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Saving the Last for Best: A Positivity Bias for End Experiences

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Imagine that your favorite restaurant is closing, and your final meal tastes especially delicious. Is it actually more tasty than normal, or is it just more enjoyable because you know it is the last one? Previous research suggests that salient endings may foster more positive attitudes toward the events that preceded them. For example, students reminded of graduation felt greater affection for their school than did students not given such reminders (Ersner-Hershfield, Mikels, Sullivan, & Carstensen, 2008), and people who considered relocating valued their hometown friends more highly than did people who did not consider relocating (Fredrickson & Carstensen, 1990).

However, "lasts" are also common in everyday life and need not involve significant experiences. For example, on a typical day, someone might read the last chapter of a book, eat the last bite of lunch, listen to the last symposium speaker, and give the last kiss goodnight. In turn, he or she may assess the quality of each event (e.g., "How interesting was that final talk?"). When made salient, serial positioning may affect such assessments; this occurs because people are highly sensitive to temporal contexts, which influence many evaluations besides major life episodes (Aaker, Rudd, & Mogilner, 2011; Levine, 1997; McGrath & Tschan, 2004). Thus, just as graduations trigger more positive perceptions of school, people might judge everyday "last" events more positively because they generally signal the end of an experience.

To test this possibility, we recruited participants to eat different flavors of chocolates one by one. We predicted that when the last chocolate was made salient, it would be more enjoyable, and it would taste better than the other chocolates irrespective of flavor. We also predicted that when the last chocolate was made salient, the experiment would be more enjoyable overall, because endings drive global evaluations (as in duration neglect—Redelmeier & Kahneman, 1996); in other words, if the last chocolate tastes better than the ones before it, the overall experience should seem better.

Method

Fifty-two students (28 males, 24 females) were recruited individually in public campus areas to participate in an alleged taste test of new Hershey's Kisses containing local ingredients. Participants were given five chocolates, each with a different flavor: milk, dark, crème, caramel, and almond. Participants were not told how many or which flavors they were tasting. An experimenter who was blind to the hypothesis randomly pulled one chocolate of each flavor from a hidden pocket inside a full bag of candy (the hidden pocket was used so participants would not know how many pieces of chocolate they would be given). After eating each chocolate, participants rated how much they enjoyed it on a scale ranging from 0 (*not at all enjoyable*) to 10 (*extremely enjoyable*). They also described each flavor so we could record the order in which they ate the five chocolates.

Participants were randomly assigned to the *next* or the *last* condition. In the *next* condition, the experimenter said, "Here is your next chocolate," before offering each chocolate after the first. In the *last* condition, the experimenter followed this same script before the second, third, and fourth chocolates but said, "Here is your last chocolate," before offering the fifth chocolate. Thus, participants were either unaware or aware of which chocolate was last. Participants then indicated which chocolate they liked best and how much they enjoyed the experiment overall.

This procedure was followed by a manipulation check and demographic questions. In the manipulation check, subjects responded to a questionnaire asking what the experimenter said before offering them the fifth chocolate (the four choices were "next," "last," "none," or "don't know"). Data from 7 participants were eliminated from analysis because their responses on the manipulation check were incorrect. Finally, we conducted a funnel debriefing (no participants indicated suspicion regarding the manipulation).

Results

Participants in the *last* condition rated the fifth chocolate as more enjoyable ($M = 8.18$, $SD = 1.87$) than participants in the

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next condition did (M = 6.26, SD = 2.30), $t(43) = 3.07$, p = .004, d = 0.92. In fact, participants in the *last* condition liked the final chocolate more than any other chocolate. As expected, ratings of the first four chocolates did not differ by condition, ts < 1.00 (see Fig. 1).[1]

Participants in the *last* condition chose the fifth chocolate as their favorite significantly more often (64% of the time) than participants in the *next* condition did (22% of the time), $\chi^2(4, N = 45) = 9.95$, p =.04. Finally, as predicted, the effect of condition on overall enjoyment of the experiment was mediated by ratings of the last chocolate, $\beta = 0.38$, p = .016. Accordingly, the experiment was rated more enjoyable by participants in the *last* condition (M = 8.73, SD = 1.42) than by participants in the *next* condition (M = 7.65, SD = 1.70), $t(43) = 2.30$, p = .026, d = 0.69.

Discussion

Endings are powerful. Long painful experiences that end relatively pleasantly are remembered better than short painful experiences that do not (Redelmeier & Kahneman, 1996). A short life that ends on a high note seems better than a long life that ends in mediocrity (Diener, Wirtz, & Oishi, 2001). Moral behavior at the end of life outweighs immoral behavior leading up to it (Newman, Lockhart, & Keil, 2010). And significant end events (e.g., graduation) may promote positive evaluations of preceding related events (Kurtz, 2008).

The research reported here demonstrates the power of endings in everyday life. Furthermore, unlike most prior research, it assessed participants' feelings as the endings occurred rather than retrospectively. Participants who knew they were eating the final chocolate of a taste test enjoyed it more, preferred it to other chocolates, and rated the overall experience as more enjoyable than participants who thought they were just eating one more chocolate in a series. These results are especially intriguing because the "end" was somewhat artificial and impermanent (i.e., participants could still eat chocolates after finishing our experiment). This suggests that the same experience is viewed as better simply because people are aware that it is the last in a series, and this awareness influences subsequent evaluations and preferences. This observation probably extends far beyond Hershey's Kisses. For example, the last book of a series or the last speaker in a symposium may receive unwarranted praise, research subjects may give overly positive responses on the last tasks of experiments, and the last job applicants or students (e.g., those whose papers are graded last) may look especially qualified.

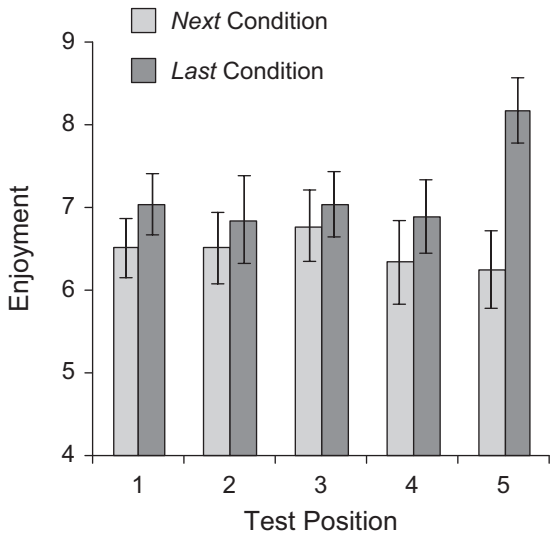

Fig. 1. Mean rating of enjoyment as a function of the chocolate's test position and the participant's condition. Error bars show ±1 *SE*.

Such implications suggest many directions for future research. Why, exactly, are everyday experiences enhanced when their end is signaled? For example, it may be evolutionarily adaptive to more strongly desire the last remaining resources or the last items in a series rather than the previous ones, because of anticipated scarcity (Kurzban & Leary, 2001). Through what specific mechanisms are these experiences enhanced? Perhaps awareness of endings shifts attention toward positive features of an experience and away from negative features (Carstensen & Mikels, 2005) or promotes savoring of final moments (Quoidbach, Dunn, Petrides, & Mikolajczak, 2010). What defines potential boundaries or parameters? For example, the last chocolate in a longer series than the one tested here may not be viewed as better if people adapt to the taste (Frederick & Loewenstein, 1999), and endings to negative experiences may produce different effects than endings to positive experiences do (Li & Epley, 2009).

Until these possibilities are tested, consider a cheaper option during your final visit to a restaurant—it may taste just as delicious as any other.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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Note

1. Flavors were distributed roughly equally across the five test positions in both conditions, which made it unlikely that participants in the *last* condition ate better fifth chocolates by chance. Nonetheless, we confirmed our findings in an additional experiment, in which 24 new participants completed the taste test in a set order, with almond randomly chosen to be presented last. As in the main experiment, participants in the *last* condition still enjoyed the last chocolate more (M = 7.98, SD = 1.71) than participants in the *next* condition did (M = 6.09, SD = 1.99), $t(22) = 3.31$, $p < .001$, d = 1.02.

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