THE PROCESSING OF BRAND ANTHROPOMORPHISM USING THE ELABORATION LIKELIHOOD MODEL: EXAMINING THE ROLES OF INVOLVEMENT, WARMTH, AND COMPETENCE

BY

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THESIS

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ABSTRACT

Brand anthropomorphism involves viewing inanimate/non-human products or brand through the lens of a human, giving it human characteristics or emotions that it would otherwise be unable to think/feel. It is a widely used advertising strategy that, despite its extensive use, has mixed results regarding its effectiveness in advertising, marketing, and communications research. Presently however, effectiveness is where much of the literature stops; brand anthropomorphism research has yet to fully explore the "how" and "why" of the complicated ways in which it affects consumers. This research aims to contribute to this less investigated area of brand anthropomorphism is by approaching it with a consumer-centric vantage point. The Elaboration Likelihood Model is introduced as a means to study how consumers process brand anthropomorphism, focusing on the "routes" (central or peripheral) in which consumers process it and giving special attention to the concepts of involvement (high or low) and brand anthropomorphism as a potential peripheral cue.

The interaction of involvement and brand anthropomorphism on consumers' attitude toward brand, ad, and purchase intention of a product after seeing an advertisement. Additionally, the concepts of warmth and competence are examined both as potential results of this interaction and as mediators between brand anthropomorphism and the aforementioned dependent variables. Results showed that while there was not a significant interaction of brand anthropomorphism and involvement, competence had a significant indirect effect on the relationship between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase intention. These findings aim to understand more about the "how" and "why" (involvement, warmth/competence) of brand anthropomorphism as a phenomenon by exploring new interactions and effects, adding to an otherwise relatively sparse collection of literature.

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CHAPTER 1: INTRODUCTION

Anthropomorphism is the "psychological process whereby people imbue the behaviors of other nonhuman agents with humanlike characteristics, such as motivations, intentions, and underlying mental states" (Liu & Wei, 2021, p. 2). In the context of advertising, anthropomorphism has been used as a common tool to "give life" to a brand or product's advertisement, such as giving a brand's animal spokesperson the ability to talk or shaping a logo to resemble a human face (Zhang et al., 2020). For example, Geico commercials are almost always narrated and endorsed by a fictional gecko, Martin, that talks to the audience about how "*15 minutes could save you 15% or more on car insurance*." Other notable examples of brand anthropomorphism include mascots such as Tony the Tiger, the Kool-Aid Man, and Mr. Peanut. Brand anthropomorphism does not always have to explicitly be an entire mascot or persona (Zhang et al., 2020); more subtle examples could be seen in a logo, such as Amazon, which has an arrow in its logo that resembles a smile, going from the A to Z in the word "Amazon." There is no doubt that brand anthropomorphism is a popular practice (Zhang et al. 2020), but a less clear question stems from its widespread use: does it work, and if so, how? Research on brand anthropomorphism in advertising has been largely split on whether it has a positive or negative influence on consumer attitudes. While not explicitly trying to determine whether brand anthropomorphism is entirely positive or negative, this research proposal aims to further understand how consumers process it by implementing circumstantial involvement-based scenarios to assess its advertising effectiveness. Consumers' involvement (high or low) with a brand or product is predicted to be a major factor in determining the resulting advertising effectiveness that brand anthropomorphism can produce.

It is important to study brand anthropomorphism in this way, as many studies approach it only from an emotional valence perspective, rather than truly understanding its nuances from a consumer-centric viewpoint. This gets to the depths of brand anthropomorphism as a phenomenon past surface-level interpretation, really getting at the "how" and "why" of it. The implication of this research is to provide a firmer grasp on when brand anthropomorphism is best to be used with the added context of consumer processing and when it's most effective: are there circumstances that brand anthropomorphism is currently being used that is not optimal? Are there opportunities to use brand anthropomorphism in situations that have not been taken advantage of yet?

A large facet of research conducted on brand anthropomorphism and consumer-brand interaction as a whole focus on the interpersonal relationship between consumers and brands (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001). Brand anthropomorphism functions as a cog within the interpersonal relationship between consumers and brands that are positively related to the strength of the parties' interdependency (Fournier, 1998). Within this, the arguments for the effectiveness of brand anthropomorphism on traditional advertising goals (e.g. attitude toward brand, attitude toward ad, brand recall) have skewed either positive or negative (e.g. positive attitude toward brand vs. negative attitude toward brand).

Among the most popular arguments for the positive effects of brand anthropomorphism include a heightened sense of social presence (Liu & Wei, 2021), pairing well with popular and warm brand positioning (Puzakova & Aggarwal, 2018; Zhang et al. 2020). On the other hand, arguments for the negative effects of brand anthropomorphism have included harsher judgements of brand moral failure (Puzakova et al., 2013; Dalman et al., 2021) and lacking the ability to be

truly unique from other brands (Puzakova & Agarwal, 2018). These positive and negative arguments for brand anthropomorphism, among others, will be covered more in-depth in the literature review.

While previous studies give helpful insights into the effectiveness of anthropomorphism as a brand strategy, they lack in their ability to consider the ways that consumers are internally processing anthropomorphism-inducing messaging. To fully understand brand anthropomorphism's role in an interpersonal brand-consumer relationship, more work needs to be done in the "consumer" portion. To address this, the Elaboration Likelihood Model of Persuasion (ELM) (Petty & Cacioppo, 1986) will be introduced in the literature review to try and better assess how consumer's process brand anthropomorphism.

The Elaboration Likelihood Model is useful for assessing consumer processing and attitude change, assigning "routes" of persuasion, either central or peripheral, that help map out what elements of a message a consumer is actively processing (Petty & Cacioppo, 1986). ELM to help study the cognitive dynamics and processes of brand anthropomorphism as a form of persuasion, as past research on brand anthropomorphism have not had heavy emphasis on internal processing. The introduction of ELM into the equation is a line of consumer-centric brand anthropomorphism research that has been very seldomly explored. To date, only one study has been done researching brand anthropomorphism using ELM (Basfirinci & Cilingir, 2015): this study found that anthropomorphic ads created significantly more positive results than non-anthropomorphic ads on attitude toward brand and brand recall, negatively moderated by involvement (lower involvement = stronger attitude toward brand and brand recall). A significant limitation of this study, as mentioned by Basfirinci & Cilingir (2015) themselves, however, was

that their stimuli to operationalize brand anthropomorphism were not real visual or television ads, instead opting to use storyboards.

Specifically, this research proposal will argue that within ELM, brand anthropomorphism will serve as a peripheral cue (Petty et al. 1983). Peripheral cues are specific features, ideas, structures, or imagery of a message that are especially "peripheral", helping guide consumers to the peripheral route of ELM (as opposed to the central route) and away from more central arguments and cues. For those in low-involvement conditions especially, peripheral cues should "dominate personal influence" (Hennessey & Anderson, 1990). This research proposal hopes to test the "giving life"-quality of brand anthropomorphism as that kind of peripheral cue. Taking this into consideration, this study will be among the first to study brand anthropomorphism through the lens of the Elaboration Likelihood Model and testing the idea of brand anthropomorphism as a peripheral cue (Petty et al., 1983). Thus, it will be argued that consumers in low-involvement conditions will report higher attitude toward brand, attitude toward ad, and purchase intention when viewing advertising stimuli with brand anthropomorphism than those in high-involvement conditions, while there will be no difference between involvement levels for no brand anthropomorphism

The concepts of warmth and competence (Fiske et al., 2002) will also be examined as additional dependent variables for that interaction effects as well as potential mediators between brand anthropomorphism and the original three dependent variables (attitude toward brand, attitude toward ad, and purchase intention). The relationship between brand anthropomorphism and warmth has been more concretely proven, so warmth as a DV & mediator will be formatted as hypotheses while the same for competence will be research questions (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020). The methodology of this study

will be a 2x2 factorial experimental design, first to test the interaction effect of involvement of brand anthropomorphism on attitude toward brand, attitude toward ad, purchase intention, warmth, and competence. An analysis of the potential mediating effect on warmth and competence on the relationship between brand anthropomorphism and the three advertising outcomes will also be tested for.

The goal of this study is to assess the effectiveness of brand anthropomorphism from a consumer-centric perspective to better understand when brand anthropomorphism does/doesn't work to produce novel insights for researchers and advertising practitioners alike. This next section, the literature review, will feature background information from various literature about brand anthropomorphism, where it fits as a part of the relationship between consumers and brands, a deeper dive into the arguments for/against brand anthropomorphism, and an in-depth description of the Elaboration Likelihood Model, involvement, peripheral cues, warmth, and competence.

CHAPTER 2: LITERATURE REVIEW

2.1. When Consumers Anthropomorphize Brands

Brand anthropomorphism and consumer interactions with it are not a one-way street; it functions as a dynamic and interpersonal relationship (Epley et al., 2007; Fournier, 1998; Guido & Peluso, 2015; Golossenko & Areoan, 2020). Brands can use advertising strategies to induce anthropomorphism, while consumers can have individually specific tendencies to want to anthropomorphize their media (Epley et al. 2007; Liu & Wei, 2021). Epley et al. (2007) presented a three-factor theory on what affects the likelihood of someone to anthropomorphize in a given situation: (1) elicited agent knowledge, (2) effectance motivation, and (3) sociability motivation.

Elicited agent knowledge refers to a situation where the more one knows about a nonhuman agent, the less they need to rely on "human" knowledge to understand it (e.g. facial features, expressions, emotions, etc.) (Epley et al., 2007). If there is a lack of knowledge about the agent however, people will be forced to rely on these easily accessible human-centric knowledge to better understand it (Epley et al., 2007). Effectance motivation refers to the extent of how motivated one is to understand a given nonhuman agent, such that people who lack the motivation to understand (e.g. ignoring it, do not care about it) will not be driven to anthropomorphize it, while those who have higher motivation will (Epley et al., 2007). And finally, sociality motivation states that the anthropomorphism of a nonhuman agent is most salient when a person feel more of a need to form interpersonal connection with it. Often, this may be due to a lack of interpersonal connection with real humans, leading them to have higher tendencies to form these relationships with nonhuman entities (Epley et al., 2007). In applicable terms, Epley et al. (2007) predict that people are the most likely to anthropomorphize brands

when "anthropocentric knowledge is accessible and applicable, when motivated to be effective social agents, and when lacking a sense of social connection to other humans" (p. 864).

2.1.1. Interpersonal Consumer-Brand Relationships

The relationship between consumers and brands has been developed into a view of it being interpersonal, where consumers approach and interact with brands in ways that reflect the manner in which one would talk to another human (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001). This idea has been extended to support the idea that this relationship is not so much one between a consumer and a separate, non-human entity, but that consumers interpersonally interact with or *desire* to interact with brands as entirely human or human-like figures. (Zhang, Li, Ye, Qin & Zhong, 2020).

To understand how brand anthropomorphism serves as a part of this interpersonal consumer-brand relationship, it is important to understand the established ways in literature that brands can take on human-like qualities. For example, one can say that a brand is "smart" (this is anthropomorphism: brands don't inherently have the capacity to be "smart" or "dumb", consumers need to assign this quality to them), but understanding the underlying mechanisms behind this is important in prefacing the empirical findings of brand anthropomorphism research.

Aaker (1997) established and tested the construct of brand personality, or "the set of human characteristics associated with a brand" (p. 347). The example of a consumer calling a brand "smart" would fit into the criteria of assigning "brand personality". In their research, Aaker (1997) divided brand personality into five dimensions: Sincerity, Excitement, Competence, Sophistication, and Ruggedness. The range of all human characteristics that consumers can give to brands can fit within the molds of these five categories. Research has established that humans feel the need to add meaning to inanimate products and brands to

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establish a relationship with them (Fournier, 1998) and in doing so, show no difficulty in consistently assigning personality qualities to them (Aaker, 1997). This propensity for assigning brand personalities demonstrates a link between brand personality and brand anthropomorphism; they both come down to assigning qualities that are "human-like" to brands. In future research, the incorporation of differing brand personalities in relation to brand anthropomorphism could uncover significant findings that would contribute to scholarly understanding of the interpersonal brand-consumer relationship.

2.2. Brand Anthropomorphism Effectiveness

The arguments for the advertising effectiveness and consumer perceptions of brand anthropomorphism have skewed largely positive or negative in current research. This next section will outline some of these various empirical findings.

2.2.1. Positive Effects of Brand Anthropomorphism in Advertising

Common arguments in research for brand anthropomorphism having positive effects on advertising include it leading to a heightened sense of social presence, i.e. the feeling that a consumer is talking to a sentient, intelligent being (Liu & Wei 2021), and that utilizing brand anthropomorphism will "enhance memory and promote favorable attitudes, which, arguably, offer support for their use in campaigns" (Folse et al., 2013, p. 339).

Delbaere et al. (2011) found that ads that embedded anthropomorphic cues (e.g. an almond wearing a wedding ring) increased participants brand liking to an advertisement (i.e. attitude toward ad) versus those without these cues. Zhang et al. (2020) aimed to further detail the effects of brand anthropomorphism by studying the relationship between anthropomorphism and brand attitude, specifically examining if brand positioning and warmth/competence are moderators and mediators of this relationship, respectively. They conceptualized brand

positioning as whether a brand positioned itself as popular or distinctive, i.e. whether the brand or products were meant for the masses, or whether they're meant for specific consumers or particular buying intentions (E.g. a brand of toothpaste that claims it is for everybody vs. a brand of toothpaste that is specifically for those with fluoride allergies) (Puzakova & Agarwal, 2018; Zhang et al., 2020). Dimensions of stereotypes were examined using the Stereotype Content Model (SCM) (Fiske et al., 2002). The SCM states that stereotypes can be divided into two interacting dimensions: warmth (high vs. low) and competency (high vs. low) and that as humans, when meeting and getting to know people, we have a subconscious urge and need to apply these dimensions of stereotypes to them to properly evaluate approachability and risk (Fiske et al. 2002).

Across two studies, Zhang et al. (2020) found that brand anthropomorphism and brand attitude have a positive relationship moderated by popularity, but not by distinctiveness. Similarly, they found that anthropomorphism and brand positioning have a positive relationship with brand attitude mediated by warmth, but not by competence. These results led these researchers to believe that as consumers, we want to interact with anthropomorphized brands interpersonally as humans. People felt distant from distinctive/competent brands that used brand anthropomorphism and rather, sought out popular/warm brand to interact and form relationships with (Zhang et al., 2020).

2.2.2. Negative Effects of Brand Anthropomorphism in Advertising

Contrastingly, the argument that brand anthropomorphism does not always have positive effects on advertising has ample supporting literature (Almeida, 2018; Puzakova et al., 2013; Puzakova & Aggarwal, 2018; Dalman et al., 2021). A primary argument made is that when distinctiveness is a primary consumer goal, brand anthropomorphism is not an effective strategy

(Puzakova & Aggarwal, 2018). When distinctiveness is a salient consumer motive, this means that the consumer buys products to meet the "desire to be different through signaling one's unique identity" (Puzakova & Agarwal, 2018, p. 80); the products are extensions of their self and their identity. This also creates a potential congruency effect; anthropomorphic strategy should be paired with non-distinct products and consumers, while it should not be employed when distinctiveness is a salient consumer goal.

A negative managerial implication for brands using brand anthropomorphism strategies revisits the idea of it functioning within an interpersonal consumer-brand relationship (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001). Since brands are treated as human-like entities, accentuated especially by brand anthropomorphism, brand-related actions are viewed more as if they were done by a human than a traditional public figure or group. Puzakova et al. (2013) states that in general, anthropomorphized brands are more susceptible to public scrutiny than non-anthropomorphized brands. Dalman et al. (2021) studied the effect of brand anthropomorphism on the ethical judgement of consumers categorized as either more- or less-lonely when the brand experienced public failure. Brand failure was operationalized as having two types: moral and competency. They found that the humanizing element of brand anthropomorphism resulted in less-lonely consumers judging moral failure by brands more negatively, while competency-related failure was judged less negatively by them (Dalman et al., 2021). This implies that anthropomorphized brands have more room for clerical or skill-related failure, but consumers are less tolerant when ethical or moral wrongdoing is performed. The topic of ethics becomes salient here due to consumer perceptions of ethical/non-ethical acts of both anthropomorphized and non-anthropomorphized brands.

Almeida (2018) researched the relationship between brand anthropomorphism and brand hate (i.e. excessive negative feelings towards brand) mediated by blame attribution (responsibility, intentionality, and blame towards the brand). Specifically, anti-brand communities, or communities built around dislike of a brand (e.g. Facebook groups like "I hate Apple" or "Facebook sucks") were studied. Almeida (2018) found that brand anthropomorphism allowed consumers to latch onto those human-like qualities more strongly and use them as a foundation for their collective hate of the brand. Anthropomorphism also helped them to make their own satirical/negative depictions of the brand and made the ability to assign blame to brands more easily (Almeida, 2018). Another study showed that even if brand anthropomorphism does or doesn't directly lead to brand hate, the effect that it has on making brands being viewed as more ethically responsible for corporate action in the end does lead to hatred (Brandão & Popoli, 2023).

2.2.3. Brand Anthropomorphism Scale

Much of literature around brand anthropomorphism, especially early, have had inconsistent conceptualization of what the phenomenon is/looks like; Guido & Peluso (2015) acknowledged this and made the first attempts in literature at centralizing brand anthropomorphism research. They aimed to create a more concrete conceptualization of brand anthropomorphism and produced the first brand anthropomorphism scale and model. This model determined that there were 3 dimensions of brand anthropomorphism: Human Body Lineaments (brand resembles a human body shape), Human Facial Physiognomy (brand resembles a human face), and Self-Brand Congruity (brand is congruent with the image I see myself as).

Building on this concept, Golossenko & Aroean (2020) created the second and most up-to-date iteration of a brand anthropomorphism scale. They revised Guido & Peluso's (2015)

scale to better capture the physical, mental, and emotional factors that define what being "human" or "human-like" means. The stronger that their new dimensions of brand anthropomorphism (Appearance, Moral Virtue, Cognitive Experience, Conscious Emotionality) are, as measured by 13 items, the stronger the brand anthropomorphism effect is. In this study, Golossenko & Aroeans' (2020) brand anthropomorphism scale will be used to pre-test and perform a manipulation check on brand anthropomorphism vs. no brand anthropomorphism conditions to assess that they function in their intended ways for the experiment. Conceptually, this study will focus much more on the "Appearance" aspect of brand anthropomorphism than other dimensions stated by the scale. See Table 2.1. to see full scale.

2.3. The Elaboration Likelihood Model

To further explore the positive or negative use of brand anthropomorphism in advertising, which has strong arguments for both sides, the Elaboration Likelihood Model of Persuasion (ELM) will be implemented (Petty & Cacioppo, 1986). ELM will be used as a theoretical tool to help study the cognitive dynamics and processes of brand anthropomorphism as a form of persuasion, a line of study that has been seldom explored.

ELM argues that there are two distinct ways of processing persuasion: a peripheral route and a central route. Petty et al. (1983) state that the central route results from "a person's diligent consideration on information that s/he feels is central to the true merits of a particular attitudinal position" (p. 135), as opposed to the peripheral route, where people may consider things less "central" to a product in their processing, i.e. components of the argument that don't speak to the "true merits" of a product/argument. Central route processing pulls the most inherent, functional information from a given ad or message to interpret its persuasiveness, while peripheral route processing considers all the "other" information as the primary means of interpretation (e.g.

color, endorser attractiveness, etc.) (Petty et al., 1983; Petty & Cacioppo, 1986). For example, one could present the same car commercial to two people and one person could process it centrally, paying attention to its price, safety rating, or fuel efficiency, while the other could process it peripherally, focusing on the car's color, a celebrity endorser, or how shiny it is in the commercial.

In choosing either the central or peripheral route of processing, many factors come into play for consumers. At the core of picking a processing route, however, is personal relevance (Petty et al., 1983). For example, revisiting the scenario of two people and the same car commercial, why did one person process it centrally and the other peripherally? Generally speaking, the more personally relevant an argument/situation is, the more likely a consumer chooses the central route (and lower relevance leading to peripheral route). Petty et al. (1983) state that "personal relevance is thought to increase a person's motivation for engaging in a diligent consideration of the issue- or product-relevant information" (p. 143). In this case, this particular car commercial may have been more personally relevant for one person because they were actively looking to buy a car (central processing), while the other person may have just been flipping through tv channels for leisure and happened to watch the commercial (peripheral processing). In addition to personal relevance, for central route processing specifically, consumers in the moment also need the ability to be able to go through thoughtful and diligent consideration of the information (Petty et al., 1983; Petty & Cacioppo, 1986). Even if personal relevance is high, factors that would inhibit the ability to deeply think about the information may lead to a consumer not choosing the central route of processing. Considering this, variables such as argument quality, time to think, distraction, and prior knowledge all can play a role for

consumers when deciding to go down the central or peripheral route of processing (Petty et al. 1983).

In the ELM framework, the process between a given persuasion attempt and central or peripheral processing is moderated by the involvement of the consumer (Petty et al., 1983). Involvement is directly tied to personal relevance but is more accurately measured as personal importance; the extent of personal relevance is an antecedent to consumer's involvement level. There are two levels of involvement: high-involvement, which predominantly leads to central processing and requires "extensive issue or product-relevant thought in order to be effective" (Petty et al., 1983, p. 137), or low-involvement, which predominantly leads to peripheral processing and will "allow a person to evaluate an issue or product without engaging in extensive issue- or product-relevant thinking" (Petty et al., 1983, p. 137). A product for high-involvement consumers will have a much larger stake and personal relevance than low-involvement consumers; Zaichkowsky (1986) found that "different people perceive the same product differently and have inherently different levels of involvement for the same product" (p. 5). For example, take the scenario of someone who graduated from a certain high school ten years ago versus a sophomore who currently attends that school. In most cases, various decisions made about school facilities, food, or faculty will affect and have much more personal relevance to the sophomore than the long-time graduate. Thus, in most cases, one could categorize the sophomore as "highly-involved" with the decisions made by the school and the person who graduated ten years ago as "low-involvement" on those same issues.

Zaichkowsky (1986) conceptualized involvement and the process of being "involved" as differing given the situation. While it is all still centered around the idea of "importance", there are different "types" of involvement that emphasize different aspects of relevance. For example,

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"product involvement" involves the importance of a product with the goals and needs of a consumer, while "purchase decision involvement" refers to the importance of the decision (Zaichkowsky, 1986). "Advertising involvement" measures the importance of an advertisement to a consumer and how "the receiver is personally affected, and hence motivated, to respond to the ad" (Zaichkowsky, 1986, p. 342). For the purposes of this research, one specific kind of involvement will not necessarily be focused on; the ways that brand anthropomorphism can affect an ad likely have impact on multiple types of involvement. For example, an anthropomorphized product in an ad may have an effect on product involvement but since the product is perceived as more human, the motivations as a consumer to want to interact with it interpersonally (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001) would affect consumer's involvement with advertisement or the brand itself as well. Thus, involvement will be conceptualized more generally to measure an *overall* sense of personal importance to an ad. This will be operationalized into involvement-based scenarios that participants will immerse themselves into where the overall context, motivations, and goals of the scenarios manipulate people's involvement overall, rather than with just one specific aspect of the ad (e.g. telling participants that a product specifically is what they should or shouldn't be involved with).

2.4. Brand Anthropomorphism Research using ELM

While brand anthropomorphism is a phenomenon that has an extensive history and literature in both psychology and consumer research (Lien, 2001), the application of ELM, processing routes, and involvement to it has been very sparse. Especially given the wide variety of contexts that brand anthropomorphism has been researched, it was surprising that in an

extensive search, only one article was found that applied involvement and ELM to brand anthropomorphism.

Basfirinci & Cilingir (2015) examined the moderating role of product involvement on the effects of brand anthropomorphism on attitude toward brand and brand recall. In their study, Basfirinci & Cilingir (2015) created advertising stimuli that compared the use of no brand anthropomorphism vs. brand anthropomorphism in ads for ice cream and ads for cameras (they were also examining product type in a different hypothesis). For one of the brand anthropomorphism manipulations, the implementation of human shape (i.e. body) was used and for the other, a spokesperson was used. The same core information was used in both advertisements; these anthropomorphic factors were the only difference between conditions. Involvement was manipulated by measuring participants' involvement toward the product on a personal involvement scale (4 items, 7-point semantic differential) and using a median split to establish low- and high-involvement groups.

The results of this study revealed a moderating effect of product involvement in the relationship between brand anthropomorphism on brand recall and attitude toward brand (Basfirinci & Cilingir, 2015). This interaction showed that when product involvement was low for participants, brand anthropomorphism had a significantly stronger impact on attitude toward brand and brand recall than those who were highly involved. On the other hand, when product involvement was high, brand anthropomorphism had a significantly lower impact on attitude toward brand and brand recall than those who were low involvement (Basfirinci & Cilingir, 2015).

While this was the lone study found in the exploration of literature using involvement AND brand anthropomorphism together, the results are promising in exploring the relationship

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of brand anthropomorphism and ELM/involvement literature. This same moderation effect that Basfirinci & Cilingir (2015) found will be used as foundational material for this thesis's hypotheses and methodology. Firstly, this same moderation effect of involvement on brand anthropomorphism will be aimed to replicated; however, as this is a study looking to explore processing on advertising *effectiveness*, the dependent measures of attitude toward ad and purchase intention will be added with attitude toward brand and brand recall will not be measured. Secondly, a significant limitation of this study, as mentioned by Basfirinci & Cilingir (2015), was that their stimuli for brand anthropomorphism were storyboards instead of real visual or TV ads. When studying advertising effects, not using stimuli that are or appear like actual advertising likely lowers the external validity of the study's findings. This limitation was considered in the creation of advertising stimuli to try and make it as realistic to an actual advertisement one may see online as possible, given the resources and scope of this thesis.

Basfirinci & Cilingir (2015) was the only article found with an application of ELM theory and involvement to study brand anthropomorphism. This research proposal hopes to expand on this study through the addition of attitude toward ad and purchase intention as dependent variables to better understand how consumers process brand anthropomorphism given their involvement.

2.4.1. Peripheral Cues

The overarching concept of involvement can be summarized and measured in line with the extent of a persuasion attempt's personal relevance to a given consumer. In a study manipulating involvement, Petty et al. (1983) found that certain peripheral cues, such as expertise or attractiveness of the endorser help reinforce low-involvement conditions, while central cues, such as argument quality, were more persuasive for high-involvement participants.

These "cues" are discernable features, ideas, structure, or imagery that are specifically "central" or "peripheral" and help guide a consumer through the ELM framework. Additionally, when studying the way that consumers in low- and high-involvement process different cues, Hennessey and Anderson (1990) stated that within the ELM, peripheral cues should "dominate personal influence" for those in low-involvement conditions.

Based on the previous literature reviewed here, brand anthropomorphism should not be utilized when a brand is particularly "serious" or "distinctive", rather when the positioning is geared more towards popularity (Puzakova et al., 2013; Puzakova & Aggarwal, 2018). This likely means that the use of brand anthropomorphism more often than not doesn't elicit central route processing; brand anthropomorphism is not a component of an ad/brand that is speaking to the "true merit" of the brand or product (Petty et al., 1983; Petty & Cacioppo, 1986). For example, take a car company utilizing brand anthropomorphism by shaping their logo to be a car that has eyes and a smile; this is not speaking to the central arguments of the car (e.g. price, fuel efficiency, safety, etc.) but instead other factors.

Based on the findings from this literature review, it is predicted that the use of brand anthropomorphism would have little to no effect on high-involvement consumers, such as someone in this scenario encountering this anthropomorphized car logo while actively searching for a new car to buy and looking to process advertising/persuasion through the central route of ELM (Petty et al., 1983; Petty & Cacioppo, 1986). Instead, it is predicted that brand anthropomorphism would act as a peripheral cue (Hennessey & Anderson, 1990). For those consumers under low-involvement conditions who aren't heavily influenced by central cues and instead, may be looking at anthropomorphism more peripherally for entertainment purposes or possibly to try and enhance "social presence" with the brand (Liu & Wei, 2021), brand

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anthropomorphism will reinforce their low-involvement status as a peripheral cue (Hennessey & Anderson, 1990; Petty et al., 1983; Petty & Cacioppo, 1986) and positively affect their attitudes toward it. Given these findings, H1 is proposed:

H1abc: Brand anthropomorphism will interact with consumer's involvement on (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention. Specifically, low-involvement consumers will have more positive (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention than high-involvement consumers when viewing an advertisement that contains brand anthropomorphism. When viewing an advertisement that does not contain brand anthropomorphism, there will be no difference among these factors between low-involvement and high-involvement consumers.

2.5. Stereotype Content Model: Warmth and Competence

The concepts of warmth and competence have been explored in brand anthropomorphism research and found to be a salient component of how consumers perceive anthropomorphic brands and products as human or human-like (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020). Warmth and competence are the main components of Stereotype Content Model (SCM), which states that when people are faced with individuals or groups, especially those new or unfamiliar to them, they need to make sense of them across these two dimensions (Fiske et al., 2002). In sorting out these situations, two questions are the basis of this compulsion: (1) "Do they *intend* to harm me?" (Cuddy et al., 2011, p. 3) (2) "Are they *capable* of harming me?" (Cuddy et al., 2011, p. 3). The first question is reflected through the warmth dimension, while the second is reflected through the competency dimension (Fiske et al.,

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2002, Cuddy et al., 2011). Translating this over to the world of brands, these two questions turn into "Does the brand have good intentions?" (warmth) and "Does the brand have the skill to carry out those intentions?" (competence) (Portal et al. 2018).

Breaking these dimensions down, warmth is a measure of trustworthiness, friendliness, sincerity, and good-naturedness, while competence is a measure of capability, ability, confidence, and skill (Fiske et al., 2002, Cuddy et al., 2011, Kervyn et al. 2021). In assessing these two dimensions, either high or low, four broad permutations arise in assessing an individual or group: low warmth/low competency, low warmth/high competency, high warmth/low competency, and high warmth/high competency (Fiske et al., 2002). By drawing these dimensions on a map, with one as the X and the other as the Y, one can then "plot" where they perceive certain individuals or groups in assessment as being.

Notably, Kervyn et al. (2012) took this idea and created the "Brands as Intentional Agents Framework", a map that took these four permutations of warmth (high vs. low) and competence (high vs. low) and created a framework for brands, with four "kinds" of brands to reflect these: paternalized brands (high warmth/low competency), troubled brands (low warmth/low competency), popular brands (high warmth, high competency), and envied brands (low warmth, high competency) (Kervyn et al., 2012). Warmth and competence have appeared numerous times in brand anthropomorphism research, with Portal et al. (2018) stating that "warmth and competence are said to enhance brand anthropomorphism, making brands more relatable to consumers" (p. 369). Anthropomorphism transforms brands from businesses into social objects, which in turn makes consumers evaluate them in the same way, along the dimensions of warmth and competence, as they would a person or group: "Brand

anthropomorphism plays a role in perceiving brands' morality, personality, and humanity" (Kervyn et al., 2021, p. 51).

In addition to the Elaboration Likelihood Model (Petty & Cacioppo, 1986), these concepts of warmth and competence from the Stereotype Content Model (Fiske et al., 2002) will be used as avenues to explore how consumers process brand anthropomorphism. Using both these models in this thesis provides two powerful, yet distinct tools for understanding what is going on in consumers' minds. Involvement will help assess how processing play a role in attitude change and advertising effectiveness (Petty & Cacioppo, 1986). Since the ELM has a very wide scope for overall human behavior and attitudes however, the Stereotype Content Model (Fiske et al., 2002) and the concepts of warmth and competence serve as a more specifically "human-centric" lens for brand anthropomorphism. Since brand anthropomorphism is a phenomenon that increases/enhances the "humanness" of a brand (Epley et al., 2007; Golossenko & Areoan, 2020; Liu & Wei, 2021), SCM as a model for assessing/judging real people will bring a new perspective in measuring how participants are perceiving brand anthropomorphism. Involvement will help measure how motivations, context, and importance play a role in consumers' processing of brand anthropomorphism (Petty et al. 1983, Petty & Cacioppo, 1986; Zaichkowsky, 1986), while warmth/competence can help understand the indirect effects of being more human-like (Fiske et al., 2002, Cuddy et al., 2011, Kervyn et al. 2021): both perspectives are important to understand.

2.5.1. Brand Anthropomorphism and Warmth/Competence

In general, the link between brand anthropomorphism and warmth has been more concretely strong than competence, which, despite being included in most studies has had more mixed results (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al.,

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2020). Zawiswa & Pittard (2015) found that when both warmth and competence are high (i.e. brands both have good intentions and have the skill to carry those intentions out), brands enter a golden area, which is labeled as "Popular Brands" in the Brands as Intentional Agents Framework (Kervyn et al., 2012). When both of these dimensions are perceived as strong, consumers are thought to have the most positive attitudes towards brands. In comparing warmth and competence side-by-side however, there have been debates on which is stronger individually (Kervyn et al., 2012; Portal et al. 2018). Through the lens of brand anthropomorphism, literature has suggested that brand anthropomorphism and warmth have a positive relationship, but the relationship with competence is a bit more complicated.

For example, while some may argue that in general warmth and competence are equally important, a brand anthropomorphism study from Zhang et al. (2020) found that while warmth mediates the interaction effect of brand anthropomorphism and brand position (distinctive vs. popular) on attitude toward brand, competence did not. Liu et al. (2022) found that consumers only preferred advertising that contained brand anthropomorphism when the products being advertised were low-safety (products that compromise consumer's safety, e.g. a restaurant that sells a burger with bad reviews and poor food hygiene ratings). Results like this show that competence may only be significant related to brand anthropomorphism in very specific circumstances (e.g. low-safety products), despite literature that would suggest there should be an effect of competence (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020).

Both warmth and competence in this thesis will be each individually examined as (1) a dependent variable of the interaction of involvement and brand anthropomorphism and (2) a mediator between brand anthropomorphism and attitude toward brand, attitude toward ad, and

purchase intention after viewing an advertisement. Due to the variance in existing relationships between brand anthropomorphism and warmth vs. competence, the effects for warmth will be hypotheses whereas those for competence will be research questions (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020).

As a dependent variable, warmth and competence become salient because of involvement being one of the independent variables. High- and low-involvement with their corresponding processing routes imply certain goal orientation (Petty et al., 1983; Zaichkowsky, 1986). In high-involvement conditions, consumers are motivated to enact careful and intention information-seeking strategies (central processing), while low-involvement conditions do not necessitate such behaviors (peripheral processing) (Petty et al., 1983; Zaichkowsky, 1986). Zawiswa and Pittard (2015) found that for high-involvement products (e.g. smartphones), competence was a more important factor in evaluating an ad for that product in relation to purchase intent, while warmth was a more important factor for low-involvement products (e.g. toothpaste).With these factors considered, it's hypothesized that low-involvement consumers have a more "warm" goal orientation (i.e. they respond more positively to warmth instead of competence), leading them to report higher perceived warmth when viewing advertising that contains brand anthropomorphism (Petty et al., 1983; Zaichkowsky, 1986). While the relationship makes sense given the "logical" nature of central route processing (Petty et al., 1983; Zaichkowsky, 1986), the relationship of whether high-involvement consumers may have the same effect of a correspondingly "competent" goal orientation will be posed as a research question. In this case, it would make sense if high-involvement consumers reported higher competence after viewing ads with no brand anthropomorphism. Thus, H2 and RQ1 are proposed:

H2: Brand anthropomorphism will interact with consumer's involvement on warmth. Specifically, low-involvement consumers will report higher warmth when viewing an advertisement that contains brand anthropomorphism than high-involvement consumers. When viewing an advertisement that does not contain brand anthropomorphism, there will be no difference in perceived warmth between low-involvement and high-involvement consumers.

RQ1: Will brand anthropomorphism interact with consumer's involvement on competence?

Taking away involvement, warmth and competence may also be mediators between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase intention after viewing an advertisement. Due to the correlation between brand anthropomorphism alone and warmth (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020), perceived warmth from ads may have an indirect effect in causing any potential differences in these dependent variables between brand anthropomorphism conditions. While not as clear, the same may be true for competence, such that competence could be the cause for a difference in attitude toward brand, attitude toward ad, and purchase intention ratings after viewing an advertisement between brand anthropomorphism conditions. Finally, H3 and RQ2 are proposed:

H3abc: Warmth will mediate the relationship between brand anthropomorphism and (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention.

RQ2abc: Does competence mediate the relationship between brand anthropomorphism and (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention?

CHAPTER 3: METHODOLOGY

3.1. Overview

A 2 (no brand anthropomorphism vs. brand anthropomorphism) x 2 (low- vs. high-involvement) factorial experimental between-subjects design was conducted to test the hypothesized interaction effect of brand anthropomorphism and involvement on attitude toward brand, attitude toward ad, purchase intention, warmth, and competence. Significant or not, the lack of literature of this interaction (Basfirinci et al., 2015) may reveal important findings on this research focus of ELM (Petty et al., 1983; Petty & Cacioppo, 1986). It may also help determine whether brand anthropomorphism is a peripheral cue (Petty et al., 1983; Petty & Cacioppo, 1986). Warmth and competence will be measured to both test the interaction effect of brand anthropomorphism and involvement on them as dependent variables (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020) as well as a potential mediating effect on the relationship between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase intention (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020).

3.2. Stimulus Development

3.2.1. Brand Anthropomorphism

While brand anthropomorphism speaks to many different aspects of human cognition, emotion, motivation (Liu & Wei, 2021), it was be operationalized here as having a human face and talking like a human. Thus, to satisfy the manipulation of brand anthropomorphism vs. no brand anthropomorphism, two versions of an advertisement for the same product were developed. For the purposes of this experiment, the product in each advertisement was a tablet computer. As will be discussed in the next section, the involvement manipulation (high- vs. low)

was chosen to be done situationally (i.e. scenario based) rather than other methods (Petty et al., 1983; Laczniak et al., 1999; Zaichkowsky, 1986). Given this, the product (the tablet) was kept constant as to control for other involvement-based variables, such as the effect of different products. While there is not a centralized scale of all products and their inherent involvement levels (e.g. the involvement of this product is X), a tablet was determined as a reasonable choice to be a relatively utilitarian and "neutral"-involvement product. Zaichkowsky (1986) defines product (or product class involvement) as dependent on two main factors: 1. Personal importance/relevance and 2. Differentiation of alternatives. While tablets likely may have been a high-involvement product in their inception, the normalization of smartphones and laptops in today's society makes it feel appropriate as a utilitarian, middle-ground product that shouldn't confound on involvement in other ways.

Thus, to manipulate the brand anthropomorphism conditions (no BA vs BA), two versions of a tablet ad were created. For the purposes of this experiment, a fictitious tablet brand called "Abstract" was created as to not introduce confounding variables of preferences and feelings towards the ad if real brands were used (E.g. Apple iPad). The condition without brand anthropomorphism features the tablet in full view with the headline, "Wherever you are, whatever you need, Be Abstract". A short description of the tablet and its capabilities was created as copy as to mimic a normal display ad you may see while on the internet.

The condition that contained brand anthropomorphism had the same tablet product but used different anthropomorphic techniques to create the manipulation. In determining the best way to represent brand anthropomorphism, several designs from different studies were considered as inspiration. In Basfirinci & Cilingirs' (2015) study, the only study found that combined involvement and brand anthropomorphism, they manipulated brand

anthropomorphism in one version of their stimuli based on shape (human vs. non-human). On the other hand, Puzakova & Aggarwal (2018) manipulated brand anthropomorphism purely through words. Instead of changing visuals between a brand anthropomorphized vs. non-brand anthropomorphized, they kept the exact same visuals and instead manipulated the ad copy. The non-brand anthropomorphism condition read very like a normal ad, referring to the product (sunglasses) as "it". In the brand anthropomorphism condition, any use of it/this were replaced with I/we pronouns, as if the sunglasses were talking to the person reading the ad. Finally, Zhang et al. (2020) seemed to combine these concepts into a more "persona" based manipulation. They had normal, non-human visuals and "it"-pronoun text for their non-anthropomorphized condition of their ad stimuli. In their anthropomorphized condition, they opted to create an overall persona by putting cartoonish human eyes and legs on the logo for their fictitious health brand, "Xuel", and switching I/we pronouns in the advertising copy to make it seem like the logo was talking at participants.

Zhang et al.'s (2020) approach for manipulating brand anthropomorphism conditions was the study that served as the biggest inspiration for this advertising stimuli and how the final operationalization of "looking" and "talking" like a human were chosen to representation brand anthropomorphism. In the brand anthropomorphism condition for the tablet advertisement for "Abstract", the tablet itself was edited to have cartoonish eyes and mouth. The content and message of the advertising copy from the non-anthropomorphized version was kept the same but was except replaced with I/We pronouns and the main points of the copy (e.g. benefits of using this tablet) were fit into more of a dialogue with participants. Figure 3.1. and Figure 3.2. show the advertising stimuli for the non-anthropomorphized and anthropomorphized advertisements, respectively.

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3.2.2. Involvement

To satisfy the conditions of involvement in this experiment (low- vs. high-involvement), Petty et al.'s (1983) recommendations for overall involvement manipulation were considered. Instead of Zaichkowsky's (1986) conceptualizations of specific types of involvement (e.g. product involvement, ad involvement) being used here, Petty et al.'s (1983) guidelines for a more overall involvement towards a general situation are being used. They state that before encountering the advertising stimuli, participants in the high-involvement treatment groups would be briefed and told that they would "subsequently be asked to evaluate the product in an advertisement they were about to see and were given some additional background information" (Petty et al., 1983, p. 137). This background information will outline that their products decisions will be important to "their families, their own time and effort, and their personal finances" (Petty et al., 1983, p. 137). In this way, rather than manipulating the product or other factors, involvement will be manipulated by giving participants low- and high- involvement scenarios to read through and imagine themselves. Among the many types of involvement and ways to manipulate it (Petty et al., 1983; Laczniak et al., 1999; Zaichkowsky, 1986), this felt the most appropriate.

The main manipulation of these involvement-based scenarios was based on the context of searching for a product online. Given that the product in the both conditions of brand anthropomorphism was the same (tablet computer), participants in the low-involvement condition read a scenario in which they were actively searching for an unrelated product (running shoes) and happened to come upon this advertisement for a tablet. Provided they read and imagine themselves in the scenario, literature suggests that this scenario would cause participants

to feel that this ad was not highly relevant to them, i.e. a low-involvement situation (Petty et al. 1983; Petty & Cacioppo, 1986; Zaichkowsky, 1986).

The high-involvement scenario puts participants into a similar scenario of having been actively shopping online and coming across an ad but this time, what they were shopping for is actually a tablet. Additionally, the detail that their tablet had just broke and now they are actively searching for a replacement were added to increase personal relevance (Petty et al. 1983; Petty & Cacioppo, 1986; Zaichkowsky, 1986). Details, per Petty et al.'s (1983) recommendations for scenario-based involvement manipulation, such as being relevant to their own effort, finances, and families were a part of this scenario that were not included in the low-involvement condition. Table 3.1. shows the full scripts created for the low- and high-involvement conditions.

3.3. Pretest

A pretest was conducted online through Amazon MTurk to test the manipulation of brand anthropomorphism and involvement in preparation for the main test. 60 samples from the population of 18-65 year old individuals on MTurk (Master status required) were collected. Each participant was awarded $0.50 for completion. A Qualtrics survey was developed and had individuals read and confirm their informed consent regarding the pretest. After consent, individuals were randomly sorted into low- vs. high-involvement groups in which they read one of two scenarios. After this, these groups were randomly sorted into no-brand anthropomorphism and brand anthropomorphism groups in which they viewed and read one version of the ad for the fictitious tablet brand, "Abstract".

After reading the involvement scenario and viewing the advertising stimuli, participants moved onto the survey portion of the experiment. They first answered 4 items to measure their involvement towards the advertising. These questions were adapted from Stephenson et al.

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(2001)'s involvement scale and were measured on a 7-point Likert scale (1 = strongly disagree 7 = strongly agree). These 4 items were measured on the statements "This advertisement…(was not relevant to me/was not important to me/really matters to me/affects me personally)" (Stephenson et al., 2001). After the involvement-based questions, participants answered the brand anthropomorphism was measured on Golossenko & Aroeans' (2020) 4 dimension, 13 item brand anthropomorphism scale. Once participants answered these questions, they were given a unique code through Qualtrics to copy and paste into Amazon MTurk to signify their completion of the test. Finally, participants were thanked for the time and received their compensation within three days of completing their test.

Results of the pretest showed a significant manipulation of involvement between low- and high-involvement conditions. Firstly, the first two questions of the scale, "This advertisement…was not relevant to me/was not important to me" (Stephenson et al., 2001) were reverse coded, as a 1 (strongly disagree) with these statements phrased as "not relevant" and "not important" actually indicate positive feelings towards the brand. The main test design changed the wording of the questions as to nullify the need for reverse coding and possible confusion for participants over the wording of the questions.

After reverse coding, a composite score of involvement based on the mean of participants' scores on Stephenson et al.'s (2001) 4 item scale was created in SPSS. An independent-samples t-test was conducted to compare involvement between the low- and high-involvement conditions. The high-involvement condition ($M = 4.07$, $SD = 1.60$) had a significantly higher involvement score than the low-involvement condition ($M = 3.27$, $SD = 1.52$), [$t(60) = -2.03$, $p = .023$] on a 95% confidence interval.

Golossenko & & Aroeans' (2020) brand anthropomorphism scale has 4 dimensions: "Appearance", Moral Virtue", "Cognitive Experience", and "Conscious Emotionality" (See Table 2.1.). For the purposes of this experiment, the "Appearance" dimension of Golossenko & Aroeans' (2020) brand anthropomorphism scale was determined to be the most important and realistic given the timeframe, resources, and nature of this experiment (Master's thesis). Additionally, there was some fear that in trying to attempt to manipulate all four of these dimensions, confounding variables would be introduced. For example, the dimension of "Conscious Emotionality" contains items such as "This brand can experience remorse over actions which it deems to be shameful" (Golossenko & Aroean, 2020). In trying to introduce the idea of shame (and pride), it may have been difficult to find a way in an experimental setting to do so that doesn't stray away from the core concept of brand anthropomorphism. Thus, the three items for "Appearance" were deemed the most relevant factors to check the brand anthropomorphism manipulation on. "Moral Virtue", "Cognitive Experience", and "Conscious Emotionality" were measured in this pre-test, but the success of the manipulation was not contingent upon these three categories being significantly different between brand anthropomorphism conditions (no vs yes).

A composite score for the dimensions of appearance, cognitive virtue, moral virtue, and conscious emotionality based on participant scores from Golossenko & Aroeans' (2020) brand anthropomorphism scale were created. An independent-samples t-test was conducted to compare the effect of brand anthropomorphism conditions (no BA vs BA) on "Appearance". The brand anthropomorphism condition ($M = 3.39$, $SD = 1.76$) had a significantly higher brand anthropomorphism (appearance) score than the no-brand anthropomorphism condition ($M = 2.39$, $SD = 1.45$), [$t(74) = -2.678$, $p = .005$]. (95% confidence). Due to a slight error in

distributing the survey, the number of people exposed to the brand anthropomorphism conditions was 14 samples higher than the anthropomorphism conditions. This error was fixed quickly and the experiment was paused to fix it but is the reason for a discrepancy of degrees-of-freedom between the conditions for brand anthropomorphism (74) vs. involvement (60). An independent-samples t-test was conducted to compare the effect of brand anthropomorphism conditions (no BA vs BA) on "Cognitive Virtue", "Moral Virtue", and "Conscious Emotionality". There was no significant difference between brand anthropomorphism conditions on each of these variables, respectively.

3.4. Dependent Measures

To test the listed hypotheses (H1abc, H2, H3abc) and research questions (RQ1, RQ2abc), measures for the dependent variables (attitude toward brand, attitude toward ad, purchase intention, warmth, and competence) were collected from validated scales and adapted for the purposes of this experiment. In addition to the involvement (Stephenson et al., 2001) and brand anthropomorphism (Golossenko & Aroeans, 2020) scales used for the pretest manipulation check, Spears & Singhs' (2004) 5-item attitude toward brand, attitude toward ad, and purchase intention scales and Aaker et al.'s (2010) 3-item warmth and competence scales were used. See Table 3.2. for descriptions of each dependent variable scale used.

3.5. Participants

18-65 year old individuals were recruited through Amazon MTurk to participate in this online experiment. In participant recruitment, "Master" status was required for all participants. According to Amazon Web Services, "Master" status is granted by the service to certain workers on the platform who have "demonstrated superior performance while completing thousands of HITs across the Mechanical Turk marketplace" (AWS, 2024). This was done data quality

reasons, as these workers previous history of high-quality responses to other tasks on Amazon Mechanical Turk should increase the likelihood that they will take this online experiment seriously and answer questions thoughtfully.Demographically, there were no other factors that recruitment was based upon. Given the relative lack of literature on involvement and brand anthropomorphism, this study was purposefully kept fairly general in order to uncover potential specific research paths in the future.

All participants were compensated $0.75 for their completion of the online experiment. In total, 146 responses were collected. 6 were thrown out for being incomplete. Upon examining responses to attention check questions, identifying statistical outliers, and total time spent on the survey, another 25 of the 140 responses were thrown out to poor data quality. After cleaning the data, the final sample for this study was 115 participants (57.4% between 35-44 years old, 64.5% Male, 57.4% White / Caucasian, 49.6% holding Bachelor's degree). See Table 3.3 for the full demographic data on participants in this survey.

3.6. Procedures

Upon clicking on the Amazon Mechanical Turk to start the assignment, participants in this online experiment were directed to a Qualtrics survey. After reading and hitting "Submit" on an informed consent page, participants were randomly sorted into low- or high-involvement groups in which they read one of two scenarios, immersing themselves and imagining themselves in that situation. The low-involvement scenario put participants into the mindset of actively searching for running shoes online while the high-involvement scenario had participants imagine that they were looking for a tablet computer.

After reading through involvement scenarios, participants were randomly sorted into a non-brand anthropomorphism and brand anthropomorphism condition. Upon sorting, participants

are asked to view an ad for the fictitious tablet brand, Abstract. The non-brand anthropomorphism condition saw a plain advertisement that featured a tablet, a headline that read "Wherever you are, Whatever you need, Be Abstract", and a paragraph of body copy highlighting some of the tablets strengths. The anthropomorphism condition saw all of this same information except the image of a tablet has been altered to have eyes and mouth and is "saying" the body copy at you. I/we pronouns have been integrated into the body copy as if the tablet is talking, along with slight alterations to text to make it seem like genuine, human speech.

After viewing these advertisements, participants clicked next and were first asked manipulation check questions about brand anthropomorphism and involvement. After these questions, participants continued to answer through the questionnaire with items relating to their attitude toward brand, attitude toward ad, purchase intention, warmth, and competence based on the ad and brand that they had just been exposed to. In addition to these questions, there were a number of "attention check" questions dispersed throughout the survey to insure people were paying attention and answering questions thoughtfully. An example of an attention check question from the questionnaire was "What color is the sky" and participants had green, orange, blue, and pink as multiple choice answers.

Once participants finished this portion of the survey, they were asked demographic questions about their age, ethnicity, education, and income. "Prefer not to answer" was a choice included for all of these demographic questions. Once completed with this, Qualtrics generated and showed participants a randomized 5-digit code. Participants were asked to copy and paste this code into Amazon Mechanical Turk to verify their participation in the survey. After this, they were thanked for their time and the experiment was over. All participants were compensated their promised $0.75 within 3 days of completing the experiment.

CHAPTER 4: RESULTS

4.1. Manipulation Check

Manipulation check items were included on the questionnaire in order to check that there was a different between groups for involvement and brand anthropomorphism. To test the high- vs. low-involvement groups, Stephenson et al. (2001)'s 4 item measure for involvement was filled out by participants after being sorted into involvement groups and viewing the advertising stimuli. An independent-samples t-test was conducted to compare involvement between the low- and high-involvement conditions ($p = 0.05$). The high-involvement condition ($M = 4.73$, $SD = 1.19$) had a significantly higher involvement score than the low-involvement condition ($M = 3.31$, $SD = 1.45$), [$t(113) = -5.743$, $p < .001$]. Thus, the manipulation of consumer's involvement was successfully established.

Brand anthropomorphism was measured using Golossenko & Aroeans' (2020) brand anthropomorphism scale, specifically the 3 items measuring the "Appearance" dimension of brand anthropomorphism. This was done to assess how anthropomorphized participants felt that the advertising stimuli was and to compare the non-brand anthropomorphism condition to the brand anthropomorphism condition. An independent-samples t-test was conducted to compare the effect of brand anthropomorphism between conditions ($p = 0.05$). The brand anthropomorphism condition ($M = 3.93$, $SD = 1.55$) had a significantly higher brand anthropomorphism (appearance) score than the non-brand anthropomorphism condition ($M = 2.63$, $SD = 1.80$), [$t(113) = -4.141$, $p < .001$]. Thus, the manipulation of brand anthropomorphism was successfully established.

4.2. Hypothesis Testing

4.2.1. H1

H1a, b, and c, proposed that low-involvement consumers will have more positive (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention than high-involvement consumers when viewing an advertisement that contains brand anthropomorphism. When viewing an advertisement that does not contain brand anthropomorphism, there will be no difference among these factors between low-involvement and high-involvement consumers.

To test all the interaction of brand anthropomorphism and involvement on these dependent variables, three separate two-way ANOVAs were conducted using SPSS on attitude toward brand, attitude toward advertising, and purchase intention. A composite score variable was created for each of the dependent variables, since each was made up of 5 questions (Spear & Singh, 2004). This composite variable displayed the average score per participant across each overall dependent variable.

H1a was tested by conducting a two-way ANOVA to analyze the effect of brand anthropomorphism and involvement on attitude toward brand. The results of the ANOVA showed that there was not a significant interaction between the effects of brand anthropomorphism (no brand anthropomorphism: $M = 5.16$, $SD = 1.16$; brand anthropomorphism: $M = 4.93$, $SD = 1.17$) and involvement (low-involvement: $M = 4.86$, $SD = 1.18$; high-involvement: $M = 5.24$, $SD = 1.13$) on attitude toward brand ($F(1, 111) = .33$, $p = .56$, $\eta p2 = .003$). Thus, H1a was not supported.

H1b was tested by conducting a two-way ANOVA to analyze the effect of brand anthropomorphism and involvement on attitude toward ad. The results of the ANOVA showed that there was not a significant interaction between the effects of brand anthropomorphism (no

brand anthropomorphism: $M = 5.18$, $SD = 1.22$; brand anthropomorphism: $M = 4.97$, $SD = 1.26$) and involvement (low-involvement: $M = 4.97$, $SD = 1.20$; high-involvement: $M = 5.17$, $SD = 1.21$) on attitude toward ad ($F(1, 111) = .04$, $p = .85$, ηp2 $= .000$). Thus, H1b was not supported.

H1c was tested by conducting a two-way ANOVA to analyze the effect of brand anthropomorphism and involvement on purchase intention. The results of the ANOVA showed that there was not a significant interaction between the effects brand anthropomorphism (no brand anthropomorphism: $M = 4.23$, $SD = 1.53$; brand anthropomorphism: $M = 4.14$, $SD = 1.50$) and involvement (low-involvement: $M = 3.71$, $SD = 1.46$; high-involvement: $M = 4.67$, $SD = 1.42$) on attitude toward ad ($F(1, 111) = .49$, $p = .48$, ηp2 $= .004$). Thus, H1c was not supported. See Figure 4.1. for graphs of interactions (non-significant) for H1a, b, and c.

4.2.2. H2

H2 proposed that low-involvement consumers will report higher warmth when viewing an advertisement that contains brand anthropomorphism than high-involvement consumers. When viewing an advertisement that does not contain brand anthropomorphism, there will be no difference in perceived warmth between low-involvement and high-involvement consumers. A composite score variable was created for the three-question scale used to measure warmth (Aaker et al., 2010), displaying the overall average of participant scores across the three warmth questions.

H2 was tested by conducting a two-way ANOVA of brand anthropomorphism and involvement on warmth. Interestingly, there was a main effect of involvement in that participants in high-involvement conditions ($M = 5.01$, $SD = 1.16$) reported significantly higher scores than participants in low-involvement conditions ($M = 4.46$, $SD = 1.15$) on warmth ($p = .014$, ηp2 $= .053$). The results of the ANOVA showed that there was not a significant interaction between the

effects brand anthropomorphism (no brand anthropomorphism: $M = 4.58$, $SD = 1.28$; brand anthropomorphism: $M = 4.88$, $SD = 1.08$) and involvement (low-involvement: $M = 4.46$, $SD = 1.15$; high-involvement: $M = 5.01$, $SD = 1.16$) on warmth ($F(1, 111) = .078$, $p = .78$, $\eta p2 = .001$). Thus, H2 was not supported. See Figure 4.2. for graph.

4.2.3. RQ1

RQ1 asked the question of whether the interaction effect involvement on brand anthropomorphism results in a significant difference in perceived competence among consumers. A two-way ANOVA was conducted to analyze the effect of brand anthropomorphism and involvement on competence. A composite score variable was created for the three-question scale used to measure competence (Aaker et al., 2010), displaying the overall average of participant scores across the three competence questions.

In examining simple main effects, participants in non-brand anthropomorphism ($M = 5.54$, $SD = 1.10$) reported statistically significantly higher competence than those in brand anthropomorphism conditions ($M = 5.00$, $SD = 1.04$), ($p = .007$, $\eta p2 = .065$). Post hoc testing indicated that competence was reported as being significantly higher for participants in non-brand anthropomorphism conditions than brand anthropomorphism conditions ($p = .013$). The results of the ANOVA showed that there was not a statistically significant interaction between the effects brand anthropomorphism (no brand anthropomorphism: $M = 5.54$, $SD = 1.10$; brand anthropomorphism: $M = 5.00$, $SD = 1.04$) and involvement (low-involvement: $M = 5.18$, $SD = 1.07$; high-involvement: $M = 5.36$, $SD = 1.10$) on attitude toward ad ($F(1, 111) = .62$, $p = .43$, $\eta p2 = .006$). See Figure 4.3. for graph. See Table 4.1. for descriptive statistics of the main effects of brand and anthropomorphism and involvement conditions on dependent measures (H1abc,

H2, RQ1) and Table 4.2. for summary of two-way ANOVA results on dependent measures (H1abc, H2, RQ1).

4.2.4. H3

H3 proposed that warmth will mediate the relationship between brand anthropomorphism and (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention. To investigate H3a, H3b, and H3c, three separate simple mediation analyses were performed using the SPSS PROCESS macro Model 4 (Hayes, 2017). The predictor variable for all three analyses was brand anthropomorphism, the mediator variable was warmth, and attitude toward brand, attitude toward ad, and purchase intention were inputted as the dependent variables, respectively.

For H3a, the results of the mediation analysis showed that the indirect effect of warmth on the relationship between brand anthropomorphism and attitude toward brand was non-significant ($\beta = .17$, 95% C.I. (-.0819, .4335)). H3a was not supported. For H3b, the results of the mediation analysis showed that the indirect effect of warmth on the relationship between brand anthropomorphism and attitude toward ad was non-significant ($\beta = .186$, 95% C.I. (-.0735, .4337)). H3b was not supported. For H3c, the results of the mediation analysis showed that the indirect of warmth on the relationship between brand anthropomorphism and attitude toward ad was non-significant ($\beta = .222$, 95% C.I. (-.1153, .5381)). H3c was not supported. See Figure 4.4. for model.

4.2.5. RQ2

RQ2 asked the question whether competence mediates the relationships relationship between brand anthropomorphism and (a) attitude toward brand, (b) attitude toward ad, and (c) purchase intention. To investigate RQ2a, RQ2b, and RQ2c, three separate simple mediation analyses were performed using the SPSS PROCESS macro model 4 (Hayes, 2017). The

predictor variable for all three analyses was brand anthropomorphism, the mediator variable was competence, and attitude toward brand, attitude toward ad, and purchase intention were inputted as the dependent variables, respectively.

For RQ2a, the results showed that the indirect effect of competence on the relationship between brand anthropomorphism and attitude toward brand was significant (β = -.44, 95% C.I. (-.7785, -.1180)). Thus, competence significantly mediated the effect of brand anthropomorphism on the attitude toward the brand. For RQ2b, the results showed that the indirect effect of competence on the relationship between brand anthropomorphism and attitude toward ad was significant (β = -.47, 95% C.I. (-.8167, -.1272)). Thus, competence significantly mediated the effect of brand anthropomorphism on the attitudes toward the ad. For RQ2c, the results showed that the indirect effect of competence on the relationship between brand anthropomorphism and attitude toward ad was significant (β = -.48, 95% C.I. (-.8976, -.1299. Thus, competence significantly mediated the effect of brand anthropomorphism on purchase intention.

CHAPTER 5: DISCUSSION

5.1. Theoretical Implications

This research showed that there is not a significant interaction effect between brand anthropomorphism and involvement on persuasion outcomes (attitude toward brand, attitude toward ad, purchase intention, warmth, competence). The previously proposed idea of brand anthropomorphism being a peripheral cue (Hennessey & Anderson, 1990; Petty et al., 1983; Petty & Cacioppo, 1986) that will reinforce low-involvement conditions into peripheral processing and having a positive impact of advertising outcomes was not supported. The results of this research indicate that brand anthropomorphism did not have differing effects on high- or low- involvement conditions for participants, suggesting that regardless how relevant an ad or product may be to you, brand anthropomorphism may not enhance or change consumers' attitudes or behaviors. Epley et al. (2007) stated that there are three reasons that consumers tend to anthropomorphize brands; having to rely on easily accessible human "centric" knowledge to understand nonhuman agents they know little about, the motivation to understand a nonhuman agent, and the need of a consumer to form a relationship with a nonhuman agent. Given the results of this study, further research could explore if these reasons have any support for a relationship with involvement.

There are a variety of theoretically significant reasons that there was not an interaction between brand anthropomorphism and involvement. Firstly, high involvement conditions and central route processing require consumers to have the space and ability to think about a persuasion situation thoughtfully and diligently (Petty et al. 1983; Petty & Cacioppo, 1986). Within the context of an online experiment, participants may not have had the motivation to enter this kind of diligent thought. While the manipulation check for involvement was

successfully established, there may be a level of further consideration here that was not established when it came to persuasion outcomes.

Theoretically, it is possible that brand anthropomorphism could be peripheral cue but its role as such does not cause attitude change. At its core, the Elaboration Likelihood Model is a framework for attitude change through its two routes of persuasion (Petty et al. 1983); however, Choi & Salmon (2003) argue that strong attitudinal shifts may occur *only* through central cues and processing. The Elaboration Likelihood Model received criticism early in its lifetime because researchers thought it proposed an absolute dual-processing model (Choi & Salmon 2003; Stiff, 1986) where people could choose only to go through central or peripheral route processing. To address this, Petty & Cacioppo (1986) introduced the idea of an elaboration continuum, where conditions that are more conducive to "issue-relevant thinking" (e.g. high-involvement, motivation to think, etc.) increase the likelihood that an individual will think carefully about a persuasion situation (i.e. the "elaboration likelihood"). When the elaboration likelihood is high, this the determinant of attitude change can be more likely attributed to central processing and less to peripheral processing (Petty & Cacioppo, 1986). Peripheral and central cues exist as the extremes on either end of this continuum (Petty & Cacioppo, 1986).

Choi & Salmon (2003) argue that while the relationship between central cues/processing and attitude change is clear, the effects of peripheral cues/processing on attitude change are not as concrete. When elaboration likelihood is low, the determinant of attitude change is not clear. There can be many reasons why someone has low involvement, some of which don't necessarily have anything to do with the argument/stimuli at hand (e.g. not paying attention, bored, etc.) (Choi & Salmon, 2003; Petty et al. 1983; Petty & Cacioppo, 1986). They also mention that consumers can process central and peripheral cues simultaneously; this is very possible in the

case of this online experiment. While the proposed peripheral cue of brand anthropomorphism was highlighted, other cues such as argument strength may have been working in consumers' processing of the stimuli at the same time, such that the overall peripheral effects of brand anthropomorphism on advertising outcomes, warmth, and/or competence were negated or were weakened by other cues. As a framework for attitude change, the Elaboration Likelihood Model, along with involvement, may have been an inappropriate to apply to the context of brand anthropomorphism. While the interaction of involvement and brand anthropomorphism seemed to have a clear relationship based on literature, the manipulation and/or the concept itself may lack the power to cause true attitude change (as opposed to the power of a more central cue) (Choi & Salmon, 2003; Petty et al. 1983; Petty & Cacioppo, 1986). This may suggest that brand anthropomorphism is not something that can spur attitudinal shifts on its own; it does *need* an interaction and involvement was not the appropriate choice. If the relationship between brand anthropomorphism and involvement is further explored, researchers should be careful in choosing how they conceptualize and operationalize involvement and brand anthropomorphism.

The results of this study also need to be considered in the context that brand anthropomorphism still *could* be a peripheral cue (Petty et al. 1983; Petty & Cacioppo, 1986). While not significantly so in this study, in other contexts such as differing products, situations, existing involvement levels (especially relevant with real world brands that people have feelings about) brand anthropomorphism may still be able to act as a peripheral cue for consumers. It's also possible that in some scenarios, brand anthropomorphism *could* be a central cue (Petty et al. 1983; Petty & Cacioppo, 1986). For example, if a brand logo is anthropomorphized to have a smile with very white teeth and the business itself is for teeth whiteners, it would make sense if brand anthropomorphism in this case acted more centrally than peripherally.

Warmth was found to not have an indirect effect on the relationship between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase intention. As defined in the Stereotype Content Model (Fiske et al., 2002), warmth goes back to a measure of trustworthiness, friendliness, sincerity, and good-naturedness (Fiske et al., 2002, Cuddy et al., 2011, Kervyn et al. 2021). While there was a significant relationship between warmth and these advertising outcomes, there was not a significant initial relationship between brand anthropomorphism and warmth. This non-significant relationship was also reflected in the two-way ANOVA for testing H2, as there was no significant main effect of brand anthropomorphism on warmth. These results show that while warmth is still a significant factor on advertising outcomes, brand anthropomorphism does not increase a sense of "trustworthiness, friendliness, sincerity, and/or good-naturedness" (Fiske et al., 2002; Cuddy et al., 2011; Kervyn et al. 2021) for consumers. This contradicts the more concrete link between brand anthropomorphism and warmth found in literature (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020). The theoretical implication here is that there may not be such a clear link between brand anthropomorphism and warmth. While other studies established this, the specific implementation of brand anthropomorphism in this study did not support it. This means that the relationship between warmth and brand anthropomorphism is not automatic; in testing brand anthropomorphism stimuli, more careful consideration to how one anthropomorphizes a brand should be taken into account. For example, the product category (tablet) was determined based on controlling for involvement, which may have played a role in how the warmth of the anthropomorphized vs. non-anthropomorphized ads were perceived.

Notably, however, competence was found to have a mediating effect on the relationship between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase

intention. The two-way ANOVA, despite not having significant interaction effect, also did reveal a main effect of brand anthropomorphism on competence. While literature points to the relationship between brand anthropomorphism and warmth more strongly (Kervyn et al., 2021; Portal et al., 2018; Zawiswa & Pittard, 2015; Zhang et al., 2020), the results showed that warmth as a mediator could not be significantly supported. The mediation model (Hayes, 2017) showed that an increase in brand anthropomorphism caused lower competence, the indirect effect of which caused attitude toward brand, attitude toward brand, and purchase intention to decrease. This means that ads with brand anthropomorphism are inherently viewed as having lower competence, which pertains to a brand's capability, ability, confidence, and skill in carrying out their intentions (Fiske et al., 2002, Cuddy et al., 2011, Kervyn et al. 2021).

Theoretically, this may mean that a more tangible link between brand anthropomorphism and competence should be explored in research. In looking at the overall warmth/competence relationship, while the predicted effect of brand anthropomorphism increasing warmth was not proven as significant, brand anthropomorphism decreasing competence was. Cuddy et al. (2011) found that when judging a person, warmth and competence most commonly interact in one of two ways: the halo effect or the contrasting effect. The halo effect means that when judging a person as highly regarded in one of these categories (warmth or competence), they also regard them highly in the other. The contrast effect shows that when someone is perceived as strong in either warmth or competence, they are perceived as weak in the other (e.g. someone who is competent is cold/someone who is warm is not competent). The results here show neither of these effects; the ads with brand anthropomorphism were perceived as less competent, but not significantly different in terms of warmth. This suggests that while brand anthropomorphism has

an effect on how consumers process advertising *more* like a human-like entity (Epley et al. 2007; Liu & Wei, 2021), there is still a gap between judging it fully like a human.

The mechanism of competence's indirect effect on brand anthropomorphism is significant in helping explore what parts of consumers' minds are being spoken to when they see an advertisement that looks, talks, thinks, etc. like a human. Brand anthropomorphism is shown to lower perceived competence, but competence's existing relationship to attitude toward brand, attitude toward ad, and purchase intention create this negative indirect effect. This means that when consumers ask themselves this question of "Does the brand have the skill to carry out its intentions?" (competence) (Portal et al., 2018) when seeing brand anthropomorphism, the answer is closer to "no" than it is "yes". Significant results here also indicate that this a question that they are actually asking themselves.

The mediation of competence between brand anthropomorphism and attitude toward brand, attitude toward ad, and purchase intention shows that while brand anthropomorphism has no effect on its own, indirectly through competence there is a significant difference in these outcomes. Similar to the prior discussion about the power of brand anthropomorphism to cause "true" attitude change (Choi & Salmon, 2003; Petty et al. 1983; Petty & Cacioppo, 1986), brand anthropomorphism in and of itself is not enough to have an effect on these outcomes. Theoretically, these results show that researchers should not only be measuring the effects of brand anthropomorphism on concepts like trustworthiness and friendliness, but also be including scales that cover measures of intelligence and capability (Fiske et al., 2002, Cuddy et al., 2011, Kervyn et al. 2021).This isn't necessarily suggesting that the sole results of this study disprove existing literature about the important of warmth in relation to brand anthropomorphism, but rather that competence is also an important measure when considering its effects.

5.2. Managerial Implications

In the advertising industry, these results suggest that practitioners should not just assume anthropomorphizing a brand with consumers that they could classify as low involvement (e.g. new consumers, distracted customers, etc.) will result in an advertisement resulting in positive effects. In reality, involvement of consumers may not be something that needs to be considered when deciding to implement brand anthropomorphism or not. With this ambiguity of how brand anthropomorphism and involvement interact, it may be wise for ad practitioners to not use brand anthropomorphism as the most prominent and featured part of their ads. There may be other cues within the ad (e.g. argument strength), regardless of how prominent anthropomorphism is or consumer's involvement, that are actively working against or weakening the effects brand anthropomorphism. Brand anthropomorphism may be best used a supplementary piece to a larger puzzle; not solely relying on it to do all the work in the ad but rather try and fit it into other established cues, such as argument quality, expertise, attractiveness (Petty et al., 1983). In creating ads, this may mean the consideration of using brand anthropomorphism or not as one of the last steps in the creative process. Ad practitioners should have an established product and message first and only then decide whether to implement brand anthropomorphism; anthropomorphism should not be made before other factors have been established.

Moon et al. (2024) found that time plays a role in the relationship between human and virtual, anthropomorphized beings. While they studied this relationship in terms of environmental campaigns, this can be extended to a larger scope for the ad industry. Many of the most successful examples of brand anthropomorphism have been established over the course of many years: e.g. Tony the Tiger (Frosted Flakes), Martin the Gecko (Geico), etc. Ad practitioners may find that initial attempts at brand anthropomorphism, much like the one-time

nature of this experiment, don't result in significant results. Establishing an extended relationship with consumers over repeated advertising and extended time, much like one may do with a friend, should be a consideration for advertisers if/when brand anthropomorphism attempts fail.

Results also show that practitioners should not use brand anthropomorphism with the assumed outcome of increasing a sense of warmth from their consumers on their advertisement/brand. While some mainstream examples (e.g. Tony the Tiger) may make some to assume that brand anthropomorphism will evoke a higher sense of warmth and in turn better attitudes towards the ads/brands, this may not be the case with every single advertisement with anthropomorphism in it that one creates. Brand anthropomorphism did not significantly increase warmth and this relationship should not be assumed as automatic. Even though warmth had a significant relationship with advertising attitudes and intentions, it was not *because* of brand anthropomorphism. The circumstances upon which one uses brand anthropomorphism need to be carefully considered rather than using it with already assumed outcomes.

Through the negative indirect effect of competence, uncareful use of brand anthropomorphism practitioners may run the risk of "dumbing" their advertisement down. This is especially important to consider in relation to one's own brand positioning. If a brand's positioning is formed around concepts like authority, intellectuality, expertise, etc., the negative mediation effect of competence suggests that brand anthropomorphism may not be a desirable advertising technique. Thematically, this fits a similar logic to Puzakova et al. (2013) about brand anthropomorphism strategy and distinctive (i.e. unique, special): anthropomorphic strategy should only be paired with non-distinct products and consumer who don't hold distinctiveness as a salient consumer motive. When anthropomorphism was implemented into brands with distinctive-minded consumers, the ads did not have positive results. The same logic applies to

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competence; strategists should be cautious about the implications that competence has in the equation of their brand positioning and consumers' goals when considering whether to use brand anthropomorphism.

5.3. Limitations and Future Research

This study aimed to help give way to future studies regarding brand anthropomorphism, interpersonal consumer-brand relationships, involvement, and ELM (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Hennessey & Anderson, 1990; Muniz & O'Guinn, 2001; Petty et al., 1983; Petty & Cacioppo, 1986). While the interaction of brand anthropomorphism and involvement proved to be non-significant, there are several limitations of this study that may help explain why. Firstly, it is important to consider the online context of this experiment. Through Amazon Mechanical Turk, participants were recruited to immersive themselves in scenarios, be exposed to advertising stimuli, and answer a survey with 5 or 6 sections. Especially with immersing themselves into involvement scenarios, it's very difficult to judge whether participants were truly putting a full effort and commitment to the experiment. While some responses were thrown out for issues relating to data quality, it's hard to ever know the minds of participants truly. An in-person setting likely would have been much more conducive to the context of this research and experiment and given more control from a researcher's perspective to help insure people are participating thoroughly and thoughtfully.

Despite a significant pretest and manipulation check, there are potential limitations with the way that the independent variables were manipulated. Firstly, pertaining to the brand anthropomorphism and involvement manipulations, there are potential confounding variables that may have been present. For example, the involvement scenarios were created using Petty et al. (1983)'s guidelines for manipulating involvement. In following this protocol however, the

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high-involvement scenario used in the test was considerably longer than the low-involvement scenario. The high-involvement scenario needed extra detail about their decisions being important to "their families, their own time and effort, and their personal finances" (Petty et al., 1983, p. 137), hence the longer script. This may have been a confounding variable in and of itself; as it is hard to expect all participants in an online experimental setting to be fully immersed, just glancing through with one condition seeing a shorter scenario (low-involvement) and the other a longer scenario (high-involvement) may have introduced other factors than just involvement (e.g. more reader fatigue from reading long scenario).

The ad copy in the brand anthropomorphism conditions also may have presented another confounding variable. As mentioned by Choi & Salmon (2005), peripheral and central cues can be processed simultaneously. By creating advertising copy in the non-brand anthropomorphism condition that described how good the "Abstract" tablet is, this could introduce other variables like argument strength and argument quality (Petty et al., 1983; Petty & Cacioppo, 1986). In manipulating this introduce "I/We" pronouns in the anthropomorphism condition, this also could have spoken to factors beyond *just* brand anthropomorphism. It's possible it may have been better to leave out the ad copy from both conditions and only focus on the product and anthropomorphizing it, as this would have a better chance of controlling for potential unwanted variables being introduced into the methodology. While it is difficult to know concretely, addressing the possibility of confounding variables like this are important.

The choice of a tablet as the product to be featured in the advertising stimuli was potentially harmful to the experiment as well. The original rationale for choosing a tablet was that in today's age, involvement with a tablet would be somewhat "neutral" and middle-of-the-road in comparison to the extremes of price, importance, utility, etc. that other products can be

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(e.g. a paper clip vs. a house). Reflecting on this choice however, it is very possible that participants aren't always thinking on this grand of a scale. Even though tablets have become somewhat utilitarian, people likely aren't thinking on the wide spectrum of "paper clip ⬅➡ house" at all times. In trying to control for the product, confounding variables may have been introduced here for both involvement and perceived warmth/competence, as participants may view a technology product as more inherently competent or less warm. In future research, if trying to find a product that is "neutral", this should be done through a pre-test rather than making assumptions.

Brand anthropomorphism seems to be a historically "loose" term; anthropomorphism is a wide net of "motivations, intentions, and underlying mental states" (Liu & Wei, 2021) that pertain to one's perception of a nonhuman agent. Manipulation of brand anthropomorphism across literature has had many different variations that all do not represent the same part of what makes someone "human". Shape, logo, product, emotions, and body copy have all been used as methods to manipulate brand anthropomorphism conditions in studies (Basfirinci & Cilingirs, 2015; Puzakova et al., 2013; Puzakova & Aggarwal, 2018; Zhang et al., 2020). In some literature, there has been questions about "whether there is a clear difference between brand anthropomorphism, logo, or spokescharacter anthropomorphism" (Zhang et al., 2020, p. 534) on advertising outcomes (Folse et al., 2013; Zhang et al., 2020).

A limitation in this research is that while the brand anthropomorphism here was not a significant factor in many places, it's unclear if this brand anthropomorphism is the "same" as other studies. While two validated brand anthropomorphism scales exist (Guido & Peluso, 2015; Golossenko & Aroean, 2020), they are both very recent developments in the grand scheme of brand anthropomorphism research, with one being published in 2015 and the other in 2020.

Golossenko & Aroeans' (2020) scale is a direct response to Guido & Pelusos' (2015) where they addressed some problems in the original scale. Additionally, while these scales exist, most literature reviewed did not use them; the studies were either published before these scales existed or used their own forms of validation for their brand anthropomorphism manipulation.

Another limitation here regarding the brand anthropomorphism scale (Golossenko & Aroean, 2020) is that while this scale had 4 dimensions on it (Appearance, Moral Virtue, Cognitive Experience, Conscious Emotionality), without much more significant resources, to satisfy all of these conditions in this experimental setting would have been extremely challenging. Thus, "Appearance", based on how other literature seemed to manipulate brand anthropomorphism primarily through appearance (Dalman et al., 2021; Delbaere et al., 2011; Folse et al., 2013; Puzakova et al., 2013; Puzakova & Aggarwal, 2018; Zhang et al., 2020) and the feasibility of it compared to the other dimensions, was what was used to check the manipulation of brand anthropomorphism. With the increasing feasibility of multi-modal, complex stimuli through more and more accessible technology and AI, future research should aim to try and be able to manipulate brand anthropomorphism on more of these categories than just appearance. For example, Moon et al. (2024) did a study on virtual humans in which Unreal Engine, a 3-D computer graphics tool, was used to manipulate anthropomorphism on not only the appearance of the stimuli through movement, audio, video. For example, Morewedge et al. (2007) found that using motion could help increase the strength of anthropomorphism conditions. Pertaining to the interpersonal consumer-brand relationship (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001), more fleshed out experimental brand anthropomorphism manipulations not just focused on simple appearance

would help participants feel that the brand is an actual interpersonal being, capable of complex thought, emotion and interaction.

While this study did not find significant interaction between brand anthropomorphism and involvement, given the lack of research on this interaction, different manipulations of involvement should be tested to see if one of them does have significant implications. This study manipulated involvement situationally through involvement-based scenarios (Petty et al., 1983) while keeping the product the same throughout (tablet computer). Looking further into Zaichkowsky's (1986) conceptualizations of different kinds of involvement (ad involvement vs product involvement vs. purchase decision involvement) should be explored in future research individually to see, if made more specific, involvement has a significant interaction with brand anthropomorphism.

Additionally, future research may look into creating a more concrete connection between brand anthropomorphism and existing literature about consumer-brand relationship concepts, such as brand personality (Aaker, 1997) or brand community (Muniz & O'Guinn, 2001). For example, a future study may use Aaker's (1997) five brand personalities (sincerity, excitement, competence, sophistication, ruggedness) and combine that with brand anthropomorphism. Future research may aim to use concepts such as this to not explore the overall effect of "being human", but also how the "kind of human" plays a role in advertising. The same could be said about warmth and competence; combining brand anthropomorphism with the permutations of warmth vs. competence in the "Brands as Intentional Agents Framework" (Kervyn et al., 2012) that outlines the 4 "kinds of brands" (paternalized, troubled, popular, and envied brands) could reveal an interesting further discourse on the recommendations/findings here that brand that emphasize competence may not benefit from brand anthropomorphism. It could also give more nuance to

Puzakova et al.'s (2013) findings that "distinctive" brands should not use brand anthropomorphism.

In conclusion, this study aimed to meaningfully contribute to literature on brand anthropomorphism in advertising, specifically regarding the lack of research on how brand anthropomorphism and involvement play a role together, using a consumer-centric processing approach. While involvement and brand anthropomorphism were found to not significantly interact, a mediating role of competence between brand anthropomorphism and common advertising outcomes (attitude toward brand, attitude toward ad, purchase intention) was found. The findings of this non-significant interaction and mediation effect resulted in a better theoretical understanding of how brand anthropomorphism may fit within our understanding of the interpersonal nature of consumer-brand relationships (Aaker, 1997; Almeida, 2018; Epley et al., 2007; Fournier, 1998; Muniz & O'Guinn, 2001). Additionally, managerial implications of what situations may be best suited for brand anthropomorphism in the industry were uncovered and recommended.
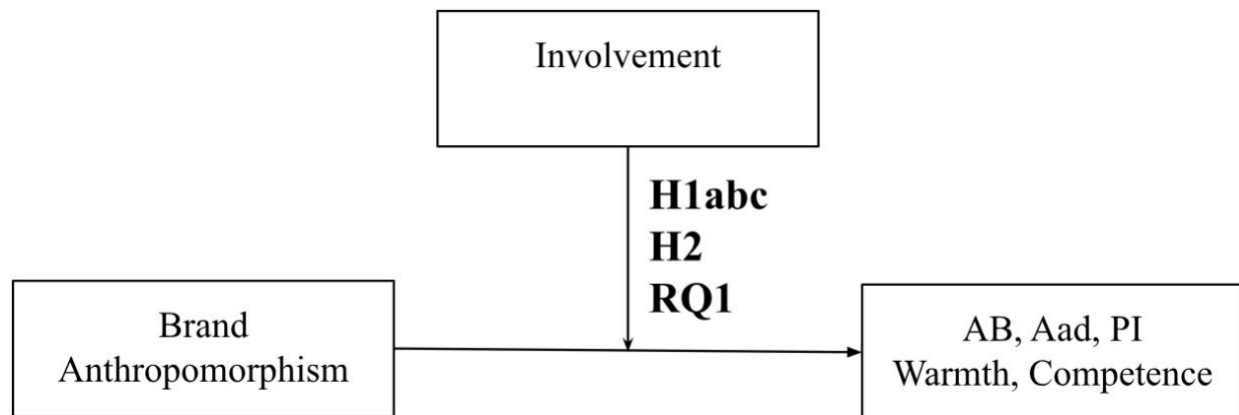
Chapter 2 Table and Figures

Table 2.1.

Brand Anthropomorphism Scale

BASC dimensions and items
Appearance
This brand looks human-like
This brand is life-like
This brand has human-like appearance
Moral virtue
This brand is trustworthy
This brand is honest
This brand is principled
Cognitive experience
This brand can engage in a great deal of thought
This brand can imagine things on its own
This brand is capable of reasoning
Conscious emotionality
This brand can experience remorse over actions which it deems to be shameful
This brand can experience compassion for people who feel down[a]
This brand can experience guilt when it hurts someone with its behaviour
This brand can experience shame when people have negative views and judgements about it

Note. 13-item, 4-dimension brand anthropomorphism scale. (Golossenko & Aroean, 2020).
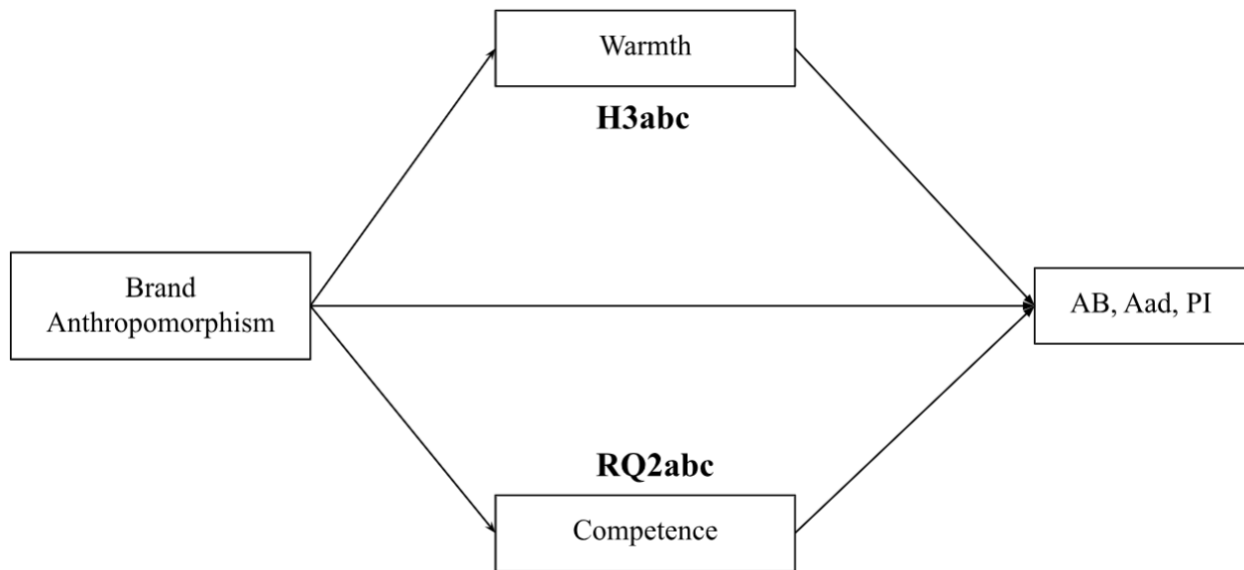
Figure 2.1.

Framework for H1abc, H2, and RQ1

Note: AB = Attitude toward brand, Aad = Attitude toward ad, PI = Purchase Intention

Figure 2.2.

Framework for H3abc and RQ2abc

Note: AB = Attitude toward brand, Aad = Attitude toward ad, PI = Purchase Intention

Chapter 3 Tables and Figures

Figure 3.1.

Non-Anthropomorphized Version of Advertising Stimuli

WHEREVER YOU ARE, WHATEVER YOU NEED

BE ABSTRACT

The Abstract Tablet is the best all-purpose tablet built for the hardest work and greatest leisure. Equipped with the power of a PC but with creativity in mind, this tablet is built for every version of you.

ABSTRACT

Figure 3.2.

Anthropomorphized Version of Advertising Stimuli

Table 3.1.

Low- vs. High-Involvement Scenarios

Involvement Level	Scenario
Low	"You are actively looking online to buy a new pair of running shoes. You are in the process of doing research about different shoes and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about running shoes, you come across an advertisement for a tablet computer from the brand, "Abstract". On the next page, you will see this advertisement."
High	"Your old tablet computer broke. You are now actively looking online to buy a new a tablet. You are in the process of doing research about different tablets and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about different tablets, you come across an advertisement for a tablet from the brand, "Abstract". On the next page, you will see this advertisement. While viewing the ad, take careful consideration of the visual and written elements, as you will be asked to evaluate the brand and the advertisement after viewing. Your decisions as a shopper about this advertisement and product will be relevant to your home and work life, as well as to your own personal finances."

Table 3.2.

Dependent Variable Scales

Dependent Variable Scale	Source	Scale Type	Items
Attitude toward brand	(Spears & Singh, 2004)	7-point semantic differential	Please describe your overall feelings about the brand described in the ad you just read… *unappealing/appealing* *bad/good* *unpleasant/pleasant* *unfavorable/favorable* *unlikable/likable*
Attitude toward ad	(Spears & Singh, 2004)	7-point semantic differential	Please describe your overall feelings about the advertisement you just read… *unappealing/appealing* *bad/good* *unpleasant/pleasant* *unfavorable/favorable* *unlikable/likable*
Purchase intention	(Spears & Singh, 2004)	7-point semantic differential	Please describe your overall purchase intentions about the brand described in the ad you just read… *would never buy/would definitely buy* *definitely do not intend to buy/definitely intend to buy* *very low purchase interest/very high purchase interest* *definitely would not buy it/definitely would buy it* *probably buy it/probably buy it*
Warmth	(Aaker et al., 2010)	7-point Likert	This brand is… *warm* *kind* *generous*
Competence	(Aaker et al., 2010)	7-point Likert	This brand is… *competent* *effective* *efficient*

Table 3.3.

Main Test Demographics

Category	Frequency	Validated Percent
Age		
18-24	1	.9
25-34	20	17.4
35-44	66	57.4
55-64	20	17.4
65 or over	4	3.5
Prefer not to say	4	3.5
Gender		
Male	73	63.5
Female	40	34.8
Prefer not to say	2	1.7
Ethnicity		
American Indian or Alaskan Native	4	3.5
Asian / Pacific Islander	30	26.1
Black or African American	5	4.3
Hispanic	5	4.3
White / Caucasian	66	57.4
Multiple Ethnicity*	2	1.7
Prefer not to say	3	2.6
Education		
High school or equivalent	18	15.7
Attended College/University	15	13.0
Associate degree	12	10.4
Bachelor's degree	57	49.6
Master's degree	9	7.8
Professional degree	1	.9
Doctorate degree	1	.9
Prefer not to say	2	1.7
Income		
Less than $18,000	19	16.5
$18,000 ~ $29,999	21	18.3
$30,000 ~ $49,000	17	14.8
$50,000 ~ $69,999	16	13.9

Table 3.3.
(cont'd)

	More than $70,000	37	32.2
	Prefer not to say	5	4.3
Total	Total Participants	115	100.0

Note: *Open response: both participants answered "White / Asian"

Chapter 4 Tables and Figures

Table 4.1.

Descriptive Statistics of Each Condition per Variable

IV	Condition	DV	N	M	SD
Brand Anthropomorphism	No	AB	57	5.16	1.16
		Aad	57	5.18	1.12
		PI	57	4.23	1.53
		Warmth	57	4.58	1.28
		Competence	57	5.54	1.07
	Yes	AB	58	4.93	1.17
		Aad	58	4.97	1.26
		PI	58	4.14	1.50
		Warmth	58	4.88	1.08
		Competence	58	5.00	1.04

IV	Condition	DV	N	M	SD
Involvement	Low	AB	58	4.86	1.18
		Aad	58	4.97	1.18
		PI	58	3.71	1.46
		Warmth	58	4.46	1.15
		Competence	58	5.17	1.07
	High	AB	57	5.24	1.13
		Aad	57	5.18	1.21
		PI	57	4.67	1.42
		Warmth	57	5.01	1.16
		Competence	57	5.36	1.10

Note: AB = Attitude toward brand, Aad = Attitude toward ad, PI = Purchase Intention

Table 4.2.

2-Way ANOVA Results of Brand Anthropomorphism and Involvement Interaction on Dependent

Measures

Dependent Measure	*F*	*p*	ηp2
H1abc			
AB	.33	.56	.003
Aad	.04	.85	.000
PI	.49	.48	.004
H2			
Warmth	.08	.78	.001
RQ1			
Competence	.62	.43	.006

Note: AB = Attitude toward brand, Aad = Attitude toward ad, PI = Purchase Intention

Figure 4.1.

H1 Interactions Graph (Non-Significant)

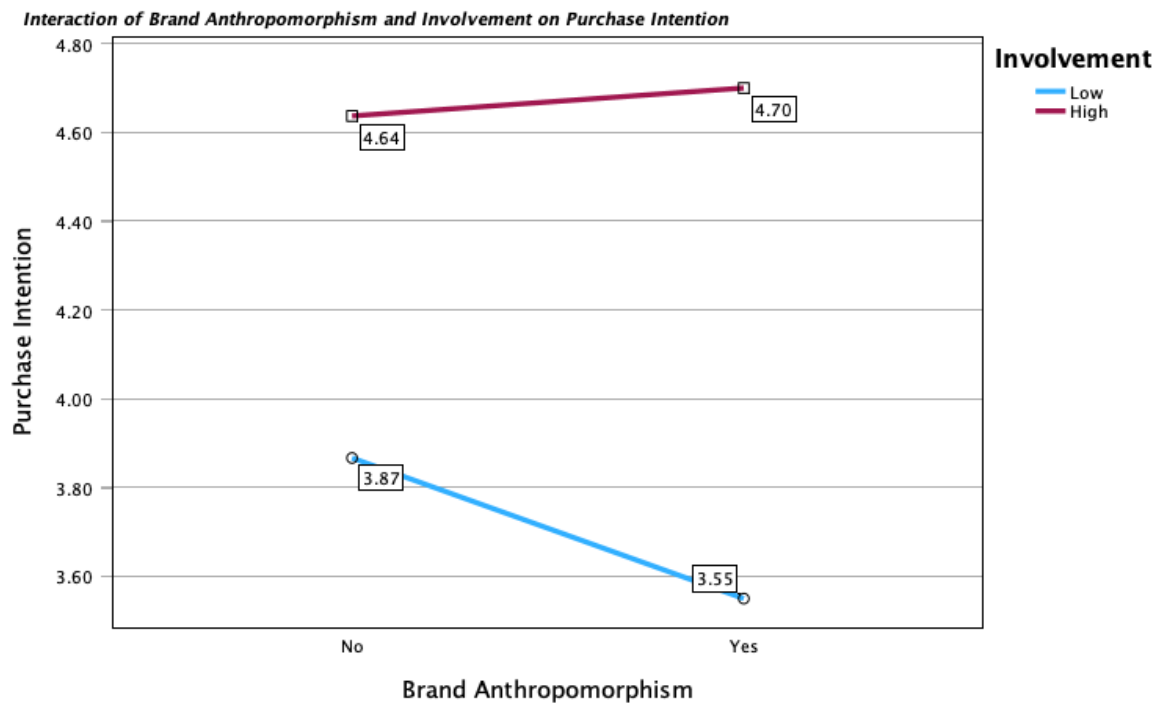Interaction of Brand Anthropomorphism and Involvement on Attitude toward Brand

Interaction of Brand Anthropomorphism and Involvement on Attitude toward Ad

Figure 4.1. (cont'd)

Interaction of Brand Anthropomorphism and Involvement on Purchase Intention
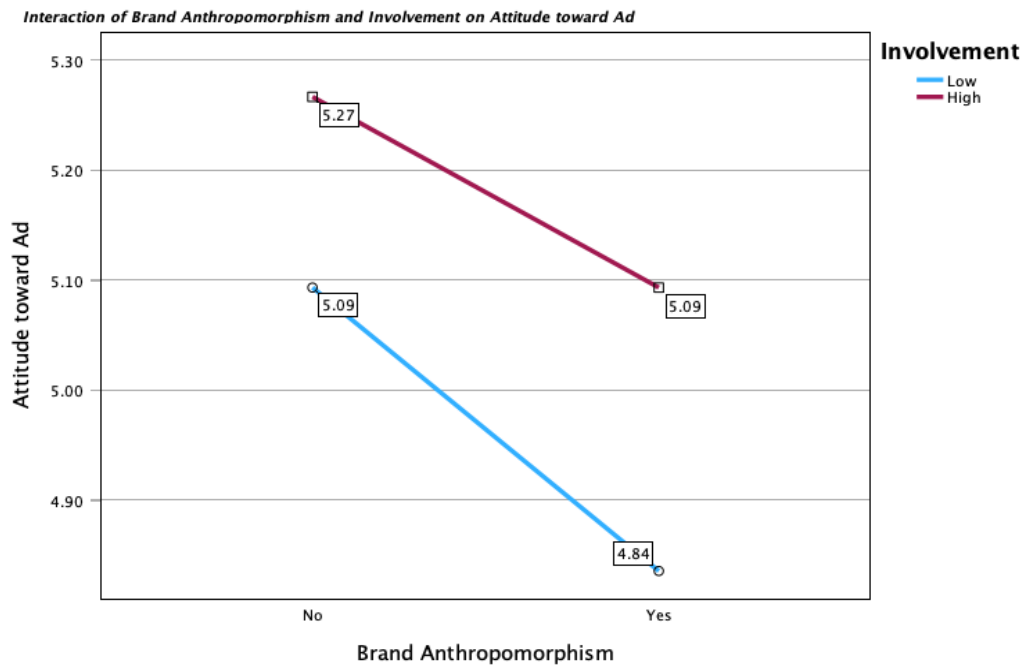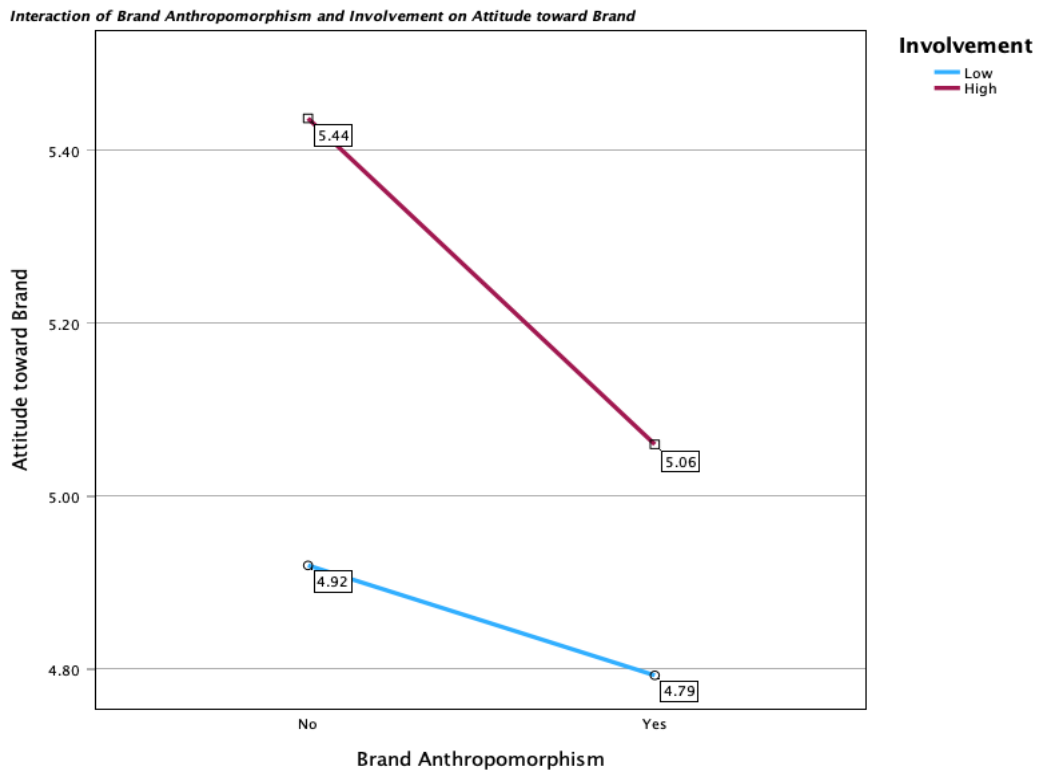
Figure 4.2.

H2 Interaction Graph (Non-Significant)

Interaction of Brand Anthropomorphism and Involvement on Warmth
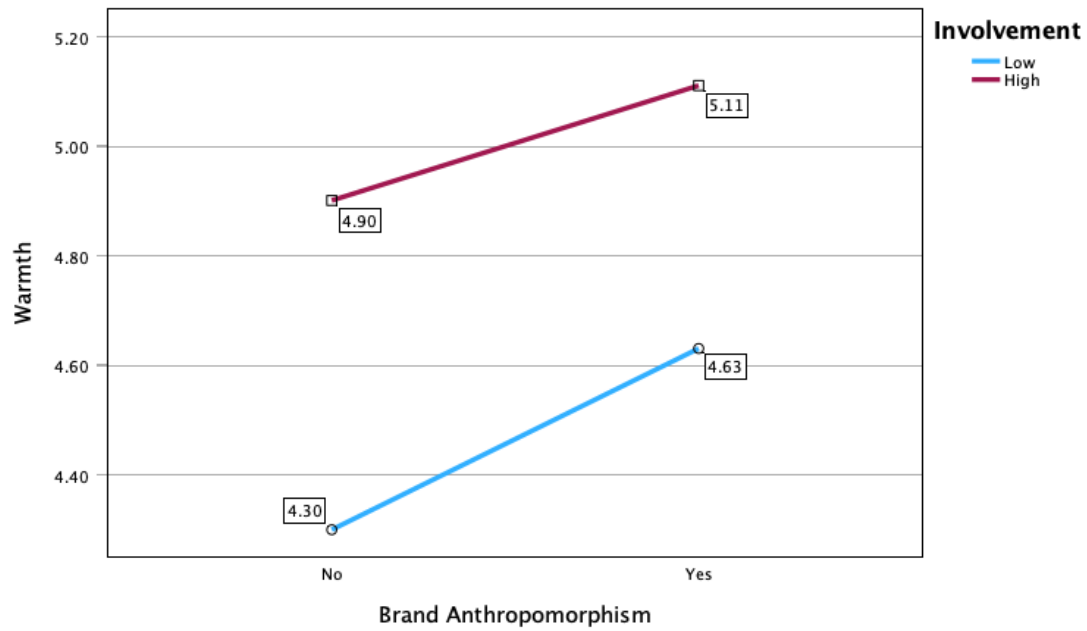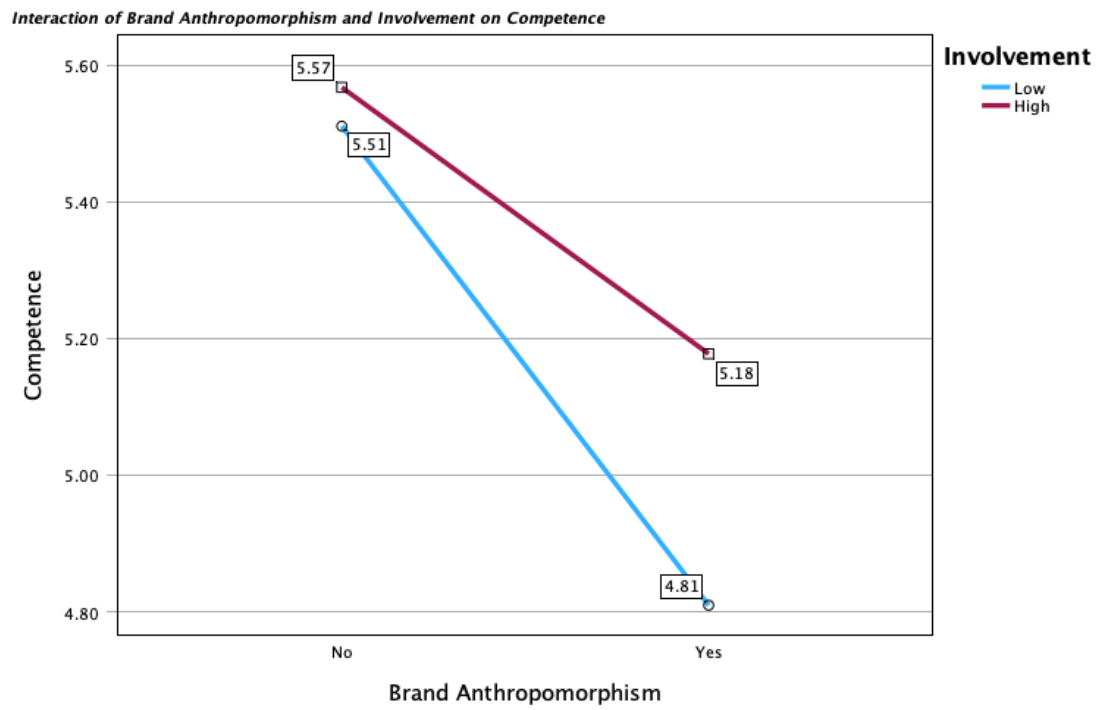
Figure 4.3.

RQ1 Interaction Graph (Non-Significant)

Interaction of Brand Anthropomorphism and Involvement on Competence
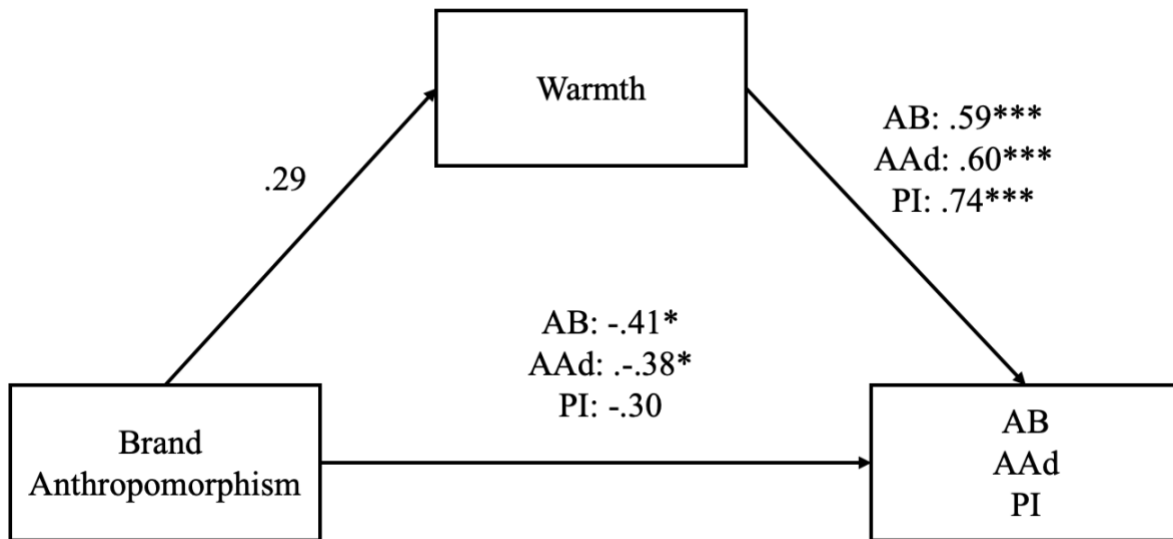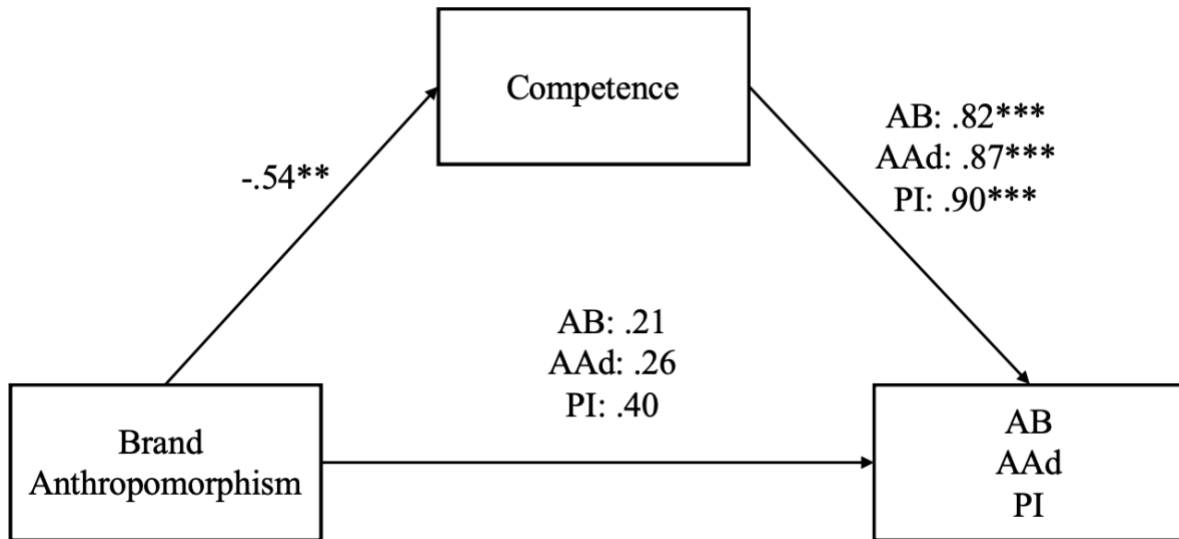
Figure 4.4.

Warmth Mediation Results

*Note: *p* < .05, ***p* <.001. AB = Attitude toward brand, Aad = Attitude toward ad, PI = purchase intention.

Figure 4.5.

Competence Mediation Results

*Note: **p < .01, ***p <.001. AB = Attitude toward brand, Aad = Attitude toward ad, PI =
purchase intention.

REFERENCES

Aaker, J. L. (1997). Dimensions of Brand Personality. Journal of Marketing Research, 34(3),
347–356. https://doi.org/10.1177/002224379703400304

Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as
competent: Firm stereotypes matter. *Journal of Consumer Research*, *37*(2), 224–237.
https://doi.org/10.1086/651566

Almeida, A. S. de C. (2018). *Negative Consumer-Brand Relationships and Brand
Anthropomorphism: The Case of Social Media Based Anti-Brand Communities*
(dissertation).

AWS. (2024). *Qualification Requirement*. QualificationRequirement.
https://docs.aws.amazon.com/AWSMechTurk/latest/AWSMturkAPI/ApiReference_Qualifi
cationRequirementDataStructureArticle.html

Basfirinci, C., & Çilingir, Z. (2015). Anthropomorphism and Advertising Effectiveness:
Moderating Roles of Product Involvement and The Type of Consumer Need. *Journal of
Social and Administrative Sciences, 2*(3), 108-131. https://doi.org/10.1453/jsas.v2i3.443

Brandão, A. and Popoli, P. (2023), ""I will always hate you"! An investigation of the impact of
anthropomorphism in online anti-brand communities", *European Business Review*, Vol.
35 No. 3, pp. 444-466. https://doi.org/10.1108/EBR-09-2022-0194

Choi, S. M., & Salmon, C. T. (2023). The Elaboration Likelihood Model of Persuasion After
Two Decades: A Review of Criticisms and Contributions. *The Kentucky Journal of
Communication*, *22*(1), 44–77.

Cuddy, A. J. C., Glick, P., & Beninger, A. (2011). The dynamics of warmth and competence

    judgments, and their outcomes in organizations. *Research in Organizational Behavior*,

    31, 73–98. https://doi.org/10.1016/j.riob.2011.10.004

Dalman, M.D., Agarwal, M.K., & Min, J. (2021). Impact of brand anthropomorphism on ethical

    judgment: the roles of failure type and loneliness. *European Journal of Marketing*.

Delbaere, M., McQuarrie, E. F., & Phillips, B. J. (2011). Personification in advertising. Journal

    of Advertising,40(1), 121–130. https://doi.org/10.2753/joa0091-3367400108

Epley, N., Waytz, A., & Cacioppo, J. T. (2007). On seeing human: a three-factor theory of

    anthropomorphism. *Psychological review*, *114*(4), 864–886.

    https://doi.org/10.1037/0033-295X.114.4.864

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype

    content: Competence and warmth respectively follow from perceived status and

    competition. Journal of Personality and Social Psychology, 82(6), 878–

    902.https://doi.org/10.1037/00223514.82.6.878

Folse, J. A. G., Burton, S., & Netemeyer, R. G. (2013). Defending Brands: Effects of Alignment

    of Spokescharacter Personality Traits and Corporate Transgressions on Brand Trust and

    Attitudes. *Journal of Advertising*, *42*(4), 331–342. http://www.jstor.org/stable/24750645

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer

    research. *Journal of Consumer Research, 24*(4), 343-373. https://doi.org/10.1086/209515

Golossenko, A., Pillai, K. G., & Aroean, L. (2020). Seeing brands as humans: Development and

    validation of a brand anthropomorphism scale. *International Journal of Research in*

    Marketing, *37*(4), 737–755. https://doi.org/10.1016/j.ijresmar.2020.02.007

Guido, G., Peluso, A. (2015). Brand anthropomorphism: Conceptualization, measurement, and

impact on brand personality and loyalty. *Journal of Brand Management,* 22, 1–19 (2015).

https://doi.org/10.1057/bm.2014.40

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A*

regression-based approach. Guilford publications.

Hennessey, J. E., & Anderson, S. C. (1990, January 1). >*the interaction of peripheral cues and*

message arguments on cognitive responses to an advertisement: ACR. ACR North

American Advances. Retrieved October 2, 2022, from

https://www.acrwebsite.org/volumes/7027/volumes/v17/NA-17

Laczniak, R. N., Kempf, D. S., & Muehling, D. D. (1999). Advertising message involvement:

The role of enduring and situational factors. *Journal of Current Issues & Research*

in Advertising, *21*(1), 51–61. https://doi.org/10.1080/10641734.1999.10505088

Lien, N. (2001). Elaboration Likelihood Model in Consumer Research: A Review.

Liu, B. and Wei, L. (2021). Machine gaze in online behavioral targeting: The effects of

algorithmic human likeness on social presence and social influence. *Computers in Human*

Behavior. 10.1016/j.chb.2021.106926

Liu, F., Wei, H., Zhu, Z., & Chen, H. (Allan). (2022). Warmth or competence: Brand

anthropomorphism, Social Exclusion, and advertisement effectiveness. *Journal of*

Retailing and Consumer Services, *67*, 103025.

https://doi.org/10.1016/j.jretconser.2022.103025

Moon, W.-K., Song, Y. G., & Atkinson, L. (2024). Virtual voices for real change: The efficacy

of virtual humans in pro-environmental social marketing for mitigating misinformation

about climate change. *Computers in Human Behavior: Artificial Humans*, *2*(1), 100047.

https://doi.org/10.1016/j.chbah.2024.100047

Morewedge, C.K., Preston, J., & Wegner, D.M. (2007). Timescale bias in the attribution of

mind. Journal of Personality and Social Psychology, 93(1), 1–11.

https://doi.org/10.1037/0022-3514.93.1.1

Muniz, A. M., Jr., & O'Guinn, T. C. (2001). Brand community. *Journal of Consumer Research,*

27(4), 412–432. https://doi.org/10.1086/319618

Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How

perceived intentions and ability can map brand perception. *Journal of Consumer*

Psychology, *22*(2), 166–176. https://doi.org/10.1016/j.jcps.2011.09.006

Kervyn, N., Fiske, S. T., & Malone, C. (2021). Social perception of brands: Warmth and

competence define images of both brands and social groups. *Consumer Psychology*

Review, *5*(1), 51–68. https://doi.org/10.1002/arcp.1074

Petty, R.E. and Cacioppo, J.T. (1986) The Elaboration Likelihood Model of Persuasion.

Advances in Experimental Social Psychology, 19, 123-205.

http://dx.doi.org/10.1016/S0065-2601(08)60214-2

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and Peripheral Routes to

Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer*

Research, *10*(2), 135–146. http://www.jstor.org/stable/2488919

Portal, S., Abratt, R., & Bendixen, M. (2018). Building a human brand: Brand

anthropomorphism unravelled. *Business Horizons*, *61*(3), 367–374.

https://doi.org/10.1016/j.bushor.2018.01.003

Puzakova, M., & Aggarwal, P. (2018). Brands as Rivals: Consumer Pursuit of Distinctiveness

    and the Role of Brand Anthropomorphism. Journal of Consumer Research, 45(4), 869–

    888. https://doi.org/10.1093/JCR/UCY035

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. https://doi.org/10.1509/jm.11.0510

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions.

    Journal of Current Issues & Research in Advertising, *26*(2), 53–66.

    https://doi.org/10.1080/10641734.2004.10505164

Stephenson, M. T., Benoit, W. L., & Tschida, D. A. (2001). Testing the mediating role of

    cognitive responses in the elaboration likelihood model. *Communication Studies*, *52*(4),

    324–337. https://doi.org/10.1080/10510970109388567

Stiff, J. B. (1986). Cognitive processing of persuasive message cues: A Meta-analytic review of

    the effects of supporting information on Attitudes. *Communication Monographs*, *53*(1),

    75–89. https://doi.org/10.1080/03637758609376128

Zaichkowsky, J. L. (1986). Conceptualizing involvement. Journal of Advertising, 15(2), 4–34.

    https://doi.org/10.1080/00913367.1986.10672999

Zawisza, M., & Pittard, C. (2015). When do warmth and competence sell best? The "Golden

    Quadrant" shifts as a function of congruity with the product type, targets' individual

    differences, and advertising appeal type. *Basic and Applied Social Psychology*, *37*(2),

    131–141. https://doi.org/10.1080/01973533.2015.1015130

Zhang, M., Li, L., Ye, Y., Qin, K., & Zhong, J. (2020). The effect of brand anthropomorphism,

    brand distinctiveness, and warmth on brand attitude: A mediated moderation

    model. *Journal of Consumer Behaviour, 19*(5), 523-536. https://doi.org/10.1002/cb.1835

Participants assigned to either low or high-involvement condition.

Low-Involvement: Read the following thoroughly and imagine yourself in this scenario. You are actively looking online to buy a new pair of running shoes.

You are in the process of doing research about different shoes and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about running shoes, you come across an advertisement for a tablet computer from the brand, "Abstract". On the next page, you will see this advertisement.

High-Involvement: Read the following thoroughly and imagine yourself in this scenario.

Your old tablet computer broke. You are now actively looking online to buy a new a tablet. You are in the process of doing research about different tablets and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about different tablets, you come across an advertisement for a tablet from the brand, "Abstract". On the next page, you will see this advertisement. While viewing the ad, take careful consideration of the visual and written elements, as you will be asked to evaluate the brand and the advertisement after viewing. Your decisions as a shopper about this advertisement and product will be relevant to your home and work life, as well as to your own personal finances.

Participants assigned to brand anthropomorphism condition and see corresponding advertisement.

After viewing advertisement, participants are asked to answer how much they agree with each statement in the following questionnaire.

Involvement: This advertisement/brand was not important to me.

This advertisement/brand was not relevant to me.

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This advertisement/brand really matters to me.

This advertisement/brand affects me personally.

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Brand Anthropomorphism: This brand looks human-like.

This brand is life-like.

This brand has human-like appearance

This brand is trustworthy.

This brand is honest.

This brand is principled.

This brand can engage in a great deal of thought.

This brand can imagine things on its own.

This brand is capable of reasoning.

This brand can experience remorse over actions which it deems to be shameful.

This brand can experience compassion for people who feel down.

This brand can experience guilt when it hurts someone with its behavior.

This brand can experience shame when people have negative views and judgement about it.

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Age: What is your age?

- 18-24
- 25-34
- 35-44
- 55-64
- 65 or over
- Prefer not to say

Gender: How do you identify?

- Male
- Female
- Non-Binary
- Prefer not to say

Ethnicity: Which category best describes you?

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- White / Caucasian
- Multiple Ethnicities / Other (please specify)
- Prefer not to say

Education: What is the highest level of education you have completed?

- Less than high school
- High school or equivalent
- Attended College/University
- Associate degree
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree
- Prefer not to say

Income: What is your household's total income?

- Less than $18,000
- $18,000 ~ $29,999
- $30,000 ~ $49,999
- $50,000 ~ $69,999
- More than $70,000
- Prefer not to say

Participants assigned to either low or high-involvement condition.

Low-Involvement: Read the following thoroughly and imagine yourself in this scenario. You are actively looking online to buy a new pair of running shoes.

You are in the process of doing research about different shoes and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about running shoes, you come across an advertisement for a tablet computer from the brand, "Abstract". On the next page, you will see this advertisement.

High-Involvement: Read the following thoroughly and imagine yourself in this scenario.

Your old tablet computer broke. You are now actively looking online to buy a new a tablet. You are in the process of doing research about different tablets and are scrolling through your phone looking at all the options. While you are in the process of doing this and gathering info about different tablets, you come across an advertisement for a tablet from the brand, "Abstract".

On the next page, you will see this advertisement. While viewing the ad, take careful consideration of the visual and written elements, as you will be asked to evaluate the brand and the advertisement after viewing. Your decisions as a shopper about this advertisement and product will be relevant to your home and work life, as well as to your own personal finances.

Participants assigned to brand anthropomorphism condition and see corresponding

advertisement.

After viewing advertisement, participants are asked to answer questions about the advertisement

and/or brand in the following questionnaire.

Involvement: This advertisement/brand was important to me.

This advertisement/brand was relevant to me.

This advertisement/brand really matters to me.

This advertisement/brand affects me personally.

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Brand Anthropomorphism: This brand looks human-like.

This brand is life-like.

This brand has human-like appearance

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Attitude toward brand: Please describe your overall feelings about the brand described in the ad you just read…

unappealing:__1__:__2__:__3__:__4__:__5__:__6__:__7__: appealing

bad:__1__:__2__:__3__:__4__:__5__:__6__:__7__: good

unpleasant:__1__:__2__:__3__:__4__:__5__:__6__:__7__: pleasant

unfavorable:__1__:__2__:__3__:__4__:__5__:__6__:__7__: favorable

unlikable:__1__:__2__:__3__:__4__:__5__:__6__:__7__: likable

Attitude toward ad: Please describe your overall feelings about the brand described in the ad you just read…

unappealing:__1__:__2__:__3__:__4__:__5__:__6__:__7__: appealing

bad:__1__:__2__:__3__:__4__:__5__:__6__:__7__: good

unpleasant:__1__:__2__:__3__:__4__:__5__:__6__:__7__: pleasant

unfavorable:__1__:__2__:__3__:__4__:__5__:__6__:__7__: favorable

unlikable:__1__:__2__:__3__:__4__:__5__:__6__:__7__: likable

Purchase intention: Please describe your overall purchase intentions about the brand described in the ad you just read…

Would never buy:__1__:__2__:__3__:__4__:__5__:__6__:__7__: Would definitely buy

Definitely do not intend to buy:__1__:__2__:__3__:__4__:__5__:__6__:__7__: Definitely intend to buy

Very low purchase interest:__1__:__2__:__3__:__4__:__5__:__6__:__7__: Very high purchase intent

Definitely would not buy it:__1__:__2__:__3__:__4__:__5__:__6__:__7__: Definitely would buy it

Probably not buy it:__1__:__2__:__3__:__4__:__5__:__6__:__7__: Probably buy it

Warmth: This brand is warm.

This brand is kind.

This brand is generous.

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Competence: This brand is competent.

This brand is effective.

This brand is efficient.

Strongly disagree:__1__:__2__:__3__:__4__:__5__:__6__:__7__:Strongly agree

Age: What is your age?

- 18-24
- 25-34

- 35-44
- 55-64

- 65 or over
- Prefer not to say

Gender: How do you identify?

- Male
- Female

- Non-Binary
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Ethnicity: Which category best describes you?

- American Indian or Alaskan Native
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- Multiple Ethnicities / Other (please specify)

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- Less than high school
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- $18,000 ~ $29,999

- $30,000 ~ $49,999
- $50,000 ~ $69,999

- More than $70,000
- Prefer not to say