

# Unconventional Consumption Methods and Enjoying Things Consumed: Recapturing the “First-Time” Experience

Personality and Social Psychology Bulletin  
2019, Vol. 45(1) 67–80  
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DOI: 10.1177/0146167218779823  
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Ed O'Brien<sup>1</sup> and Robert W. Smith<sup>2</sup>

## Abstract

People commonly lament the inability to re-experience familiar things as they were first experienced. Four experiments suggest that consuming familiar things in new ways can disrupt adaptation and revitalize enjoyment. Participants better enjoyed the same familiar food (Experiment 1), drink (Experiment 2), and video (Experiments 3a-3b) simply when re-experiencing the entity via unusual means (e.g., eating popcorn using chopsticks vs. hands). This occurs because unconventional methods invite an immersive “first-time” perspective on the consumption object: boosts in enjoyment were mediated by revitalized immersion into the consumption experience and were moderated by time such that they were strongest when using unconventional methods for the first time (Experiments 1-2); likewise, unconventional methods that actively disrupted immersion did not elicit the boost, despite being novel (Experiments 3a-3b). Before abandoning once-enjoyable entities, knowing to consume old things in new ways (vs. attaining new things altogether) might temporarily restore enjoyment and postpone wasteful replacement.

## Keywords

enjoyment, novelty, variety, consumption, waste

Received December 5, 2017; revision accepted May 7, 2018

Jorge Spielmann’s guests had a surprise: to honor their host, a blind clergyman, they donned blindfolds mid-dinner. Upon doing so, they suddenly found their dining experience more enjoyable, despite returning to the same food. After testing many more guests at subsequent gatherings, Spielmann was inspired to open the world’s first “pitch black” restaurant, where patrons must eat in complete darkness. The restaurant has boomed since opening in 1999, producing a cottage industry of successful imitators around the globe (Forbes, 2015).

Is there something special about darkness that enhances gastronomic pleasures? Perhaps. In the current research, however, we explore a more parsimonious possibility: the mere fact that dining in the dark is unusual.

A large literature highlights a link between novel *things* and consumption enjoyment: repeated consumption eventually spoils enjoyable entities due to satiation and adaptation (Frederick & Loewenstein, 1999; McAlister, 1982; Redden, 2008), leading many positive psychologists to advocate for variety and novelty in the things we consume (“variety is the spice of life”: Lyubomirsky, Sheldon, & Schkade, 2005; Sheldon, Boehm, & Lyubomirsky, 2012; Sheldon & Lyubomirsky, 2012). Indeed, novel things are not taken for granted: People attend to them more closely, explore them more thoroughly, and react to them more intensely than their

familiar counterparts (Berlyne, 1970). We refer to such reactions to novelty as reflecting a generally more “immersive” experience. In turn, increased immersion tends to make consumption experiences more enjoyable (Brown & Ryan, 2003; Csikszentmihalyi, 1990; Killingsworth & Gilbert, 2010; Sansone, Weir, Harpster, & Morgan, 1992). The lesson from this traditional approach is clear: if you are bored with something, consume something else.

A second approach is suggested by research on enjoyment and mindfulness. Mindfulness involves drawing distinctions within the same consumption object (Langer & Moldoveanu, 2000). Mindful participants are typically instructed to imagine they are consuming the object for the first time and to focus on features that they would not usually focus on—in essence, to *construe* the experience as new so to sustain immersion and enjoyment (for a review, see Siegel, 2007). For example, one popular manipulation involves eating a raisin for 5 min while imagining that one has never seen a raisin

<sup>1</sup>The University of Chicago, IL, USA

<sup>2</sup>The Ohio State University, Columbus, OH, USA

## Corresponding Author:

Ed O'Brien, Booth School of Business, The University of Chicago, 5807 South Woodlawn Avenue, Chicago, IL 60637, USA.  
Email: eob@chicagobooth.edu

before and paying close attention to its touch, smell, taste, and even sound, which has been shown to enhance enjoyment (Arch et al., 2016) so long as users do not find this experience frustrating or taxing (Van Dam et al., 2018). Rather than simply replacing old things with new things, the lesson here is that the same old thing can be revitalized if people learn to regulate their attention, especially toward novelty, while consuming it.

A recent taxonomy of strategies for well-being (Quoidbach, Mikolajczak, & Gross, 2015) captures these distinct enjoyment-boosting approaches, which fall under the proposed categories of “Situation Selection” and “Attentional Deployment,” respectively. However, as suggested by our opening example, still a third approach could exist that boosts enjoyment for the same entity (no selecting a different entity altogether), while not demanding any particular instructions for internal focus (no mindfulness required). This approach may be found in a third category proposed by Quoidbach et al. (2015): “Situation Modification.” Situation Modification refers to the strategy of directly changing external features of a consumption experience in ways that maximize chances for enjoyment (e.g., requesting the table by the fireplace once in the situation of a dinner date). A number of studies have demonstrated support for this idea. For example, the same snack tastes better when consumed after long versus short breaks (Quoidbach & Dunn, 2013), at the end versus middle of a sequence (O’Brien & Ellsworth, 2012a), and following a ritual versus eaten in isolation (Vohs, Wang, Gino, & Norton, 2013)—all external features that one could intentionally structure into the experience beforehand. Nonetheless, when comparing the existing evidence for each of their proposed strategies, Quoidbach et al. (2015) conclude that “more work is needed to establish the specific benefits of the other strategies, especially Situation Modification” (p. 655).

In the current research, we add to this literature on Situation Modification by exploring one especially powerful way to modify. As reviewed, two common approaches to boosting enjoyment each highlight the importance of *novelty*: acquiring new things and attending to new things can help. While yet untested, there remains another possible way to tap into the psychology of novelty and boost enjoyment for the same familiar entity, derived from a Situation Modification perspective. That is, the traditional lesson to seek out a novel replacement when one grows bored with a familiar entity might also apply to novel consumption *methods*: consuming old things in new *ways*. As Spielmann’s blindfolded guests may have noted, even if one is familiar with a dish, the event of now eating it “like this” likely feels unprecedented, thereby eliciting a more immersive perspective, thereby fostering a more enjoyable consumption experience. Simply utilizing a novel method of consumption may promote similar rejuvenated feelings “on its own.”

This potential boosting effect of unconventional consumption methods on enjoyment and immersion would integrate the well-established effectiveness of novelty into the

Situation Modification literature, highlighting a concrete, generalizable approach for how to modify. This general strategy might even often be cheaper and easier than other ways to improve a situation (e.g., procuring the fireside table). Rather than seeking out novelty and variety in *what* we consume—people’s intuitive strategy for recapturing enjoyment (Campbell, O’Brien, Van Boven, Schwarz, & Ubel, 2014; Herrnstein & Prelec, 1991)—knowing to also seek out novelty and variety in *how* we consume (i.e., changing one’s external methods of consumption while holding the object constant) could help provide similar boosts but with lower individual and societal costs (e.g., from wasted leftovers or premature replacement). Variety may be the “spice of life” not only in things themselves but in how those things are experienced.

We tested this idea by asking people to eat snacks, sip drinks, and watch videos via normal or unusual means. We hypothesized that the experience may remain enjoyable as long as the methods of consumption are new and exciting, even if the entity itself is old and familiar. Throughout we sought to test for the role of a revitalized “first-time” perspective elicited by novel methods in general, rather than something about individual methods (e.g., a given unusual method simply may be a superior way to consume). With this goal in mind, boosts in enjoyment should be mediated by boosts in immersion (Experiments 1, 3a, and 3b) and should be biggest for one’s literal first-time use of a method (Experiment 1) and likewise when rotating through different unusual methods that each reflect first-time uses (vs. sticking with the same method over time: Experiment 2). Last, not all unconventionality should do the trick: There are countless ways to consume something unusually, but an unusual method should *not* help (despite being novel) if it actively disrupts abilities to immerse into the intended experience (Experiments 3a and 3b).

## Experiment 1

### *Eating Popcorn With Chopsticks*

In Experiment 1, participants repeatedly ate popcorn using their hands (the traditional way to eat popcorn) or chopsticks (an unconventional way to eat popcorn likely not utilized by participants before).

Our hypothesis was threefold: (a) chopsticks may enhance popcorn enjoyment; and if so, this may be (b) mediated by corresponding boosts in immersion akin to a revitalized “first-time” experience, and (c) moderated by time, such that enjoyment and immersion are most affected upon using the chopsticks in the task for the very first time (rather than simply reflecting something objectively superior about chopsticks).

### *Method*

**Participants.** We recruited 68 participants ( $M_{\text{age}} = 19.63$ ,  $SD_{\text{age}} = 2.71$ ; 61.80% women; 36.80% Caucasian) from our

campus subject pool, which is open to the general public. They completed the study for US\$3.00. Participation took place in private laboratory sessions guided by a hypothesis-blind experimenter.

Sample size was determined by G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) using  $d = 0.70$ ,  $\alpha = .05$ , power = .8, ratio = 1. Estimates were taken from Study 1 of Vohs et al. (2013), which follows a similar design. This produced a recommended total  $N = 68$  for power = .8. This number gives additional power for our purposes because we also assess within-subject measures. For this and all experiments, we report all measures, manipulations, conditions, and exclusions aside from basic attention checks (over 90% passing rate across all experiments). These attention checks, plus all data and materials, are available at <http://osf.io/rwfmq>.

**Procedure.** Participants were assigned to one of two conditions (consumption method: traditional or unconventional) for a study on “helping people eat more slowly.” To ostensibly achieve this goal, traditional participants ( $n = 33$ ) were instructed to eat 10 kernels of popcorn using their hands, one at a time. This represented a single trial (all participants completed two trials in total). Unconventional participants ( $n = 35$ ) followed identical instructions except when instructed to eat each kernel using chopsticks. This cover story and manipulation helped disguise the hypothesis while also accounting for various incidental effects that otherwise could emerge (e.g., eating by the handful in one condition but not the other).

**Trial 1.** To begin, participants chose a flavor (from a selection of four) for Trial 1 and ate 10 kernels. Afterward, they rated the popcorn and their eating experience on four blocks of items, presented one at a time in the following order. To reduce contamination effects, we began with the most important block for the basic effect (enjoyment), followed by the other relevant block for our broader framework (immersion). The final two blocks included manipulation checks and other items.

**Dependent measure (enjoyment).** The first block was the key enjoyment block, comprising 10 items about the popcorn eating experience ( $\alpha = .91$ ). Participants rated how enjoyable the popcorn was; how much they liked it; how delicious, flavorful, and pleasurable it was; how fun it was to eat; how gross it was (reverse scored); how exciting it was to eat; how much they savored it; and how positive it was, each rated from 1 (*not at all*) to 9 (*extremely*).

**Proposed mediator (immersion).** The second block was the immersion block, comprising three items ( $\alpha = .82$ ). Participants rated how much the task led them to immerse into the eating experience; how much it helped intensify the taste; and how much it helped them focus on the food, each rated from 1 (*not at all*) to 9 (*extremely*).

Our key hypothesis for Trial 1 is that using chopsticks to eat otherwise identical popcorn may boost enjoyment and immersion relative to using hands.

**Other blocks.** In the third block, participants rated four items: how much they would want to do the task again; how much they would want to tell their friends about the task; how high quality their chosen popcorn was; and how memorable the task was, each rated from 1 (*not at all*) to 9 (*extremely*). In the fourth block, participants rated five items: how difficult the task was to complete; how filling the popcorn was; how complex and unusual the task was; and how luxurious/“gourmet” the experience was, each rated from 1 (*not at all*) to 9 (*extremely*).

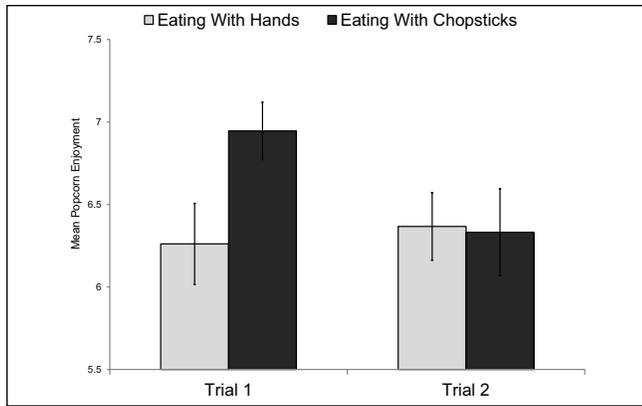
Because this was the very first experiment that we conducted, we did not have consistent a priori hypotheses for these items in the third and fourth blocks, which is why we presented them after the key blocks of interest (enjoyment and immersion). We report the results for all of these items in the Supplementary Materials. Experiments 2, 3a, and 3b improve upon the current experiment by using fewer, more streamlined measures.

Here, we report the results for the three manipulation checks that are most relevant: how difficult, complex, and unusual the task was. The difficulty and complexity items can check whether using chopsticks versus hands was differentially challenging (which may suggest that effects are due to effort justification), and the unusualness item can confirm that using chopsticks is (unsurprisingly) seen as an unusual way to eat popcorn while using hands is seen as normal.

**Trial 2.** Participants then moved to Trial 2 and followed identical procedures: they chose their popcorn, ate 10 kernels, and reported their reactions via the same measures in the same way as Trial 1 (Enjoyment scale,  $\alpha = .93$ ; Immersion scale,  $\alpha = .86$ ).

We included this second trial to disentangle “first-time” feelings from something about chopsticks per se: if unconventionality enhances enjoyment by inviting a fresh “first-time” perspective, then any observed boosts should be highest upon using the chopsticks for the very first time (i.e., at Trial 1). Other accounts (e.g., if chopsticks encourage slower eating, provide effort justification, are an inherently better way to eat popcorn, or evoke some kind of demand) suggest that any relative boosts of chopsticks over hands should hold across trials because all such features remain constant.

Following both trials, all participants reported demographic information. We also assessed food attitudes more generally (e.g., dieting). These measures do not bear on our hypothesis and are accounted for by random assignment (see Supplementary Materials).



**Figure 1.** Mean eating enjoyment by consumption method and time ( $\pm 1$  SE).

## Results

For our main analyses, data were submitted to a repeated-measures generalized linear model (GLM) with condition (traditional, unconventional) as a between-subjects factor and time (Trial 1 ratings and Trial 2 ratings) as a within-subjects factor.

**Main analyses: Boosting enjoyment.** For enjoyment, there was neither a main effect of condition,  $F(1, 66) = 1.40, p = .241, \eta^2 = .02$ , nor a main effect of time,  $F(1, 66) = 2.50, p = .118, \eta^2 = .04$ ; we observed only the critical interaction,  $F(1, 66) = 5.03, p = .028, \eta^2 = .07$  (see Figure 1).

Pairwise comparisons reveal that unconventionality indeed enhanced enjoyment at Trial 1: consuming the same popcorn was more enjoyable when eaten one-at-a-time using chopsticks ( $M = 6.95, SD = 1.03$ ) versus hands ( $M = 6.26, SD = 1.41$ ),  $F(1, 66) = 5.27, p = .025, d = 0.56$ , 95% confidence interval  $[CI]_{\text{difference}} = [0.09, 1.28]$ . But equally critical, these boosts disappeared at Trial 2: consumption was equally enjoyable regardless of whether people ate using chopsticks ( $M = 6.33, SD = 1.56$ ) versus hands ( $M = 6.37, SD = 1.18$ ),  $F(1, 66) = 0.01, p = .917, d = 0.03$ , 95%  $CI_{\text{difference}} = [-0.71, 0.64]$ .<sup>1</sup>

This moderation by time is consistent with our framework: chopsticks may boost enjoyment not because they represent an inherently superior way to consume but because they help provide an unusual “first-time” experience, which was the case at Trial 1.

**Main analyses: Boosting immersion.** For immersion, there was no main effect of condition,  $F(1, 66) = 3.66, p = .060, \eta^2 = .05$ , and no main effect of time,  $F(1, 66) = 1.72, p = .195, \eta^2 = .03$ ; again, however, we observed the critical interaction,  $F(1, 66) = 5.75, p = .019, \eta^2 = .08$ . Pairwise comparisons reveal that, at Trial 1, using chopsticks invited more immersion ( $M = 7.34, SD = 1.45$ ) than using hands ( $M = 6.38, SD = 1.42$ ),  $F(1, 66) = 7.60, p = .008, d = 0.67$ , 95%  $CI_{\text{difference}} = [0.26, 1.65]$ . This supports the idea that novel methods may invite a more engaging “first-time” perspective in a similar

way that novel entities do. Furthermore, these boosts again disappeared at Trial 2, when immersive tendencies returned to baseline regardless of using chopsticks ( $M = 6.90, SD = 1.88$ ) or hands ( $M = 6.52, SD = 1.27$ ),  $F(1, 66) = 0.94, p = .335, d = 0.23$ , 95%  $CI_{\text{difference}} = [-0.40, 1.16]$ . Chopsticks invite immersion only if they are indeed novel to the task.

Consistent with our hypothesized framework, boosts in immersion indeed mediated boosts in enjoyment at Trial 1 (PROCESS Model 4, 5,000 iterations: Hayes, 2013): the indirect effect of condition on enjoyment, via immersion, was significant, Indirect Effect = 0.49,  $SE = .20$ , 95%  $CI_{\text{bootstrapping}} = [0.17, 0.96]$ .

**Other analyses: Manipulation checks.** For difficulty ( $M_{\text{overall}} = 1.83, SD_{\text{overall}} = 1.39$ ), there was no main effect of condition,  $F(1, 66) = 2.29, p = .135, \eta^2 = .03$ ; no main effect of time,  $F(1, 66) < .01, p = .975, \eta^2 < .01$ ; and no interaction,  $F(1, 66) = 2.99, p = .088, \eta^2 = .04$ . For complexity ( $M_{\text{overall}} = 1.78, SD_{\text{overall}} = 1.13$ ), there was no main effect of condition,  $F(1, 66) = 2.80, p = .100, \eta^2 = .04$ ; no main effect of time,  $F(1, 66) = 0.54, p = .465, \eta^2 = .01$ ; and no interaction,  $F(1, 66) = 0.54, p = .465, \eta^2 = .01$ . This suggests no obvious differences in how challenging the task was. When re-running our mediation analyses including difficulty and complexity as covariates, the indirect effect of condition on enjoyment, via immersion, remained significant: Indirect Effect = 0.03,  $SE = .19$ , 95%  $CI_{\text{bootstrapping}} = [0.03, 0.82]$ . These task features cannot alternatively explain the basic effect.

For unusualness, there was a main effect of condition,  $F(1, 66) = 11.61, p = .001, \eta^2 = .15$ ; a main effect of time,  $F(1, 66) = 18.86, p < .001, \eta^2 = .22$ ; and no interaction,  $F(1, 66) = 0.04, p = .850, \eta^2 < .01$ . Teasing apart these main effects, pairwise comparisons within trial confirm that Trial 1 was seen as much more unusual when using chopsticks ( $M = 6.00, SD = 2.25$ ) versus hands ( $M = 4.27, SD = 2.04$ ),  $F(1, 66) = 10.98, p = .001, d = 0.81$ , 95%  $CI_{\text{difference}} = [0.69, 2.77]$ , just as Trial 2 was seen as much more unusual when using chopsticks ( $M = 5.37, SD = 2.21$ ) versus hands ( $M = 3.70, SD = 2.02$ ),  $F(1, 66) = 10.58, p = .002, d = 0.79$ , 95%  $CI_{\text{difference}} = [0.65, 2.70]$ . Unsurprisingly, using chopsticks was a uniformly more unusual way to eat popcorn than using hands.<sup>2</sup>

Experiment 1 shows the basic effect: Using unconventional consumption methods boosted enjoyment for otherwise identical food. Next, we expanded these findings: we recruited a larger, more representative sample; we tested a different consumption object; and we utilized stimulus sampling (Wells & Windschitl, 1999) to further rule out a literal “chopsticks effect,” testing the more general psychology beyond any one method per se.

## Experiment 2

### Drinking in (Many) Unconventional Ways

In Experiment 2, participants completed an at-home taste test: they rated their enjoyment for five consecutive sips of water. Like Experiment 1, we chose this stimulus because it

is highly familiar for everyone and normally consumed in monotonous ways.

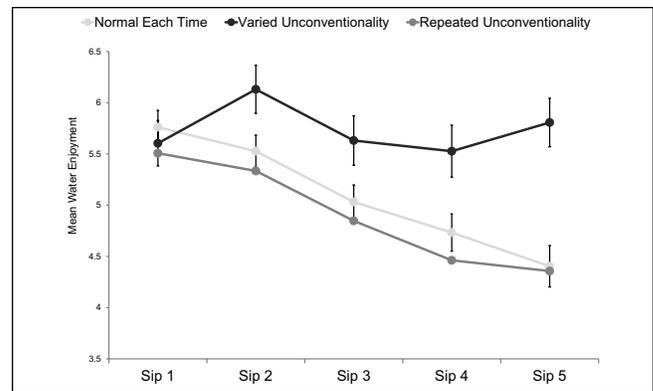
Some participants were asked to drink normally for each sip, others were asked to drink in the same unconventional way for each sip, and still others were asked to drink in different unconventional ways, rotating to a new way for each sip. We hypothesized that drinking each sip in a different novel way over time would combat adaptation more than drinking each sip via the same method each time, whether sipping in a traditional way or an initially unconventional way, highlighting the critical role of “first-time” feelings. Having many “firsts” should sustain enjoyment for longer than relying on any one method, if “first-time” experiences drive the effect and not a particular feature of a particular method. Another feature of this experiment is that participants generated their own ideas for unusual methods, and we piped these ideas for each individual participant. This helps generalize the effects beyond any one method concocted by an experimenter.

## Method

**Participants.** Our previous sample size was based on a power analysis of existing research. For a more powerful test, we aimed for about 100 participants per condition (which was also our goal for Experiments 3a and 3b, as much as subject pool availability allowed). We requested and yielded 300 participants ( $M_{\text{age}} = 33.82$ ,  $SD_{\text{age}} = 9.50$ ; 46.00% women; 83.30% Caucasian) via Amazon Turk to complete the current study for US\$3.00.

**Procedure.** The study was advertised as an interactive water taste test. First, all participants were asked to grab a bottle or cup of water that contained enough for them to take five normal-sized sips, whatever “normal” was for them (using water as a stimulus also ensured that all participants had access to it). They were then instructed to think about ways they had never consumed water before. They listed five unique ways that were “fresh, new, and fun,” with the restrictions that they could not objectively change the water itself (e.g., no adding flavors) and that each way was truly feasible (e.g., they had to be able and willing to actually drink using each listed method). Responses ranged from “drink out of a martini glass” and “drink from a travel coffee mug and a straw” to “lap at water with tongue like a cat” and “drink it out of a shipping envelope” (see data for the lists).<sup>3</sup> Before being able to continue, all participants had to upload a photo of their water and materials, next to a hand-written note of the date, time, and a unique ID code generated in their survey window. This photo-verification process allowed us to confirm compliance despite being conducted via an online platform.

Next, participants began the taste test and were randomly assigned to condition (consumption method: traditional, unconventional-variety, or unconventional-repetition). They took five individual sips one-at-a-time. Traditional participants



**Figure 2.** Mean drinking enjoyment by consumption method and time ( $\pm 1$  SE).

( $n = 101$ ) were instructed to sip the water in the normal way they usually drink, for each sip, and rated their enjoyment after each. We used the same 1 to 9 scales but fewer measures to reduce participant workload (also given the high alphas in Experiment 1): participants rated how enjoyable and positive each sip tasted and how much they savored and liked each sip, comprising the dependent variables (four-item Enjoyment scale:  $\alpha s \geq .94$ ).

Unconventional-variety participants ( $n = 101$ ) were instructed to drink via one of the methods they listed, piped one at a time at random and without replacement. After each sip, they rated their enjoyment via the same items. Unconventional-repetition participants ( $n = 98$ ) followed identical procedures, except that they were piped one of their novel ways at random for the first sip and then were piped this same way for all sips.

Last, all participants rated their enjoyment for the taste test overall (1 = *not at all* to 9 = *extremely*) and reported demographic information.

## Results

**Main analyses: Sustaining enjoyment.** Data were submitted to a repeated-measures GLM with condition (traditional, unconventional-variety, unconventional-repetition) as a between-subjects factor and time (Sips 1-5) as a within-subjects factor.

There was a main effect of condition,  $F(2, 297) = 6.68$ ,  $p = .001$ ,  $\eta^2 = .04$ , as well as a main effect of time such that the water grew less enjoyable across sips,  $F(2, 297) = 53.64$ ,  $p < .001$ ,  $\eta^2 = .15$ . However, these effects were qualified by the critical interaction,  $F(2, 297) = 11.37$ ,  $p < .001$ ,  $\eta^2 = .07$  (see Figure 2).

Teasing this apart, pairwise comparisons reveal no effect of condition upon the first sip,  $F(2, 297) = 0.42$ ,  $p = .658$ ,  $\eta^2 < .01$ . At first glance, this result may seem at odds with Experiment 1, in which we found the boost *only* at T1, as hypothesized. There are two related reasons we suspect why this experimental design will not demonstrate a benefit of unconventional consumption for the first sip. First, all

**Table 1.** Means and Standard Deviations for Enjoyment in Experiment 2.

	Traditional		Unconventional- variety		Unconventional- repetition	
	M	SD	M	SD	M	SD
Sip 1	5.76	1.64	5.60	2.22	5.51	2.04
Sip 2	5.53	1.58	6.13	2.37	5.33	2.13
Sip 3	5.03	1.66	5.63	2.43	4.85	2.21
Sip 4	4.73	1.83	5.53	2.55	4.46	2.29
Sip 5	4.40	2.03	5.81	2.38	4.36	2.29

participants began the study by generating fun novel ways to drink water with the belief that they may use them, and merely thinking about potential future variety enhances enjoyment of mundane objects (Sevilla, Zhang, & Khan, 2016). By making otherwise mundane consumption feel less mundane, this boost would especially benefit the control condition, and especially so for the first sip, when these participants may still reasonably expect future variety. This is not a possible influence in Experiment 1 (nor in Experiments 3a and 3b), in which control participants were entirely unaware of chopsticks. Second, some of the participants' self-generated methods may have been somewhat unpleasant, which would lower enjoyment across all unconventional sips. However, because unconventional consumption methods are especially beneficial for overly familiar consumption objects, that benefit would be especially easy to mask at the first sip, which benefits from other forms of novelty. In sum, it may be difficult to interpret relative differences at Sip 1 in this design. For current purposes, it is more informative to assess how enjoyment then changes across repeated exposures, as the task normalizes for all participants but with only some participants (participants in unconventional-variety condition) indeed utilizing the novel methods.

Accordingly, the key effect emerged upon the second sip,  $F(2, 297) = 4.11, p = .017, \eta^2 = .03$ ; third sip,  $F(2, 297) = 3.74, p = .025, \eta^2 = .03$ ; fourth sip,  $F(2, 297) = 6.09, p = .003, \eta^2 = .04$ ; and fifth sip,  $F(2, 297) = 13.62, p < .001, \eta^2 = .08$ , highlighting the role of continual "first-time" experiences. Descriptive statistics are presented in Table 1.

As can be seen, these effects were driven entirely by boosts from the "unconventional-variety" condition during all but the initial sip: For each subsequent sip, participants who had many first-time experiences felt sustained enjoyment throughout the taste test, more than those who drank normally each time ( $ts \geq 2.00, ps \leq .046, ds \geq 0.29$ ) and more than those who drank in the same unconventional way each time ( $ts \geq 2.60, ps \leq .010, ds \geq 0.34$ ). Likewise, repeating the same unconventional method made the water no more enjoyable than drinking normally for these sips ( $ts \leq 0.85, ps \geq .395, ds \leq 0.13$ ). (All individual pairwise results are reported in full in the Supplementary Materials.)

*Additional enjoyment analyses.* Mirroring these results, we also re-ran these analyses in the context of growth curve modeling, which tests for changes in enjoyment within each condition accounting for the nesting of time points within individuals (Peugh & Enders, 2005). We specified a multi-level random coefficient model using the SPSS Mixed command with condition, the linear effect of time, and the resulting interaction as predictors of enjoyment, which varied over time. The significant interaction here,  $F(2, 1343.70) = 8.50, p < .001$ , indicates that enjoyment changed at a different rate depending on condition: indeed, while traditional participants ( $B = -0.34, SE = .04, p < .001$ ) and unconventional-repetition participants ( $B = -0.29, SE = .05, p < .001$ ) showed standard adaptation (i.e., enjoyment declined over time), unconventional-variety participants did *not* adapt ( $B = -.001, SE = .08, p = .991$ ).

These findings are further captured by ratings of overall enjoyment at the end of the study, omnibus  $F(2, 297) = 14.76, p < .001, \eta^2 = .09$ . Planned contrasts reveal that unconventional-variety participants enjoyed the overall experience ( $M = 7.33, SD = 1.82$ ) more than traditional participants ( $M = 5.96, SD = 2.08$ ),  $t(297) = 4.65, p < .001, d = 0.70, 95\% CI_{\text{difference}} = [0.83, 1.91]$ , and more than unconventional-repeated participants ( $M = 5.92, SD = 2.35$ ),  $t(297) = 4.75, p < .001, d = 0.67, 95\% CI_{\text{difference}} = [0.82, 2.00]$ .

Experiment 2 extends the basic effect documented in Experiment 1, emphasizing the driving role of "first-time" feelings in boosting enjoyment beyond any one method. All participants began the taste test in the same psychological state (e.g., similarly excited about water, having just generated novel ways to drink it) and proceeded to consume five sips of the same product. However, as the taste test unfolded, participants who actually used those five different, novel methods enjoyed the water for longer than participants who drank in the same conventional way each time, and even longer than participants who drank in the same unconventional way each time. As in the moderation by time in Experiment 1, this latter finding—just comparing the two unconventional conditions—should especially not have been the case if there is something objectively superior about any one method; instead, having many different "first-time" experiences helped the most.

Last, the diversity of consumption ideas generated by participants in Experiment 2 hints at an intuitive yet important point: Not all unconventional consumption methods may categorically enhance enjoyment. According to our proposed framework, a new method that actively disrupts immersion (one's ability to attend to, explore, and react to the entity as intended) should *not* help, despite providing a novel "first-time" experience. We tested this hypothesis in Experiments 3a and 3b.

Moreover, the designs of Experiments 3a and 3b extend our findings so far in two important ways. First, the unconventional manipulation will be implemented at the end of a consumption sequence rather than at or from the beginning,

after participants have begun adapting to repeated conventional exposures. This feature addresses the potential issue in Experiment 2 by providing a cleaner, more powerful design, with all participants first normalizing to the stimuli in the same way. It also enhances realism, because after one adapts to a stimulus is precisely when unconventional methods may be most useful to employ in daily life. Second, our framework thus far has assumed that unconventional methods can revitalize one's experience of the *entity* (in addition to making a generally enjoyable consumption experience), but our measures to this point have not obviously teased these dimensions apart. Experiment 3b assesses specific scales for enjoyment of the method and enjoyment of the entity, confirming that boosts in enjoyment upon using unconventional methods also specifically reflect enjoyment of the consumption object.

## Experiments 3a and 3b

### *Watching an Old Video Anew (but Askew)*

In Experiment 3a, participants watched the same video repeatedly. At the third and final exposure, some watched the video in the same way they did for preceding exposures. Others watched in one of two "first-time" unconventional ways, one of which impeded immersion (watching upside-down). We hypothesized that this impeding form of unconventionality would not allow people to immerse into the experience and hence not boost enjoyment, despite being a novel "first-time" experience (and indeed especially novel, coming after two conventional exposures). Experiment 3a was conducted in the laboratory with undergraduate students. Experiment 3b was designed as a preregistered replication and extension on Amazon Turk, using finer grained dependent measures.

### *Experiment 3a Method*

**Participants.** We recruited 241 participants ( $M_{\text{age}} = 20.51$ ,  $SD_{\text{age}} = 1.17$ ; 50.20% women; 73.00% Caucasian) from our undergraduate participant pool to complete the study for course credit, via in-person laboratory sessions guided by a hypothesis-blind experimenter.

**Procedure.** Participants watched the same 1-min video 3 times in a row and reported their reactions to each exposure. The video is of an exciting motorcycle ride filmed with a GoPro camera from the driver's perspective.

First, all participants watched the video once in full. The video loaded and played automatically, with all keyboard controls disabled. The survey then continued to a new screen and participants rated how enjoyable the video was via the same 1 to 9 rating scales as our other experiments. We adapted the items for videos rather than foods/drinks and again streamlined the number of items: participants rated

how enjoyable, fun, exciting, and positive the video was, and how much they liked it (five-item Enjoyment scale:  $\alpha = .95$ ). These items serve as the dependent variables. Participants also rated how immersed they felt while watching, how intense their video viewing experience was, and how close they felt to the driver's experience (three-item Immersion scale:  $\alpha = .89$ ). These items serve as the proposed mediator. All participants then repeated this process for the second viewing (enjoyment,  $\alpha = .96$ ; immersion,  $\alpha = .92$ ).

Before the third viewing, participants were randomly assigned to condition (consumption method: traditional, unconventional-immersive, unconventional-disruptive). Traditional participants ( $n = 81$ ) simply continued this process again like the preceding viewings. These participants should show declines in enjoyment, reflecting standard adaptation. Unconventional-immersive participants ( $n = 78$ ) were instructed to watch using "hand goggles"—forming circles with their thumbs and index fingers around their eyes and using them to track the ride (e.g., to bob their heads left/right when the driver turned left/right). This method is both unusual and also allows for immersion, so these participants may show boosts in enjoyment as in Experiments 1 and 2.

Unconventional-disruptive participants ( $n = 82$ ) also watched the video in a new way, but which may disrupt immersion during the viewing experience: the video was flipped upside-down. These participants may *not* enjoy the experience, despite being their "first-time" watching via this method. Accordingly, these divergent effects of unconventionality should be supported by corresponding increases in immersion ratings among hand goggles participants and decreases in immersion ratings for upside-down participants. All conditions otherwise had identical prompts to reduce incidental demand.

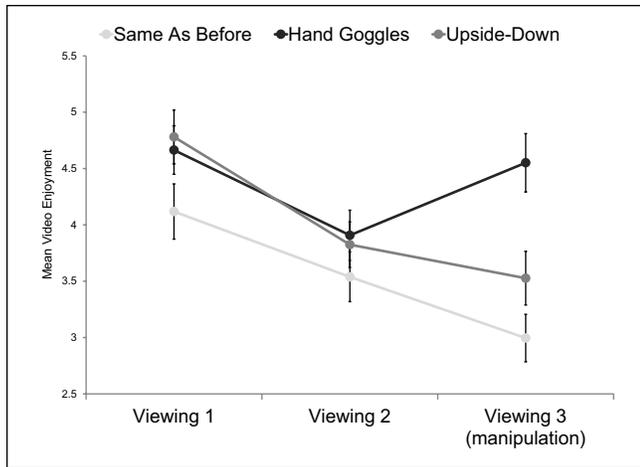
After watching and rating this final exposure (enjoyment,  $\alpha = .98$ ; immersion,  $\alpha = .94$ ), all participants then responded to a manipulation check regarding how "unconventional/unusual" their third viewing was (1 = *not at all*, 9 = *extremely*) and reported demographic information.

### *Experiment 3a Results*

For our main analyses, data were submitted to repeated-measures GLM analyses with condition (traditional, unconventional-immersive, unconventional-disruptive) as a between-subjects factor and time (Viewings 1-3) as a within-subjects factor.

**Main analyses: Boosting (and not boosting) enjoyment.** There was a main effect of condition,  $F(2, 238) = 3.99$ ,  $p = .020$ ,  $\eta^2 = .03$ , and a main effect of time such that the video grew less enjoyable across exposures,  $F(1, 238) = 51.32$ ,  $p < .001$ ,  $\eta^2 = .18$ . However, this was qualified by the critical interaction,  $F(2, 238) = 9.55$ ,  $p < .001$ ,  $\eta^2 = .07$  (see Figure 3).

Teasing apart this interaction, pairwise comparisons reveal no effect of condition for the first viewing,  $F(2, 238) = 2.30$ ,



**Figure 3.** Mean enjoyment by consumption method and time ( $\pm 1$  SE).

$p = .103$ ,  $\eta^2 = .02$  ( $M_{\text{Normal}} = 4.12$ ,  $SD_{\text{Normal}} = 2.21$ ;  $M_{\text{HandGoggles}} = 4.66$ ,  $SD_{\text{HandGoggles}} = 1.90$ ;  $M_{\text{UpsideDown}} = 4.78$ ,  $SD_{\text{UpsideDown}} = 2.16$ ), nor the second viewing,  $F(2, 238) = 0.81$ ,  $p = .446$ ,  $\eta^2 = .01$  ( $M_{\text{Normal}} = 3.54$ ,  $SD_{\text{Normal}} = 1.98$ ;  $M_{\text{HandGoggles}} = 3.91$ ,  $SD_{\text{HandGoggles}} = 1.97$ ;  $M_{\text{UpsideDown}} = 3.82$ ,  $SD_{\text{UpsideDown}} = 1.83$ ), unsurprising because all participants viewed the video normally. However, there was a significant effect at the third viewing where the manipulation took place,  $F(2, 238) = 11.04$ ,  $p < .001$ ,  $\eta^2 = .09$ .

Replicating the basic effect, unconventional participants who watched via hand goggles enjoyed the video more ( $M = 4.55$ ,  $SD = 2.29$ ) than participants who watched the same video normally ( $M = 3.00$ ,  $SD = 1.90$ ),  $t(238) = 4.63$ ,  $p < .001$ ,  $d = 0.74$ , 95%  $CI_{\text{difference}} = [0.89, 2.22]$ . Unconventionality again enhanced enjoyment. Critically, however, not all unconventionality helped: Unconventionality involving watching upside-down ( $M = 3.53$ ,  $SD = 2.16$ ) did *not* boost enjoyment versus watching normally,  $t(238) = 1.60$ ,  $p = .111$ ,  $d = 0.26$ , 95%  $CI_{\text{difference}} = [-1.19, 0.12]$ , in turn, watching via hand goggles gave a bigger boost than watching upside-down,  $t(238) = 3.06$ ,  $p = .002$ ,  $d = 0.46$ , 95%  $CI_{\text{difference}} = [0.36, 1.69]$ .

These patterns are further highlighted via the same growth curve analyses from Experiment 2, interaction:  $F(2, 574.71) = 8.62$ ,  $p < .001$ —control participants ( $B = -0.56$ ,  $SE = .07$ ,  $p < .001$ ) and upside-down participants ( $B = -0.63$ ,  $SE = .12$ ,  $p < .001$ ) showed standard adaptation, whereas hand goggles participants did not adapt ( $B = -0.06$ ,  $SE = .11$ ,  $p = .623$ ).

**Main analyses: Boosting (and disrupting) immersion.** For immersion, we observed a main effect of condition,  $F(2, 238) = 4.93$ ,  $p = .008$ ,  $\eta^2 = .04$ , and a main effect of time such that the video grew less immersive across exposures,  $F(1, 238) = 97.27$ ,  $p < .001$ ,  $\eta^2 = .29$ . This was qualified by the critical interaction,  $F(2, 238) = 16.95$ ,  $p < .001$ ,  $\eta^2 = .13$ . Pairwise comparisons reveal no effect of condition for the first

viewing,  $F(2, 238) = 0.88$ ,  $p = .418$ ,  $\eta^2 = .01$  ( $M_{\text{Normal}} = 5.61$ ,  $SD_{\text{Normal}} = 2.30$ ;  $M_{\text{HandGoggles}} = 6.00$ ,  $SD_{\text{HandGoggles}} = 1.86$ ;  $M_{\text{UpsideDown}} = 5.95$ ,  $SD_{\text{UpsideDown}} = 1.82$ ), nor second viewing,  $F(2, 238) = 0.08$ ,  $p = .919$ ,  $\eta^2 = .001$  ( $M_{\text{Normal}} = 4.65$ ,  $SD_{\text{Normal}} = 2.06$ ;  $M_{\text{HandGoggles}} = 4.75$ ,  $SD_{\text{HandGoggles}} = 1.94$ ;  $M_{\text{UpsideDown}} = 4.77$ ,  $SD_{\text{UpsideDown}} = 1.94$ ). This reflects random assignment. But again, there was a significant effect at the third viewing where the manipulation took place,  $F(2, 238) = 21.16$ ,  $p < .001$ ,  $\eta^2 = .15$ .

As with enjoyment, unconventional participants who watched the third video using hand goggles reported more immersion into the experience ( $M = 5.68$ ,  $SD = 2.31$ ) than those who watched normally ( $M = 3.88$ ,  $SD = 2.28$ ),  $t(238) = 5.03$ ,  $p < .001$ ,  $d = 0.78$ , 95%  $CI_{\text{difference}} = [1.10, 2.50]$  and more than those who watched upside-down ( $M = 3.50$ ,  $SD = 2.18$ ),  $t(238) = 6.12$ ,  $p < .001$ ,  $d = 0.97$ , 95%  $CI_{\text{difference}} = [1.48, 2.88]$ , and immersion was no different between control and upside-down conditions,  $t(238) = 1.08$ ,  $p = .282$ ,  $d = 0.17$ , 95%  $CI_{\text{difference}} = [-0.32, 1.08]$ .

Boosts in immersion again mediated enjoyment boosts at Trial 3: The indirect effect of condition on enjoyment, via immersion, was significant, Indirect Effect = 0.79,  $SE = .15$ , 95%  $CI_{\text{bootstrapping}} = [0.52, 1.10]$ .

**Other analyses: Manipulation check.** We conducted an ANOVA with condition as the independent variable and unconventionality ratings as the dependent variable. The manipulation worked as intended, reflected in an omnibus effect of condition,  $F(2, 238) = 53.66$ ,  $p < .001$ ,  $\eta^2 = .31$ . Not surprisingly, watching with hand goggles ( $M = 6.62$ ,  $SD = 2.00$ ) was seen as a more unconventional method than watching normally ( $M = 3.85$ ,  $SD = 2.31$ ),  $t(238) = 8.24$ ,  $p < .001$ ,  $d = 1.28$ , 95%  $CI_{\text{difference}} = [2.09, 3.44]$ , just as watching upside-down ( $M = 7.01$ ,  $SD = 2.02$ ) was also seen as a more unconventional method than watching normally,  $t(238) = 9.54$ ,  $p < .001$ ,  $d = 1.46$ , 95%  $CI_{\text{difference}} = [2.49, 3.83]$ . Thus, differences in the unconventional conditions on enjoyment and immersion cannot be explained by the upside-down condition not being sufficiently unconventional.

### Experiment 3b Method

In Experiment 3b, we conducted this study again (using the same manipulations and motorcycle video), except did so via Amazon Turk. We had two additional goals in mind. First, Experiment 3b is preregistered and can bolster our findings via a replication study. Second, we used finer grained dependent measures of enjoyment: one block of items specifically referred to enjoyment for the video itself, and one block of items specifically referred to enjoyment for the method of viewing. This distinction allows us to directly test whether the benefits of unconventional consumption reflect participants' reactions to the entity in question, above and beyond merely reflecting enjoyment of the fun method per se.

**Participants.** We requested 300 participants via Amazon Turk, yielding 301 participants ( $M_{\text{age}} = 37.10$ ,  $SD_{\text{age}} = 11.33$ ; 49.20% women; 73.10% Caucasian) who completed the study for US\$1.00.

**Procedure.** The procedure was identical to Experiment 3a. Participants watched the motorcycle video 3 times and reported their enjoyment and immersion after each viewing. Based on random assignment, participants completed the third viewing either traditionally ( $n = 100$ ), using hand goggles ( $n = 101$ ), or watching upside-down ( $n = 100$ ).

The measures, however, were new to this study. After each viewing, participants completed two blocks of enjoyment ratings: a video-enjoyment block and a method-enjoyment block. For the three-item video-enjoyment block ( $\alpha \geq .96$ ), participants rated how much they enjoyed, how much they liked, and how much they appreciated “the video itself,” each from 1 (*not at all*) to 9 (*extremely*). For the three-item method-enjoyment block ( $\alpha \geq .98$ ), participants rated how much they enjoyed, how much they liked, and how much they appreciated “the method of watching the video in this way,” each from 1 (*not at all*) to 9 (*extremely*). The order of these blocks was randomized. These blocks serve as the dependent variables, with the key block of interest being the video-enjoyment block. By including both blocks within subjects all on the same page, we hoped to elicit the clearest possible rating of the video itself (e.g., if we included only the video-enjoyment items, participants who solely enjoyed the method may still give high ratings because there is no other outlet to express their enjoyable experience; see Gal & Rucker, 2011). After each viewing, participants also reported their immersion via the same items from Experiment 3a ( $\alpha \geq .94$ ), serving as the mediator.

At the end of the study, we also included exploratory measures. First, all participants rated the extent to which they would enjoy watching the video “one more time in this HIT” from 1 (*not at all*) to 9 (*very much*). Second, we included a behavioral measure: participants were told that we could email them “a link to download the raw video file, so you can have a copy of this video for yourself.” They were invited to leave their email address if they wanted to download the file for their own permanent keeping. These measures were designed to further tap into participants’ experience of the video itself, beyond their reactions to the method. We preregistered these measures as exploratory because we suspected other incidental forces may work against such items in this study context. For example, Amazon Turk participants may be generally motivated to complete any one HIT within the minimum amount of paid time.

### Experiment 3b Results

Data were analyzed in the same way as Experiment 3a. Of most interest for this replication study, we focus on the enjoyment measures that specifically referenced the video

itself (we report results for the method-specific measures in the Supplementary Materials<sup>4</sup>). Below, we first report the main analyses for these items. Then, we report these results when including block order and the method-specific items in the model.

**Main analyses: All effects replicate for video-specific enjoyment.** There was a main effect of condition,  $F(2, 298) = 5.11$ ,  $p = .007$ ,  $\eta^2 = .03$ , and a main effect of time such that the video grew less enjoyable across exposures,  $F(1, 298) = 29.06$ ,  $p < .001$ ,  $\eta^2 = .09$ . Again, however, this was qualified by the critical interaction,  $F(2, 298) = 8.24$ ,  $p < .001$ ,  $\eta^2 = .05$ .

Teasing apart this interaction, pairwise comparisons reveal no effect of condition for the first viewing,  $F(2, 298) = 1.83$ ,  $p = .163$ ,  $\eta^2 = .01$  ( $M_{\text{Normal}} = 5.17$ ,  $SD_{\text{Normal}} = 2.27$ ;  $M_{\text{HandGoggles}} = 5.09$ ,  $SD_{\text{HandGoggles}} = 2.58$ ;  $M_{\text{UpsideDown}} = 4.57$ ,  $SD_{\text{UpsideDown}} = 2.37$ ), nor the second viewing,  $F(2, 298) = 1.39$ ,  $p = .474$ ,  $\eta^2 = .01$  ( $M_{\text{Normal}} = 5.06$ ,  $SD_{\text{Normal}} = 2.28$ ;  $M_{\text{HandGoggles}} = 4.97$ ,  $SD_{\text{HandGoggles}} = 2.48$ ;  $M_{\text{UpsideDown}} = 4.54$ ,  $SD_{\text{UpsideDown}} = 2.35$ ), unsurprising because all participants viewed the video normally. However, there was a significant effect at the third viewing where the manipulation took place,  $F(2, 298) = 13.49$ ,  $p < .001$ ,  $\eta^2 = .08$ .

Replicating the basic effect, unconventional participants who watched via hand goggles enjoyed the video itself more ( $M = 5.09$ ,  $SD = 2.44$ ) than participants who watched the same video normally ( $M = 4.31$ ,  $SD = 2.36$ ),  $t(298) = 2.31$ ,  $p = .026$ ,  $d = 0.32$ , 95%  $CI_{\text{difference}} = [0.11, 1.45]$ . However, not all unconventionality helped: unconventionality involving watching upside-down ( $M = 3.28$ ,  $SD = 2.64$ ) undermined enjoyment compared with watching normally,  $t(298) = 2.92$ ,  $p = .004$ ,  $d = 0.41$ , 95%  $CI_{\text{difference}} = [0.33, 1.73]$ —in turn, watching via hand goggles also gave a bigger boost than watching upside-down,  $t(298) = 5.06$ ,  $p < .001$ ,  $d = 0.71$ , 95%  $CI_{\text{difference}} = [1.11, 2.52]$ . Again, these patterns are further highlighted via the same growth curve analyses from Experiments 2 and 3a—interaction:  $F(2, 738.39) = 7.86$ ,  $p < .001$ : control participants ( $B = -0.43$ ,  $SE = .09$ ,  $p < .001$ ) and upside-down participants ( $B = -0.65$ ,  $SE = .13$ ,  $p < .001$ ) showed standard adaptation, whereas hand goggles participants did not adapt ( $B = 0.002$ ,  $SE = .12$ ,  $p = .989$ ).

Finally, it is also informative to re-conduct our main analyses while entering block order as a factor (i.e., whether the video-specific block was presented before or after the method-specific block). This did not change any result: there was no main effect of block order,  $F(1, 295) = 0.92$ ,  $p = .338$ ,  $\eta^2 = .003$ , and the critical interaction between condition and time remained significant,  $F(2, 295) = 8.55$ ,  $p < .001$ ,  $\eta^2 = .06$ , which was *not* qualified by a three-way interaction with block order,  $F(2, 295) = 0.30$ ,  $p = .739$ ,  $\eta^2 = .002$ . Likewise, when re-conducting our main analyses when including block order as well as method-enjoyment ratings as covariates, this did not change any result—critical interaction,  $F(2, 294) = 7.11$ ,  $p = .001$ ,  $\eta^2 = .05$ , and growth curve interaction,

$F(2, 855.19) = 9.93, p < .001$ . These analyses further highlight the effects on *video-specific* enjoyment.

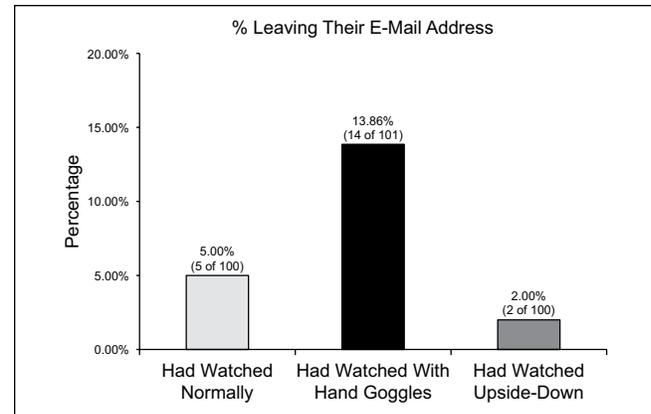
**Main analyses: Replicating the corresponding patterns for immersion.** We also replicated the corresponding patterns for the immersion ratings. We observed a marginal main effect of condition,  $F(2, 298) = 2.85, p = .059, \eta^2 = .02$ , and a main effect of time such that the video grew less immersive across exposures,  $F(1, 298) = 141.46, p < .001, \eta^2 = .32$ . This was qualified by the critical interaction,  $F(2, 298) = 12.12, p < .001, \eta^2 = .08$ . Pairwise comparisons reveal no effect of condition for the first viewing,  $F(2, 298) = 0.31, p = .734, \eta^2 = .002$  ( $M_{\text{Normal}} = 6.94, SD_{\text{Normal}} = 1.88; M_{\text{HandGoggles}} = 7.07, SD_{\text{HandGoggles}} = 1.93; M_{\text{UpsideDown}} = 6.85, SD_{\text{UpsideDown}} = 2.05$ ), nor second viewing,  $F(2, 298) = 0.78, p = .459, \eta^2 = .005$  ( $M_{\text{Normal}} = 6.24, SD_{\text{Normal}} = 2.02; M_{\text{HandGoggles}} = 6.33, SD_{\text{HandGoggles}} = 2.16; M_{\text{UpsideDown}} = 6.59, SD_{\text{UpsideDown}} = 2.02$ )—but indeed at the third viewing where the manipulation took place,  $F(2, 298) = 14.72, p < .001, \eta^2 = .09$ .

Unconventional participants who watched the third video using hand goggles reported more immersion into the experience ( $M = 6.01, SD = 2.61$ ) than those who watched normally ( $M = 5.51, SD = 2.42$ ),  $t(298) = 1.39, p = .175, d = 0.20, 95\% CI_{\text{difference}} = [-1.21, 0.22]$ , although this difference was not statistically significant, and more than those who watched upside-down ( $M = 4.11, SD = 2.69$ ),  $t(298) = 5.09, p < .001, d = 0.72, 95\% CI_{\text{difference}} = [1.19, 2.62]$ ; likewise, immersion was lower in upside-down compared with control conditions,  $t(298) = 3.89, p < .001, d = 0.55, 95\% CI_{\text{difference}} = [0.69, 2.12]$ .

Again, and most critically, boosts in immersion mediated enjoyment boosts at Trial 3: the indirect effect of condition on enjoyment of the video itself, via immersion, was significant, Indirect Effect = 0.44,  $SE = .12, 95\% CI_{\text{bootstrapping}} = [0.22, -0.69]$ .

**Other analyses: Manipulation check and exploratory items.** The manipulation worked, reflected in an omnibus effect of condition,  $F(2, 298) = 91.20, p < .001, \eta^2 = .38$ . Watching with hand goggles ( $M = 7.12, SD = 1.96$ ) was seen as a more unconventional method than watching normally ( $M = 4.16, SD = 2.38$ ),  $t(298) = 10.27, p < .001, d = 1.36, 95\% CI_{\text{difference}} = [2.35, -3.57]$ , and watching upside-down ( $M = 7.84, SD = 1.74$ ) was seen as a more unconventional method than watching normally,  $t(298) = 12.74, p < .001, d = 1.77, 95\% CI_{\text{difference}} = [3.10, 4.26]$ . Like in Experiment 3a, the difference in the basic effect cannot be explained by a lack of unconventionality within the upside-down condition.

In terms of the exploratory measures, we found a marginal effect of condition on expectations for watching the video again, driven by participants in the upside-down condition reporting lower expected enjoyment ( $M = 3.05, SD = 2.28$ ) than participants in the control condition ( $M = 3.68, SD = 2.49$ ) and the hand goggles condition ( $M = 3.80, SD = 2.70$ ),  $F(2, 298) = 2.62, p = .075, \eta^2 = .02$ . These patterns are generally consistent with the patterns we have observed



**Figure 4.** The percentage of participants per condition who chose to leave their email address to receive a link to download the video file for their own permanent keeping.

across all other studies and measures, but may be difficult to interpret given the caveats described in the “Procedure” section. More intriguing and perhaps easier to interpret, a chi-square test of the behavioral measure showed a significant difference across conditions,  $\chi^2(2, N = 301) = 11.80, p = .003$  (see Figure 4).

The percentage of participants who agreed to leave their email address (so that they could download the file for permanent keeping) roughly tripled among participants in the hand goggles condition. This was a genuine behavior. Again, we preregistered this measure as exploratory, and the absolute numbers are small. In any case, this measure is perhaps the clearest to interpret in terms of participants’ perceptions of the video itself—echoing our main findings on video-specific enjoyment. Participants were more likely to acquire the entity after experiencing it via nondisruptive unconventional methods.

Taken together, Experiments 3a and 3b show further support for our hypothesis. Among the countless ways to consume something unusually, a novel method may not enhance immediate enjoyment (despite providing a “first-time” experience) if it actively disrupts immersion. Experiment 3b further suggests that these results reflect, at least in part, enjoyment of the actual stimulus itself, by showing consistent results on ratings explicitly about the stimulus, a behavioral measure involving additional consumption of the stimulus, and no effect of question order.

## General Discussion

Four experiments—with evidence across different domains, direct effects, control comparisons, and mediation and moderation analyses—reveal that familiar entities can remain enjoyable so long as they are consumed via unconventional ways. This boost dissipated when the novelty of the method grew dull or inhibited immersion, which should not have been the case if the new methods being tested were simply superior.

The boost may instead reflect a revitalized “first-time” immersive experience, gleaned from consuming something in a new way despite the thing itself remaining old and familiar.

### *Insights and Implications*

These findings contribute to various literatures. First, the basic effect of unconventional consumption methods echoes growing research on the psychological construction of satiation and its effects on consumption experiences, adding to the “Situation Modification” strategy of positive emotion regulation (see Quoidbach et al., 2015). That people can break adaptation simply by changing the method of consumption reveals a potentially effective (yet easy) strategy for better enjoying the things we consume, which can be surprisingly hard: A consistent pattern in national surveys of well-being finds that a majority of working adults reports feeling too busy to find time for fun, and when they do, they struggle to enjoy themselves as much as they want to enjoy themselves (Gallup, 2013; Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004). Likewise, experiments confirm that actively trying to enjoy oneself mostly backfires by adding pressure and setting unattainable expectations (see Ford & Mauss, 2014; O'Brien & Roney, 2017; Schooler, Ariely, & Loewenstein, 2003). Knowing simply to consume something in a (nondisruptive) new way may invite a less dramatic route to enjoyment.

This strategy not only seems easier than people's intuitive strategy of replacing old entities with new entities, but it is likely cheaper and less wasteful as well. Waste is a growing concern (see calls from The World Bank [Hoornweg & Bhada-Tat, 2012] and the Organisation for Economic Co-Operation and Development [OECD, 2014] for the need of a better understanding of the psychology of waste). People replace phones that still dial and cars that still drive; leave cities and jobs that may otherwise still stimulate; and dump friends and partners that may otherwise still satisfy. When something declines, people notoriously assume “it” is the problem and hence abandon the entity for a new alternative (Campbell et al., 2014; Herrnstein & Prelec, 1991; Kahneman & Snell, 1992). More work is needed to understand these diverse trends, but our findings hint at one overarching way to combat: before intuitively reverting to substitution, first changing how “it” is experienced may prolong momentary value. While traditional frameworks for boosting enjoyment emphasize variety in the actual entities we consume (Lyubomirsky et al., 2005; McAlister & Pessemier, 1982), people may be wise to also consider variety in how to consume the same entity. Perhaps the “magic” of first-time encounters is felt not only when experiencing new *things* but when experiencing new perspectives on familiar ones.

### *Future Directions*

The idea of unconventional consumption raises fruitful avenues for research, such as identifying important everyday

sources of unconventionality and immersion; testing individual differences in the effect (e.g., people who prefer tradition over change, such as political conservatives: Jost, Glaser, Kruglanski, & Sulloway, 2003); testing whether forecasters can anticipate the effect (e.g., people lack past experience with unconventional consumption methods but past experience is often needed to calibrate forecasts: O'Brien & Ellsworth, 2012b; Van Boven, Loewenstein, Dunning, & Nordgren, 2013); testing negative experiences (e.g., re-experiencing pain via unusual methods may feel even *worse*: O'Brien, 2015); and testing lower arousal outcomes (e.g., an unusual method for a massage may have less positive effects, similar to being disruptive).

More generally, to the extent that unconventional methods reignite “fresh” immersive feelings, similar effects should be triggered by other ways to demarcate an experience as new. For example, adding unique category labels along a consumption sequence can help maintain enjoyment (Menon & Kahn, 2002; Redden, 2008), as can arbitrary temporal landmarks (e.g., consuming something on January 1, a “new year”: Dai, Milkman, & Riis, 2015). Perceived novelty may be a thread connecting such effects. This idea echoes broader research on novel contexts and dishabituation, such as how rats run faster on new wheels (Groves & Thompson, 1970) and overdose on drugs when ingested inside new cages (Poulos & Cappell, 1991). Our findings add the unique piece that “first-time” methods of consumption might reinvigorate consumption enjoyment, shown directly via mediation and moderation evidence.

Future research should also further explore the longer term dynamics beyond the immediate experiences that were assessed here. This is an unresolved but important issue in enjoyment research. Quoidbach et al. (2015) note that, in describing the longer term effects of Situation Modification outside of boosting the moment itself, “no intervention has targeted this component of positive emotion regulation” (p. 678). Indeed, other one-shot studies might show a similar time course as the current experiments (e.g., rituals may lose their boosting effect faster than people might anticipate: Vohs et al., 2013). Below, we highlight two promising routes for future research on unconventional methods.

First, one such avenue could tease apart different aspects of “immersion.” While our studies find that increased attention toward the entity slows adaptation, other studies find that increased attention toward longer term consequences hasten adaptation (e.g., people high in self-control are faster to satiate to unhealthy foods, because they are more aware of and give more weight to each bite: Redden & Haws, 2013); likewise, people who devote too much attention to their own happiness end up feeling less happy (Ford & Mauss, 2014; O'Brien, 2013), and a similar detriment may occur for enjoyment.

Second, if the boost emerges most strongly during one's first time using a given method, one might wonder about the practicality of this “one off” strategy—especially if continually using

different novel methods proves difficult (e.g., trying to generate ever-creative ideas) or wasteful (e.g., purchasing ever-new equipment to consume). Future research should explore what is required for a method to feel new in terms of time elapsed since its last usage as well as how different it feels from other recent methods. Indeed, just as traditional variety-seeking typically involves waiting until a thing becomes enjoyable again rather than throwing it out after a single use, the unconventionality of a given method likely ebbs and flows in time (e.g., chopsticks may stop doing the trick for two nights in a row, but perhaps one night every month retains its newness). Managers too could wisely heed these recommendations to retain repeat customers (e.g., offering rotating unconventional methods at variable times of the month rather than the same one).

Even if a given method never feels new again, however, a one-time boost still adds value to a thing that otherwise at this exhausted point would have gone in the trash, and the sum of these boosts across objects and individuals can create sizable savings. It is also possible that our strategy proves most efficiently utilized by service providers than by individuals, akin to Experiments 1 and 3a and 3b (e.g., a theater stocking dozens of unique popcorn containers or a bar stocking dozens of odd mugs seems more sustainable than each individual having to buy their own collection). Finally, even after immediate effects wear off in any one moment of consumption, other studies find that unique “diversifying” experiences have downstream effects like fostering creativity and cognitive flexibility on subsequent tasks (Ritter et al., 2012) and promoting more general evaluative meaning (Keinan & Kivetz, 2011). For these reasons, we view the basic effect as much more than a “one off” boost, even though our experiments here document immediate enjoyment.

Finally, the broader idea of unconventional consumption and its effects on enjoyment helps to integrate—and potentially qualify—existing enjoyment-boosting factors, which largely appeared throughout the literature as isolated strategies and effects (see Quoidbach et al., 2015): if past enjoyment-enhancing manipulations have essentially invited people to behave atypically (e.g., performing arbitrary rituals or eating a raisin for 5 min), currently known boosts may reflect the unconventionality of the method. We may know less about specific utility-maximizing interventions than assumed.

Until these possibilities are tested, consider using the wrong utensils at tonight’s meal rather than splurging at a trendy “dark” restaurant—it may taste just as delicious.

### Acknowledgments

Jaewon Yoon, Miguel Ortega, and Ellen Roney collected data. Linda Hagen and Anna Paley provided helpful feedback.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the Willard Graham Faculty Scholarship and the Charles E. Merrill Faculty Scholarship at the University of Chicago Booth School of Business.

### Notes

1. This same pattern holds for each item, from those that may more obviously assess the popcorn to those that may more assess the method. See the Supplementary Materials. We include all items together as is because that was how they were intended and presented. Experiment 3b teases apart these dimensions and confirms that the effect holds when explicitly assessing the object itself.
2. The null interaction reflects that both conditions showed significant drops over time: chopsticks became more normal from Trial 1 to Trial 2,  $F(1, 66) = 10.58, p = .002, d = 0.28$ , 95% confidence interval  $[CI]_{\text{difference}} = [0.24, 1.01]$ , but so did using hands,  $F(1, 66) = 8.37, p = .005, d = 0.28$ , 95%  $CI_{\text{difference}} = [0.18, 0.97]$ . One explanation is that our unusualness measure partly tapped into general familiarity with procedures; comparing unusualness with enjoyment and immersion ratings may not be appropriate for this experiment. Moreover, one-sample  $t$  tests against the midpoint find that using hands fell below the midpoint both at Trial 1,  $t(32) = 2.05, p = .048, d = 0.36$ , 95%  $CI_{\text{difference}} = [-1.45, -0.01]$ , and at Trial 2,  $t(32) = 3.70, p = .001, d = 0.64$ , 95%  $CI_{\text{difference}} = [-2.02, -0.59]$ , indicating this is not an unusual way to consume popcorn across all stages. Using chopsticks, however, was significantly unusual (above the midpoint) only at Trial 1, during the first-time experience,  $t(32) = 2.63, p = .013, d = 0.44$ , 95%  $CI_{\text{difference}} = [0.23, 1.77]$ . By Trial 2, unusualness fell to neutral (no different than the midpoint),  $t(32) = 0.99, p = .327, d = 0.17$ , 95%  $CI_{\text{difference}} = [-0.39, 1.13]$ . These analyses correspond to the patterns for immersion and enjoyment. Only when a method is perceived as truly unusual might one expect to find the hypothesized boosts.
3. In a post hoc analysis, we gave the 1,500 generated methods to 10 blind, independent coders from the same population. Each coder rated each method on practical feasibility for everyday use, from 1 (*not at all feasible*), 2 (*maybe feasible*), to 3 (*definitely feasible*). Interrater reliability was high ( $\alpha = .77$ ). The vast majority seemed feasible—“3” was chosen 84.75% of the time;  $M_{\text{Overall}} = 2.82, SD_{\text{Overall}} = .25$ , one-sample  $t$  test against the midpoint (2.00),  $t(1499) = 129.03, p < .001, d = 3.33$ , 95%  $CI_{\text{difference}} = [0.81, 0.83]$ . See the Supplementary Materials and data file for full information.
4. Method-specific items were correlated with video-specific items ( $r_s \geq .481, p_s \leq .001$ ) and show the same interaction. Interestingly, however, this interaction was driven by participants liking the upside-down method less than all others: hand goggles participants enjoyed their method no more than participants who watched normally. While method-enjoyment and entity-enjoyment surely both contribute to enjoyment in daily life, these findings might further highlight the unique effects of our manipulation on the video itself.

### Supplemental Material

Supplementary material is available online with this article.

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