WEB APPENDICES

THE ART OF SLOWNESS:

SLOW MOTION ENHANCES CONSUMER EVALUATIONS BY INCREASING PROCESSING FLUENCY

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WEB APPENDIX A: SLOW MOTION CONTENT ON SOCIAL MEDIA

Table W1: Examples of Short-Form Videos in Slow Motion

Poster	Platform	Likes	Views	Link
Kim Kardashian	Instagram	5.7M	54.8M	www.instagram.com/reel/CG_VISUA5EJ
mirandaalol	TikTok	2.1M	10M	www.tiktok.com/@mirandaalol/video/6925516083147377926
Venikajain18	TikTok	3.3M	66.7M	www.tiktok.com/@venikajain18/video/6658200029733326085
Dior	TikTok	2.7K	63.8K	www.tiktok.com/@dior/video/7070422253170674950
Mercedes	Instagram	61.5K	835K	www.instagram.com/reel/CXBl_8_D1Bf
Yves Saint Laurent	Instagram	10.9K	205K	www.instagram.com/reel/CRWanptKs0_/
McDonalds	Facebook	124	93K	https://fb.watch/dgnwxv4Iy_/
Pizza Hut	Facebook	152	8.8K	https://fb.watch/dgnvmU64Dt/
Puma	Facebook	162	7.4 K	https://fb.watch/dgnxmVPn3q/

WEB APPENDIX B: OVERVIEW OF STIMULI

Table W1 provides an overview of all stimuli used in each of our experimental studies. The field dataset (https://osf.io/jka9e/) includes links to the GIF stimuli in study 3.

Table W1: Links to Stimuli

Stimuli	Speed condition	Boundary condition	Link to stimuli
Study 1			
Hair	Slow motion	/	hair_s.gif
	Regular speed	/	hair_r.gif
Runner	Slow motion	/	run_s.gif
	Regular speed	/	run_r.gif
Wave	Slow motion	/	wave_s.gif
	Regular speed	/	wave_r.gif
Drop	Slow motion	/	drop_s.gif
	Regular speed	/	drop_r.gif
Basketball	Slow motion	/	basketball_s.gif
	Regular speed	/	basketball_r.gif
Puppy	Slow motion	/	puppy_s.gif
	Regular speed	/	puppy_r.gif
Pizza	Slow motion	/	pizza_s.gif
	Regular speed	/	pizza_r.gif
Drum	Slow motion	/	drum_s.gif
	Regular speed	/	drum_r.gif
Strawberry	Slow motion	/	strawberry_s.gif
	Regular speed	/	strawberry_r.gif
Dog	Slow motion	/	dog_s.gif
	Regular speed	/	dog_r.gif
Motorbike	Slow motion	/	bike_s.gif
	Regular speed	/	bike_r.gif
Tennis	Slow motion	/	tennis_s.gif
	Regular speed	/	tennis_r.gif
Model	Slow motion	/	model_s.gif
	Regular speed	/	model_r.gif
Ballet	Slow motion	/	ballet_s.gif
	Regular speed	/	ballet_r.gif
Study 2a			
Stimuli	**Speed condition**	**Boundary condition**	**Link to stimuli**
Waterfall	Slow motion	Low complexity	waterfall_s.gif
	Regular speed	Low complexity	waterfall_r.gif
Teacup	Slow motion	Low complexity	teacup_s.gif
	Regular speed	Low complexity	teacup_r.gif
Coffee cup	Slow motion	Low complexity	coffee_s.gif
	Regular speed	Low complexity	coffee_r.gif
Milk	Slow motion	Low complexity	milk_s.gif
	Regular speed	Low complexity	milk_r.gif
Rain	Slow motion	Low complexity	rain_s.gif
	Regular speed	Low complexity	rain_r.gif
Fountain	Slow motion	Low complexity	fountain_s.gif
	Regular speed	Low complexity	fountain_r.gif
Drum	Slow motion	Low complexity	drum_s.gif
	Regular speed	Low complexity	drum_r.gif
Gargle	Slow motion	Low complexity	gargle_s.gif
	Regular speed	Low complexity	gargle_r.gif
Lightning	Slow motion	Low complexity	lightning_s.gif
	Regular speed	Low complexity	lightning_r.gif
Hummingbird	Slow motion	Low complexity	hummingbird_s.gif
	Regular speed	Low complexity	humingbird_r.gif
Airbag	Slow motion	Medium complexity	airbag_s.gif
	Regular speed	Medium complexity	airbag_r.gif
Dominos	Slow motion	Medium complexity	dominos_s.gif
	Regular speed	Medium complexity	dominos_r.gif
Volleyball	Slow motion	Medium complexity	volleyball_s.gif
	Regular speed	Medium complexity	volleyball_r.gif
Hamsters	Slow motion	Medium complexity	hamsters_s.gif
	Regular speed	Medium complexity	hamsters_r.gif
Geyser	Slow motion	Medium complexity	geyser_s.gif
	Regular speed	Medium complexity	geyser_r.gif
Sneakers	Slow motion	Medium complexity	sneakers_s.gif
	Regular speed	Medium complexity	sneakers_r.gif
Ladybug	Slow motion	Medium complexity	ladybug_s.gif
	Regular speed	Medium complexity	ladybug_r.gif
Ballet	Slow motion	Medium complexity	ballet_s.gif
	Regular speed	Medium complexity	ballet_r.gif
Waterglass	Slow motion	Medium complexity	waterglass_s.gif
	Regular speed	Medium complexity	waterglass_r.gif
Crash	Slow motion	Medium complexity	crash_s.gif
	Regular speed	Medium complexity	crash_r.gif
Glitter	Slow motion	High complexity	glitter_s.gif
	Regular speed	High complexity	glitter_r.gif
Baseball	Slow motion	High complexity	baseball_s.gif
	Regular speed	High complexity	baseball_r.gif
Sync. diving	Slow motion	High complexity	syncdiving_s.gif

	Regular speed	High complexity	syncdiving_r.gif
Fencing	Slow motion	High complexity	fencing_s.gif
	Regular speed	High complexity	fencing_r.gif
Shooting	Slow motion	High complexity	shoot_s.gif
	Regular speed	High complexity	shoot_r.gif
Stick	Slow motion	High complexity	stick_s.gif
	Regular speed	High complexity	stick_r.gif
Cheering	Slow motion	High complexity	cheering_s.gif
	Regular speed	High complexity	cheering_r.gif
Fish	Slow motion	High complexity	fish_s.gif
	Regular speed	High complexity	fish_r.gif
Rose petals	Slow motion	High complexity	rosepetals_s.gif
	Regular speed	High complexity	rosepetals_r.gif
Parkour	Slow motion	High complexity	parkour_s.gif
	Regular speed	High complexity	parkour_r.gif
		Study 2b	
Stimuli	**Speed condition**	**Boundary condition**	**Link to stimuli**
Hamsters	Slow motion	Low complexity	hamster_low_s.gif
	Regular speed	Low complexity	hamster_low_r.gif
	Slow motion	High complexity	hamster_high_s.gif
	Regular speed	High complexity	hamster_high_r.gif
Hummingbird	Slow motion	Low complexity	bird_low_s.gif
	Regular speed	Low complexity	bird_low_r.gif
	Slow motion	High complexity	bird_high_s.gif
	Regular speed	High complexity	bird_high_r.gif
Ladybug	Slow motion	Low complexity	ladybug_low_s.gif
	Regular speed	Low complexity	ladybug_low_r.gif
	Slow motion	High complexity	ladybug_high_s.gif
	Regular speed	High complexity	ladybug_high_r.gif
Kingfisher	Slow motion	Low complexity	kingfish_low_s.gif
	Regular speed	Low complexity	kingfish_low_r.gif
	Slow motion	High complexity	kingfish_high_s.gif
	Regular speed	High complexity	kingfish_high_r.gif
Ballet	Slow motion	Low complexity	ballet_low_s.gif
	Regular speed	Low complexity	ballet_low_r.gif
	Slow motion	High complexity	ballet_high_s.gif
	Regular speed	High complexity	ballet_high_r.gif
		Study 2c	
Stimuli	**Speed condition**	**Boundary condition**	**Link to stimuli**
Basketball	Slow motion	positive	basketball_s.gif
	Regular speed	positive	basketball_r.gif
Puppy	Slow motion	positive	puppy_s.gif
	Regular speed	positive	puppy_r.gif
Runner	Slow motion	positive	run_s.gif
	Regular speed	positive	run_r.gif
Wave	Slow motion	positive	wave_s.gif
	Regular speed	positive	wave_r.gif
Boxing	Slow motion	negative	boxing_s.gif
	Regular speed	negative	boxing_r.gif
Tattoo	Slow motion	negative	tattoo_s.gif
	Regular speed	negative	tattoo_r.gif
Spit	Slow motion	negative	spit_s.gif
	Regular speed	negative	spit_r.gif
Piercing	Slow motion	negative	piercing_s.gif
	Regular speed	negative	piercing_r.gif
		Study 4a	
Stimuli	**Speed condition**	**Boundary condition**	**Link to stimuli**
Basketball 1	Slow motion	/	basketball1_s.gif
	Regular speed	/	basketball1_r.gif
Basketball 2	Slow motion	/	basketball2_s.gif
	Regular speed	/	basketball2_r.gif
Basketball 3	Slow motion	/	basketball3_s.gif
	Regular speed	/	basketball3_r.gif
Basketball 4	Slow motion	/	basketball4_s.gif
	Regular speed	/	basketball4_r.gif
Basketball 5	Slow motion	/	basketball5_s.gif
	Regular speed	/	basketball5_r.gif
Basketball 6	Slow motion	/	basketball6_s.gif
	Regular speed	/	basketball6_r.gif
		Study 4b	
Stimuli	**Speed condition**	**Boundary condition**	**Link to stimuli**
Ski	Slow motion	Exciting	exciting_slow.mov
	Regular speed	Exciting	exciting_fast.mov
	Slow motion	Relaxing	relaxing_slow.mov
	Regular speed	Relaxing	relaxing_fast.mov

WEB APPENDIX C: RELATIVE VS. ABSOLUTE FLUENCY

Past research suggests that fluency is a relative, rather than absolute, experience. That is, for a stimulus to feel fluent, this stimulus must feel easy to process relative to what one might expect based on the context of other stimuli (for a review, see Hansen and Wänke 2013). For this reason, most experiments in the fluency literature use within- rather than between-subjects manipulations, in which participants are exposed to and rate more and less fluent stimuli sequentially (Wänke and Hansen 2015). Indeed, classic fluency manipulations, such as varying the level of visual clarity or exposure duration of stimuli, only produced effects on liking when they were applied within-subjects but not when they were applied between-subjects (Forster, Gerger, and Leder 2015).

We designed this experiment to demonstrate that the effect of speed (slow motion vs. regular speed) on liking is contingent on varying playback speed within-subjects. That is because participants should only experience slow-motion videos as fluent if they are relatively easier to process than other videos. We manipulated between-subjects whether six target slow-motion videos were presented in a context of six videos that played in regular speed (relative fluency condition) or slow motion (absolute fluency condition). Slow-motion videos should be liked significantly more in the relative (vs. absolute) fluency condition

Methods

Stimuli development. This experiment used the six video stimuli from study 1 that showed the strongest effect as target videos. The six target videos played in slow motion. As context stimuli, we selected six other videos from study 1. These were either played in slow motion or regular speed, depending on condition. All videos were looped.

Design and procedure. According to G*Power, approximately 500 participants are needed to detect small-sized effects (d = .25) with 80% power in between-subjects designs

(Faul et al. 2019). At the end of data collection, 507 MTurk participants had completed the study (267 females, M_{age} = 39.02, SD_{age} = 11.41).

Participants were randomly assigned to one of two fluency conditions. In the relative fluency condition, participants watched the six slow-motion target videos and the six regular-speed context videos sequentially, in random order, and without sound. In the absolute fluency condition, participants watched all twelve videos (the six target and the six context videos) in slow motion. In response to each video, participants indicated liking ("How much do you like this video clip? 1 = *not at all* to 7 = *extremely*). To compute our dependent measure, we averaged the liking ratings for the six target slow-motion videos.

Results and Discussion

We conducted a between-subjects t-test to compare liking in the absolute fluency and the relative fluency conditions. As predicted, the slow-motion target videos were liked significantly more in a context of regular-speed videos (M = 4.91, SD = .89) as compared to a context of slow-motion videos (M = 4.71, SD = 1.03; $t(505) = -2.35$, $p = .019$).

According to previous research, fluency is a relative experience. Conceptually replicating this result, we find that presenting slow-motion videos in a context of regular-speed videos (vs. other slow-motion videos) increased liking. Presumably, because in a context of regular-speed videos, the slow-motion clips are experienced as relatively fluent. Our investigation thus manipulates video speed within-subjects, which is consistent with classic findings in the fluency literature. Zajonc's (1968) mere exposure effect and Hasher and colleague's (1977) illusory truth effect, for instance, are reliably observed in within- but not in between-subjects designs (Dechêne et al. 2009; Hansen, Dechêne, and Wänke 2008).

WEB APPENDIX D: VALIDATION OF SPEED MANIPULATION (STUDY 1)

We conducted a pretest to verify that we had successfully altered the speed of the 14 short-form video clips utilized in study 1. The pretest aimed to verify that the slow-motion videos were perceived as significantly slower than the regular-speed videos. Moreover, the pretest served to ensure that the slow-motion videos were perceived as playing in slow motion and that the regular-speed videos were perceived as playing in normal speed.

Method

To validate that participants perceived the videos in slow motion (regular speed) as playing in slow motion (regular speed), we asked people from the same population as those who completed the main study to participate in the pretest. The procedure mirrored that of main study 1. Fifty Mechanical Turk workers (MTurk; 17 females; M_{age} = 34.38, SD_{age} = 10.79) rated the 14 videos sequentially, in random order. As in the main study, we randomly assigned participants to see either the slow-motion version or the regular-speed version of each video. Below each video, we measured subjective perceptions of speed using a 3-point scale ("How would you describe the speed of this video?"; 1 = *Slower than normal*; 2 = *Normal*; 3 = *Faster than normal*).

Results and Discussion

We conducted a within-subjects t-test to examine whether subjective perceptions of speed differed between the two experimental conditions (slow motion vs. regular speed). The manipulation was successful. Videos that played in slow motion were rated as significantly slower (M_{slow} = 1.17, SD_{slow} = .19) than videos that played in regular speed (M_{regular} = 1.97, SD_{slow} = .35; $t(49)$ = -15.02, p < .001, d = 2.13).

We further verified our speed manipulation by assessing whether each of the two observed means is located at the expected scale range using two separate one-sample t-tests.

The first t-test showed that the perceived speed of videos that played in slow motion was significantly lower than the scale midpoint (2 = *Normal*): $t(49) = 30.61$, $p < .001$. The second t-test showed that the perceived speed of videos that played in regular speed was significantly higher than the scale minimum (1 = *Slower than normal*): $t(49) = 19.58$, $p < .001$. In sum, by increasing the frame rate in Photoshop, we successfully manipulated the perceived speed of 14 short-form videos.

WEB APPENDIX E: FLUENCY VERSUS ALTERNATIVE EXPLANATIONS

We conducted an additional study to examine alternative explanations for the observed effect of speed (slow motion vs. regular speed) on liking. We propose that slow motion increases liking because it facilitates visual processing (i.e., fluency). Yet, slow motion has also been shown to increase attention to visual details (Hammerschmidt and Wöllner 2018) and to influence perceptions of intentionality, object size, and emotional outcomes such as affect and arousal (Caruso et al. 2016; Jia et al. 2020; Spitz et al. 2018; Wöllner et al. 2018; Yin et al. 2021) – all of which might alternatively account for our effect.

Alternative Accounts

Intentionality. Actions that unfold in slow motion appear more deliberate and premeditated (Caruso et al. 2016; Yin et al. 2021). Because the short-form videos in our studies do not show human actors interacting with products but instead involve inanimate objects and human actors moving, intentionality perceptions might not have negative connotations (i.e., the action appearing "fake" and "posed") but instead positive connotations. For instance, a scene of a basketball player dunking might be perceived as more intentional, deliberate, and ultimately more skillful in slow motion, which might boost consumer evaluations. We measure the perceived intentionality of the depicted action to test this possibility.

Object size. Objects that move in slow motion appear to be larger (Jia et al. 2020). Because a larger size (e.g., tallness) is often seen as a positive trait in people and products (Jackson and Ervin 1992), consumers might like slow-motion short-form videos more because the displayed people and objects are perceived to be bigger. We measure the perceived size of the objects/people shown in the short-form videos to test this possibility.

Amount of visual information. Slow motion provides a more detailed viewing experience (Hammerschmidt and Wöllner 2018) which might explain the effect of speed on liking. Indeed, when consumers perceive a stimulus as fluent, they typically experience the cognitive process associated with the stimulus as accurate (Alter and Oppenheimer 2016; Graf et al. 2018; Reber, Schwarz, and Winkielman 2004) which suggests that perceiving a lot of details in a stimulus may cover one aspect of processing fluency such that it may act as a potential mediator. Yet, “amount of information” is only one of several perceptual aspects of processing fluency, which is why a direct measurement of fluency should be a better explanation for our effect. Importantly, the design of the present study rules out differences in the *objective* “amount of visual information” by holding the temporal duration of the slow-motion and regular-speed clips constant. Exposing participants to the visual information for the same amount of time equalizes deliberation time and the objective visual input across conditions.

Emotional outcomes. Slow motion has been linked to arousal and affect. Yet, existing work provides no clear rationale for an indirect effect of speed on liking via arousal. Slow motion (vs. regular speed) has been shown to increase and decrease arousal (Barnett and Grabe 2000; Wöllner et al. 2018), and arousal itself is not clearly positively or negatively associated with liking (Wundt 1874). As such, we were agnostic about a potential indirect effect of arousal but expected that fluency would be a stronger explanation (given that there is no clear theoretical link between arousal, slow motion, and liking). Processing fluency is known to trigger positive affect, which is attributed to the object being processed (Winkielman et al. 2003). It is thus plausible that positive affect might also explain the effect of speed on liking.

Methods

Stimuli development. We selected the six video stimuli from study 1 that showed the strongest effect. To hold constant the exposure duration between the slow-motion and regular-speed conditions, we created regular-speed versions by doubling (200%), tripling (300%), or quadrupling (400%) the speed of the original slow-motion video – depending on which rate most resembled regular speed. To match the duration of the slow-motion version, we played the regular-speed videos twice, three times, or four times in a row (depending on the speed rate), while the slow-motion video played only once.

Design and procedure. Study 1 finds a small effect of speed (slow motion vs. regular speed) on liking (d = .16). Approximately 300 participants are needed to detect this effect with 80% power in within-subjects designs. At the end of data collection, 301 MTurk participants had completed the study (229 females, M_{age} = 36.96, SD_{age} = 13.36).

The design of this study closely followed the procedure that we applied in study 1. Participants rated six video clips that played sequentially, in random order, and without sound. Speed was, again, manipulated within-subjects: Out of the six videos, we randomly selected three to play in slow motion and three to play at regular speed.

For each video, participants first indicated liking on the scale from study 1. Next, we measured the five mediating constructs in randomized order. On separate pages, participants saw the video again and completed the respective scale below the video (fluency, intentionality, object size, amount of information, or emotional outcomes). Fluency was measured with the item from study 1. To measure intentionality, we used the two original items by Yin and colleagues (2021; "To what extent is this movement performed [wilfully; intentionally]?" 1 = *not at all* to 7 = *to a great extent*). These were averaged to create an index of intentionality. Object size was measured by adapting the items from Jia and colleagues (2020; e.g., "How high is the wave shown in this video clip?"). As in the original study, participants indicated their answers on a slider scale (e.g., *0 feet* to *100 feet*). We Z-transformed and then averaged these values to create an index of object size. We measured emotional outcomes with the items developed by Wöllner (2018). To measure arousal, we asked "How aroused or calm are the emotions conveyed in this video?" (1 = *very calm* to 7 = *very aroused*) and to measure affect, we asked "How positive or negative are the emotions conveyed in this video?" (1 = *very negative* to 7 = *very positive*). The level of visual details was assessed by asking "The amount of visual information in this video clip is …" (1 = *low* to 7 = *high*). This process was repeated for all six videos.

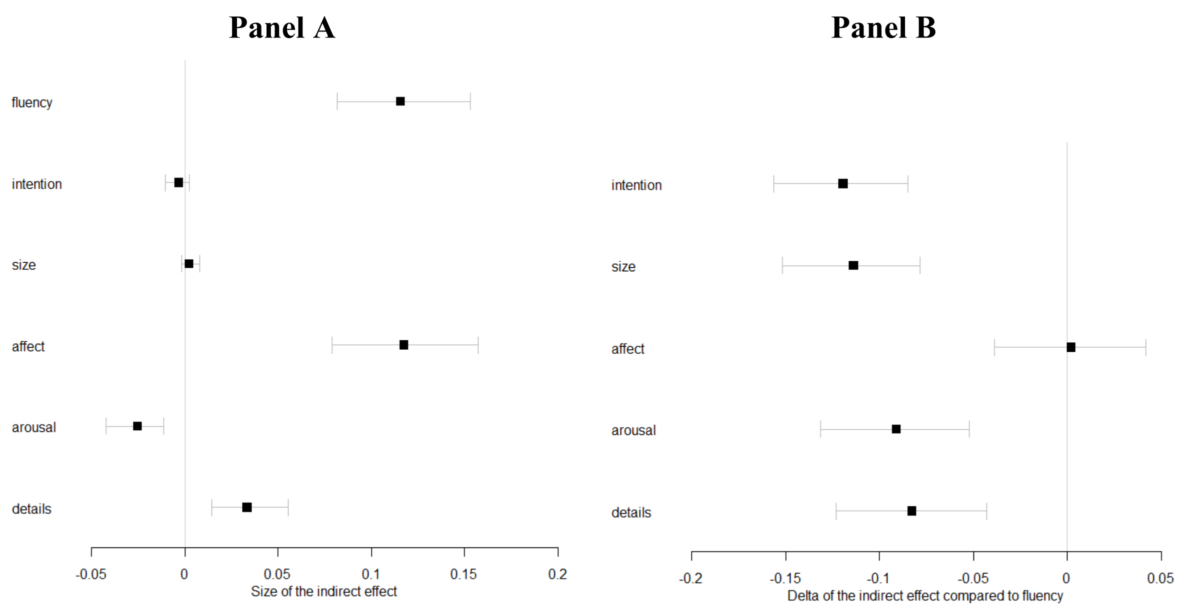
Results

The analyses closely followed the analysis of study 1. We used LMM to account for the repeated measurement structure of the data and the random sampling of stimuli. The model included a random intercept per participant and a crossed random intercept per stimulus. For each of the six potential mediators, we estimated the second (i.e., regressing the mediator on presentation speed) and third model (i.e., regressing liking on the mediator and on presentation speed) described in study 1 (we also estimated the first model described in study 1, which replicated the total effect of presentation speed on liking: b = .248; $p < .001$).

Based on these analyses, we computed the indirect effect for each of the six potential mediators and a corresponding bootstrapped 95%-confidence interval based on 5,000 samples. Panel A of figure W1 depicts these estimates and shows that only the effects of fluency, affect, arousal (negative), and details are significant. To assess whether the indirect effect through fluency is stronger than the alternative indirect effects, we then bootstrapped the difference between the indirect effect through fluency and through any of the five other potential mediators (i.e., negative values indicate that fluency is stronger). Panel B of figure 1 shows that, with the exception of positive affect, fluency is a stronger mediator than any of the other constructs.

Importantly, the indirect effects via fluency and affect are asymmetric. Speed has a stronger effect on fluency than on affect, and the association between affect and liking is stronger than the association between fluency and liking. This pattern of results indicates a serial mediation with fluency being the first mediator and positive affect being a subsequent second mediator, which is theoretically in line with the hedonic fluency model. A serial mediation model finds a statistically significant indirect effect (slow motion → fluency → positive affect → liking: b = .05; *SE* = .007; *Sobel-z* = 7.18; $p < .001$) that is stronger than when the order of mediators is reversed (slow motion → positive affect → fluency → liking: b = .02; *SE* = .004; *Sobel-z* = 5.35; $p < .001$).

Figure W1: Indirect Effects of Six Potential Mediators (Panel A) and Differences Between the Indirect Effect of Fluency and the Five Other Potential Mediators (Panel B)



Notes. Bootstrapped estimates and 95%-confidence intervals based on 5,000 samples.

Discussion

In sum, the results of this study suggest that fluency and positive affect are the strongest mediators of the effect of slow motion on liking. Importantly, these two variables are conceptually closely connected in that positive affect is considered a consequence of an experience of high processing fluency, which is also supported by a serial mediation analysis. Taken together, we find strong evidence that the hedonic fluency model is the most parsimonious explanation for the effect of speed on liking: Slow motion videos feel "easier to watch" (i.e., more fluent), which is accompanied by mild positive affect, which then feeds into consumer evaluations (e.g., aesthetic appreciation).

While our study finds strong support for the hedonic fluency mechanism, we find no evidence that slow motion influences perceptions of intentionality and object size (figure 1, panel A). We believe that we do not replicate these processes with our set of short-form videos for two reasons. First, intentionality attributions have been shown to be specific to human actors (Yin et al. 2021). Because many of our videos involve non-human actors (e.g., animals), this process presumably does not apply to our stimuli. Second, the speed-scaling effect only occurs when consumers are relatively unfamiliar with the target domain (Jia et al. 2020). Because our videos show stimuli that consumers are very accustomed to (e.g., people, animals, everyday objects), size perceptions might not be sufficiently ambiguous for playback speed to unfold an effect.

WEB APPENDIX F: VALIDATION OF ALGORITHMIC DYNAMIC COMPLEXITY MEASURE

We strived to validate that our algorithmic measure of dynamic complexity correlated with subjective perceptions of dynamic complexity. To achieve this goal, we used Photoshop to decompose 100 slow-motion videos into their corresponding static images and then computed the dynamic complexity of each video with our algorithm ($M_{obj\_complexity}$ = .21; $SD_{obj\_complexity}$ = .16). The degree of complexity varied greatly (range: <.01 to .73). Moreover, our complexity measure did not correlate with the number of images (*r* [100] = .095, *p* = .346) or the number of pixels (*r* [100] = -.045, *p* = .659) that the videos were comprised of. This suggests that, as intended, more complex videos were not necessarily longer (in terms of duration) or of higher resolution than more simple videos.

To assess subjective perceptions of dynamic complexity, we recruited 210 MTurk participants (80 females, M_{age} = 36.50 SD_{age} = 11.04). From the overall set of 100 videos, each participant evaluated a random subset of 30. For each of the 30 videos, the participants responded to the question "How complex is the movement in this scene? (i.e., are there many or only few moving elements in this scene?)" on a slider scale from 1 = *simple* to 100 = *complex* (the scale was anchored at 50). Participants rated the videos sequentially and in random order.

For each of the 100 videos, we computed the average perceived complexity ($M_{subj\_complexity}$ = 53.00, $SD_{subj\_complexity}$ = 14.98). The correlation between objective and subjective complexity was significant and positive (*r*[100] = .35, *p* < .001) and comparable in size to previous studies that validated objective complexity measures with subjective perceptions of complexity. For instance, Pieters, Wedel, and Batra (2010) report a multiple correlation of .37 when regressing subjective complexity on objective complexity and several further predictor variables. Thus, the higher the objective complexity, as computed by our algorithm, the higher the subjective perceptions of complexity. In sum, our algorithm successfully captures variation in dynamic complexity.

WEB APPENDIX G: VALIDATION OF SPEED MANIPULATION (STUDY 2A)

We conducted a pretest to ensure that we had successfully altered the speed of the 30 video clips utilized in study 2a. We again aimed to verify that slow-motion and regular-speed videos were perceived as playing at different speeds. In addition, we strived to make sure that the slow-motion videos were perceived as playing in slow motion and that the regular-speed videos were perceived as playing in regular speed. Finally, we aimed to validate that perceptions of speed were not predicted by movement complexity. Put differently, movement complexity should not affect participants' ability to recognize differences in speed.

Method

One hundred and four MTurk workers (34 females; $M_{\text{age}} = 36.57$, $SD_{\text{age}} = 11.66$) rated the 30 videos sequentially, in random order. Mirroring the procedure in the main study, for each video, participants were randomly assigned to see either the slow-motion version or the regular-speed version. Below each video, we measured subjective perceptions of speed with the same 3-point scale used in the pretest for study 1 ("How would you describe the speed of this video?"; 1 = *Slower than normal*; 2 = *Normal*; 3 = *Faster than normal*).

Results and Discussion

A within-subjects t-test confirmed that videos that played in slow motion were rated as significantly slower ($M_{\text{slow}} = 1.11$, $\text{SD}_{\text{slow}} = .20$) than videos that played in regular speed ($M_{\text{regular}} = 1.85$, $\text{SD}_{\text{slow}} = .29$; $t(103) = -24.42$, $p < .001$, $d = 2.39$). We also verified our speed manipulation by conducting two one-sample t-tests. The perceived speed of videos that played in slow motion was significantly slower than the scale midpoint (2 = *Normal*; $t(103) = -45.47$, $p < .001$). Conversely, the perceived speed of videos that played in regular speed was significantly higher than the scale minimum (1 = *Slower than normal*; $t(103) = 29.88$, $p < .001$).

Lastly, we examined the correlation between objective movement complexity and speed perceptions for our set of 30 stimuli. We examined the correlation between movement complexity, as defined by our algorithm, and the difference in perceived speed between the slow-motion and regular-speed conditions. Movement complexity did not correlate with the difference score ($r(30) = -.199$, $p = .291$), nor with the perceived speed in the slow-motion ($r(30) = .066$, $p = .727$) or regular-speed condition ($r(30) = .263$, $p = .160$).

Our results suggest that our manipulation successfully altered the perceived speed of the 30 video clips in study 2a. Most importantly, participants were sensitive to speed perceptions independent of how complex the depicted movement was. Results in the main study thus cannot be attributed to the possibility that participants are less able to recognize slow motion for simple (vs. complex) movements.

WEB APPENDIX H: VALIDATION OF VALENCE MANIPULATION (STUDY 2C)

We conducted a posttest to ensure that short-from videos in study 2c significantly differed in terms of valence. Sixty-two MTurk workers (24 females; M_{age} = 35.53*,* SD_{age} = 8.43) were randomly assigned to the positive or negative valence condition (between-subjects). Depending on condition, they watched the four short-form videos that depicted positively valenced content or negatively valenced content from the main study in random order without sound. Below each video, we measured subjective perceptions of valence with a 7-point Likert scale ("What types of emotions does this GIF intend to elicit?"; 1 = *definitely intended to elicit negative emotions* to 7 = *definitely intended to elicit positive emotions*). We averaged the ratings across the videos to create a measure of perceived valence (M = 4.14, SD = 2.04). A between-subjects t-test confirmed that videos in the negative valence condition were perceived as significantly more negative in terms of valence ($M_{negative}$ = 2.31, $SD_{negative}$ = 1.20) than videos in the positive valence condition ($M_{positive}$ = 5.86, $SD_{positive}$= 0.76; $t(60)$ = 13.993, p < .001, d = 3.56). Our results suggest that study 2c successfully manipulated the perceived valence of the underlying content.

WEB APPENDIX I: VALIDATION OF SPEED MANIPULATION (STUDY 2C)

The pretest served to ensure that we had successfully altered the speed of the video clips utilized in study 2c. We predicted that the slow-motion videos were perceived as significantly slower than the regular-speed videos. In addition, the slow-motion videos should be perceived as playing in slow motion, and the regular-speed videos should be perceived as playing in regular speed. Most important, perceptions of speed should not depend on valence. Participants should be equally able to recognize speed differences in scenes depicting pleasant and unpleasant movements.

Method

The pretest used the same procedure as main study 2c in the manuscript. Participants were randomly assigned to the positive or negative valence condition (between-subjects). As in the main study, they watched the slow-motion and regular-speed versions of the four videos back-to-back. Below each video, participants indicated their subjective perception of speed on the same scale used in the previous pretests ("How would you describe the speed of this video?"; 1 = *Slower than normal*; 2 = *Normal*; 3 = *Faster than normal*). For each video, we randomized whether participants first evaluated the slow-motion version or the regular-speed version. We also randomized the order of the four videos. We recruited sixty Prolific Academic workers (39 females; M_{age} = 37.43, SD_{age} = 11.98) for the pretest.

Results and Discussion

A within-subjects t-test confirmed that slow-motion videos were rated as significantly slower (M_{slow} = 1.06, SD_{slow} = .14) than regular-speed videos ($M_{regular}$ = 2.11, SD_{slow} = .41; $t(59) = -18.92$, $p < .001$, $d = 2.44$). The perceived speed of slow-motion videos was significantly slower than the scale midpoint (2 = *Normal*; $t(60) = - 56.70$, $p < .001$).

Conversely, the perceived speed of regular-speed videos was significantly higher than the scale minimum (1 = *Slower than normal*; $t(59) = 21.069$, $p < .001$).

Lastly, we examined whether valence moderates the effect of speed on speed perceptions. We conducted a mixed ANOVA that examined the effect of speed (within-subjects), valence (between-subjects), and their interaction on speed perceptions. We only detected a strong main effect of speed; $F(1, 58) = 352.81$, $p < .001$, $\eta_p^2 = .859$). There was no main effect of valence; $F(1, 58) = .95$, $p = .334$, $\eta_p^2 = .016$). And, most importantly, no interaction between valence and speed; $F(1, 58) = .05$, $p = .823$, $\eta_p^2 = .001$).

Taken together, our pretest confirms that our manipulation successfully altered the perceived speed of the video clips in study 2c. Participants could detect differences in speed equally well for negatively and positively-valenced videos. Results in the main study thus cannot be attributed to the possibility that participants are less able to recognize slow motion in unpleasant (vs. pleasant) movements.

WEB APPENDIX J: SUPPLEMENTARY ANALYSES (STUDY 3)

Table W1 contains the results of Chi-square tests that examine whether the frequency of tags differs between the slow motion and random category. We find that slow-motion GIFs are significantly more often tagged using the words “sport” and “guns” and significantly less often tagged using the word “funny” as compared to GIFs in the random category. Two independent t-tests examine differences in the variables “number of images” and “pixels”. On average, slow-motion GIFs are comprised of significantly more pixels and images than GIFs from the random category.

Table W1: Comparison of Slow Motion and Random-Category GIFs

	$\%_{slow}$	$\%_{random}$	$\chi 2$	*p*
Animals	15.68	18.71	.817	.366
Fail	13.56	17.27	1.335	.248
Sport	29.23	22.30	3.233	.072
Guns	10.59	.02	16.024	<.001
Funny	21.61	67.27	107.011	<.001
	M_{slow} (SD_{slow})	M_{random}(SD_{random})	*t*	*p*
Images	17.51 (11.78)	15.07 (9.61)	2.591	.010
Pixels	92664.83 (30483.97)	85902.96 (32058.67)	2.437	.015

We conduct additional analyses that examine the effect of speed and our proposed moderators (complexity and valence) on various variables in our dataset (table W2). Models 1 and 2 examine the dependent measures votes and views, respectively. Because votes and views are overdispersed count variables (the variance is larger than the mean), we conduct negative binomial regressions. The linear regression models 3 and 4 examine the dependent measures ratings and volume (votes/views). Finally, model 5 looks at additive composite liking in which we combined the standardized rating variable and the standardized votes/views variable using addition rather than multiplication. We replicate the positive main effect of slow motion (all *p* <.005) and the interaction between speed and complexity in the models for volume (*p* = .009; model 4) and additive composite liking (*p* = .099; model 5) but not in the models for votes, views, and ratings.

Table W2: Disaggregate Analyses

	Negative Binomial Regression				*Linear Regression*					
	1 Votes		*2 Views*		*3 Rating*		*4 Volume (Votes/Views)*		*5 Additive Composite Liking*	
	b	*z*	b	*z*	b	*t*	b	*t*	b	*t*
Speed	-.044	-2.492*	-.108	-3.252**	-.011	-.801	<.001	3.185**	.019	2.840**
Complexity	-.260	-2.774**	-.440	-2.513*	-.145	-2.066*	.001	3.010**	.071	1.978*
Valence	-.047	-3.538***	-.091	-3.644***	-.001	-.098	<.001	2.556*	.013	2.574*
Speed X Complexity	-.098	-1.097	-.163	-.982	-.127	-1.899’	.001	2.608**	.057	1.655’
Speed X Valence	.010	.786	.024	1.027	-.004	-.471	<.001	1.357	.005	1.139
Funny	.052	1.425	.145	2.129*	.028	1.015	<.001	-1.848’	-.019	-1.351
Animals	-.069	-1.808’	-.192	-2.716**	.045	1.593	<.001	.387	.018	1.257
Fail	-.083	-1.885’	-.172	-2.084*	.033	1.003	<.001	.128	.011	.673
Sports	-.037	-1.061	-.076	-1.163	-.017	-.654	<.001	.791	.006	.460
Guns	.035	.524	.015	.122	.071	1.432	<.001	.632	.036	1.423
Images	-.013	-8.231***	-.017	-5.847***	-.003	-2.898**	<.001	3.380**	.001	1.909’
Pixels	<.001	-12.021***	.<.001	-9.801***	<.001	-5.514***	<.001	10.080***	<.001	7.381***

*Notes: *** p <.001, ** p <.01, * p <.05, ‘ p ≤.1*

WEB APPENDIX K: BRAND LOGO PRETEST (STUDY 4A)

The pretest (*n* = 50; 20 females; M_{age} = 38.43, SD_{age} = 9.66) served to find two logos of sports apparel brands that our target sample was unfamiliar with and that they considered equally attractive. We selected ten logos of relatively obscure sneaker brands from the internet that we presented in randomized order. For each of the logos, participants indicated liking ("How much do you like this logo?" 1 = *not at all* to 7 = *very much*) and whether they had seen the logo before ("Do you know this brand?" 1 = *yes*, 0 = *no*; binary). A paired samples t-test indicates that the logos of Atalasport and Superga were equally liked ($M_{Atalasport}$ = 4.37, SD = 1.34 versus $M_{Superga}$ = 4.33, SD = 1.44; $t(50) = .22$, $p = .830$). A Wilcoxon Singed-Ranks Test showed that the brands Atalasport and Superga were equally unfamiliar ($Know_{Atalasport}$ = 2% versus $Know_{Superga}$ = 6%, Z = -1.41, $p = .157$). We thus selected the logos of Atalasport and Superga for the main study.

WEB APPENDIX L: VALIDATION OF SPEED MANIPULATION (STUDY 4A)

To ensure that we had successfully altered the speed of the basketball video clips in study 4a, we conducted a pretest that used the same procedure as main study 4a in the manuscript. As in the main study, participants watched three basketball videos in slow-motion and three basketball videos in regular-speed. As in the main study, we randomized the order of the speed condition (slow-motion videos first vs. regular-speed videos first). We also used two order conditions (videos A, B, and C in slow motion vs. videos D, E, and F in slow motion). As in all other pretests, participants indicated their subjective perception of speed below each video ("How would you describe the speed of this video?"; 1 = *Slower than normal*; 2 = *Normal*; 3 = *Faster than normal*). We recruited 58 MTurk workers (28 females; $M_{\text{age}} = 34.69$, $SD_{\text{age}} = 8.33$) for the pretest.

A within-subjects t-test confirmed that slow-motion videos were rated as significantly slower ($M_{\text{slow}} = 1.12$, $SD_{\text{slow}} = .33$) than regular-speed videos ($M_{\text{regular}} = 2.04$, $SD_{\text{slow}} = .61$; $t(57) = -11.14$, $p < .001$, $d = 1.45$). The perceived speed of slow-motion videos was significantly lower than the scale midpoint (2 = *Normal*; $t(57) = 20.38$, $p < .001$). Conversely, the perceived speed of regular-speed videos was significantly higher than the scale minimum (1 = *Slower than normal*; $t(57) = 13.08$, $p < .001$). We also examined whether the order of speed conditions (slow motion first vs. regular speed first) or the order of videos moderates the effect of speed on speed perceptions. Two mixed ANOVAs found no main effects of order (all $F < 3.23$, all $p > .078$, all $\eta_p^2 < .055$) or interactions between speed and order (all $F < 1.25$, all $p > .269$, all $\eta_p^2 < .022$). In sum, our manipulation in study 4a successfully altered the perceived speed of the video clips.

WEB APPENDIX M: FAITH IN INTUITION AND PRODUCT INVOLVEMENT (STUDY 4A)

As part of study 4a, we assessed two additional individual differences that could potentially moderate the effect of speed, and thus fluency, on brand liking. First of all, we wondered whether our speed manipulation would unfold a stronger effect on judgments among consumers who tend to rely on and trust automatic and experiential forms of information processing (i.e., "faith in intuition"; Epstein et al. 1996). To measure faith in intuition, we adapted the original five-item scale to focus on products (e.g., "My initial impressions of products are almost always right."; 1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = 90$, $M = 3.76$, SD = .73; Epstein et al. 1996). Second, we explored whether the effect of playback speed on liking is stronger among consumers who are less involved in the product category because highly involved consumers tend to form attitudes based on facts and objective information rather than the affect conveyed in the message (Petty and Cacioppo 1986). To measure product involvement, we used an abbreviated version of Zaichkowsky's bipolar scale (1985) which consisted of four items (e.g., Sports apparel …. 1 = *is important to me* to 7 = *is unimportant to me*; 1 = *matters to me* to 7 = *does not matter to me*; $\alpha = .97$; $M = 4.05$, SD = 1.72).

Next, we conducted mixed linear regressions to test for potential interactive effects between our speed manipulation and these variables on brand liking. The results are reported in table W1 and suggest no moderating influence of faith in intuition or product involvement (all interaction p values >.453).

Table W1: Mixed Linear Regressions

Dependent Measure: Brand Liking			
Faith in Intuition (FII)		*Involvement*	
Speed	.749 (.082)***	Speed	.749 (.082)***
FII	.304 (.065)***	Involvement	-.419 (.064)***
Speed X FII	.029 (.082)	Speed X Involvement	.061 (.082)

Notes: Unstandardized regression coefficients, standard errors in parentheses, *** <.001. FII and Involvement were Z transformed. Speed was effect coded.

WEB APPENDIX N: ORDER EFFECTS (STUDY 4A)

Study 4a counterbalanced, between-subjects, the order of speed conditions (regular speed first vs. slow motion first), the order of brands (Atalasport in slow motion vs. Superga in slow motion), and the order of videos (videos A, B, and C in slow motion vs. videos D, E, and F in slow motion). To make sure that order did not influence our pattern of results, we conducted three mixed linear regressions that included the order conditions as an experimental factor (table W1). All three-way interactions between speed, processing style, and order condition are insignificant (all $p > .220$), which is why we collapse across order conditions in the main manuscript.

Table W1: Mixed Linear Regressions

Dependent Measure: Brand Liking			
	Order Speed	*Order Brand*	*Order Video*
Speed	.915 (.113)***	.757 (.112)***	.752 (.113)***
Processing Style	-.028 (.099)	-.052 (.104)	.015 (.099)
Order	.652 (.146)***	.046 (.149)	-.164 (.149)
Speed X Processing Style	-.225 (.109)*	-.326 (.113)**	-.379 (.107)***
Speed X Order	-.343 (.160)*	-.017 (.161)	-.003 (.161)
Processing Style X Order	.084 (.146)	.088 (.149)	-.057 (.150).
Speed X Processing Style X Order	-.197 (.161)	.043 (.161)	.170 (.162)

Notes: Unstandardized regression coefficients, standard errors in parentheses, *** <.001, ** <.01, * <.05. Processing style was mean centered. Speed and order condition were effect coded.

WEB APPENDIX O: VALIDATION CONSUMPTION GOAL MANIPULATION (STUDY 4B)

We conducted a posttest to ensure that our manipulation in study 4b hat significantly shifted the participants' consumption goal. Sixty-one MTurk workers (24 females; M_{age} = 35.38 SD_{age} = 9.88) were randomly assigned to the excitement goal and relaxation goal conditions (between-subjects). Next, they saw the original manipulation that we had used in the main study. Specifically, in the excitement condition, participants were asked to imagine that they are looking for a vacation that is *exciting and thrilling*. In the relaxation condition, participants were asked to imagine that they are looking for a vacation that is *relaxing and tranquil.* To measure the consumption goal, we then asked participants to indicate, on a 7-point Likert scale, whether they would strive to experience "1 = … *slightly negative feelings and a sense of riskiness*" or "7 = … *slightly positive feelings and a sense of safety*" in this situation. A between-subjects t-test confirmed that our manipulation had a significant effect on the participants' consumption goal ($M_{excitement}$ = 5.50, $SD_{excitement}$ = 1.48 versus $M_{relaxation}$ = 6.39, $SD_{relaxation}$= 0.67; $t(59) = 3.035$, $p = .004$, $d = 0.78$). Our results suggest that study 4b successfully manipulated the consumers' consumption goal as intended.

WEB APPENDIX P: HEDONIC VS. UTILITARIAN PRODUCTS

We wondered whether the effect of speed on liking might differ between hedonic and utilitarian products. Slow motion induces a sense of fluency which is an inherently affective experience (Winkielman and Cacioppo 2001; Winkielman et al. 2003). Affect informs judgments when consumers evaluate hedonic products that are consumed for pleasure. In contrast, cognitions, rather than affect, inform judgments when consumers evaluate utilitarian products that are consumed because they provide functional benefits (Dhar and Wertenbroch 2000; Kempf 1999; Voss, Spangenberg, and Grohmann 2003). As such, slow motion might be more effective at increasing product liking when promoting hedonic as compared to utilitarian products.

We explored this idea in two ways which are reported in more detail below. First, we asked independent raters to code the GIFs in our large field dataset (study 3) in terms of content (hedonic vs. utilitarian). Second, we conducted an experiment in which participants were randomly assigned to a hedonic or utilitarian product (between-subjects) that was paired with slow-motion videos in an affective priming paradigm. Both studies provide no evidence for a moderating effect of product type. Instead, slow motion (vs. regular speed) increased liking equally for hedonic and utilitarian stimuli. The finding that utilitarian products benefit from a more fluent presentation is consistent with the observation that fluency shapes cognitive evaluations such as judgments of truthfulness (Koch and Forgas 2012) or recognition (Johnston, Dark, and Jacoby 1985; for a review, see Winkielman et al. 2003).

Field Evidence

Two independent raters coded each of the 514 GIFs from study 3 in terms of content type (hedonic vs. utilitarian). To familiarize the raters with the hedonic versus utilitarian dimension, we showed a brief definition that we took from the literature ("GIFs can be utilitarian which means that the content is effective, helpful, functional, necessary and/or practical and GIFs can be hedonic which means that the content is fun, exciting, delightful, thrilling, and/or enjoyable; Dhar and Wertenbroch 2000). They then rated each GIF on a 7-point scale (1 = *definitely utilitarian* to 7 = *definitely hedonic*). The level of agreement between the raters was acceptable: *r*(514) = .479. We averaged the ratings to form an index of content type (α = .56, *M* = 5.29, SD = 1.30).

We conducted a linear regression that regressed composite liking on the effect-coded presentation speed (slow motion = 1 vs. random category = -1), the content type variable (centered), and their interaction. The regression revealed a positive significant main effect of speed (b = .011, *t*(510) = 2.93, *p* = .004) and a negative significant main effect of content (b = -.007, *t*(510) = -2.36, *p* = .019) but no interaction (b = .001, *t*(510) = .24, *p* = .811).

Experimental Evidence

We conducted an experiment that used an affective priming paradigm in which a product was paired with slow-motion or regular-speed videos. The experiment employed a 2 (product type: hedonic vs. utilitarian) X 2 (speed: slow motion vs. regular) between-subjects design. Participants were randomly assigned to evaluate a hedonic or utilitarian product. During the affective priming phase, the participants watched slow-motion and regular-speed videos. However, we varied between-subjects whether the product was paired with the slow-motion or the regular-speed videos. Product liking served as a dependent measure.

Stimuli development. To manipulate product type, we framed a blog as either hedonic or utilitarian (Lu, Liu, and Fang 2016). The hedonic blog was called "*Outside & Fun*" and described as a "*travel blog that takes you on an enjoyable ride to the world's most beautiful and exotic travel destinations*". The utilitarian blog was called "*Outside & Smart*", and described as a "*science blog that hones your analytical thinking skills by reviewing multidisciplinary research".* Besides the different descriptions, the blogs also featured different logos. To illustrate, the logo of the travel blog featured a smiling face, while the logo of the science blog featured a lightbulb.

A pretest (n = 50) verified that the different blogs were indeed perceived as hedonic or utilitarian, respectively. Participants were randomly assigned to one of the blog descriptions (between-subjects). They completed five bipolar scales to measure perceptions of the blog being hedonic (e.g., 1 = *not fun* to 7 = *fun*; 1 = *dull* to 7 = *exciting*; α = .94, M = 4.98, SD = 1.30) and five bipolar scales to measure perceptions of the blog being utilitarian (e.g., 1 = *ineffective* to 7 = *effective*; 1 = *unhelpful* to 7 = *helpful*; α = .85, M = 4.69, SD = 1.01). We adopted these scales from previous research (Voss et al. 2003). The order of the scales was randomized. Two between-subjects tests confirmed that our manipulation was successful. The hedonic blog was perceived as significantly more hedonic (M = 5.62, SD = .87) than the utilitarian blog (M = 4.32, SD = 1.36; $t(49) = -4.10$, $p < .001$, d = 1.14). Conversely, the utilitarian blog was perceived as significantly more utilitarian (M = 5.02, SD = .84) than the hedonic blog (M = 4.38, SD = 1.08; $t(49) = -2.38$, p = .021, d = .66).

Design and procedure. We manipulated product type (hedonic vs. utilitarian) and speed (slow motion vs. regular speed) between-subjects. To provide enough power for an attenuated interaction hypothesis in a between-subjects design, we recruited 601 MTurk participants (267 females, M_{age} = 39.85, SD_{age} = 11.83).

At the beginning of the experiment, participants were randomly assigned to one of two product-type conditions. They then saw the logo of the respective blog (*Outside & Fun* or *Outside & Smart*) together with the description. As a next step, participants completed an affective priming procedure. The logo of the blog served as the neutral stimulus. Eight short videos of nature scenes served as affective stimuli, out of which four played in regular speed and four played in slow motion[1]. Thus, consistent with our previous studies, speed was

[1] To rule out the possibility that specific videos might drive the effects, we created two order conditions. In one order condition, videos A,B,C, and D played in slow motion (and E,F,G, and H played in regular speed). In the other order condition, videos E,F,G, and H played in slow motion (and A,B,C, and D played in regular speed). We detected no main effect of order or interactive effects of order and our predictors (all $F < .70$; $p > .404$) which is why we ignore this variable going forward.

manipulated within-subjects which is necessary to produce fluency effects (also see web appendix C). However, we varied whether the logo was paired with the regular-speed videos or the slow-motion videos, which allowed us to make a between-subject comparison. The videos were lopped and presented sequentially. We timed the page such that the survey automatically moved to the next video after five seconds. After the priming phase, participants indicated how much they liked the blog on a 7-point scale (1 = *not at all* to 7 = *very much*). On the final page of the survey, participants indicated their age and gender.

Results and discussion. To test our hypotheses, we conducted a 2X2 ANOVA that examined the effects of product type (hedonic vs. utilitarian; between-subjects), speed (slow motion vs. regular speed; between-subjects), and their interaction on product liking. Conceptually replicating our previous findings, we detected a significant main effect of speed. The blogs were liked significantly more when they were paired with slow-motion (M = 4.92, SD = 1.26) as compared to regular-speed (M = 4.52, SD = 1.40) videos; F (1, 597) = 13.89, $p < .001$, $\eta_p^2 = .023$. There was also a main effect of product type indicating that the science blog was liked more (M = 4.89, SD = 1.28) than the travel blog; M = 4.58, SD = 1.39; F (1, 597) = 7.85, $p = .006$, $\eta_p^2 = .013$. However, there was no interaction between product type and speed; F (1, 597) = .59, $p = .445$, $\eta_p^2 = .001$. Taken together, this experiment provides no evidence that product type moderates the effect of speed on product liking. Instead, hedonic and utilitarian products benefit equally from being paired with slow-motion imagery.

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