**Web Appendix**

This Web Appendix summarizes extant research on how static visual cues influence product size assessment, provides links to the stimuli, and describes the pretest results for the manipulations and other supplementary analyses.

**TABLE WA1**

Review of Literature on Visual Cues that Influence Product Size Assessment

|  |  |  |  |
| --- | --- | --- | --- |
| Study | Visual Cues | | Key Insights into How Visual Cues Influence Size Assessment |
| Static | Dynamic |
|  |  |  |  |
| Raghubir and Krishna (1999); Wansink and Van Ittersum (2003) | **√** |  | Consumers use package height as a heuristic to judge package volume and perceive elongated product packages to be larger. |
|  |  |  |  |
| Folkes and Matta (2004) | **√** |  | Consumers perceive product packages with unusual shapes to be larger because unusual shapes capture more attention. |
|  |  |  |  |
| Chandon and Ordabayeva (2009); Ordabayeva and Chandon (2013) | **√** |  | Consumers’ impression of the size of a product package is more susceptible to a primary spatial dimension than to all three spatial dimensions. |
|  |  |  |  |
| Deng and Kahn (2009) | **√** |  | Consumers perceive products to be heavier when product package façades display product images at the bottom, on the right side, or in the bottom-right corner. |
|  |  |  |  |
| Sevilla and Kahn (2014) | **√** |  | Consumers perceive products with incomplete shapes to be smaller. |
|  |  |  |  |
| Hagtvedt and Brasel (2017) | **√** |  | Consumers perceive products in saturated colors to be larger because saturated colors capture more attention. |
|  |  |  |  |
| This article |  | **√** | Consumers perceive products to be smaller when the products are animated to move faster in video ads due to knowledge transfer of the learned size–speed association originating from the domain of animate agents. |
|  |  |  |  |

**TABLE WA2**

Pair-Wise Comparisons Between Experimental Conditions (Study 1)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Conditions | Static Product Images | | Product Videos | | | | |
| Image Combination | Slide Mode | 50% Speed | 100% Speed | 150% Speed | 200% Speed | 250% Speed |
| Image Combination |  |  |  |  |  |  |  |
| Slide Mode | 1.13 |  |  |  |  |  |  |
| 50% Speed | .64 | -.50 |  |  |  |  |  |
| 100% Speed | -.43 | -1.56 | -1.06 |  |  |  |  |
| 150% Speed | -1.12 | -2.25 | -1.76 | -.70 |  |  |  |
| 200% Speed | -1.91 | -3.04a | -2.54 | -.148 | -.79 |  |  |
| 250% Speed | -3.89\* | -5.02\*\* | -4.52\*\* | -3.46\* | -2.77 | -1.98 |  |

Note 1: a *p* < .10, \* *p* < .05, \*\* *p* < .01.

Note 2: Differences in means between conditions (the mean of the condition listed in the first column minus the mean of the condition listed in the second row) are reported in cells.

***STIMULI***

***Stimuli for Study 1***

Audio Speaker: <https://sites.google.com/site/stimulispeed/study-1>

***Stimuli for Study 2***

Swiss Army Knife: <https://sites.google.com/site/stimulispeed/study-2>

***Stimuli for Study 3***

Mobile WiFi: <https://sites.google.com/site/stimulispeed/study-3>

***Stimuli for Study 4***

Dehumidifier: <https://sites.google.com/site/stimulispeed/study-4>

***Stimuli for Study 5***

Mobile WiFi: <https://sites.google.com/site/stimulispeed/study-5>

***Stimuli for Study 6***

Bottled Blueberry Drink: <https://sites.google.com/site/stimulispeed/study-6>

***PRETESTS***

***Pretest Results for Study 1***

We conducted a pretest for the speed manipulation (N = 81), in which we measured perceived speed (“To what extent do you think that the audio speaker moves:” 1 = *slowly*, 7 = *fast*), perceived normalness of speed (“To what extent do you think that the audio speaker moves at a normal speed you usually see in video ads?” and “To what extent do you think that the audio speaker’s movements deviate from the normal speed in a typical video ad? (reverse-coded)” 1 = *not at all*, 7 = *very much*; α= .63), and perceived image quality (“To what extent do you think the image quality of the product animation is:” 1 = *bad*, 7 = *good*). Regression analyses showed that an increase in movement speed indeed led to an increase in perceived speed (B = 1.59, t(79) = 7.78, *p* < .001), but it did not affect perceived image quality (B = .13, t(79) = .68, *p* = .50). Yet, there was an inverted U-shaped relationship between movement speed and perceived normalness of speed (the squared term of movement speed: B = -.78, t(78) = -2.04, *p* = .05), such that perceived normalness of speed first increased and then decreased as movement speed increased from 50% to 250% of the original speed. Thus, we also measured perceived normalness of speed in the main study to control for its potential influence.

***Pretest Results for Study 2***

We conducted a pretest (N = 100) with a 2 (movement speed: fast vs. slow) × 2 (perceived movement similarity: control vs. low) between-subjects design following the same procedure used in the main study. After participants indicated their choices for which of the three entities (i.e., “fish, dog, and bird” in the control condition or “gear, tire, and fan” in the low-similarity condition) the knife looks most similar to in terms of movement patterns, they further rated the extent to which “the way the knife moves is similar to the way an animal moves” (1 = *not at all*, 7 = *very much*), which was used as the manipulation check for perceived cross-domain movement similarity. Then, participants completed the speed manipulation check and other control measures used in the pretest for Study 1.

First, a two-way ANOVA revealed a main effect of the movement speed manipulation on speed perception, such that fast movements were indeed perceived as faster than slow movements regardless of the perceived movement similarity manipulation (Mfast = 5.31, SD = .98 vs. Mslow = 4.20, SD = 1.64; F(1, 96) = 16.47, *p* < .001). Another two-way ANOVA generated a main effect of the perceived movement similarity manipulation on perceived cross-domain movement similarity, which was higher in the control conditions than in the low-similarity conditions (Mcontrol = 3.62, SD = 2.09 vs. Mlow = 2.69, SD = 1.95; F(1, 96) = 5.26, *p* = .02). No other main effects or two-way interactions on these manipulation checks were significant (F’s < .79, *p*’s > .37). Moreover, the manipulations and their interaction did not influence perceived normalness of speed and image quality (F’s < 1.94, *p*’s > .16).

***Pretest Results for Study 3***

In the first pretest (N = 50), participants rated their belief on an 8-point bipolar scale (1 = *small animals move faster*, 8 = *large animals move faster*) after they watched one of the two pairs of the videos that manipulated the accessibility of the relationship between physical size and movement speed. Indeed, they tended to agree more that small animals move faster after watching the two default-association videos (i.e., hummingbird and elephant; Mdefault = 3.17, SD = 1.90; against 4.5, the scale mid-point, t(23) = -3.43, *p* = .002) and that large animals move faster after watching the two reversed-association videos (i.e., snail and cheetah; Mreversed = 6.00, SD = 1.90; against 4.5, the scale mid-point, t(25) = 4.03, *p* < .001).

Another pretest (N = 50) showed that movement speed was perceived to be faster in the fast-movement condition than in the slow-movement condition (Mfast = 5.42, SD = .83 vs. Mslow = 3.54, SD = 1.53; F(1, 48) = 28.44, *p* < .001), and there were no differences in perceived normalness of speed, perceived image quality, attention to the animation, attention to the product, and arousal across the two videos on the scales adopted in our prior studies (F’s < 1.28, *p*’s > .26).

***Pretest Results for Study 4***

A pretest (N = 50) adopting the measures reported earlier confirmed that the dehumidifier’s movements were indeed perceived as faster in the fast-movement condition than in the slow-movement condition (Mfast = 5.35, SD = 1.15 vs. Mslow = 3.81, SD = 1.67; F(1, 48) = 13.82, *p* = .001). Furthermore, neither perceived normalness of movement speed nor perceived image quality differed across two conditions (F’s < 1.14, *p*’s > .29).

***Pretest Results for Study 5***

A pretest (N = 51) confirmed that the mobile WiFi device was perceived to move faster in the fast-movement video than in the slow-movement video (Mfast = 5.60, SD = 1.04 vs. Mslow = 3.77, SD = 1.82; F(1, 49) = 19.27, *p* < .001), and the two videos did not differ in perceived normalness of speed and image quality (F’s < 1.22, *p*’s > .27).

***Pretest Results for Study 6***

A pretest (N = 50) showed that the bottled blueberry drink was perceived to move faster in the fast-movement video (Mfast = 5.15, SD = 1.16 vs. Moriginal = 4.29, SD = 1.16; F(1, 48) = 6.92, *p* = .01). The two videos also scored similarly on image quality (F(1, 48) = 1.24, *p* = .27). Yet, the fast speed was perceived as less normal than the original speed (Mfast = 3.54, SD = 1.92 vs. Moriginal = 4.52, SD = 1.27; F(1, 48) = 4.46, *p* = .04). Thus, we also measured perceived normalness of speed in the main study as a control variable.

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