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The Effect of Anthropomorphism on Consumer Preference

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The current research proposes that anthropomorphism—attributing humanlike characteristics to nonhuman agents—increases consumer preference for physically superior products. This effect occurs because consumers perceive anthropomorphized products similar to person perception which often relies on physical cues.

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EXTENDED ABSTRACT

Anthropomorphism, defined as imbuing non-human objects with humanlike characteristics (Epley et al. 2007), is often adopted in marketing communications. Prior research has shown that specific appearance designs can enhance the effectiveness of anthropomorphism in marketing (e.g., when the grille of a car resembles the mouth of a friendly person). The current research goes beyond the specific physical attributes of specific products and documents a general elevated effect of anthropomorphism on consumers' preference for products with superior physical attributes (e.g., products with a more attractive appearance design or packaging design). In the next section, we review key findings in the literature and elucidate how and why anthropomorphism impacts consumer preference. Then we present four studies that test our propositions.

Recent research in marketing shows that anthropomorphism induces consumers to apply knowledge in human schema in processing information about products and brands. For example, Aggarwal and McGill (2007) find that product anthropomorphism leads consumers to evaluate the product based on human schema congruity. Consistent with findings in marketing literature, research in neuroscience shows that the same neural systems involved in making judgments about humans are activated when people make anthropomorphic judgment about non-human agents (Castelli et al. 2000). We thus posit that consumers are likely to use the way they comprehend a person to understand a product when the product is anthropomorphized. It is fairly common in our daily life that people form impressions about other people based on their physical appearance (Asch 1946). Person construal research by Freeman and Ambady (2011) shows that appearance cues, such as facial and body features, are often the first input that people access when they form impressions about other people. Empirical studies in the literature have demonstrated many cases that people rely on a person's appearance to make judgments in a wide range of contexts such as strategic games playing (Tingley 2014), criminal sentencing (Porter, Brinke, and Gustaw 2010), political voting (Antonakis and Dalgas 2009), and business practice (Gorn, Jiang, and Johar 2008). Based on prior research on anthropomorphism and person perception, we propose that anthropomorphizing a product would increase the importance of the physical attribute in consumers' product evaluation and choice. As a result, in a decision context involving the trade-offs between physically superior product and functionally superior product, anthropomorphizing the product would increase consumers' preference for products with superior physical (vs. functional) attributes. We first test the importance of physical attributes using the information search paradigm in experiments 1, and then examine the downstream effect on consumers' product preference in experiments 2-4.

Experiment 1 served as an initial test of our basic proposition using an information search task (Jacoby 1977). If anthropomorphism enhances the importance of physical attributes in consumer judgment and decision, we then expect that consumers would allocate more resources (e.g., money) to search information about the physical attributes when the product is anthropomorphized. We used a pictorial presentation to prime anthropomorphism in this study (Puzakova, Kwak, and Rocereto 2013). Participants completed an information search task in which they need to allocate limited forum coins to view product information about physical attributes and functional

attributes. Results of experiment 1 reveal that participants allocated more resource to acquire information about physical attributes when the product was anthropomorphized.

Experiment 2 aimed to test the downstream effect of anthropomorphism on product preference in a real purchase context. Adapted from Aggarwal and McGill (2007), we manipulated anthropomorphism using either first-person or third-person language in the introductions of the product (i.e., portable charger). After reading the introduction, participants used their own money to purchase only one of four portable chargers. Two of them were physically superior whereas another two of them were functionally superior. The percentage of participants who purchased the physically superior chargers served as the dependent variable. As expected, a larger percentage of participants in the anthropomorphism (vs. non-anthropomorphism) condition actually purchased the physically superior chargers.

Experiment 3 aimed to replicate the downstream effect of anthropomorphism using a different sample and a different product category. Participants were asked to describe a pack of cereal as either human or product, a method adapted from Aggarwal and McGill (2012). Next, all participants were presented with information of two options of packaged cereal involving the trade-off between the physical attribute and the functional attribute. Specifically, cereal A, the physically superior option, was rated as five-star for the package design and four-star for nutrition, whereas cereal B, the functionally superior option, was rated as four-star for the package design and five-star for nutrition. Then participants indicated their choice between the two options. Results of experiment 2 suggest that anthropomorphizing the cereal increased participants' choice share for the physically superior product option.

The purpose of experiment 4 was to reveal the mechanism using a moderation approach. If consumers indeed apply the same way of person perception to their understanding of a product, priming the belief that physical appearance is an unreliable criterion for judging a person would eliminate the effect. In the belief priming condition, we showed participants a research report and claimed that it was drafted by distinguished scholars. The key message of the report was that physical appearance is not a reliable criterion for judging people. The participants in the baseline condition did not perform this task. Then participants went through a procedure that was identical to experiment 3, and indicated their preference for physically (vs. functionally) superior laptop computers. Result in the baseline condition replicated that of experiment 2-3, but the effect was eliminated in the belief priming condition.

The present research contributes to the literature of anthropomorphism by documenting novel effects and mechanism for product anthropomorphism, and advances the understanding of consumer decision-making involving the assessment of a combination of physical and functional attributes.

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