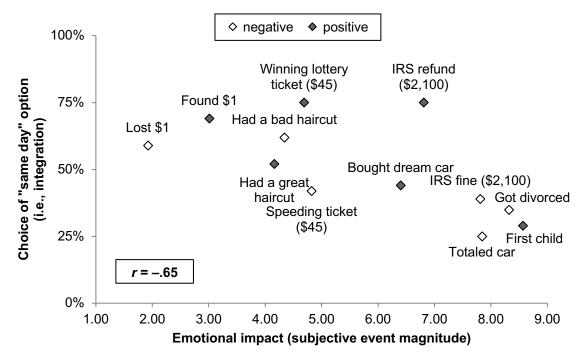


Figure 2. Subjective event magnitude (i.e., emotional impact) is negatively associated with the preference for integration

This interaction suggests magnitude may have a stronger attenuating effect on negative events than positive, which would reflect a logical extension of the renewable resources model (Linville & Fischer, 1991) and prospect theory (Kahneman & Tversky, 1973). Specifically, if people indeed maintain limited capacity to savor gains and buffer losses, and losses loom larger than equivalent gains, then the prospect of losing \$1,000 at the same time as a friend, for example, would be more emotionally impactful than the prospect of gaining \$1,000 at the same time as a friend. Participants in Study 5a thus preferred integration more for gaining \$1,000 than for losing \$1,000.

We did, however, ask participants to rate the emotional impact of events in Study 5b, which, in principle, should have accounted for loss aversion. And yet we nevertheless observed a

directional valence × emotional impact interaction. We caution, though, that in Study 5b we manipulated valence between participants. It is possible that those who evaluated only positive events used the scale slightly differently than participants who evaluated only negative events. And there are many other potential reasons for segregating negative events with others. For example, if two people each owed the IRS a large fine, it might be helpful to space these events out, so one could lend the other some cash in a pinch.

## **Single-Paper Meta-Analysis**

A single-paper meta-analysis (McShane & Bockenholt, 2017) included the relevant proportions from (a) Study 1 and Studies 5a–b, (b) the "self-other" conditions of Studies 2a–c, (c) the "like" condition of Study 3, and (d) the "same" political beliefs condition of Study 4. For Study 4, we converted the scale measure to a proportion by coding values greater than the midpoint as integration. Across studies, the overall preference for integration averaged 70% (95% CI = [.63, .77]; Figure 3).

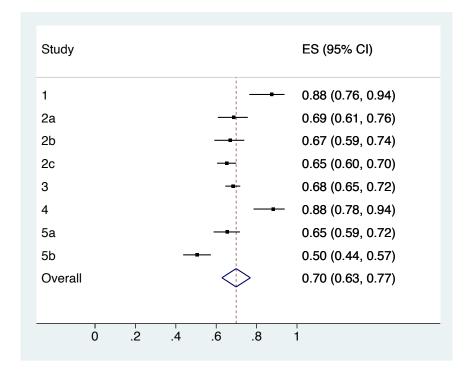


Figure 3. Single-paper meta-analysis examining the overall preference for integration

### **General Discussion**

In this research, we explored *social* hedonic editing, finding that people prefer integrating (vs. segregating) events that happen to the self and to others, both overall and relative to events that happen to the self. This occurs, in part, because people desire the interpersonal connection facilitated by integration—but only as long as events are not emotionally overwhelming. Thus, our account not only bridges work on hedonic editing with researching exploring shared experience and collective attention, but also differs from the latter by testing event timing as a *dependent* variable (i.e., what people choose and prefer), rather than as an independent variable (i.e., manipulating whether attention and experiences are shared).

Studies 3–4 also hint at a potential corollary of our theory: It is possible that people strategically segregate events to distance themselves from disliked others, just as they integrate events to connect with liked others. For example, in Study 3, participants expressed a preference for segregation (when forced to choose); however, in Study 4, participants expressed relative indifference (when not forced to choose). Studies 5a–b, meanwhile, suggest magnitude may have a stronger attenuating effect on negative events than positive. Future work could explore these potential extensions.

Additionally, other factors likely influence this preference for integration. For example, whether both people know about it, the possibility of commiseration beforehand or afterward, and the temporal denominator (e.g., "same hour" vs. "same day") could matter. Other features of events (i.e., aside from valence) could also play a moderating role. For example, "nonmonetary," experiential events could conform more to our hypotheses (i.e., whereby magnitude suppresses the preference for integration; Figure 2). And while we adapted only two basic paradigms from the hedonic editing hypothesis (e.g., segregating gains and integrating losses), additional

research could examine its other corollaries (e.g., people should segregate [separate] small gains from larger losses and integrate [cancel] smaller losses with larger gains).

Finally, this research focused on forward-looking preferences. Yet it is possible that these beliefs are misguided. For example, the prospect of totaling one's car on the same day that a close friend gets divorced seems unappealing (Study 5b). But it is unknown whether, in retrospect, people might actually appreciate some unanticipated benefits of integrating traumatizing events (e.g., feelings of solidarity).

We believe these findings suggest numerous practical implications for social coordination. For example, past research has shown that people underestimate their enjoyment of and thus hesitate to engage in hedonic activities alone (Ratner & Hamilton, 2015). Integration might help people relax such resistance to "bowling alone." More broadly, that intrapersonal and interpersonal preferences for event timing differ so starkly suggests an important, understudied, and untapped source of everyday utility.

### References

- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60(2), 241–253.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529.
- Boothby, E. J., Clark, M. S., & Bargh, J. A. (2014). Shared experiences are amplified. *Psychological Science*, 25(12), 2209–2216.
- Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods*, *14*(2), 81–100.
- Dehaene, S. (2003). The neural basis of the Weber–Fechner law: A logarithmic mental number line. *Trends in Cognitive Sciences*, 7(4), 145–147.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\*

  Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*,

  41(4), 1149–1160.
- Goldstein, N. J., & Cialdini, R. B. (2007). The spyglass self: A model of vicarious self-perception. *Journal of Personality and Social Psychology*, 92(3), 402–417.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292.
- Kahneman, D., Fredrickson, B. L., Schreiber, C. A., & Redelmeier, D. A. (1993). When more pain is preferred to less: Adding a better end. *Psychological Science*, *4*(6), 401–405.

- LeBoeuf, R. A., Williams, E. F., & Brenner, L. A. (2014). Forceful phantom firsts: Framing experiences as firsts amplifies their influence on judgment. *Journal of Marketing Research*, 51(4), 420–432.
- Linville, P. W., & Fischer, G. W. (1991). Preferences for separating or combining events. *Journal of Personality and Social Psychology*, 60(1), 5–23.
- Loewenstein, G. F., & Prelec, D. (1993). Preferences for sequences of outcomes. *Psychological Review*, 100(1), 91–108.
- Maner, J. K., DeWall, C. N., Baumeister, R. F., & Schaller, M. (2007). Does social exclusion motivate interpersonal reconnection? Resolving the "porcupine problem." *Journal of Personality and Social Psychology*, 92(1), 42–55.
- McNeish, D., & Kelley, K. (2019). Fixed effects models versus mixed effects models for clustered data: Reviewing the approaches, disentangling the differences, and making recommendations. *Psychological Methods*, 24(1), 20–35.
- McShane, B. B., & Böckenholt, U. (2017). Single-paper meta-analysis: Benefits for study summary, theory testing, and replicability. *Journal of Consumer Research*, 43(6), 1048–1063.
- O'Brien, E., & Ellsworth, P. C. (2012). Saving the last for best: A positivity bias for end experiences. *Psychological Science*, 23(2), 163–165.
- Raghunathan, R., & Corfman, K. (2006). Is happiness shared doubled and sadness shared halved? Social influence on enjoyment of hedonic experiences. *Journal of Marketing Research*, 43(3), 386–394.

- Ramanathan, S., & McGill, A. L. (2007). Consuming with others: Social influences on moment-to-moment and retrospective evaluations of an experience. *Journal of Consumer Research*, 34(4), 506–524.
- Ratner, R. K., & Hamilton, R. W. (2015). Inhibited from bowling alone. *Journal of Consumer Research*, 42(2), 266–283.
- Redelmeier, D. A., & Kahneman, D. (1996). Patients' memories of painful medical treatments:

  Real-time and retrospective evaluations of two minimally invasive procedures. *Pain*,

  66(1), 3–8.
- Ross, W. T., & Simonson, I. (1991). Evaluations of pairs of experiences: A preference for happy endings. *Journal of Behavioral Decision Making*, 4(4), 273–282.
- Schachter, S. (1959). The Psychology of Affiliation: Experimental Studies of the Sources of Gregariousness. Stanford, CA: Stanford University Press.
- Shteynberg, G. (2015). Shared attention. *Perspectives on Psychological Science*, 10(5), 579–590.
- Shteynberg, G., Hirsh, J. B., Apfelbaum, E. P., Larsen, J. T., Galinsky, A. D., & Roese, N. J. (2014). Feeling more together: Group attention intensifies emotion. *Emotion*, 14(6), 1102–1114.
- Thaler, R. H., & Johnson, E. J. (1990). Gambling with the house money and trying to break even: The effects of prior outcomes on risky choice. *Management Science*, *36*(6), 643–660.
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199–214.
- Tu, Y., Shaw, A., & Fishbach, A. (2015). The friendly taking effect: How interpersonal closeness leads to seemingly selfish yet jointly maximizing choice. *Journal of Consumer Research*, 42(5), 669–687.

Wegner, D. M., Erber, R., & Raymond, P. (1991). Transactive memory in close relationships.

Journal of Personality and Social Psychology, 61(6), 923–929.