

**When Anthropomorphism Backfires:
The Effects of Power and Brand Role amid Product Wrongoings**

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Abstract

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Qimei Wang

Anthropomorphism is the attribution of human features to nonhuman entities. Brand anthropomorphization, as a popular marketing strategy, has only recently begun to spur interests of researchers. However, its potential negative repercussions have so far received scarce attention. Consisting of two studies, this thesis seeks to look into that gap. Specifically, study 1 examines the effects of brand anthropomorphism and power on brand attitudes amid product wrongoings. Study 2 investigates the influence of power and two specific types of anthropomorphization (brand as a partner or as a servant) in the same setting. Power is manipulated as a contextually malleable status. In both studies, we explored the moderating effects of two dimensions of Hofstede's cultural orientations: power distance and uncertainty avoidance. As inherent traits, they are measured at an individual level. The findings suggest that marketers should be aware of consumers' power status, cultural orientations and their combined implications when imbuing anthropomorphic features to their brand. For example, consumers in high-power positions (compared to those in low-power positions) are more sensitive towards product wrongoings involving a human-like brand. Also, high-power-people possibly favor less a servant brand (compared to a partner brand) when it has done wrong. On the one hand, in the short term, the manipulation of power balance might help with the brand crisis. But on the other, ethics and social responsibilities should not be omitted when long-term consumer-brand relationship is considered, especially when an anthropomorphized positioning is concerned.

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1. Introduction

Marketers passionately incorporate human-like features and personalities in their marketing campaigns. It is a common practice to attribute such anthropomorphic elements to a brand, given that humans have a built-in tendency to anthropomorphize (Epley, Waytz, & Cacioppo, 2007). If this propensity is cleverly manipulated, the similarity between the brand and a person may bring desirable outcomes for marketers (Aggarwal & McGill, 2007). The literature defines anthropomorphism as the tendency to imbue human intentions, emotions, and behavioral characteristics to nonhuman entities (Aggarwal & McGill, 2007; Epley et al., 2007; Epley, Waytz, Akalis, & Cacioppo, 2008). Prior research suggests that motivations including sociality (e.g. loneliness) and effectance (e.g. need for power and control) seem to be driven factors of anthropomorphism (Waytz, Morewedge, Epley, Monteleone, Gao, & Cacioppo, 2010). Only recently has another stream of research begun to look into the impact of brand anthropomorphism on consumer's product-related responses. For example, facial expressions on a car or a cell phone may influence consumer's liking, which in turn boosts sales (Landwehr, McGill, & Herrmann, 2011). Also, if one regards his possessions as a person, they become less willing to replace them (Chandler & Schwarz 2010). Anthropomorphism, on the other hand, also exerts its power in shifting consumer's judgment and social perceptions (Aggarwal & McGill, 2012; Chandler & Schwarz, 2010; Waytz, Cacioppo & Epley, 2010; Kim & McGill, 2011). Importantly, as attachment and norms that usually reside in the social realm can also be applied to a nonhuman entity (Chandler & Schwarz, 2010), each individual may interact with the object world based on their own divergent beliefs (Kim & McGill, 2011). Therefore, when a humanized brand conducts wrongdoings, one may assume that the misconduct is intentional and feels more offensive and insulting. However, related literature so far has largely focused on the bright side of brand anthropomorphism. More recent researchers pointed out that there can be negative repercussions if anthropomorphization goes wrong (Kim & McGill, 2011; Puzakova, Kwak, & Rocereto 2013; Aggarwal & McGill, 2007). Kim and McGill (2011) argue that the impact of anthropomorphism is moderated by a person's power position at that moment. While Puzakova,

Kwak, and Rocereto (2013) contended that external factors (negative publicity) that are not inherent of anthropomorphism cause greater damage to brand evaluation.

Concentrating on delivering more understanding of the negative effects of anthropomorphism, the current study also brings into consideration the influence of power and brand roles. One of the research questions that this thesis seeks to address is that when product wrongdoing is present, whether individuals with divergent levels of power perceptions respond to an anthropomorphized brand differently and how. Another focus is given to the moderating effect of brand role in the same backdrop by testing two types of consumer-brand relationships. Additionally, two relevant dimensions of Hofstede's cultural values (uncertainty avoidance and power distance) are incorporated to explore their impacts at an individual level (Hofstede, 2001; Yoo, Donthu, & Lenartowicz, 2011). In general, the findings show that the effects of brand anthropomorphism are obtained differently, depending on a person's contextual power perception.

This thesis is organized as follows. First, related literature is reviewed and summarized, with an emphasis on the effects of brand anthropomorphism, the role of power as a contextually malleable status, and two types of the consumer-brand relationship. The hypotheses are developed along with the process of review. This is followed by pretest 1 and study 1 which examine the combined role of brand anthropomorphism and power. Next, we present pretest 2 and study 2, testing anthropomorphized brand roles and power. Finally, the thesis is concluded by a discussion of related implications and limitations.

2. Theoretical Background

2.1 Anthropomorphism and Anthropomorphized Brand

Anthropomorphism refers to a person's tendency to imbue mind, intentions, emotions, and behaviors to nonhuman entities (Aggarwal & McGill, 2007; Epley et al., 2007, 2008). Prior research has looked into when and why this tendency is likely to occur (Epley et al., 2007; Epley

&Waytz, 2009; Waytz, Gray, Epley, & Wegner, 2010; Waytz et al., 2010). According to Epley et al. (2007), it is considered to be driven by sociality (e.g. loneliness) and effectance (e.g. need for power and control). Waytz et al. (2010) demonstrate that, by anthropomorphizing a nonhuman object, one's environment is rendered less unpredictable and more understandable, thus satisfying the effectance motivation to maintain a sense of control and reduce unpredictability. Sociality motivation posits that another determinant of anthropomorphism is desire for belongingness (Epley et al., 2007, 2008). From a cognition-based point of view, Aggarwal and McGill (2007) investigated in their study the process by which an object is anthropomorphized. Their study suggests that anthropomorphism occurs when the human schema becomes more accessible. When human schema is activated, on the condition that congruence between the schema and an entity is perceived, people are more likely to see the entity as a person.

Anthropomorphism has been a prevalent practice in marketing. Marketers put anthropomorphic elements in their brand design and consumers are encouraged to interact with them. For example, a car with a "smiling" grille is presented in accordance with human facial expression (Landwehr et al., 2011). Consumers accept anthropomorphized products to be not only like them, but also to be a part of them. And some have entered consumer-brand relationships with them (Aggarwal, 2004; Fournier, 1998; MacInnis & Folkes, 2017). A recent stream of research involves different aspects of brand anthropomorphism. Some concentrate specifically on the implications of this phenomenon.

Research has investigated how anthropomorphism impacts consumer's responses towards the products. Landwehr et al. (2011) draw attention to the emotional expressions of functional components of a product (e.g. car and cell phone). They argue that the shape of these "faces" conveys not only an emotional state but also the product's personality. And these anthropomorphic cues are processed the same way people judge human faces. Importantly, the study reports that consumers have a particular preference for a certain combination of facial elements (e.g. a mouth and eyes), which can affect liking and sales. Also, anthropomorphism seems to be able to direct people's pursuit away from quality and performance. Those who view

their possessions as a person are reluctant to replace them (Chandler & Schwarz, 2010). Aggarwal and McGill (2007) shed light on how people evaluate anthropomorphized products. A favorable opinion towards such a product depends on the level of congruency between anthropomorphic cues of the product and relevant human behavior. When the similarity is high, the likelihood that one humanizes the product is greater, this, in turn, leads to more liking. However, people may favor the product less provided that they fail to perceive the congruity.

Apart from direct impacts on the brand itself, anthropomorphism also shifts consumer's judgment, behavior and social belief (Aggarwal & McGill, 2012; Waytz et al., 2010; Chandler & Schwarz, 2010; Kim & McGill, 2011). After being exposed to a brand, consumers might show behaviors associated or disassociated with what the brand image tries to carry, depending on the type of the anthropomorphized brand role (Aggarwal & McGill, 2012). Anthropomorphized brand triggers a desire for successful social interaction, and exposure to it influences consumer's subsequent behavior. Kim and McGill (2011) point out that, since different social beliefs are attributed to the physical world by individuals, it is likely that the way these individuals react to humanized objects is also different. For instance, low-power people perceive greater risk in interacting with risk-bearing anthropomorphized entities. Furthermore, anthropomorphized products restore a sense of connectedness and competence for those who are lonely or helpless (Chen, Sengupta, & Adaval, 2018). An experience with human-like products satisfies one's social needs and it also encourages socially desirable behaviors as people feel like they are being looked over by a humanlike agent (Waytz et al., 2010). In the same vein, Waytz et al. (2010) have opened the door to reveal that humanized agents bring about moral care and empathy. They are capable of growing into an item that is more than merely a belonging or an instrument to a person. This again demonstrates that the assertion that holds in a social realm can be applied to such an object, such as attachment and social norms (Chandler & Schwarz, 2010).

2.2 Negative Repercussions of Brand Anthropomorphization

Having been focused on the positive influence of anthropomorphism, related research is generally silent regarding the adverse effects of brand anthropomorphization. Based on their reasoning schema congruity, Aggarwal and McGill (2007) already suggested that depending on whether the primed anthropomorphized trait is consistent with human schema, anthropomorphization may boost or damage product evaluation. For example, a mismatch between the human-like feature and human schema causes less favorable responses toward the brand. Further, due to this human-brand connection, consumers inevitably view the brand as capable of intentional behavior. As it appears to be intentional and own a mind, the brand should, therefore, be responsible for their actions and answer for their misdeed (Gray, Gray, & Wegner 2007). Puzakowa et al. (2013) also argue that negative actions increase peoples' perceptions of brand intentionality.

Using different anthropomorphized targets(e.g. diseases and slot machines), Kim and McGill (2011) studied different types of anthropomorphization. They found that anthropomorphism effects are based on people's power position at that moment. A stronger feeling of social power leads to lower risk perception of skin cancer when it is anthropomorphized. That is to say, people's social perceptions and beliefs shape the way they react to humanized agents. Instead of studying internal factors that are inherent in brand anthropomorphism, Puzakowa et al. (2013) concentrate on how external factors (negative publicity) affect brand evaluation. Their research, instead, combines a neutral anthropomorphization with harmful brand information. The increased perception of intentionality is proved to have, indeed, adverse effects on brand attitudes and trust. Moreover, they bring in personality traits to explain how these effects occur and emphasize that consumer's personality difference is one of such determinants. Based on the reasoning above, the current study proposes that, when processing harmful information concerning publicity, the perception of consumer's augmented intentionality of the anthropomorphized brand has a detrimental effect on brand evaluations.

H1:Product wrongdoings induce more negative attitudes towards an anthropomorphized brand than towards a non-anthropomorphized brand.

2.3 Power and Cultural Orientations on Anthropomorphization

2.3.1 Power

In the psychology literature, power refers to the relative position of dominance in controlling others' states (Fiske, 1993). Power is believed to be contextual and malleable, which means this psychological state can be manipulated and tilted (Galinsky, Gruenfeld, & Magee, 2003). Our study follows one common way to realize the manipulation of power, that is, asking participants to recall their relevant past occurrence (Galinsky et al., 2003). As an individual's power position alters, so will his emotions, perceptions of risk and subsequent behavior (Kim & McGill 2011). This provides a handy insight for marketers who may desire to alter consumer's power dynamics.

In a recent study, Kim and McGill (2011) find that a primed low power status induces a greater risk perception for highly anthropomorphized entities. As our research involves product wrongdoings of an anthropomorphized entity, it is reasonable to also include the role of the social factors. Following the study of Kim and McGill (2011) which centers on the influence of power, this thesis considers power as a research focus, since wrongdoings imply the loss of power due to a risk-bearing brand. Specifically, after an individual is put to a certain position of power, they will apply the feeling at the moment to the unrelated entity to which they are exposed. In our study, we predict that those in low power positions already perceive more risks than the powerful in the anthropomorphized brand. Thus, when being presented with negative brand information, these individuals will not be as significantly affected as their counterparts. This is due to the fact that they are already convinced that they would be at the mercy of the entity stemming from their lack of power. Whereas, high power individuals believe they have greater control (Kim & McGill, 2011). They would not assume it is desirable if things do not go

as expected because the situation makes no sense. To sum up, we expect to observe more negative responses towards anthropomorphized brands from the powerful.

H2a: When product wrongdoings occur, participants who are in high power positions respond more negatively to an anthropomorphized brand compared to a non-anthropomorphized brand.

H2b: When product wrongdoings occur, for participants who are in low power positions, there is no difference in their attitudes towards anthropomorphized brands and nonanthropomorphized brands.

2.3.2 Culture Orientations: Power Distance and Uncertainty Avoidance

In this study, cultural orientations are measured at an individual level as inherent traits.

Culture is defined by Hofstede (2011) as: "... the collective programming of the mind that distinguishes the members of one group or category of people from others". His research extended to fifty-three countries worldwide and developed a six-dimension metric of culture that has since been dominating in related domains. On the country level, his metric consists of power distance, uncertainty avoidance, masculinity/femininity, individualism/collectivism, long/short term orientation, and indulgence/restraint. Combined, they thoroughly cover the concept and have guided a number of cross-cultural studies through the decades. Recently, Yoo et al. (2011) have taken Hofstede's conceptualization from the country level to the individual level. Benefiting from their newly developed scale, culture which has always been studied as a collective phenomenon, becomes ready to be handled at an individual level. This scale actually establishes a link between cultural values at these two levels. In addition, differences in attitudes and behaviors come to be more accessible to relevant research (Yoo et al., 2011).

One of our research interests is to explore the influence of differences of personal traits on brand anthropomorphism. Specifically, two dimensions of Hofstede's metric pertain to the current study: uncertainty avoidance and power distance.

Uncertainty avoidance specifies the overall level of acceptance of a society to ambiguity and uncertainty (Hofstede, 2001). At an individual level, this dimension addresses a person's opinions on standardized procedures and strict instructions, as well as their inclination to obey or disobey rules and regulations. In Hofstede's view, uncertainty avoiding cultures favor controls and rigid norms. They show lower tolerance for deviant behaviors and have higher levels of stress and anxiety. By contrast, members from uncertainty accepting cultures are more open-minded and less rule-oriented. They welcome changes and are more risk-tolerant. Furthermore, people in such a culture believe that they are able to manage their life and make changes to it (Hofstede, 2001).

In our research particularly, we assume that individuals who tend to avoid unpredictable and deviant factors in life will naturally respond less favorably to product wrongdoings. Compared to uncertainty accepting people, they will exhibit lower liking for an entity that they cannot control. Moreover, brand anthropomorphism provides quasi-social experiences (Aggarwal & McGill, 2007; Fournier, 1998). When the brand is given human features, handling a product entails dealing with person-to-person relationships. We assume that uncertainty avoiding people will regard such an entity as more unpredictable and risk-bearing than a normal product. Thus, the following is suggested:

H3a: When product wrongdoings occur, participants with high levels of uncertainty avoidance respond more negatively towards an anthropomorphized brand (vs nonanthropomorphized brand).

H3b: When product wrongdoings occur, for participants with low levels of uncertainty avoidance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.

On the other hand, power distance reflects how inequality of power is viewed and handled. It usually evinces the opinions of the less powerful units of a culture (Hofstede, 2001). This dimension deals with the extent to which power imbalance is respected and accepted. For example, a fixed system of order and hierarchy, conformity to superiors and authority are typical

characteristics of high-power-distance culture. Moreover, these members assume that everyone has their rightful place in the hierarchy. Wealth, prestige as well as personal capabilities, to their way of thinking, are rightfully distributed unequally. Meanwhile, small power distance cultures expect the discrepancy in wealth and power to be minimized. The ideas of the powerless should be heard and respected. Individuals in this type of culture tend to endorse an equal position no matter a member's actual social status.

This dimension is also brought into our study as a moderator, as it reflects how a person view their current power position in the social hierarchy. And the goal is to find out whether it has any effects on brand anthropomorphism in affecting brand attitudes. As small power distance advocates equality, which implies it is mainly meaningful for interpersonal relationships. Based on Hofstede's interpretation, when product wrongdoings of an anthropomorphized brand are the case and the damage to power balance is involved, we predict that these individuals will take it worse than those who possess higher power distance traits. Whereas, we do not expect that large power-distance individuals react any more negatively towards anthropomorphization priming. Since in their nature, they are not uncomfortable with the idea that others have power over them. We predict the following:

H4a: When product wrongdoings occur, participants with small power distance respond more negatively to an anthropomorphized brand(vs nonanthropomorphized).

H4b: When product wrongdoings occur, for participants with large power distance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.

2.4 Power and Brand Role

Prior researchers have suggested that consumers may form relationships with the brand (Aggarwal, 2004; Fournier, 1998; MacInnis & Folkes, 2017). It is, in fact, quite common to be involved in a quasi-social relationship which requires one to apply our social beliefs and expectations to the object world (Chandler & Schwarz, 2010). More relevant to this study is the proposition of Epley et al. (2007, 2008) that social affiliation motivates the engagement in a

product-anthropomorphizing experience. Further, different types of brand relationships are formed, depending on a person's personal value, for example, the varying power positions (Fournier & Alvarez, 2012). Fournier (1998) identifies partner as one type of enduring consumer-brand relationship. A partner entails a sharing of equal power with the brand. Consumers believe that they can work together and co-create value. Recently, Aggarwal & McGill (2012) suggest that a brand can also take the role of a servant. As the word itself suggests, a servant brand means to serve and work for the "master". Their studies mainly illustrate that, after exposure to an anthropomorphized servant brand that a person like (vs dislike), consumers tend to exhibit behaviors dissociated (vs associated) with this brand (Aggarwal & McGill, 2012). In the same vein, Kim and Kramer (2015) argue that, for example, in order to effectively interact with a servant brand, a master-servant relationship orientation will be activated. Hence, consumers assume dominance in line with the category, which is in this case, a servant. Especially, the current study follows the research of Aggarwal & McGill (2012) and Kim and Kramer (2015), we adopt the term brand role in its figurative sense.

As Rucker and Galinsky(2009) argue, when feeling powerful or powerless, consumers experience different motives which yield distinct consumption patterns; for example, those in high power positions have a greater preference for brands that offer more utility while low power leads to conspicuous consumption. Kim and Kramer (2015) also imply that consumers in high power status may have a greater desire for control and dominance in a social relationship; therefore, they may show a preference for a servant role. Following this reasoning, we contend that, if these consumers are presented with product wrongdoings, a greater decrease in brand liking may be observed. When the situation where they presume to can take control, on the contrary, gets out of hand, the preference may grow into confusion, distrust, then detest. However, we did not assume that the same will happen for the powerless. Meanwhile, as situation changes and the perception of power alters, one may also perceive that they possess almost equal power as the brand does, namely, a partner relationship in the current consumer-brand interaction. When this is the case, we suggest that the effects of negative brand information will not cause as greater a dent as a servant brand. Similarly, we expect to see a neutral reaction from the powerless. Given that they are at the lower end of power distance, they may not be

sensitive to brand misdeed, thus, demonstrate less disappointment and dismay. We tested the effects of power and brand role with H5a and H5b in study 2:

H5a: When product wrongdoings occur, participants who are in high power positions respond more negatively towards a servant brand (vs a partner brand).

H5b: When product wrongdoings occur, participants who are in low power positions show no difference in attitudes towards a servant brand and a partner brand.

Additionally, we continued to explore in study 2 the role of power distance, hoping that this individual trait sheds light on the internal mechanism beneath the surface. Mainly, we seek to demonstrate that power distance affects how individuals perceive a humanized brand. A large power distance indicates a lower tolerance for defiant and unorthodox behaviors. This implies that they are more likely to reject and avoid the source of such behaviors. For example, individuals who believe norms should be conformed to and hierarchy be preserved, may expect the same strict order in a quasi-social experience. If the existing order is broken, say, a servant brand fails to be a good servant, these individuals are most likely to abandon their affinity with the brand in question. To sum up, we predict that:

H6: When product wrongdoings occur, the effect of brand role will be obtained for participants with large power distance, but not for those with small power distance.

TABLE 2.1. Statements of Hypotheses

H1: Product wrongdoings induce more negative attitudes towards an anthropomorphized brand than towards a non-anthropomorphized brand.
H2a: When product wrongdoings occur, participants who are in high power positions respond more negatively to an anthropomorphized brand compared to a non-anthropomorphized brand.
(see next page)

Table 2.1. Continued

H2b: When product wrongdoings occur, for participants who are in low power positions, there is no difference in their attitudes towards anthropomorphized brands and nonanthropomorphized brands.

H3a: When product wrongdoings occur, participants with high levels of uncertainty avoidance respond more negatively towards an anthropomorphized brand (vs nonanthropomorphized brand).

H3b: When product wrongdoings occur, for participants with low levels of uncertainty avoidance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.

H4a: When product wrongdoings occur, participants with small power distance respond more negatively to an anthropomorphized brand (vs nonanthropomorphized).

H4b: When product wrongdoings occur, for participants with large power distance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.

H5a: When product wrongdoings occur, participants who are in high power positions respond more negatively towards a servant brand (vs a partner brand).

H5b: When product wrongdoings occur, participants who are in low power positions show no difference in attitudes towards a servant brand and a partner brand.

H6: When product wrongdoings occur, the effect of brand role will be obtained for participants with large power distance, but not for those with small power distance.

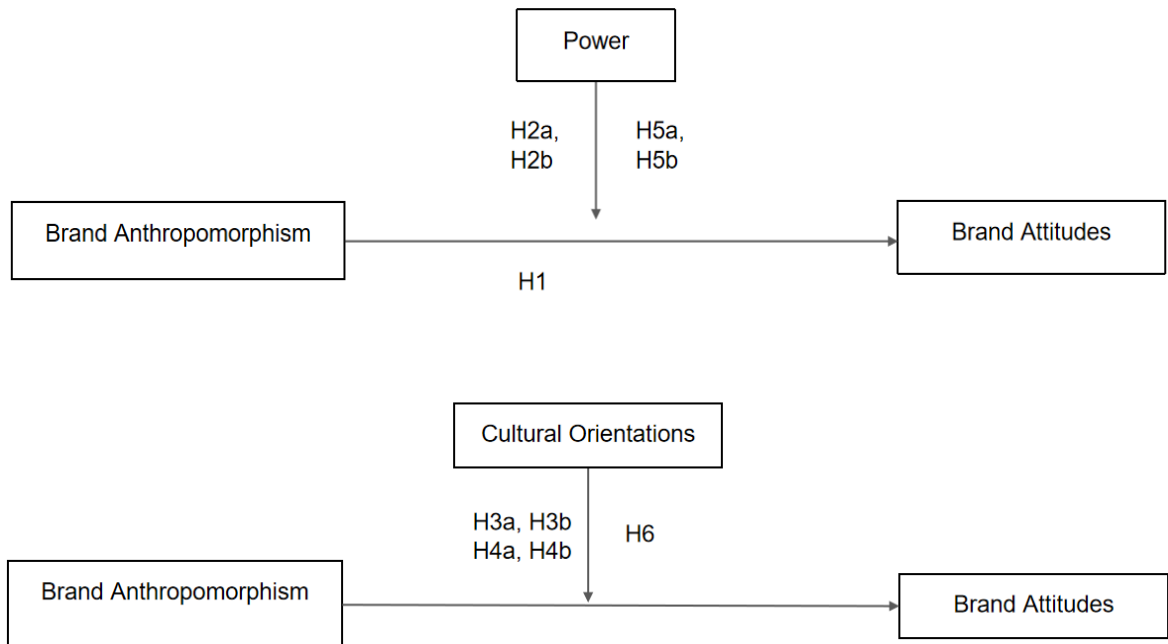
3. Methodology

Overview

This research tests the role of power and brand anthropomorphism on brand attitudes amid product wrongdoings. It includes mainly two experiments, both conducted under the situation of product negative publicity. Specifically, the focus of experiment 1 is to look into, in general, the effects of neutral anthropomorphization of a brand and different levels of social power positions in affecting brand liking. While experiment 2 is designed to dive beneath the surface of anthropomorphism by investigating its major sub-types: brand as a servant or a partner. The two studies also explore the moderating role of cultural orientations: uncertainty avoidance and power distance.

Participants for both pilot and main studies were recruited through online platform Amazon MTurk. First, we conducted a manipulation check for brand anthropomorphism to test our stimulus material by presenting a fictitious brand (Hom-touch) in an anthropomorphized or a nonanthropomorphized condition. The results showed that the product in anthropomorphized condition was perceived indeed as more mindful. Next, we conducted experiment 1 to test two factors: power and anthropomorphism. Participants were randomly assigned to one of the four conditions and then completed the measures for individual cultural values and brand attitudes. In the subsequent pretest 2 that checked the manipulation for brand role, the same fictitious brand and product category were adopted, with an additional text in the ad copy as the priming for two types of brand roles. As the manipulation check held, we proceeded with experiment 2 which testing brand role and power. After that, participants reported the same measures as in experiment 1. In both experiments, all constructs were measured on seven-point scales.

FIGURE 3.1. Research Model



3.1 Pretest 1

Method

50 participants were recruited for pretest 1 and they were randomly assigned to two conditions: anthropomorphized and nonanthropomorphized. Two color print advertisements of a fictitious brand named “Hom-touch” are developed for the manipulation check (Figure1). In the anthropomorphized condition, the product addresses in the first person and it briefly introduces its functions and performance as a reliable vacuum robot. The product is designed to have human-like eyes and a smile. In the non-anthropomorphized condition, instead, a third-person ad copy is attached beside a nonanthropomorphized product picture. The content of the messages to the participants are otherwise the same. The essence of the design is adopted from the studies of Puzakowa et al. (2013) .

Next, participants answered the following three items regarding the extent of anthropomorphization: “Hom-touch looks like a person,” “Hom-touch seems as if it has free will,” and “Hom-touch seems almost as if it has intentions.” (1=strongly disagree; 7= strongly agree)(Puzakowa et al., 2013). Since the goal of the main study is to investigate the effects of brand anthropomorphization amid product misdeed, we do not want a difference in brand liking due to the type of product design. It is necessary to rule out the possibility that a humanized product causes greater brand attitudes (Puzakowa et al., 2013).Therefore, we added a four-item measure of brand attitude: “favorable”, “good”, “pleasant”, “like”. (1=strongly disagree; 7= strongly agree)

FIGURE 3.2. Stimulus Material for the Anthropomorphization Manipulation



I am Hom-Touch!

I am a reliable brand of robot vacuum on the market. My app helps you to schedule, and customize cleaning preferences from your smartphone. I learn your home, remember your rooms, and find the best way to clean it seamlessly. Work for up to 80 minutes, I automatically recharge myself and return to finish the job.



Hom-Touch!

It is a reliable brand of robot vacuum on the market. The hom-touch app lets you schedule, and customize cleaning preferences from your smartphone. It learns your home, remembers your rooms, and adapts to determine the best way to clean it seamlessly. Runs for up to 80 minutes, it automatically recharges and resumes the job.

Results

A one-way analysis of variance was conducted to examine if participants from the anthropomorphism condition perceive more anthropomorphic traits in the anthropomorphic product design than the normal design. SPSS yielded an $F(1,48) = 12.21, p < .05$ (Table A2), indicating a significant difference in perception of our product designs. Participants perceived more human features in the anthropomorphized design ($M_{\text{anth}} = 4.2, M_{\text{nonanth}} = 2.36$). Thus, the manipulation of brand anthropomorphism held well. Besides, the results revealed that our

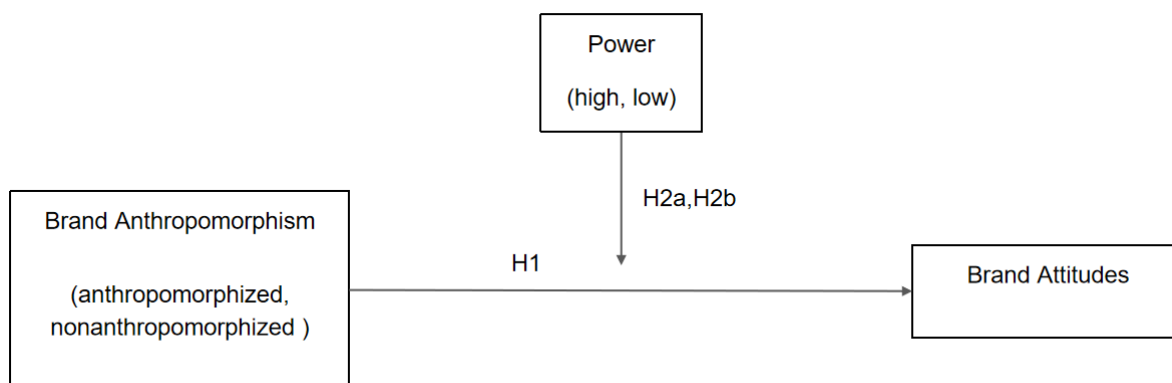
anthropomorphic advertisement did not lead to more favorable brand attitudes ($M_{anth} = 2.88$, $M_{nonanth} = 2.74$; $F(1, 48) = 0.92, p=0.34$) (Table A3&A4). Taken together, the findings indicated that the fictitious brand was an appropriate candidate for the main experiments.

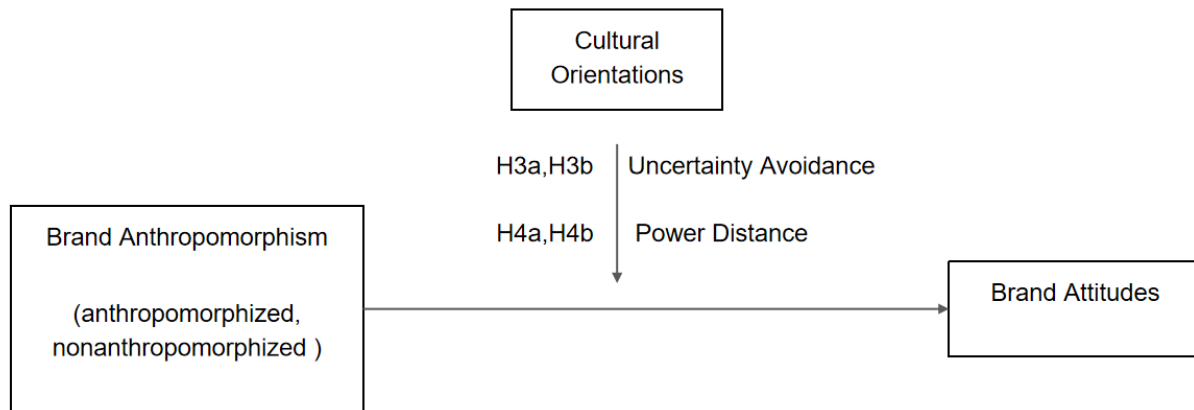
3.2 Experiment 1: Brand Anthropomorphization and Power on Brand Attitudes

This experiment replicates the research of Puzakowa et al. (2013). First, the fictitious brand as designed in pretest 1 is used to examine the negative effects of anthropomorphism amid product wrongdoings induced by negative publicity. Also, the role of power is taken into consideration. Its interaction with brand anthropomorphization was discussed. Moreover, in order to explore the potential moderating role of cultural values in influence brand liking at an individual level, uncertainty avoidance and power distance are tested.

Particularly, experiment 1 is constructed to test H1, H2a, H2b, H3a, H3b, H4a and H4b.

FIGURE 3.3. Research Model of Experiment 1



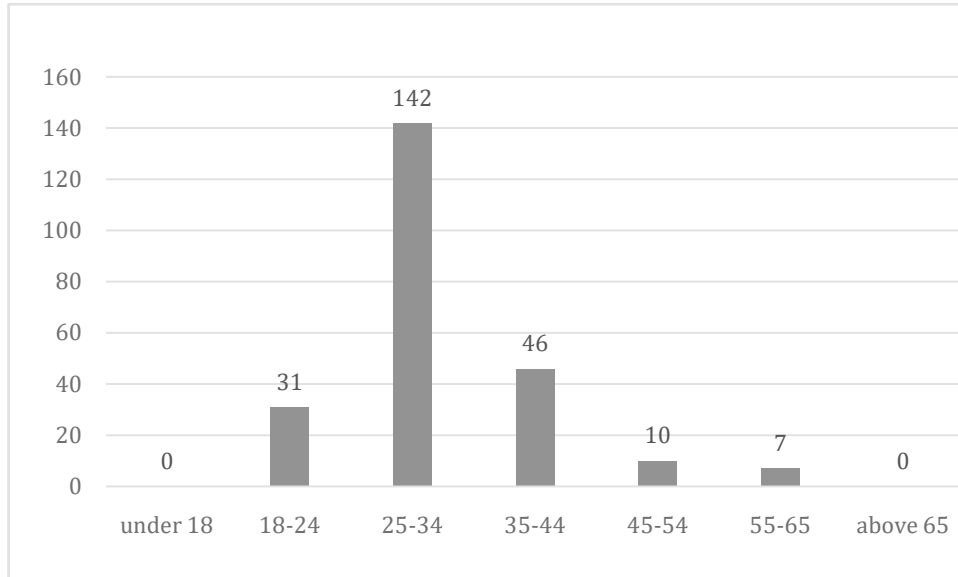


Method

Participants

A total of 240 participants (32.6% female) were recruited online by Amazon MTurk in December 2019. They were randomly assigned to one of the 2 (power: high, low) × 2 (anthropomorphized, non-anthropomorphized) between-subject conditions. Four of the participants failed to fully complete the questionnaire or the power manipulation. They were excluded from the study. The distribution of participants retained across the conditions are as follows: high power - anthropomorphized (n=58), high power - non-anthropomorphized (n=58), low power - anthropomorphized (n=64), low power - non-anthropomorphized (n=56). The range of age is illustrated in Figure 3.4. Approximately 80% of participants fall between the age of 25 and 44.

FIGURE 3.4. The Age Range of Study 1



Procedure

With the assistance of Qualtrics, we were able to spread relatively evenly 236 participants across 4 manipulated conditions (high power - anthropomorphized, high power - non-anthropomorphized, low power-anthropomorphized, low power - non-anthropomorphized). Following randomization, we manipulated brand anthropomorphism by presenting one of the two advertisements of a fictitious new high-tech product(Hom-touch, see Figure 3.2).The stimulus material manipulated brand anthropomorphism in the following two ways: 1)endowing the product with human-like features (facial expressions and legs); 2) an ad copy describing the product withfirst person (Puzakowa et al., 2013). While in nonanthropomorphized condition, the product is devoid of human features, with the ad copy adopting a third-person narrative (Figure 3.2).

After that, power was manipulated by asking participants to describe a past experience where a high power or low power position was primed. This episodic recall is adopted from Galinsky et al. (2003). In the high-power condition, participants read:“Please recall a particular

incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power—what happened, how you felt, etc.”In the low-power condition, participants read, instead: “Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power—what happened, how you felt, etc.”

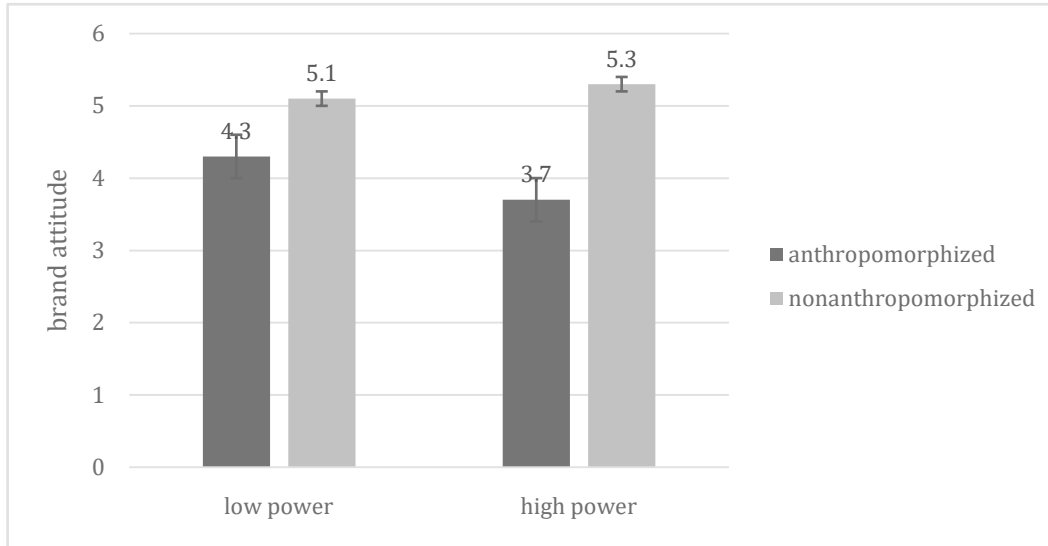
These two manipulations were followed by exposure to short publicity providing negative information about the fictitious brand. The abstract of the news included the brand’s misconduct during production (See Appendix B EXPERIMENT1) .

Next, participants responded to the main dependent variables and a brief demographic section. These measures include a four-item brand attitudes, power distance, uncertainty avoidance (Yoo et al., 2011). In addition, the anthropomorphism manipulation was checked. All measures were recorded on 7-point scales.

Results

We first checked anthropomorphism manipulation with one-way ANOVA to confirm that the stimulus material works fine. The results revealed a greater perception of human features in the anthropomorphic design than the normal design ($F(1,234) = 7.58, p < .01; M_{\text{anth}} = 4.72, M_{\text{nonanth}} = 4.09$) (Table A6). Reliability test showed acceptable results for brand attitudes, and two cultural orientation variables ($\alpha > .70$) (Table A5). Then, we conducted a 2 (power: high, low) \times 2 (anthropomorphism: high, low) ANOVA with brand attitudes as a dependent variable. Planned contrasts showed that, when product wrongdoings occur, participants demonstrated less favorable responses towards an anthropomorphized brand than a nonanthropomorphized brand ($M_{\text{anth}} = 4.02, M_{\text{nonanth}} = 5.21; F(1, 234) = 39.68, p < .01$) (Table A8 & A9). H1 is thus supported. We also found a significant interaction between power and brand anthropomorphism ($F(1,232) = 4.87, p < .05$).

FIGURE 3.5. Interaction between Brand Anthropomorphism and Power



We then looked into the breakdown of the interaction effects. Specifically, when high power position was primed, brand attitudes were significantly more negative when the brand looked like a human ($M_{hi\ anth} = 3.73$, $M_{hi\ nonanth} = 5.32$; $F(1, 234) = 36.03$, $p < .01$). Those who had a lower power status exhibited a similar decrease of brand liking in the anthropomorphized condition ($M_{low\ anth} = 4.29$, $M_{low\ nonanth} = 5.1$; $F(1, 234) = 8.7$, $p < .05$). In fact, the contrasts demonstrated an ordinal interaction. Hence, H2a and H2b are supported. In the case of negative publicity, participants in both power positions respond less favorably to anthropomorphized brand (vs non-anthropomorphized).

By looking at the other pair of contrasts, we further investigated the effects of power. In non-anthropomorphized condition, an individual's power status did not have significant influence on brand liking ($M_{hi\ nonanth} = 5.32$, $M_{low\ nonanth} = 5.1$; $F(1, 234) = .76$, $p = 0.4$). Although power perception itself did not necessarily cause difference in their responses ($M_{hi\ pow} = 4.53$, $M_{low\ pow} = 4.74$; $F(1, 234) = 1.09$, $p = 0.3$), when dealing with a humanized brand, compared to low power, high power led to worse brand evaluation ($M_{low\ anth} = 4.29$, $M_{hi\ anth} = 3.73$; $F(1, 234) = 4.97$, $p < .05$).

TABLE 3.1. Planned Contrasts of Anthropomorphism and Power

Planned Contrasts	Value of Contrast	Std. Error	t	df	Significance (2-tailed)
hi nonanth vs hi anth	1.60	.27	6.01	232	.000
low nonanth vs low anth	.78	.26	2.95	232	.004
low anth vs hi anth	.60	.27	2.23	232	.027
low nonanth vs hi nonanth	.23	.26	.87	232	.385
high pow vs low pow	.21	.20	1.05	234	.297
nonanth vs anth	1.18	.19	6.30	234	.000

Next, we performed a three-way ANOVA, bringing in the role of cultural orientation. As the study pertains to two continuous variables (uncertainty avoidance and power distance), before any analysis was conducted, we divided them by two levels (high uncertainty avoidance - low uncertainty avoidance; large power distance - small power distance) using the method of median split.

First, we looked at the effects of uncertainty avoidance. No main effect of uncertainty avoidance was found in influencing brand attitudes ($F(1, 228) = .027, p = .87$) (Table A11). The variable alone seemed to have no contribution in changes in participants' evaluation amid product wrongdoing. Yet, it played its role through interaction with brand anthropomorphism. Consistent with our prediction, there is an interaction going on between the two factors, although only marginally ($F(1, 228) = 3.63, p = .058$). We resorted to planned contrasts for more underlying information. Despite the results above, contrasts actually indicated a significant interaction ($F(1,228) = 3.97, p < .05$). We further studied the effects of two pairs of contrasts. Contrast 4 (Table 3.2&3.3) suggested that uncertainty avoiding individuals reacted more negatively towards the human-like products than towards nonanthropomorphized products ($M_{hi\ nonanth} = 5.39, M_{hi\ anth} = 3.87; F(1,228) = 36.34, p < .05$). By looking at contrast 5, those with low uncertainty avoidance levels exhibited a similar drop of liking ($M_{low\ nonanth} = 5.02, M_{low\ anth} = 4.25; F(1,228) = 7.43, p < .05$). Thus, H3a is supported and H3b is rejected. When product wrongdoing occurs, participants with high levels of uncertainty avoidance responded more negatively to anthropomorphized brand (vs nonanthropomorphized). In fact, the plot (Figure 3.6) marked that

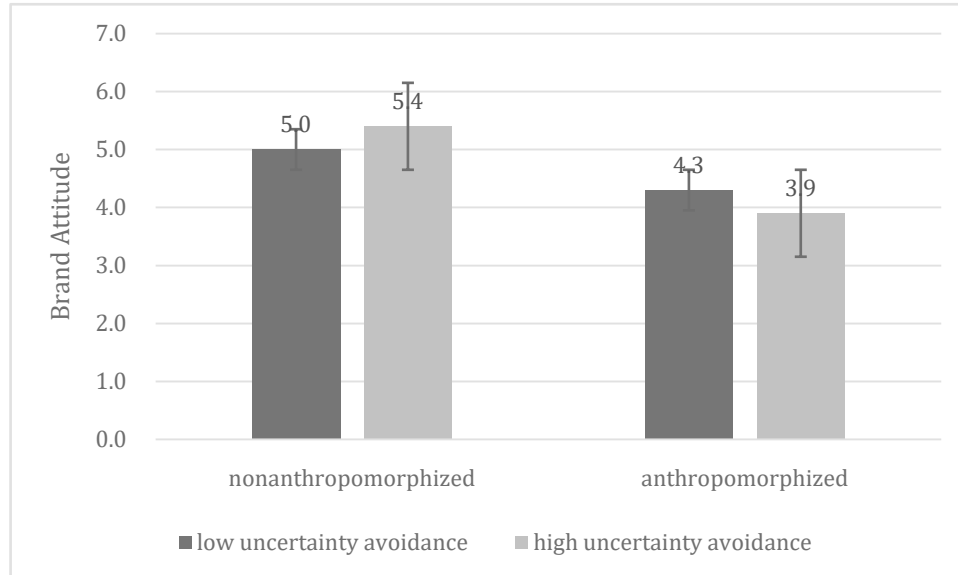
this decrease in liking was more drastic for uncertainty avoiding participants, which probably explains why the interaction exists. However, for those with low levels of uncertainty avoidance, there is also a difference in their attitudes towards two types of brands. In addition, we analyzed another pair of contrasts. When participants from non-anthropomorphized conditions were taken as a whole, by comparing two levels of uncertainty avoidance (contrast 2), we discovered that their attitudes did not differ despite their distinct orientation ($M_{\text{low nonanth}} = 5.02$, $M_{\text{hi nonanth}} = 5.39$; $F(1,228) = 2.03$, $p = .16$). Similarly, no difference in brand attitudes between two levels of uncertainty in anthropomorphized condition (contrast 3 $M_{\text{low anth}} = 4.25$, $M_{\text{hi anth}} = 3.87$; $F(1,228) = 1.95$, $p = .16$).

TABLE 3.2 & 3.3. Planned Contrasts of Anthropomorphism and Uncertainty Avoidance

Contrast	Contrast Coefficients			
	conditions			
	NA low UA	NA hi UA	A low UA	A hi UA
1	-.5	.5	.5	-.5
2	-1	1	0	0
3	0	0	1	-1
4	0	1	0	-1
5	1	0	-1	0

Planned Contrasts	Value of Contrast	Std. Error	t	df	Significance (2-tailed)
1	.38	.19	1.99	232	.047
2	.38	.26	1.43	232	.156
3	.39	.27	1.40	232	.164
4	1.52	.25	6.01	232	.000
5	.77	.28	2.73	232	.007

FIGURE 3.6. Interaction of Anthropomorphism and Uncertainty Avoidance



As for power distance, apart from the main effect ($F(1, 228) = 93.71, p < .00$) (Table A13), other interactions involving power distance were not significant. No evidence was found to verify H4a and H4b which predicted an interaction between power distance and brand anthropomorphism ($F(1, 228) = .48, p = .49$). Although we did not propose it, small power distance seemed to, in general, lead to more negative brand attitudes than large power distance ($M_{hi\ pd} = 5.5, M_{low\ pd} = 3.7$).

FIGURE 3.7. Interaction of Anthropomorphism and Power Distance

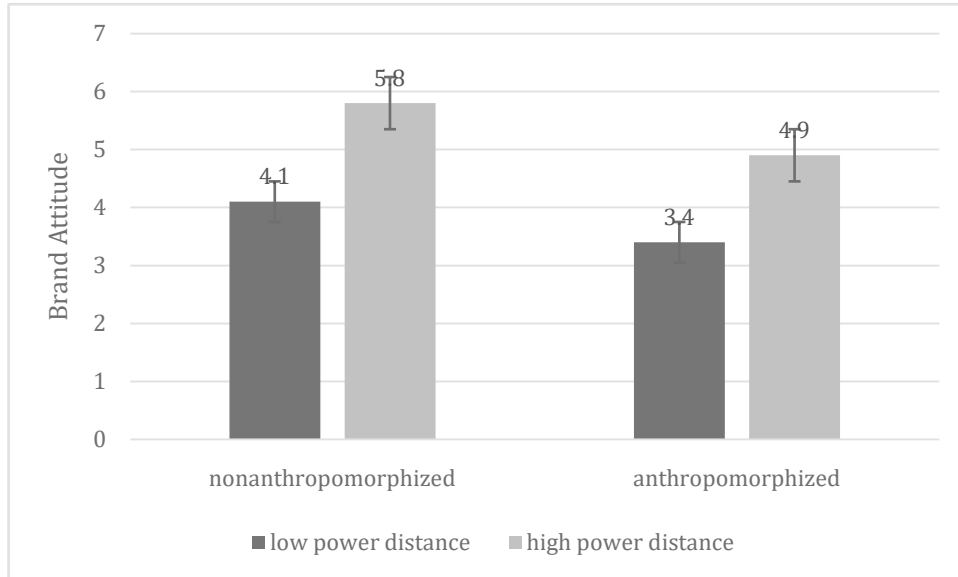


TABLE3.4. Summaries of Hypotheses Testing (Experiment 1)

Hypotheses	Supported or Rejected
H1: Product wrongdoings induce more negative attitudes towards an anthropomorphized brand than towards a non-anthropomorphized brand.	Supported
H2a: When product wrongdoings occur, participants who are in high power positions respond more negatively to an anthropomorphized brand compared to a non-anthropomorphized brand.	Supported
H2b: When product wrongdoings occur, for participants who are in low power positions, there is no difference in their attitudes towards anthropomorphized brandsand nonanthropomorphized brands.	Rejected

(Table3.4. continued)	
H3a: When product wrongdoings occur, participants with high levels of uncertainty avoidance respond more negatively towards an anthropomorphized brand (vs nonanthropomorphized).	Supported
H3b: When product wrongdoings occur, participants with low levels of uncertainty avoidance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.	Rejected
H4a: When product wrongdoings occur, participants with small power distance respond more negatively to an anthropomorphized brand(vs nonanthropomorphized).	Rejected
H4b: When product wrongdoings occur, for participants with large power distance, there is no difference in their attitudes towards anthropomorphized and non-anthropomorphized brands.	Rejected

Discussion

First, we test the proposition that negative brand information causes less favorable attitudes towards a humanized brand (vs a nonanthropomorphized brand), which is originally put forward by Puzakowa et al. (2013). By replicating their research with a different product category (i.e. vacuum robot), the current study confirms that adverse influence can be driven by anthropomorphic features, which have been largely considered as a contributing factor to brand attitudes. In particular, the damage is induced by the combination of an external negative factor and neutral brand anthropomorphization, rather than inherent traits of the anthropomorphization.

Another aim of the study is to look into how social power imposes its influence in our research setting. We designed the study using a high-tech product, assuming it is appropriate for power manipulation. Consistent with our reasoning that social perceptions and beliefs shape how people react to humanized agents (Kim & McGill, 2011; Chandler & Schwarz, 2010), power only impacts brand attitudes if the product resembles a human. The status of power plays no role when dealing with a non-humanized product. This may be explained by the social meaning attributed to the brand, which makes it ready to be perceived as a person. The congruency between a person and the brand further recalls the norms and beliefs in the social realm and affects the way participants judge the brand. Besides, the findings provide a partial support for H2. Participants in both high and low power positions respond more negatively towards anthropomorphized brands (vs a nonanthropomorphized brands). High power status, as predicted, sees a greater drop in attitudes. As discussed above, when they can not get their way as they expected, they seem to feel worse about it. However, we originally assumed no difference as such be discerned for those primed with low power. One possible explanation is that the publicity of wrongdoings render participants powerless, regardless of the level of power manipulation primed before the exposure.

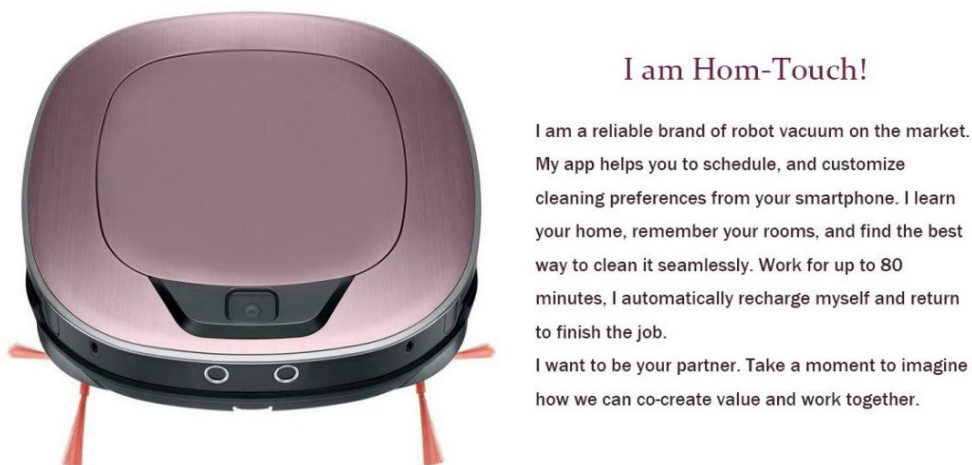
Apart from power, which is a contextually malleable state, this experiment explored cultural orientation as a person's built-in traits. With respect to uncertainty avoidance, those who are more uncertainty-avoiding show less preference towards an anthropomorphic product than towards a nonanthropomorphized one. Their counterparts, contrary to our prediction, also dislike this type of brand, though to a lesser extent. Our hypothesis is again partly proved, but the results are quite reasonable, considering product wrongdoings being a rather huge risk even for uncertainty-accepting people. Besides, in both product conditions, uncertainty avoidance alone does not affect participants' attitudes. Meanwhile, power distance has no effect in moderating brand anthropomorphization. However, this orientation itself seems to be able to exert influence on brand evaluation. That is, a smaller power distance predicts less favorable attitudes, which can be explained by their tendency to shun away from risks.

3.3 Pretest 2

Method

100 participants were recruited for pretest 2 and they were randomly assigned to one of the two brand role conditions: servant or partner. Two color print advertisements of a fictitious brand named “Hom-touch” as in experiment 1 were used for manipulation check (Figure 3.8). Participants in both conditions were presented with the same anthropomorphized design, in which the product addresses in the first person and it briefly introduces its functions and performance as a reliable vacuum robot. The only element that differs in the two ad copies stimulates the association of two brand roles. For example, Participants in the partner condition were exposed to the following instruction: “I want to be your partner. Take a moment to imagine how we can co-create value and work together.” Those in the servant condition read, “I want to serve you. Take a moment to imagine how I can serve and work for you”. Brand role was thus manipulated in a similar manner as Aggarwal & McGill (2012). In order to ensure that the manipulation holds, we also added an open-end question in the survey instructing participants to describe the brand role (e.g. Briefly describe how Hom-Touch can co-create value and work with you).

FIGURE 3.8. Stimulus Material for Pretest 2





I am Hom-Touch!

I am a reliable brand of robot vacuum on the market. My app helps you to schedule, and customize cleaning preferences from your smartphone. I learn your home, remember your rooms, and find the best way to clean it seamlessly. Work for up to 80 minutes, I automatically recharge myself and return to finish the job.

I want to serve you, take a moment to imagine how I can serve and work for you.

Then, participants answered four items indicating brand role perception (“Hom-Touch is a servant to me.” “Hom-Touch obeys me.” “Hom-Touch is a partner to me.” “Hom-Touch co-creates value with me.”; 1=strongly disagree; 7= strongly agree). Based on the similar reasoning in pretest 1, we did not expect a difference in brand liking due to the type of brand role, thus it is necessary to rule out the possibility that a particular brand type causes greater or worse brand attitudes (Puzakowa et al., 2013) Last, we asked participants to report the four-item measure of brand attitudes.

Results

We ran one-way ANOVA with 99 valid participants who answered completely the questionnaire. The results revealed that brand role manipulation worked well, with a significantly higher perception of servant for participants in the servant condition ($F(1,97) = 8.57, p < .01; M_{\text{ser}} = 5.52, M_{\text{par}} = 4.68$) (Table A17) and a significantly higher perception of partner for participants in the other condition $F(1,97) = 7.51, p < .01; M_{\text{ser}} = 4.86, M_{\text{par}} = 5.6$) (Table A19). In addition, the results yielded an $F(1,97) = .69, p = .41$ for the test of difference in brand attitudes, which means that two designs of advertisement did not lead to a better or worse brand evaluation ($M_{\text{ser}} =$

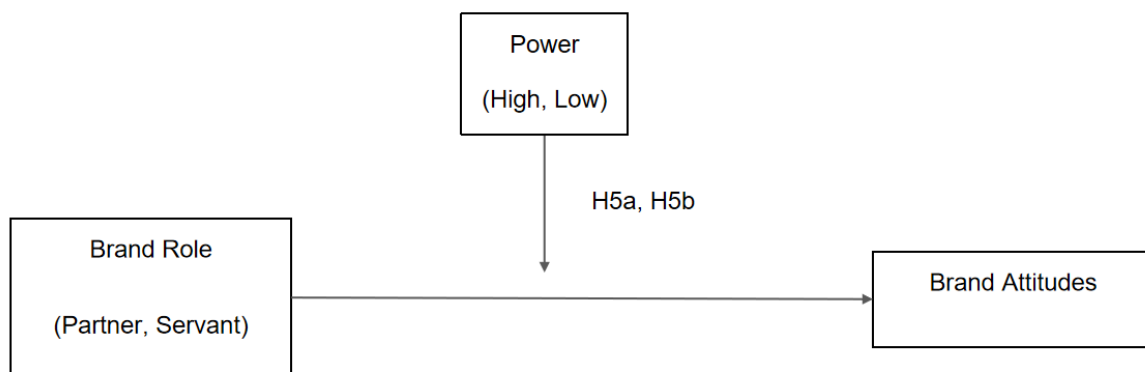
5.88, $M_{par} = 5.7$) (Table A15). Thus, we were convinced that current brand design was appropriate for main experiment 2.

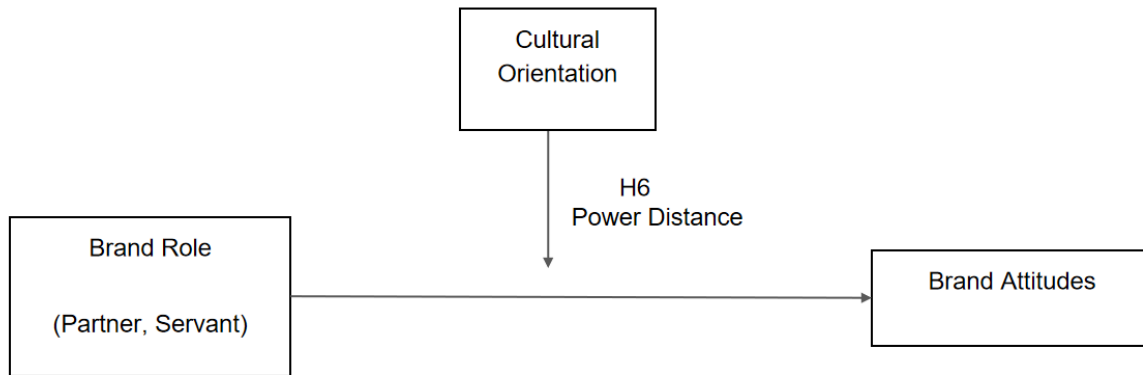
3.4 Experiment 2: Brand Role and Power on Brand Attitudes

Recall that in experiment 1, regardless of the level of a person's power status, they tended to show more negative attitudes towards an anthropomorphized brand. Experiment 1 solely investigated the effects of anthropomorphism as a whole, we did not specify the relationship such a practice entailed. This begged the question: how specific brand role imposes its influence in a quasi-social experience with a humanized brand. Inspired by former findings, in this study, we use the same fictitious brand to examine the effect of brand role and social power amid product wrongdoings caused by negative publicity. Besides, the moderating role of power distance in affecting brand liking is also explored.

Particularly, experiment 2 is designed to test H5a, H5b and H6.

FIGURE 3.9. Research Model of Experiment 2



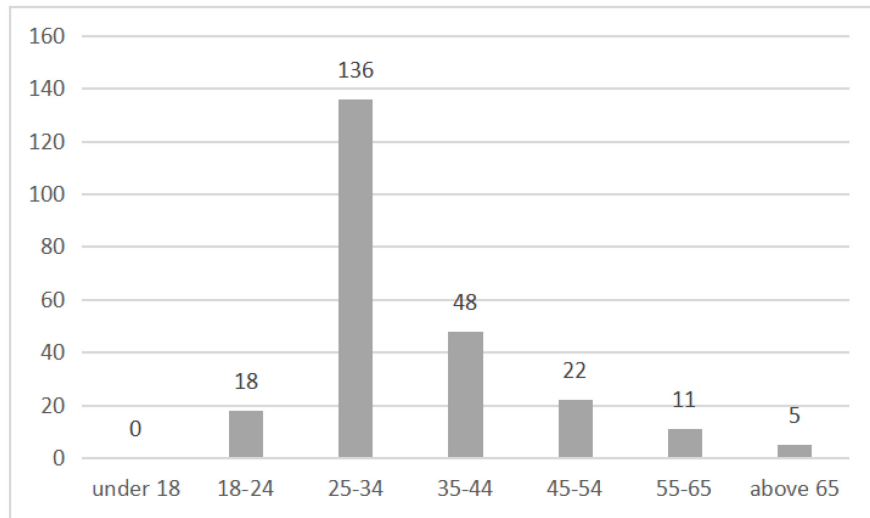


Method

Participants

A total of 240 participants (36.3% female) were recruited online through Amazon MTurk in December 2019. At the beginning of the online survey, they were randomly assigned to one of the 2 (power: high, low) \times 2 (servant brand, partner brand) between-subject conditions. Three of the participants who failed to fully complete the survey were excluded from the subsequent analysis. Across the conditions, the distribution of participants were as follows: high power - servant brand (n=58), high power - partner brand (n=55), low power - servant brand (n=58), low power - partner brand (n=66). The distribution of age is illustrated in Figure 7. Approximately 80% of participants fall between the age of 25 and 44.

FIGURE 3.10. the Age Range for Experiment 2



Procedure

After being assigned to one of the four conditions, each participant was shown one of the two advertisements of a fictitious new high-tech product (Hom-touch, see pretest 2; Figure 3.8). The stimulus material depicted a vacuum robot with human-like features (facial expressions and legs), accompanied by an ad copy introduced the product with first person (Puzakowa et al., 2013). At the end of the advertisements, participants were asked to imagine the brand as their partner or their servant. Following the exposure to the product, participants were instructed to give a brief description of how the brand can work for/work with them, which we expected to strengthen the effect of brand role manipulation (Aggarwal & McGill, 2012). Then, participants were told to describe an experience where they had power over others (vs someone had power over them). As in study 1, the episodic recall served as power manipulation. Next, they were presented with a short description providing negative brand information, which was the same publicity we used in Experiment 1. Finally, participants responded to dependent variables and a brief demographic section. The questions mainly covered brand attitudes and power distance. All measures were recorded on 7-point scales.

Results

First, reliability analysis generated decent results for brand attitudes, and two cultural orientation variables ($\alpha > .80$) (Table A20). A 2 (power: high, low) \times 2 (brand role: servant, partner) between-subject ANOVA was performed where brand attitudes served as a dependent variable. The results revealed a significant interaction between power and brand role ($F(1, 233) = 7.91, p < .01$) (Table A22). The effects of interaction were investigated with a set of planned contrasts (Table 3.4&3.5). Contrast 1 confirmed that the interaction between the two variables was significant ($F(1, 233) = 7.91, p < .01$). The positive t value indicated that the direction of its effects went as predicted, that is, participants who were in high power positions responded more negatively towards a servant brand than towards a partner brand ($M_{\text{ser hp}} = 3.11, M_{\text{par hp}} = 4.50; F(1, 233) = 17.51, p < .001$). Meanwhile, those who were in low power positions showed no difference in attitudes towards two types of brand ($M_{\text{ser lp}} = 3.54, M_{\text{par lp}} = 3.64; F(1, 233) = .09, p = .76$). Thus, H5a and H5b is supported. Interestingly, we found that, the partner brand received generally better opinions across both power positions. We also looked at another pair of contrasts dissecting two types of brand roles. When being introduced with a brand that wants to work with them, power position leads to distinct brand attitude ($F(1, 233) = 7.17, p < .01$). The powerless seemed to demonstrate less liking while the powerful showed a greater favor towards it ($M_{\text{par lp}} = 3.64, M_{\text{par hp}} = 4.50$). However, that is not the case for a brand which positioned itself as a servant. Servant brands failed to draw a significant difference in attitudes from the powerful and the powerless ($M_{\text{ser lp}} = 3.54, M_{\text{ser hp}} = 3.11; F(1, 233) = 1.72, p = .19$).

Figure 3.11. Interaction between Brand Role and Power

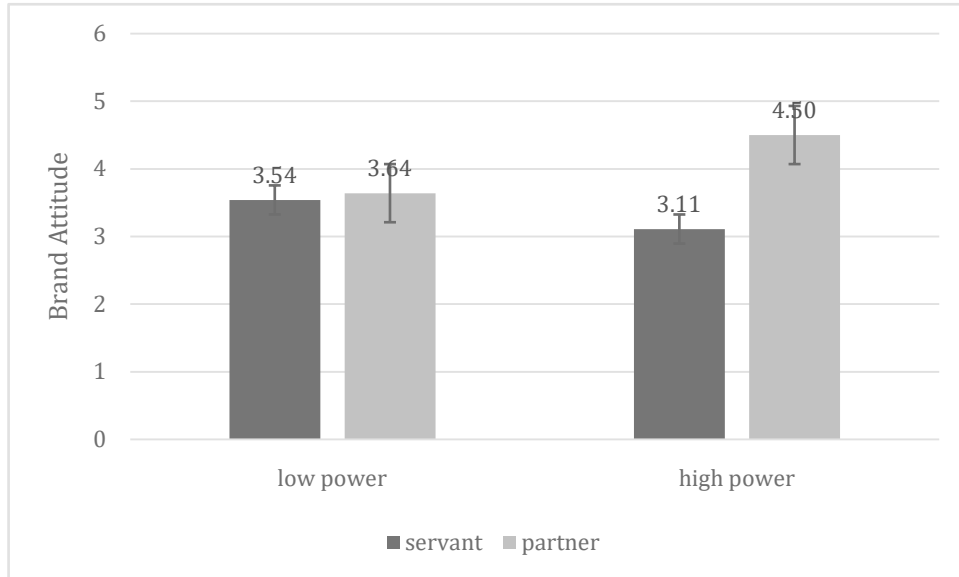


TABLE 3.5 & 3.6. Planned Contrasts of Brand Role and Power

Contrast Coefficients

Contrast	conditions			
	Ser LP	Ser HP	Par LP	Par HP
1	.5	-.5	-.5	.5
2	1	-1	0	0
3	0	0	-1	1
4	-1	0	1	0
5	0	-1	0	1

Planned Contrasts	Value of Contrast	Std. Error	t	df	Significance (2-tailed)
1	.65	.23	2.8	233	.005
2	.43	.33	1.3	233	.191
3	.86	.32	2.68	233	.008
4	.10	.32	.31	233	.761
5	1.39	.33	4.18	233	.000

We then performed a three-way ANOVA with power distance as the third factor: power distance. As it was originally measured as a continuous variable, we divided it by two levels (high power distance - low power distance) based on the median split principle. The results revealed a significant main effect ($F(1, 229) = 69.35, p < .00$) (Table A24). However, none of other interactions involving power distance were significant. H6 was not supported. There was no evidence indicating any interaction between power distance and brand role ($F(1, 229) = .13, p = .72$). Similar to experiment 1, participants with a small power distance orientation were inclined to have more negative brand attitudes than their counterparts. ($M_{hi\ pd} = 4.58, M_{low\ pd} = 2.58$).

TABLE3.7. Summaries of Hypotheses Testing (Experiment 2)

Hypotheses	Supported or Rejected
H5a: When product wrongdoings occur, participants who are in high power positions respond more negatively towards a servant brand (vs a partner brand).	Supported
H5b: When product wrongdoings occur, participants who are in low power positions show no difference in attitudes towards a servant brand and a partner brand.	Supported
H6: When product wrongdoings occur, the effect of brand role will be obtained for participants with large power distance, but not for those with small power distance.	Rejected

Discussion

This study closely follows study 1, which concentrates on the effects of anthropomorphism on product wrongdoing. While the purpose of study 2 is to explore the influence of two distinct types of anthropomorphization in the same situation. Extending the finding of study 1, we found that power continues to play an important role in explaining the processing of anthropomorphization. That is, the difference in brand attitudes induced by brand role is solely obtained for the powerful, but not for the powerless. This is to say, those who do not have power at the moment show approximately the same attitudes regardless of which kind of brand they are dealing with. In fact, these individuals are not severely influenced by the negative publicity and their attitudes maintain around the average on our scale of measurement. One possible explanation is that their lower power status has blunted their perception of the otherwise

bad situation. In other words, they become less sensitive to the exposure, which is consistent with our reasoning. The powerless may regard it normal when they cannot get their way in interacting with humanized entities. Their counterparts though, generate a different picture. Individuals who are primed to perceive a higher social power show distinct attitudes when anthropomorphism backfires. It appears that they dislike the servant brand, whereas slightly favored the partner brand. Clearly, the effects of anthropomorphized brand roles are not the same for everyone. This is, to some extent, consistent with the research of Kim & McGill (2011). It is possible that high-power people do not get used to their power being violated. Their less favorable towards a servant role may exactly due to their greater desire for control (Kim & Kramer 2015). Because they would not treat a partner in such a strict manner, the liking for the partner brand in our research does not suffer too much. Nevertheless, contrary to our prediction, power distance does not exhibit any moderating effect with anthropomorphized brand roles on brand evaluation. Its influence does not differ for both types of anthropomorphization. In line with the results of Study 1, product wrongdoings hurt more seriously the opinions of low-power-distance people, but not their counterparts.

4. Managerial Implications

Anthropomorphism is a ubiquitous marketing communication technique and marketers never fail to find a creative anthropomorphic positioning expecting to elicit more positive reactions to their brands. Nevertheless, that is not always the case. On some less ideal occasions, the practice of anthropomorphization may bring about negative repercussions. For example, in line with the findings of Puzakowa et al. (2013), the current study exhibits evidence that human-like characteristics attributed to a brand are likely to backfire when product wrongdoings occur. Specifically, we experiment with the scenario of product misconduct during production, which is a common form of wrongdoings (e.g. Apple's Foxconn plant in China, Ted and Alice slave-made clothing). In particular, we manage to confirm the assertion that an anthropomorphized brand receives less favorable responses from consumers who are exposed to negative publicity caused by product wrongdoings. Only recently have researchers begun to turn their attention

towards brand anthropomorphism; however, the potential negative influence of this strategy remains largely overlooked. This research shows again that more caution should be exercised by marketers who intend to engage in such an approach.

Importantly, this research suggests that the psychographic segmentation should be carefully studied before any anthropomorphic features are imbued to a brand, that is, marketers should be aware of consumers' power status, cultural orientations and their combined implications. Take high-power people as an example. They tend to be more sensitive towards a brand's positioning amid product wrongdoing. These individuals demonstrate especially negative attitudes towards anthropomorphic positioning. Thus, one might want to be extra cautious adopting the technique if their brand mainly targets "powerful" consumers who view themselves as high-status. Whereas, those who hold lower power status are somewhat dull to the types of marketing communication against the same backdrop. Power is an interesting variable; on the one hand, it manifests as one's built-in perception throughout their social life, on the other hand, though, it is ready to be manipulated by simple cues contained in an advertisement (Galinsky et al., 2003). The findings documented in the current research thus suggest that another way to save a failing marketing communication is to alter a person's power position by planting phrases in the advertisement. However, marketers should not forgo ethical concerns when power balance is the case. In short term, the tilt of consumer-brand power balance seems to be a good move. That may not be so beneficial for the brand in the long run when the consumers and society realized what has been going on. The consideration of ethics and social responsibility communities require the brand, especially those take an anthropomorphized positioning, not to take advantage of the vulnerable groups, such as children and the elder. Furthermore, a better understanding is provided for the effects of a person's cultural values. Specifically, when targeting consumers who are in different positions on the uncertainty avoidance spectrum, one should bear in mind that uncertainty-avoiding individuals are more likely to shun away from a human-like brand, while showing acceptance of a pure object-like brand. Meanwhile, uncertainty-accepting people are generally more tolerant to misconducts and anthropomorphization appears to render a minor impact on their evaluation.

Moreover, our study argues that the seemingly intentional behavior of a brand that takes different roles may bear distinct consequences in the quasi-social realm. One would anticipate that, if a brand is anthropomorphized to be a servant, in order to gain preference, it should conform to the consumer's expectations and experiences with a human servant. Another implication the current study offers is that high-power-people possibly like less a servant brand (vs a partner brand) when it has done wrong. A brand positioned as a partner was relatively safer under the same circumstances. Meanwhile, those with a lower level of social power are less conscious of the brand positioning. Prior research affirmed that a brand anthropomorphized as a servant gains more favor among materialists, who expect a master-servant relationship from the brand (Kim & Kramer, 2015). Thus, they suggested that marketers might want to portray their brands as a servant. Our study, though, shows a different picture. On the whole, a partner positioning appears to be actually safer than a servant, and a worth-trying strategy in the aftermath of product wrongdoings.

5. Limitations and Future Research

First, this research investigates the effects of several factors on one single dependent variable: brand attitudes. While the 4-item scale reflects consumer's overall attitudes towards the brand, the items are concise and can only convey limited messages. Other constructs (e.g. brand trust, risk perceptions) that capture more underlying meanings and motivations of consumer perceptions can also be tested with the same set of independent variables. Together with brand attitudes, they may offer a more complete picture of the logic behind the current research. We may come across potential mediations effects and other consequences of brand anthropomorphism.

Second, power distance fails to demonstrate its role as a moderator. It might be due to some omissions in our reasoning. Also, it is an indication that a wider range of data is required. And participants need to be acquired from diversified sources. Even though cultural values are investigated at an individual level, our survey is solely conducted with English-speaking

participants, which can cause inaccuracy in the results. With respect to accurate predictions, qualitative methods are good avenues which might obtain more understanding before quantitative research.

Third, compared to a fictitious brand, the adoption of real-world brands may generate more reliable results for the current study. One of the research procedures is to ask participants to describe how the fictitious can work for/with them. This method is adopted from Aggarwal and McGill (2012) who used the real-world brand Apple and Apple was primed with a servant or partner role. Although it functions well in their study, the method lacks realism with a fictitious brand, in that the description is based on pure imagination but not real-life experience. Fournier (1998) argued that the development of an enduring partnership demands trust. Hence, it might not be ideal to rely on an imagined relationship in constructing the research. Furthermore, our two studies use the same product category: a high-tech vacuum robot. Future research can adopt different brand types in an attempt to acquire vision through a wider lens.

Fourth, the use of closeness-implying pronoun (e.g “we”) in the advertisements may induce unwanted associations from participants, thus confounding the results. As we attempt to manipulate brand roles, a first person scenario is adopted to resemble an interpersonal relationship. However, according to Sela, Wheeler, and Sarial-Abi (2012), the language implying closeness might make people uncomfortable when they have a distant, rather than a close relationship with a brand. In particular, if the pronoun connotes experiences and expectations consistent with consumers’ interactions with the brand, they would react more positively. This suggests that it is, therefore, necessary to select real brands with which participants are familiar to make up for the ambiguity.

Fifth, this study manipulates power by priming a lower or higher level of it. One possible future direction for research is to look at power as an orientation, instead of a contextual psychological state. Rucker, Galinsky, and Dubois (2012) conclude that power can also manifest itself as two kinds of orientations: agentic versus communal. In interacting with one’s environment, an agentic orientation means that one pays more attention to their self-protection and dominance over others, while communal orientation refers to a person's tendency to be more

considerate to others in decision-making. Rucker et al. (2012) suggested that these two orientations touch the fundamental definition of power, in that the powerless are more dependent on other people whereas those who are higher in the hierarchy require more freedom. Worthwhile areas for future research. Divergent from power as a temporary status, this provides another worthwhile way to explore the role of power.

Sixth, future research can also extend the role of culture by investigating another Hofstede's dimension: individualism and collectivism. Individualists care more about themselves instead of other members in the society. They stress less on belonging and consider less the concept of "we". As opposed to the individualist culture, those with high levels of collectivism are more willing to take account of other social members (Hofstede, 2001). They also value more cooperation and a friendly relationship with others. Individual differences on this dimension may have an interaction with brand role because of the way they value the concept of "I" and "We". Different emphasis on how people deal with personal relationship and other social members may influence how they treat anthropomorphized brands, which are ready to be seen as a member in the quasi-social realm.

References

- Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research*, 31(1), 87-101.
- Aggarwal, P., & Law, S. (2005). Role of relationship norms in processing brand information. *Journal of Consumer Research*, 32(3), 453-464.
- Aggarwal, P., & McGill, A. L. (2007). Is that car smiling at me? Schema congruity as a basis for evaluating anthropomorphized products. *Journal of Consumer Research*, 34(4), 468-479.
- Aggarwal, P., & McGill, A. L. (2012). When brands seem human, do humans act like brands? Automatic behavioral priming effects of brand anthropomorphism. *Journal of Consumer Research*, 39(2), 307-323.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168.
- Chandler, J., & Schwarz, N. (2010). Use does not wear ragged the fabric of friendship: Thinking of objects as alive makes people less willing to replace them. *Journal of Consumer Psychology*, 20(2), 138-145.
- Chen, F., Sengupta, J., & Adaval, R. (2018). Does endowing a product with life make one Feel more alive? The effect of product anthropomorphism on consumer vitality. *Journal of the Association for Consumer Research*, 3(4), 503-513.
- Delgado-Ballester, E., Munuera-Aleman, J. L., & Yague-Guillen, M. J. (2003). Development and validation of a brand trust scale. *International Journal of Market Research*, 45(1), 35-54.
- Doney, Patricia M., Joseph P. Cannon, and Michel P. Mullen (1998). Understanding the influence of national culture on the development of trust. *Academy of Management Review*, 23 (July), 601–620.
- Elizur, D., & Sagie, A. (1999). Facets of personal values: A structural analysis of life and work values. *Applied Psychology*, 48(1), 73-87.

- Epley, N., Waytz, A., & Cacioppo, J. T. (2007). On seeing human: a three-factor theory of anthropomorphism. *Psychological Review*, *114*(4), 864.
- Epley, N., Waytz, A., Akalis, S., & Cacioppo, J. T. (2008). When we need a human: Motivational determinants of anthropomorphism. *Social Cognition*, *26*(2), 143-155.
- Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, *48*(6), 621.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, *24*(4), 343-373.
- Fournier, S., & Alvarez, C. (2012). Brands as relationship partners: Warmth, competence, and in-between. *Journal of Consumer Psychology*, *22*(2), 177-185.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, *85*(3), 453.
- Gray, H. M., Gray, K., & Wegner, D. M. (2007). Dimensions of mind perception. *Science*, *315*(5812), 619-619.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*, *2*(1), 8.
- Kim, S., & McGill, A. L. (2011). Gaming with Mr. Slot or gaming the slot machine? Power, anthropomorphism, and risk perception. *Journal of Consumer Research*, *38*(1), 94-107.
- Kim, H. C., & Kramer, T. (2015). Do materialists prefer the “brand-as-servant”? The interactive effect of anthropomorphized brand roles and materialism on consumer responses. *Journal of Consumer Research*, *42*(2), 284-299.

- Landwehr, J. R., McGill, A. L., & Herrmann, A. (2011). It's got the look: The effect of friendly and aggressive “facial” expressions on product liking and sales. *Journal of Marketing*, 75(3), 132-146.
- MacInnis, D. J., & Folkes, V. S. (2017). Humanizing brands: When brands seem to be like me, part of me, and in a relationship with me. *Journal of Consumer Psychology*, 27(3), 355-374.
- Puzakova, M., Kwak, H., & Rocereto, J. F. (2013). When humanizing brands goes wrong: the detrimental effect of brand anthropomorphization amid product wrongdoings. *Journal of Marketing*, 77(3), 81-100.
- Rucker, D. D., & Galinsky, A. D. (2008). Desire to acquire: Powerlessness and compensatory consumption. *Journal of Consumer Research*, 35(2), 257-267.
- Rucker, D. D., & Galinsky, A. D. (2009). Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behavior. *Journal of Experimental Social Psychology*, 45(3), 549-555.
- Rucker, D. D., Galinsky, A. D., & Dubois, D. (2012). Power and consumer behavior: How power shapes who and what consumers value. *Journal of Consumer Psychology*, 22(3), 352-368.
- Sela, A., Wheeler, S. C., & Sarial-Abi, G. (2012). We are not the same as you and I: Causal effects of minor language variations on consumers' attitudes toward brands. *Journal of Consumer Research*, 39(3), 644-661.
- Waytz, A., Heafner, J., & Epley, N. (2014). The mind in the machine: Anthropomorphism increases trust in an autonomous vehicle. *Journal of Experimental Social Psychology*, 52, 113-117.
- Waytz, A., Cacioppo, J., & Epley, N. (2010). Who sees human? The stability and importance of individual differences in anthropomorphism. *Perspectives on Psychological Science*, 5(3), 219-232.
- Waytz, A., Gray, K., Epley, N., & Wegner, D. M. (2010). Causes and consequences of mind perception. *Trends in cognitive sciences*, 14(8), 383-388.

Waytz, A., Morewedge, C. K., Epley, N., Monteleone, G., Gao, J. H., & Cacioppo, J. T. (2010). Making sense by making sentient: effectance motivation increases anthropomorphism. *Journal of Personality and Social Psychology*, 99(3), 410.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, 23(3-4), 193-210.

Appendix A

PRETEST 1

Table A1 &A2: anthropomorphism manipulation check

ONEWAY Descriptives								
MeanAnth								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
nonanth	26	2.3590	1.92509	.37754	1.5814	3.1365	1.00	6.33
anth	24	4.1944	1.77725	.36278	3.4440	4.9449	1.00	6.33
Total	50	3.2400	2.05705	.29091	2.6554	3.8246	1.00	6.33
ONEWAY ANOVA								
MeanAn								
		Sum of Squares	df	Mean Square	F	Significance		
Between Groups		42.045	1	42.045	12.209	.001		
Within Groups		165.298	48	3.444				
Total		207.342	49					

Table A3 &A4: anthropomorphism on brand attitudes

ONEWAY Descriptives								
Brand Attitudes Mean								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
nonanth	26	2.7356	.58130	.11400	2.5008	2.9704	.63	3.50

Table A3 continued								
anth	24	2.8750	.42189	.08612	2.6969	3.0531	2.00	3.50
Total	50	2.8025	.51078	.07224	2.6573	2.9477	.63	3.50

ONEWAY ANOVA					
Brand Attitudes Mean					
	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.243	1	.243	.928	.340
Within Groups	12.541	48	.261		
Total	12.784	49			

EXPERIMENT 1

Table A5: Reliability Analysis

Constructs	Citation	N of Items	Cronbachs Alpha
Brand attitudes	Puzakowa et al.(2013)	4	.965
Uncertainty avoidance	Yoo, Donthu, and Lenartowicz (2011)	5	.798
Power distance	Yoo, Donthu, and Lenartowicz (2011)	5	.934

Table A6 &A7: Experiment 1 Anthropomorphism Manipulation Check

ONEWAY Descriptives								
Anth check								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
nonanth	122	4.0902	1.99772	.18087	3.7321	4.4482	1.00	6.67
anth	114	4.7193	1.44963	.13577	4.4503	4.9883	1.00	6.
Total	236	4.3941	1.77894	.11580	4.1659	4.6222	1.00	6.67

ONEWAY ANOVA					
	Sum of Squares	df	Mean Square	F	Significance
Between Groups	23.326	1	23.326	7.577	.006
Within Groups	720.359	234	3.078		
Total	743.685	235			

Table A8&A9: Experiment 1 Brand Anthropomorphism and Power on Brand Attitudes

Descriptive Statistics				
Dependent Variable: attitude				
A=1 NA=0	HP=1 LP=0	Mean	Std. Deviation	N
0	0	5.0977	1.64668	64
	1	5.3233	1.15850	58
	Total	5.2049	1.43417	122
1	0	4.3259	1.28534	56

Table A8 continued				
	1	3.7284	1.54699	58
	Total	4.0219	1.44958	114
Total	0	4.7375	1.53251	120
	1	4.5259	1.57886	116
	Total	4.6335	1.55577	236

Tests of Between-Subjects Effects						
Dependent Variable: attitude						
Source	Type III Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Corrected Model	94.192 ^a	3	31.397	15.348	.000	.166
	5022.235	1	5022.235	2455.013	.000	.914
Anth	82.407	1	82.407	40.283	.000	.148
Power	2.034	1	2.034	.994	.320	.004
Anth * Power	9.967	1	9.967	4.872	.028	.021
Error	474.604	232	2.046			
Total	5635.500	236				
Corrected Total	568.796	235				
a. R Squared = .166 (Adjusted R Squared = .155)						

Table A10&A11: Experiment 1 Brand Anthropomorphism, Power and Uncertainty Avoidance on Brand Attitudes

Descriptive Statistics					
Dependent Variable: attitude					
A=1 NA=0	HP=1 LP=0	HUA=1 LUA=0	Mean	Std. Deviation	N
0	0	.00	4.7500	1.43856	28
		1.00	5.3681	1.76421	36
		Total	5.0977	1.64668	64
	1	.00	5.2500	1.05876	32
		1.00	5.4135	1.28636	26
		Total	5.3233	1.15850	58
	Total	.00	5.0167	1.26463	60
		1.00	5.3871	1.56987	62
		Total	5.2049	1.43417	122
1	0	.00	4.6400	1.13899	25
		1.00	4.0726	1.35738	31
		Total	4.3259	1.28534	56
	1	.00	3.7857	1.45191	21
		1.00	3.6959	1.61711	37
		Total	3.7284	1.54699	58
	Total	.00	4.2500	1.34681	46
		1.00	3.8676	1.50526	68
		Total	4.0219	1.44958	114
Total	0	.00	4.6981	1.29474	53

		Table A10 continued			
		1.00	4.7687	1.70633	67
		Total	4.7375	1.53251	120
1		.00	4.6698	1.41487	53
		1.00	4.4048	1.70650	63
		Total	4.5259	1.57886	116
Total		.00	4.6840	1.34974	106
		1.00	4.5923	1.70957	130
		Total	4.6335	1.55577	236

Tests of Between-Subjects Effects						
Dependent Variable: attitude						
Source	Type III Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Corrected Model	105.155 ^a	7	15.022	7.387	.000	.185
	4881.003	1	4881.003	2400.284	.000	.913
Anth	75.125	1	75.125	36.944	.000	.139
Power	1.678	1	1.678	.825	.365	.004
UA	.055	1	.055	.027	.869	.000
Anth * Power	11.265	1	11.265	5.540	.019	.024
Anth * UA	7.390	1	7.390	3.634	.058	.016
Power * UA	.002	1	.002	.001	.976	.000
Anth * Power * UA	3.103	1	3.103	1.526	.218	.007
Error	463.640	228	2.034			
Total	5635.500	236				

Corrected Total	568.796	235			
a. R Squared = .185 (Adjusted R Squared = .160)					

Table A12&A13: Experiment 1 Brand Anthropomorphism, Power and Power Distance on Brand Attitudes

Descriptive Statistics						
Dependent Variable: attitude						
A=1 NA=0	HP=1 LP=0	HPD=1 LPD=0	Mean	Std. Deviation	N	
0	0	.00	3.7396	1.70753	24	
		1.00	5.9125	.91908	40	
		Total	5.0977	1.64668	64	
	1	.00	4.5500	1.40394	20	
		1.00	5.7303	.74973	38	
		Total	5.3233	1.15850	58	
	Total	.00	4.1080	1.61155	44	
		1.00	5.8237	.84044	78	
		Total	5.2049	1.43417	122	
1	0	.00	3.7344	1.18617	32	
		1.00	5.1146	.95831	24	
		Total	4.3259	1.28534	56	
	1	.00	3.1757	1.30019	37	
		1.00	4.7024	1.48875	21	
		Total	3.7284	1.54699	58	
			continued			

	Total	.00	3.4348	1.27089	69
		1.00	4.9222	1.23723	45
		Total			
Total	0	.00	4.0219	1.44958	114
		1.00	3.7366	1.41856	56
		Total	5.6133	1.00488	64
	1	.00	4.7375	1.53251	120
		1.00	3.6579	1.48100	57
		Total	5.3644	1.17014	59
	Total	.00	4.5259	1.57886	116
		1.00	3.6969	1.44445	113
		Total	5.4939	1.08994	123
		4.6335	1.55577	236	

Tests of Between-Subjects Effects						
Dependent Variable: attitude						
Source	Type III Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Corrected Model	240.619 ^a	7	34.374	23.881	.000	.423
	4625.472	1	4625.472	3213.539	.000	.934
Anth	35.362	1	35.362	24.567	.000	.097
Power	.404	1	.404	.281	.597	.001
PD	134.880	1	134.880	93.708	.000	.291
Anth *Power	8.801	1	8.801	6.114	.014	.026
Anth * PD	.685	1	.685	.476	.491	.002

continued						
Power * PD	2.464	1	2.464	1.712	.192	.007
Anth * Power * PD	4.466	1	4.466	3.103	.079	.013
Error	328.176	228	1.439			
Total	5635.500	236				
Corrected Total	568.796	235				
a. R Squared = .423 (Adjusted R Squared = .405)						

PRETEST 2

TABLE A14, A15, A16, A17, A18, A19: Brand Role Manipulation Check

ONEWAY Descriptives								
Brand Attitude								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
servant	55	5.8773	.94019	.12678	5.6231	6.1314	3.00	7.00
partner	44	5.6989	1.19663	.18040	5.3351	6.0627	2.00	7.00
Total	99	5.7980	1.05986	.10652	5.5866	6.0094	2.00	7.00

ONEWAY ANOVA					
Brand Attitudes					
	Sum of Squares	df	Mean Square	F	Significance
Between Groups	.778	1	.778	.690	.408

Within Groups	109.307	97	1.127		
Total	110.085	98			

ONEWAY Descriptives								
servant								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
servant	55	5.518	1.2434	.1677	5.182	5.854	2.0	7.0
partner	44	4.682	1.5997	.2412	4.195	5.168	1.0	7.0
Total	99	5.146	1.4660	.1473	4.854	5.439	1.0	7.0

ONEWAY ANOVA					
servant					
	Sum of Squares	df	Mean Square	F	Significance
Between Groups	17.099	1	17.099	8.570	.004
Within Groups	193.527	97	1.995		
Total	210.626	98			

ONEWAY Descriptives								
partner								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
servant	55	4.855	1.5506	.2091	4.435	5.274	1.0	7.0
partner	44	5.602	1.0431	.1573	5.285	5.919	3.5	7.0
Total	99	5.187	1.3935	.1400	4.909	5.465	1.0	7.0

ONEWAY ANOVA					
partner					
	Sum of Squares	df	Mean Square	F	Significance
Between Groups	13.667	1	13.667	7.506	.007
Within Groups	176.626	97	1.821		
Total	190.293	98			

EXPERIMENT 2

TABLE A20: Reliability Analysis

Constructs	Citation	N of Items	Cronbachs Alpha
Brand attitudes	Puzakowa et al.(2013)	4	.975
Uncertainty avoidance	Yoo, Donthu, and Lenartowicz (2011)	5	.856
Power distance	Yoo, Donthu, and Lenartowicz (2011)	5	.933

TABLE A21&A22: Brand Role and Power on Brand Attitude

Descriptive Statistics				
Dependent Variable: attitude				
Ser=0	LP=0	Mean	Std. Deviation	N
Par=1	HP=1			
0	0	3.5431	1.78391	58
	1	3.1121	1.75543	58
	Total	3.3276	1.77526	116
1	0	3.6402	1.91810	66
	1	4.5045	1.56605	55
	Total	4.0331	1.81198	121
Total	0	3.5948	1.84968	124
	1	3.7898	1.79985	113
	Total	3.6878	1.82485	237

Tests of Between-Subjects Effects						
Dependent Variable: attitude						
Source	Type III Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Corrected Model	57.278 ^a	3	19.093	6.106	.001	.073
	3229.855	1	3229.855	1032.857	.000	.816
Brand role	32.716	1	32.716	10.462	.001	.043
Power	2.769	1	2.769	.886	.348	.004

Brand role * power	24.745	1	24.745	7.913	.005	.033
Error	728.616	233	3.127			
Total	4009.000	237				
Corrected Total	785.895	236				
a. R Squared = .073 (Adjusted R Squared = .061)						

TABLE A23&A24: Brand Role, Power and Power Distance on Brand Attitude

Descriptive Statistics					
Dependent Variable: attitude					
Ser=0 Par=1	LP=0 HP=1	LPD=0 HPd=1	Mean	Std. Deviation	N
0	0	0	2.9741	1.58304	29
		1	4.1121	1.81706	29
		Total	3.5431	1.78391	58
	1	0	2.3056	1.15590	36
		1	4.4318	1.78816	22
		Total	3.1121	1.75543	58
	Total	0	2.6038	1.39257	65
		1	4.2500	1.79374	51
		Total	3.3276	1.77526	116
1	0	0	2.6833	1.40953	30
		1	4.4375	1.93592	36
		Total	3.6402	1.91810	66

	1	0	3.4896	1.48448	24	
		continued				
		1	5.2903	1.12379	31	
		Total	4.5045	1.56605	55	
	Total	0	3.0417	1.48558	54	
		1	4.8321	1.65682	67	
		Total	4.0331	1.81198	121	
	Total	0	0	2.8263	1.49154	59
			1	4.2923	1.87634	65
Total						
		0	3.5948	1.84968	124	
1		1	2.7792	1.41203	60	
		Total	4.9340	1.48401	53	
		0	3.7898	1.79985	113	
Total		1	2.8025	1.44602	119	
		Total	4.5805	1.73417	118	
			3.6878	1.82485	237	

Tests of Between-Subjects Effects						
Dependent Variable: attitude						
Source	Type III Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Corrected Model	232.006 ^a	7	33.144	13.703	.000	.295
	3186.969	1	3186.969	1317.622	.000	.852

Brand role	15.563	1	15.563	6.434	.012	.027
continued						
Power	6.192	1	6.192	2.560	.111	.011
PD	167.729	1	167.729	69.346	.000	.232
role *Power	14.543	1	14.543	6.012	.015	.026
role * PD	.305	1	.305	.126	.723	.001
Power * PD	3.863	1	3.863	1.597	.208	.007
role * Power * PD	3.199	1	3.199	1.323	.251	.006
Error	553.889	229	2.419			
Total	4009.000	237				
Corrected Total	785.895	236				
a. R Squared = .295 (Adjusted R Squared = .274)						

Appendix B

QUESTIONNAIRES EXAMPLES

PRETEST 1

The experimented condition: Nonanthropomorphized Brand

(presenting the stimulus material)



I am Hom-Touch!

I am a reliable brand of robot vacuum on the market. My app helps you to schedule, and customize cleaning preferences from your smartphone. I learn your home, remember your rooms, and find the best way to clean it seamlessly. Work for up to 80 minutes, I automatically recharge myself and return to finish the job.

Q1. Please indicate your attitudes towards Hom-Touch.

- “Hom-touch looks like a person.”
- “Hom-touch seems as if it has free will. ”
- “Hom-touch seems almost as if it has intentions.”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

Q2. Please indicate your attitudes towards Hom-Touch.

- “Favorable”
- “Good”
- “Pleasant”

•“Like”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

EXPERIMENT 1

The experimented condition: High Power, Anthropomorphized Brand

(presenting the stimulus material)



I am Hom-Touch!

I am a reliable brand of robot vacuum on the market. My app helps you to schedule, and customize cleaning preferences from your smartphone. I learn your home, remember your rooms, and find the best way to clean it seamlessly. Work for up to 80 minutes, I automatically recharge myself and return to finish the job.

Q1. Please indicate your attitudes towards Hom-Touch.

- “Hom-touch looks like a person.”
- “Hom-touch seems as if it has free will. ”
- “Hom-touch seems almost as if it has intentions.”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

Q2. Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power—what happened, how you felt, etc.

Q3. Please read the recent news about Hom-touch.

In a recent research concerning worker's conditions, Panoma travelled down Hom-touch's supply chain to the Indonesian island. Hom-touch says it is dedicated to the ethical sourcing of minerals, but the programme found evidence that tin from illegal mines could be entering its supply chain. It found children digging tin ore out by hand in extremely dangerous conditions - miners can be buried alive when the walls of sand or mud collapse. Twelve-year-old Riato was working with his dad at the bottom of a 70-foot cliff of sand. He said: "I worry about landslides. The earth slipping from up there to the bottom. It could happen." Panoma tracked down a gang who collect tin from the area where Riato was working. One of them said they sold tin to a smelter on Hom-touch's list of suppliers. Murod, who runs one of the smelters on Hom-touch's list, said 70% of the tin that is exported comes from the small-scale mines.

Q4. Please indicate your attitudes towards Hom-Touch.

- "Favorable"
- "Good"
- "Pleasant"
- "Like"

Likert-type scale: 1 = "strongly disagree," and 7 = "strongly agree"

Q5 Indicate your attitudes towards the following statements.

- "It is important to have instructions spelled out in detail so that I always know what I'm expected to do."
- "It is important to closely follow instructions and procedures."
- "Rules and regulations are important because they inform me of what is expected of me."
- "Standardized work procedures are helpful."
- "Instructions for operations are important."

Likert-type scale: 1 = "strongly disagree," and 7 = "strongly agree"

Q6 Indicate your attitudes towards the following statements.

•“People in higher positions should make most decisions without consulting people in lower positions.”

•“People in higher positions should not ask the opinions of people in lower positions too frequently. ”

•“People in higher positions should avoid social interaction with people in lower positions. ”

•“People in lower positions should not disagree with decisions by people in higher positions. ”

•“People in higher positions should not delegate important tasks to people in lower positions.”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

PRETEST 2

The experimented condition: Brand as A Partner

(presenting the stimulus material)



Hom-Touch!

It is a reliable brand of robot vacuum on the market. The hom-touch app lets you schedule, and customize cleaning preferences from your smartphone. It learns your home, remembers your rooms, and adapts to determine the best way to clean it seamlessly. Runs for up to 80 minutes, it automatically recharges and resumes the job.

It is presented as a product that partners with you, take a moment to imagine how you can co-create value and work together.

Q1 Briefly describe how Hom-Touch can co-create value and work with you.

Q2. Please indicate your attitudes towards Hom-Touch.

- “Hom-Touch is a servant to me.”
- “Hom-Touch obeys me.”
- “Hom-Touch is a partner to me.”
- “Hom-Touch co-creates value with me.”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

Q3. Please indicate your attitudes towards Hom-Touch.

- “Favorable”
- “Good”
- “Pleasant”
- “Like”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

EXPERIMENT 2

The experimented condition: Low Power, Brand as A Servant

(presenting the stimulus material)



I am Hom-Touch!

I am a reliable brand of robot vacuum on the market. My app helps you to schedule, and customize cleaning preferences from your smartphone. I learn your home, remember your rooms, and find the best way to clean it seamlessly. Work for up to 80 minutes, I automatically recharge myself and return to finish the job.

I want to serve you, take a moment to imagine how I can serve and work for you.

Q1. Briefly describe how Hom-Touch can serve and work for you.

Q2. Please indicate your attitudes towards Hom-Touch.

- “Hom-Touch is a servant to me.”
- “Hom-Touch obeys me.”
- “Hom-Touch is a partner to me.”
- “Hom-Touch co-creates value with me.”

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”

Q3. Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power—what happened, how you felt, etc.

Q4. Please read the recent news about Hom-touch.

In a recent research concerning worker's conditions, Panoma travelled down Hom-touch's supply chain to the Indonesian island. Hom-touch says it is dedicated to the ethical sourcing of minerals, but the programme found evidence that tin from illegal mines could be entering its supply chain. It found children digging tin ore out by hand in extremely dangerous conditions - miners can be buried alive when the walls of sand or mud collapse. Twelve-year-old Riato was working with his dad at the bottom of a 70-foot cliff of sand. He said: "I worry about landslides. The earth slipping from up there to the bottom. It could happen." Panoma tracked down a gang who collect tin from the area where Riato was working. One of them said they sold tin to a smelter on Hom-touch's list of suppliers. Murod, who runs one of the smelters on Hom-touch's list, said 70% of the tin that is exported comes from the small-scale mines.

Q5. Please indicate your attitudes towards Hom-Touch.

- "Favorable"
- "Good"
- "Pleasant"
- "Like"

Likert-type scale: 1 = "strongly disagree," and 7 = "strongly agree"

Q6 Indicate your attitudes towards the following statements.

- "People in higher positions should make most decisions without consulting people in lower positions."
- "People in higher positions should not ask the opinions of people in lower positions too frequently. "
- "People in higher positions should avoid social interaction with people in lower positions. "
- "People in lower positions should not disagree with decisions by people in higher positions. "
- "People in higher positions should not delegate important tasks to people in lower positions."

Likert-type scale: 1 = “strongly disagree,” and 7 = “strongly agree”