Exploring How Body Diversity Impacts the Effectiveness of Marketing Communications

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Abstract

Exploring How Body Diversity Impacts the Effectiveness of Marketing Communications

Sarah Psihogios

Past research on body diversity has largely focused on the positive impact plus-size models in media have on consumers' self-esteem and body image, but the impact of these diversity efforts on consumer responses to marketing communications and the advertised brands is less conclusive. This research aimed to understand why (and when) consumers may react more positively (or negatively) to body diversity and investigates the underlying psychological mechanism involved in the effect. To address this question, I employed experimental methods across one pre-test and three studies, one exploratory (Study 1) and two confirmatory (Study 2a and 2b). Participants in these studies were recruited from Amazon Mechanical Turk and were asked to evaluate a sponsored social media post featuring either a plus-size or thin model advertising a luggage (Studies 1 and 2a) or an app (Study 2b). Along with a significant main effect of model size on attitudes and marginally significant main effects on behavioral intentions and purchase likelihood, an exploratory serial mediation effect was found through participants' opinion of the model and their perceived persuasion intent of the post. Study 2 aimed to replicate and confirm these findings. Study 2a used the same stimuli (i.e., carry-on luggage) to closely replicate Study 1, while Study 2b conceptually replicated it using a lower-involvement product (i.e., a mobile game app). Both Study 2a and 2b replicated the serial mediation effects found in Study 1. Finally, theoretical and managerial contributions are discussed.

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Introduction

Body diverse advertisements, which I define as advertisements featuring models that fall outside the thin ideal to include average or plus-size individuals, are becoming increasingly more common from popular brands in fashion (e.g., Aerie, Old Navy, Lululemon) and personal care/beauty (e.g., Fenty Beauty, and Dove). Some brands such as Fenty Beauty have managed to hit all the marks in terms of meeting diverse consumers' needs and desires (e.g., widespread availability of a large range of products catering to many people) and are highly acclaimed for their inclusive and representative business model (McKinnon, 2023; Wilson, 2020; Wingard, 2019). However, consumers' responses are not always positive when brands attempt to include body diverse models in their marketing. For example, Victoria's Secret faced major criticism following their body diversity campaigns with some consumers calling the attempt "performative" (Bennett, 2022; Hagy, 2023). Although the marketplace is rife with examples of brands that more (vs. less) successfully employed body diversity in their marketing communications (Mull, 2018), the reasons why consumers respond more (vs. less) positively to such initiatives are still somewhat unclear.

Body diversity in media is a growing topic as body positive models, influencers, and other social media users openly talk about their insecurities and desire for more representation. Although some prior research has shown that body diversity has positive effects on self-esteem and body image, particularly among female consumers (e.g. Borau & Bonnefon, 2015; Dittmar & Howard, 2004; Grabe, Ward, & Hyde, 2008; Polivy & Herman, 2002), there is a gap in the marketing literature as to how body diversity impacts consumers' responses to marketing communications and the advertised brands and products. The proposed research thus aims to

address this gap by investigating when body diversity is more (vs. less) effective, and better understand potential psychological processes underlying this relationship.

In this thesis, I will first review past research on body diversity and provide my rationale for investigating its impacts on consumer behavior, for my proposed underlying psychological mechanisms, and for my hypotheses. I will then present the methods and results of a pre-test and three studies, in which participants were asked to evaluate a sponsored social media post featuring a plus-size or thin model advertising a luggage (Studies 1 and 2a) or an app (Study 2b). The studies also explored the roles of participants' opinion of the model and perceived persuasion intent in the effects of body diversity on consumers' responses. Note that the studies offer both exploratory (Study 1) and confirmatory (Studies 2a and 2b) findings. Lastly, I will discuss the implications of my research and possible future directions that build on its limitations.

Theoretical Background

Reflecting its increasing use in the marketplace, research on body diversity has also been growing in popularity in academia. Past research on this topic has primarily focused on the impact of the lack of model size diversity on consumers, with females being particularly susceptible to negative outcomes. For example, the thin ideal in media can promote negative body image (Dittmar & Howard, 2004), increased feelings of body anxiety (Borau & Bonnefon, 2015; Grabe, Ward, & Hyde, 2008), the development of eating disorders (Polivy & Herman, 2002), and decreased body satisfaction (Durkin, Paxton, & Sorbello, 2007).

Research on the impacts of body diversity on branding and consumer behavior has produced mixed findings, with some studies showing that average and plus-sized models can be beneficial for a brand in terms of improving its brand image, brand attitudes, and advertising

effectiveness (Plotkina & Saurel, 2021; Shoenberger, Kim, & Johnson, 2020; Sohn & Youn, 2013), and other conversely finding that depicting thin models in advertisements results in a higher purchase likelihood compared to depicting average and plus-size models (Borau & Bonnefon, 2017; Lieberson & Bizer, 2021; Ridgway, 2016). Additional research has further found that using average-sized models is equally as effective as using thin models (Diedrichs & Lee, 2011; Dittmar & Howard, 2004).

Taken as a whole, prior research provides an inconclusive answer regarding the effects of body diversity on consumers' responses, as does the mixed anecdotal evidence from the marketplace. I therefore ran an exploratory study (see Study 1 below) to help develop my hypothesized effects. Contrary to my original intuition (where I predicted a positive effect), this study revealed that body diversity negatively impacted consumers' responses (i.e., attitudes towards, behavioral intentions towards and purchase likelihood of the advertised brand/product). In addition, after reviewing my literature review, it seems that prior work that has found negative effects of plus-size models on consumer responses used experimental methods (vs. surveys or qualitative research), which aligns with the methods used in this thesis. Examples of such prior work investigated the effects of body diversity in the context of a model's pose (i.e., classical vs. natural pose; Plotkina & Saurel, 2021), a model's digital enhancement (e.g. Schoenberger et al., 2020), and of product type (i.e., by flipping through a magazine with advertisements for bodycare products, shoes, or books; Borau & Bonnefon, 2017). Building on this line of work and based on the findings from my exploratory study, I hypothesize that:

H1: An advertisement featuring a plus-size model will generate more negative responses from consumers than one featuring a thin model.

This hypothesis will be tested in Studies 2a and 2b (see below; in order to confirm the exploratory findings of Study 1) using a highly popular form of marketing communications, sponsored social media posts, as brands have been spending more heavily on digital (vs. traditional) advertising for several years (Summerfield, 2022), and especially social media marketing (Powderly, 2024).

In addition, the mixed evidence from past research and the marketplace demonstrates a lack of understanding of the various reasons *why* (and *when*) body diversity can be beneficial (vs. not) for brands. Next, I will discuss potential psychological processes that may help explain why body diversity in marketing communications may be more (vs. less) effective.

The Role of Consumers' Opinion of the Model

A crucial element of advertisements employing body diversity is the model themselves, and using an individual to represent a brand in an advertisement can have both pros and cons (Thwaites et al., 2012). For example, in the case of celebrities – where the public already has an idea or opinion of the individual based on their actions, personality, and appearance – evaluations of the celebrity have been found to transfer to consumers' evaluations of the brand (Centeno & Wang, 2017; Hussain et al., 2023; Thwaites et al., 2012; Till & Shimp, 1998; White et al., 2009). This can be particularly problematic for the brand when consumer evaluations of the spokesperson are negative, given that this negative affect is now transferred to the brand itself (Hussain et al., 2023; Thwaites et al., 2012; Till & Shimp, 1998; White et al., 2009).

However, when consumers have no prior knowledge of an ad's spokesperson – as is often the case with models – they may base their opinion on observable characteristics, such as their perceived attractiveness (Mañas-Viniegra et al., 2019), which has been found to significantly affect evaluations of an advertisement (e.g. Park et al., 2021; Reingen & Kernan, 1993; Trampe

et al., 2010). When a model's body type falls outside what is typically presented in marketing campaigns, consumers' opinions will likely be based on their gut reactions to the model's appearance, and heavier body types tend to be perceived more negatively (Brewis et al., 2011; Cramer & Steinwert, 1998). In addition, physical appearance and body diversity tends to be associated with societal issues related to representation and diversity (BBC, 2023). A body diverse model may therefore not only generate a reaction based on their appearance, but also the societal issues they may be associated with. The public has often shown mixed reactions towards body diversity for a variety of reasons such as upbringing, political orientation, and health-related concerns, among others (Pick, 2023). Taken together, consumers most likely base their opinion of a model based on what they look like and/or what they represent, and their reactions to atypical (such as heavier) body types generally tend to be more negative than to thinner body types (Brewis et al., 2011; Cramer & Steinwert, 1998).

For the purposes of this thesis, opinion of the model is defined as the attractiveness and negativity-positivity rating of the model. Building on the above and the exploratory findings from Study 1 (see below), I therefore predict that consumers will have a more negative opinion of a plus-size (vs. thin) model. I also predict that consumers' positive (vs. negative) opinion of the model featured in an advertisement will positively impact their responses to the ad. Consequently, I hypothesize that:

H2: Consumers' opinion of the model featured in an advertisement will mediate the effect of the model's body size on consumers' responses to the brand/ad.

The Role of Perceived Persuasion Intent

Exposure to marketing communications usually activates consumers' persuasion knowledge, which allows them to recognize and assess potential persuasion attempts by

marketers (Rahmani, 2023). Among the many ways they may evaluate this persuasion attempt, consumers often try to identify the ulterior motives, or perceived persuasive intentions, of the advertisement. In this thesis, perceived persuasion intent is defined as the extent to which individuals evaluate marketing communication as being genuine, sincere, authentic, etc.

The persuasion knowledge literature argues that persuasion cues influence what consumers think of an ad, both negatively and positively. In the case of social media advertisements, cues that help consumers recognize such attempts, thus activating persuasion knowledge, are branded social media accounts, hashtags (e.g., #ad, #sponsored), and paid endorsement disclosures (Wojdynski, 2016). Consumers tend to be particularly sensitive to such cues on social media and in influencer marketing because they tend to place a higher importance on organic and authentic content (Myers et al., 2024), which may be evaluated as having more positive persuasive intentions (e.g. more genuine and authentic).

On one hand, past research has found that the disclosure of a sponsorship in native advertising leads to feelings of disbelief and distrust, which negatively impacts consumers' attitudes towards the post (Boerman et al., 2012; Lou et al., 2020; Rozendaal et al., 2011). Other studies have shown that the activation of persuasion knowledge can negatively affect the way consumers see the brand itself (Krouwer et al., 2017). On the other hand, some consumers find influencer marketing and sponsored content useful and see it positively. Opinions coming from an influencer tend to be seen as more authentic than information that comes directly from a brand, and consumers tend to be more trusting of influencers than brands (Leung et al., 2022; Martínez-López et al., 2020).

Of relevance to the present research, attractiveness has been shown to impact consumers' perceived persuasion intent of marketing communications (Reinhard et al., 2008). Reinhard et al.

(2008) found that more (vs. less) attractive salespeople were directionally perceived as having more (vs. less) self-serving motives, which had a negative directional effect on participants' attitudes and purchase intentions. In a similar vein, consumers' opinion of the model featured in an advertisement may impact their perceived persuasion intent, as featuring less (vs. more) attractive models may be seen as more authentic or sincere, among other motives.

Building on the above and the exploratory findings from Study 1 (see below), I therefore predict that consumers will perceive an advertisement featuring a plus-size (vs. thin) model having more positive persuasion intentions (e.g., more authentic, convincing, informative). I also predict that consumers' positive (vs. negative) perceived persuasion intent of an advertisement will positively impact their responses to the ad. Consequently, I hypothesize that:

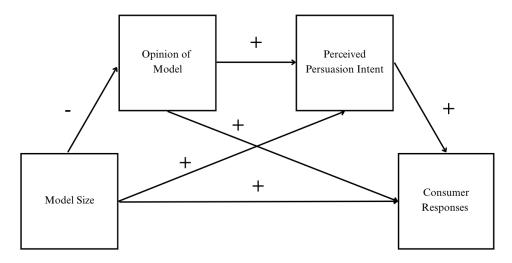
H3: Perceived persuasion intent will mediate the effect of the model's body size on consumers' responses to the brand/ad.

Taken together, my literature review suggests that consumers' opinion of the model should impact an advertisement's perceived persuasive intent, as attractiveness can serve as a persuasion cue (Reinhard et al., 2008). The exploratory findings of Study 1 (see below) are what led me to uncover this potential serial mediation effect. Although an advertisement's perceived persuasion intent could also impact consumers' opinion of the model featured in the ad (e.g., by making the persuasion attempt more explicit rather than implicit; Reinhard et al, 2008), in my thesis I only manipulated the body size of the model featured in the advertisement and no other persuasion cues, such that participant's opinion of the model should have impacter their perceived persuasive intent of the sponsored social media post rather than the other way round, given that it was the only persuasion cue that varied across conditions.

Consequently, I predict that the plus-size model will be evaluated more negatively compared to the thin model, but this evaluation will result in more positive perceived persuasion intentions of the sponsored social media post, in turn resulting in more positive consumer responses to the brand/ad. I thus hypothesize that:

H4: The effect of model body size on consumers' responses will be serially mediated through i) their opinion of the model and ii) the perceived persuasion intent of the ad.

Figure 1. Proposed conceptual model



Overview of the Studies

This thesis consists of one pre-test and three studies (Studies 1, 2a, and 2b). The goals of the pre-test were to determine (1) whether matching (vs. not) the gender of the model featured in the sponsored social media post to that of participants impacted their responses, (2) whether the various versions of the sponsored social media posts (i.e., model gender, model body size, product types) were evaluated similarly by participants, and (3) whether the products featured in the posts were considered "neutral" (i.e., irrelevant to body size) by participants. Study 1 tested the hypothesized relationship between model size and consumers' responses, and explored the roles of the proposed psychological processes (i.e., opinion of the model and perceived

persuasion intent), which were then confirmed in Study 2. Study 2a was a close replication of Study 1, while Study 2b was a conceptual replication of Study 1 (and Study 2a) using a different product, to help determine the generalizability of the findings.

Pre-Test

The pre-test had three main aims: 1) to test whether matching (vs. mismatching) the gender of participants and the model featured in the sponsored social media post impacted their perceptions of the model; 2) to test whether participants evaluated the sponsored social media posts equally in terms of credibility, authenticity, persuasiveness, etc.; and 3) to test whether the selected products (i.e., carry-on luggage and fitness watch) were perceived as less/more associated with a model's body size (as this could impact the hypothesized effects). The pretest also aimed to better understand the participants' opinions and preferences related to social media and body diversity.

Methods

Three-hundred and twenty-two U.S. participants were recruited from Amazon Mechanical Turk through the CloudResearch platform and were compensated US\$1.25 for a 9-minute study. Participants were excluded based on the following rules: 1) failed any of the attention checks; 2) incorrectly answered specific questions (e.g., indicate a nonsensical year that they were born in); 3) indicated a low level of English proficiency (i.e., less than 4 on a 7-point scale); 4) reported encountering technical issues while completing the survey; and/or 5) indicated that their data should not be included in the analyses. After exclusions, 288 participants were included in the analyses ($M_{Age} = 41.45$, SD = 11.18; 60.42% Male).

Participants first provided informed consent, completed three attention checks (e.g., "A piano is a type of animal;" True/False), and were presented with a short introduction about the

purpose of the study. Participants were then asked what gender (i.e., Male/Female/Non-binary or third gender) they identified with in order to assign an equal number of participants to the gender match (vs. mismatched) conditions. Participants who indicated identifying with a non-binary or third gender were then asked whether they identified most closely with the male or female gender at the current moment. No participant chose this option.

Participants were then randomly assigned to one of four conditions in a 2 (participant-model gender: match vs. mismatch) by 2 (model size: plus vs. thin) between-subjects design. They also were sequentially shown two sponsored social media posts featuring the same model, but promoting two different products (i.e., luggage first and fitness watch second; fixed order of presentation). The overall design of the pre-test thus was a 2 (gender match) x 2 (model size) x 2 (product type) mixed design. See Appendix A for the stimuli.

Specifically, participants were first shown a photo of the randomly assigned model and were asked to rate the model on a 7-point scale (1 = Strongly Disagree to 7 = Strongly Agree) using the following terms: likable, attractive, credible, believable, similar to me, trustworthy, authentic, genuine, and representative of me. Next, participants were sequentially presented with a sponsored social media post featuring the model pointing to a product (i.e., luggage or fitness watch). The social media post was posted by a fictional brand (i.e., TravelMate or FitMate). The caption read "Looking for the perfect sidekick in your travel [fitness] journey? The TravelMate Luggage [FitMate Fitness Watch] is by your side every step of the way. #ByYourSide #Travel [#Fitness] #LiveYourBestLife." The number of likes and comments was kept constant across posts. Participants were asked to rate each post on a 7-point scale (1= Strongly Disagree to 7 = Strongly Agree) using the following terms: visually appealing, pleasant, credible, believable, persuasive, convincing, trustworthy, authentic, genuine, and inclusive. Participants were then

asked "I believe the individual is _____ with the product advertised" and were given the following 7-point bipolar scales: *Appropriate-Inappropriate*, *Well-aligned-Not well-aligned*, *Consistent-Inconsistent*, and *A good fit-A bad fit*.

Following the evaluation of the model and of the two sponsored social media posts, participants were asked another set of questions pertaining to their perception of the size of the model ("The individual featured in the social media post was..." on a 7-point scale of 1 = Very thin to 7 = Very plus size), social media habits (e.g. "How often do you use the following social media platforms?" on a 7-point scale from 1 = Never to 7 = Multiple times a day for Instagram, TikTok, and Facebook), and their experiences with body diversity on social media (e.g. "How often do you see body diversity on social media?" and "How often do you see paid or sponsored posts featuring body diversity on social media?" on a 7-point scale from 1 = Never to 7 = Multiple times a day). Participants were also asked how body diversity makes them feel (Good-Bad, Positive-Negative, and Happy-Sad on 7-point bipolar scales) with an open-ended question to briefly explain their answers, as well as an open-ended question asking if they think there are certain products in which body diverse models are more versus less appropriate to be used in advertising.

Finally, participants were asked standard demographics questions, questions about their body type (on a 7-point scale from 1 = Very thin to 7 = Very plus size) and satisfaction with how they look ("Overall, I am satisfied with how I look." on a 7-point scale from 1 = Strongly Disagree to 7 = Strongly Agree), as well as questions related to data quality (i.e., technical difficulties, distractions, seriousness).

Results and Discussion

Factor Analyses

Factor analyses were conducted on each set of items. For instance, a factor analysis of the nine items related to the evaluation of the model (*likable*, *attractive*, *credible*, *believable*, *similar* to me, trustworthy, authentic, genuine, and representative of me) revealed two factors with Eigenvalues greater than 1. Factor 1 included the following items: *Likable*, *Credible*, *Believable*, *Trustworthy*, *Authentic*, *Genuine*. Factor 2 included: *Representative* of me and *Similar* to me. *Attractive* was kept as a single item because it loaded equally on both factors. Mean indices for Factor 1 ($\alpha = .96$) and 2 (r = .85) were then created. Table 1 shows the Eigenvalues and Cronbach's alphas for each Factor, with correlations and p-values when the factor included only two items.

Table 1. Factor Analyses – Pre-test

	Eigenvalue / r	α/p		
Evaluation of the Model ("I think the individual is")				
Factor 1: Model Evaluation (<i>Likable</i> , <i>Credible</i> , <i>Believable</i> , <i>Trustworthy</i> , <i>Authentic</i> , <i>Genuine</i>)	5.90	.96		
Factor 2: Model Representativity (Representative of me, Similar to me)	.85	< .001		
Single item: Model Attractiveness (Attractive)	-	-		
Evaluation of the Posts ("I think the social media post is")				
Luggage Factor 1: Luggage Evaluation (Credible, Trustworthy, Authentic, Genuine, Convincing, Believable, Persuasive, Pleasant, Visually Appealing)	7.50	.97		
Luggage Single item: Luggage Inclusivity (Inclusive)	-	-		
Fitness Watch Factor 1: Watch Evaluation (Credible,	7.82	.97		

Trustworthy, Authentic, Genuine, Convincing, Believable, Persuasive, Pleasant, Visually Appealing)			
Fitness Watch Single item: Watch Inclusivity (Inclusive)	-	-	
Appropriateness of the Product with the Model ("I believe the individual is with the product advertised.")			
Luggage Factor 1: Luggage Appropriateness (Appropriate, Well-Aligned, Consistent, Good Fit)	3.50	.95	
Fitness Watch Factor 1: Watch Appropriateness (Appropriate, Well-Aligned, Consistent, Good Fit)	3.61	.96	

Gender Match Versus Mismatch

I first addressed aim 1 of the pre-test by (1) conducting two-way ANOVAs for the model evaluation, model representativity, and model attractiveness measures (see Table 2) and (2) conducting three-way repeated-measure ANOVAs with product type and gender match as within-subject variables, and model size as a between-subject variable for the product evaluation, product inclusivity, and product appropriateness measures (see Table 3).

Table 2. Two-Way ANOVAs – Gender (Mis) Matching

		df	F	p
Model Evaluation	Gender Match	1	.44	.51
	Model Size x Gender Match	1	1.64	.20
Model Representativity	Gender Match	1	19.26	<.001
	Model Size x Gender Match	1	2.13	.15
Model Attractiveness	Gender Match	1	.66	.42
	Model Size x Gender Match	1	7.59	.006

As per table 2, there was a significant main effect for model representativity between the gender matched and mismatched conditions, such that participants whose gender matched that of the model indicated higher ratings on these items than participants whose gender did not match that of the model, F(1, 284) = 19.26, p < .001. This result was expected given the assumption that participants would feel more represented by and similar to a model whose gender matches their own.

There also was a significant interaction between model size and gender matching in terms of attractiveness ratings, F(1, 284) = 7.59, p = .006. Participants in the thin-mismatched condition rated the model as most attractive (M = 5.42, SD = 1.39) compared to the thin-matched condition (M = 5.05, SD = 1.47), followed by the plus-matched condition (M = 3.83, SD = 1.84), and lastly the plus-mismatched condition (M = 3.17, SD = 1.56). This finding suggests that the role of participants' perceived attractiveness of the model would be worth exploring in more depth in subsequent studies.

Table 3. Three-Way Repeated-Measure ANOVAs - Gender (Mis) Matching

		df	F	p
	Gender Match	1	.11	.74
Due do et Eveloctica	Model Size x Gender Match	1	.45	.51
Product Evaluation	Product x Gender Match	1	.002	.97
	Model Size x Product x Gender Match	1	1.42	.23
Product Inclusivity	Gender Match	1	.08	.78
	Model Size x Gender Match	1	.59	.44
	Product x Gender Match	1	.28	.60

	Model Size x Product x Gender Match	1	.02	.90
Product Appropriateness	Gender Match	1	.001	.98
	Model Size x Gender Match	1	1.50	.22
	Product x Gender Match	1	.06	.802
	Model Size x Product x Gender Match	1	.02	.89

There were no other significant results related to gender matching. These results suggest that participant-model gender matching does not need to be controlled for in subsequent studies, as it does not seem to impact most of participants' evaluations, except for perceived representativity and attractiveness.

Product Type and Model Size

Analyses were then collapsed across the gender match condition to (1) conduct one-way ANOVAs for model evaluation, model representativity, model attractiveness measures (see Table 4) and (2) conduct two-way repeated-measure ANOVAs with product type as a within-subject variable and model size as a between-subject variable for product evaluation, product inclusivity, product appropriateness measures (see Table 5).

Table 4. One-Way ANOVAs – Pre-test

Model Size	df	F	p
Model Evaluation	1	.10	.75
Model Representativity	1	2.63	.11
Model Attractiveness	1	82.74	<.001

For model attractiveness, there was a significant main effect of model size on ratings of attractiveness, F(1, 284) = 82.742, p < .001. The thin model (M = 5.23, SD = 1.439) was rated as

more attractive than the plus-size model (M = 3.52, SD = 1.739), again suggesting that this variable should be explored more in future studies. The models were rated equally on all other items.

Table 5. Two-Way Repeated-Measure ANOVAs - Pre-test

		df	F	p
	Model Size	1	1.92	.17
Product Evaluation	Product Type	1	5.58	.02
	Model Size x Product Type	1	26.14	<.001
	Model Size	1	6.13	.01
Product Inclusiveness	Product Type	1	.28	.59
	Model Size x Product Type	1	1.05	.31
	Model Size	1	1654.66	<.001
Product Appropriateness	Product Type	1	5.67	.02
	ModelSize x ProductType	1	27.77	<.001

For the product evaluation (*Likable*, *Credible*, *Believable*, *Trustworthy*, *Authentic*, *Genuine*), there was a significant main effect of product type, F(1, 284) = 5.58, p = .02, and a significant interaction between model size and product type, F(1, 284) = 26.14, p < .001. There was no significant difference between evaluations of the thin model (M = 4.34, SE = .12) and the plus-size model (M = 4.41, SE = .12) when they were advertising the luggage. On the other hand, when the post was advertising the fitness watch, there was a statistically significant difference between evaluations of the thin model (M = 4.50, SE = .12) and the plus-size model (M = 3.96,

SE = .13). Participants rated the thin model more positively. This indicates that the luggage was a more neutral product, as it generated similar evaluations across model size conditions, whereas participants reacted differently when models of different body sizes advertised a fitness watch. This is likely due to the higher salience of body type associated with the fitness watch (vs. luggage).

For the product inclusiveness measure, there was a significant main effect of model size, F(1, 284) = 6.13, p = .01. The plus-size model was seen as more inclusive (M = 4.67, SE = .12) than the thin model (M = 4.23, SE = .12).

For the product appropriateness measures (*Appropriate, Well-Aligned, Consistent, Good Fit*), there was a significant main effect of model size, F(1, 284) = 1654.66, p < .001. The thin model (M = 2.75, SE = .11) was generally seen as more appropriate than the plus-size model (M = 3.79, SE = .11). There also was a significant main effect of product type, F(1, 284) = 5.67, p = .02, and a significant interaction between model size and product type, F(1, 284) = 27.77, p < .001. The thin fitness watch condition was seen as most appropriate (M = 2.62, SD = 1.43), followed by the thin luggage condition (M = 2.88, SD = 1.37), then the plus-size luggage condition (M = 3.45, SD = 1.60), and lastly, the plus-size fitness watch condition (M = 4.14, SD = 1.82; see Table 6). Lower values indicated that the fit between the model and product was more appropriate.

Table 6. Mean Appropriateness Ratings of the Product by Model Size Condition

		Product Type		
		Luggage (SD) Fitness Watch (SD) Total (SD)		
Model Size	Thin	2.88 (1.37) ^{1a, 2a}	2.62 (1.43) ^{1b, 2a}	2.75 (1.19) ^{1d}

Plus	3.45 (1.60) ^{1a, 1c}	4.14 (1.82) ^{1b, 1c}	3.79 (1.52)
Total	3.16 (1.52) ^{2b}	3.37 (1.80) ^{2b}	

Note. Superscripts indicate significant differences at 1) $p \le .001$ and 2) $p \le 0.05$.

Other Findings

Descriptive analyses were conducted to better understand the population sampled. Participants were average users of social media (M = 4.09; SD = 1.71). Participants also reported seeing body diversity (M = 4.03; SD = 1.44) and paid body diversity advertisements on social media (M = 3.56; SD = 1.56) fairly regularly. Participants had slightly negative feelings about seeing body diversity (M = 3.22; SD = 1.53), reported being fairly satisfied with how they look (M = 4.76; SD = 1.76), and were about average weight (M = 4.13; SD = 1.22).

Participants gave a variety of responses when asked to explain how body diversity makes them feel, and fell into three main categories of responders: 1) body positive enthusiasts; 2) body positivity opposers and; 3) neutral responders. Body positivity enthusiasts had positive responses: "It encourages individuals to embrace their own unique bodies and reduces the pressure to conform to a narrow definition of beauty" and "I like seeing everybody represented." On the other hand, some were body positivity opposers and responded negatively ("They are unhealthy and should not be promoting it" and "I wouldn't want to see fat people.") Lastly, neutral responders took an indifferent stance, saying "I am indifferent to seeing various body sizes" and "Doesn't matter to me if they are big or small." These responses illustrate the opinions of the participant population sampled.

An additional exploratory qualitative question was included to get participant's opinions on whether certain products were more or less appropriate for different body types to advertise.

Responses were as expected, with many stating that plus-size individuals should not be

advertising fitness-related products, certain clothes (i.e., tight-fitted leggings, short dresses), swimwear, and even weight-loss solutions. These answers provide product categories that may not be neutral when comparing across body sizes. Consequently, I decided not to use the fitness watch stimuli in subsequent studies (and replaced it with a more neutral mobile game app) in order to avoid potential negative impressions related to the product-model match, as this potential moderating effect is beyond the scope of my thesis.

Overall, the pre-test helped determine how to best approach the subsequent studies. The pre-test indicated that participant-model gender-matching would not be necessary, as there were no differences across participant gender groups in terms of most types of ratings (aim 1), but that the model's perceived attractiveness should be explored more as it differed across model conditions (aim 2), and that the luggage acted as a neutral product compared to the fitness watch (aim 3).

Study 1

The aim of Study 1 was to better understand how a model's body size in a sponsored social media post impacts consumers' responses to the advertised brand and product, as well as potential mediating variables of this relationship. Hypotheses and analyses were pre-registered using AsPredicted (see Appendix B). In the pre-registration, I hypothesized that more (vs. less) body diversity would have a positive effect on consumers' self-image and, in turn, produce more positive attitudes toward the featured brand and product, and higher behavioral intentions. The pre-registered hypotheses were not supported, such that Study 1 instead serves as an exploratory study, and the results served as a foundation for the hypotheses formulated in this thesis (which will be confirmed in Studies 2a and 2b).

Methods

Four hundred and sixty-nine U.S. participants were recruited from Amazon Mechanical Turk through CloudResearch and compensated US\$1.00 for a 6-minute study. Participants were again excluded based on the following criteria: 1) failed any of the attention checks; 2) incorrectly answered specific questions (e.g., indicated a nonsensical age); 3) indicated a low level of English proficiency (i.e., less than 4 on a 7-point scale); 4) indicated encountering technical issues while completing the survey; and/or 5) indicated that their data should not be included in the analyses. These data exclusion criteria were pre-registered and consistently applied across all subsequent studies. After exclusions, 447 participants were included in the analyses ($M_{Age} = 44.51$, SD = 12.26; 52.30% Male, 1.79% other).

Participants first provided informed consent, answered three attention checks (e.g., "A piano is a type of animal" True/False), and were presented with a short introduction about the purpose of the study. Participants were randomly assigned to one of four conditions in a 2 (size of model: plus vs. thin) by 2 (order of measures presentation: process-outcome vs. outcome-process). The stimuli featured either a thin or plus-sized model advertising a carry-on luggage. The order of the stimuli was randomized to determine whether presenting the process measures before (vs. after) the dependent variables impacted the results. See Appendix C for the stimuli.

Participants were then presented with four statements on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree) adapted from the appearance dimension of the State Self-Esteem Scale (Heatherton & Polivy, 1991): "I feel satisfied with the way my body looks," "I feel good about myself,"; "I am pleased with my appearance," "I feel unattractive" (reverse coded). The self-esteem measure did not yield any significant results (contrary to the pre-registered hypotheses) and were not included in the subsequent studies, so they will not be discussed

further (see Appendix D for the results). To measure perceived persuasion intent, participants were presented with items adapted from past research (e.g., MacKenzie & Lutz, 1989; OberMiller & Spangenberg, 1998; Ohanian, 1990) using the prompt "This post seems..." and rated seven items on 7-point bipolar scales: *sincere-insincere*, *inauthentic-authentic*, *manipulative-not manipulative*, *unconvincing-convincing*, *not persuasive-persuasive*, *uninformative-informative*, and *not-entertaining-entertaining*.

The consumer responses measures were presented in the following way. First, participants were presented with three 7-point bipolar scales adapted from Chu and Chen (2019) to measure brand attitude with the prompt "My opinion of the TravelMate luggage is:" badgood, negative-positive, and unfavorable-favorable. Then, the following four statements were adapted from Machleit et al. (1990) to measure behavioral intentions, which were rated on a 7-point scale (1 = Strongly disagree to 7 = Strongly agree) with "After seeing this post, I would..." as instructions: "like to know more about TravelMate," "be interested in learning more about the luggage," "look for more information about TravelMate," and "recommend this luggage to other people." Lastly, participants were asked about their purchase likelihood (i.e., "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?") using a 7-point scale (1 = Extremely unlikely to 7 = Extremely likely); the item was adapted from Chu and Chen (2019).

Next, participants responded to two control questions related to i) Model attractiveness ("I found the female model featured in the social media post attractive") rated on a 7-point scale ($1 = Strongly\ disagree$ to $7 = Strongly\ agree$) and ii) Opinion of the model ("What was your overall opinion of the female model featured in the social media post?" rated on a 7-point scale ($1 = Extremely\ negative$ to $7 = Extremely\ positive$).

Finally, participants were asked standard demographics questions, questions about their body type (on a 7-point scale, from 1 = Very thin to 7 = Very plus size) and satisfaction with how they look ("Overall, I am satisfied with how I look;" on a 7-point scale from 1 = Strongly Disagree to 7 = Strongly Agree), as well as questions related to data quality (i.e., technical difficulties, distractions, seriousness).

Results and Discussion

Factor Analyses

Factor analyses were conducted for the four self-esteem items, seven perceived persuasion intent items, eight consumer responses items, and two control variables (attractiveness and opinion of the model). For instance, a factor analysis of the seven perceived persuasion intent items revealed one factor with an Eigenvalue greater than 1. An index variable was thus created by averaging participants' scores on the seven items ($\alpha = .90$). Of note, although the eight consumer responses measures loaded onto one factor and had a high Cronbach's alpha $(\alpha = .95)$, the items were split into three measures, because they consist of conceptually different outcomes: attitudes towards the brand/product (3 items: "My opinion of the TravelMate luggage is...bad-good, negative-positive, and unfavorable-favorable"), behavioral intentions (4 items: "After seeing this post, I would...like to know more about TravelMate; be interested in learning more about the luggage; look for more information about TravelMate; recommend this luggage to other people."), and purchase likelihood (1 item: "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?"). Subsequent analyses in this thesis looked at these three measures separately. Table 7 shows the Eigenvalues and Cronbach's alphas for each variable, with correlations and p-values when the variable included only two items (i.e., the control variables).

Table 7. Factor Analyses – Study 1

	Eigenvalue / r	α/p		
Perceived Persuasion Intent (Process)				
Factor 1: Sincere, Authentic, Not Manipulative, Convincing, Persuasive, Informative, Entertaining	4.49	.90		
Attitudes (Outcome)				
Items: "My opinion of the TravelMate luggage isbad-good, negative-positive, and unfavorable-favorable"	2.81	.97		
Behavioral Intentions (Outcome)				
Items: "After seeing this post, I wouldlike to know more about TravelMate; be interested in learning more about the luggage; look for more information about TravelMate; recommend this luggage to other people."	3.45	.95		
Purchase Likelihood (Outcome)				
Single item: "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?"	-			
Opinion of the Model				
Factor 1: Attractiveness of the Model, Opinion of the Model	.76	<.001		

Order of Presentation

Following the pre-registered analyses, I conducted two-way between-subject ANOVAs to test for the effects of model size and order of presentation on the process measures and dependent variables. See Appendix E for results. There was a significant interaction between model size and order only for purchase likelihood (p = .03), whereas all the other interaction effects were not significant (all $ps \ge .15$).

Order of Presentation with Covariates

Next, I conducted exploratory analyses by including gender, age, body type, and body satisfaction as covariates in two-way between-subject ANOVAs testing for potential order effects, as conducted above. The results of these analyses can be found in Appendix F. When these covariates were included in the analyses, there were no significant interactions between model size and order of presentation on any of the process or outcome measures (all $ps \ge .07$).

Main Effects of Model Size

Following the pre-registered analyses, data were collapsed across the order of presentation conditions and one-way ANOVAs were conducted to test for the effects of model size on the process measures and dependent variables. Table 8 presents the results for these analyses, along with the mean ratings for the thin and plus-size conditions. The main effect of model size was significant for attitudes (F(1,433) = 4.95, p = .03) and opinion of the model (F(1,433) = 94.67, p < .001). Participants had more positive attitudes towards the post showcasing a thin model (M = 5.05, SD = 1.17) compared to the post showcasing a plus-size model (M = 4.79, SD = 1.24). Participants also had more positive opinions of the thin model (M = 5.10, SD = 1.02) compared to the plus-size model (M = 3.99, SD = 1.33).

Table 8. One-Way ANOVAs for Model Size – Study 1

Model Size	df	F	p	$M_{ m Thin} ({ m SD})$	M _{Plus} (SD)
Attitudes	1, 433	4.95	.03	5.05 (1.17)	4.79 (1.24)
Behavioral Intentions	1, 433	3.29	.07	4.17 (1.58)	3.88 (1.68)
Purchase Likelihood	1, 433	3.16	.08	4.66 (1.39)	4.42 (1.42)
Persuasion Knowledge	1, 433	.15	.70	4.14 (1.24)	4.09 (1.30)
Opinion of Model	1, 433	94.67	<.001	5.10 (1.02)	3.99 (1.33)

The other two dependent variables (i.e., behavioral intentions and purchase likelihood) had marginally significant main effects of model size (all $ps \ge .07$). There were no significant main effects of model size on the two process measures (i.e., self-esteem and perceived persuasion intent).

Main Effects of Model Size with Covariates

I then conducted additional exploratory analyses by including the four previously mentioned covariates (i.e, gender, age, body type, and body satisfaction) in the one-way ANOVAs. Appendix G outlines these results. With the addition of covariates in the analyses, both attitudes and opinion of the model remained the only two significant effects.

Serial Mediation Analyses

As discussed as part of my conceptual framework, consumers' opinion of the model should impact an advertisement's perceived persuasive intent, as attractiveness can serve as a persuasion cue (e.g. Park et al., 2021; Reingen & Kernan, 1993; Trampe et al., 2010). I therefore decided to explore the roles of participants' opinion of the model and their perceived persuasion intent of the sponsored social media posts as potential sequential mediators of the effects of model size on consumers' responses.

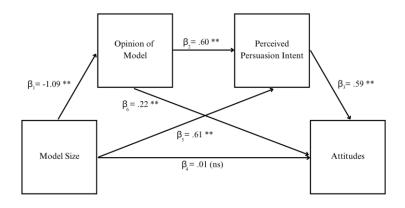
Serial mediation analyses were conducted using PROCESS Model 6, with model size as the independent variable (coded as 0 = thin and 1 = plus-sized model), opinion of the model as the first mediator (continuous), perceived persuasion intent as the second mediator (continuous) and attitudes, behavioral intentions and purchase likelihood as the dependent variables. Each dependent variable was analyzed separately.

As shown in Figure 2, with attitudes as the dependent variable, the effects of the indirect path of (1) model size on opinion of model ($\beta = -1.09$, SE = .11, t = -9.80, p < .001), (2) opinion

25

of model on perceived persuasion intent (β = .60, SE = .04, t = 14.01, p < .001), and (3) perceived persuasion intent on attitudes (β = .59, SE = .04, t = 16.70, p < .001) were all significant. Conversely, there was a non-significant direct effect of model size on attitudes (4; β = .01, SE = .09, t = .07, p = .94) when the serial mediators were included in the model. The effects of (5) model size on perceived persuasion intent (β = .61, SE = .11, t = 5.52, p < .001), and (6) opinion of model on attitudes (β = .22, SE = .04, t = 5.73, p < .001) were also significant. Mediation effects through either opinion of model (95% CI [-.35; -.14]) or perceived persuasion intent (95% CI [.24; .50]) were both significant, as well as the serial mediation (95% CI [-.50; -.28]). Table 9 outlines the findings for all three dependent variables.

Figure 2. Serial Mediation – Study 1



Note. ** indicates significant differences at p < .001.

Table 9. Serial Mediations – Study 1

	Opinion of Model	Perceived Persuasion Intent	Attitudes
Model Size	$\beta = -1.09$, $SE = .11$, $t = -9.80$, $p < .001$	$\beta = .61, SE = .11, t = 5.52, p < .001$	$\beta = .01$, $SE = .09$, $t = .07$, $p = .94$
Opinion of Model	-	$\beta = .60, SE = .04, t = 14.01, p < .001$	$\beta = .22$, $SE = .04$, $t = 5.73$, $p < .001$
Perceived Persuasion Intent	-	-	$\beta = .59$, $SE = .04$, $t = 16.70$, $p < .001$

Mediation 95% CI	[35;14]	[.24; .50]	[50;28]
	Opinion of Model	Perceived Persuasion Intent	Behavioral Intentions
Model Size	$\beta = -1.09$, $SE = .11$, $t = -9.80$, $p < .001$	$\beta = .61$, $SE = .11$, $t = 5.52$, $p < .001$	$\beta = .06$, $SE = .12$, $t = .44$, $p = .66$
Opinion of Model	-	$\beta = .60, SE = .04, t = 14.01, p < .001$	$\beta = .29$, $SE = .06$, $t = 5.11$, $p < .001$
Perceived Persuasion Intent	-	-	β = .74, SE = .05, t = 14.37, p < .001
Mediation 95% CI	[46;18]	[.30; .63]	[63;35]
	Opinion of Model	Perceived Persuasion Intent	Purchase Likelihood
Model Size	$\beta = -1.09$, $SE = .11$, $t = -9.80$, $p < .001$	$\beta = .61, SE = .11, t = 5.52, p < .001$	$\beta = .11, SE = .11, t = .95, p = .34$
Opinion of Model	-	$\beta = .60, SE = .04, t = 14.01, p < .001$	$\beta = .30, SE = .05, t = 5.95, p < .001$
Perceived Persuasion Intent	-	-	$\beta = .56$, $SE = .05$, $t = 12.02$, $p < .001$
Mediation 95% CI	[-46;21]	[.21; .48]	[48;26]

This serial mediation generated important insights into the effects of model size on consumers' responses. The main effects of body size were negative according to the one-way ANOVAs, as the plus-size model produced lower attitudes, behavioral intentions, and purchase likelihood than the thin one, but the indirect effects on these outcome variables were positive in the serial mediations.

Serial Mediation Analyses with Covariates

The serial mediation analyses were run again including the four aforementioned covariates and can be found in Appendix H. Adding age, gender, body type, and body satisfaction in the analyses did not change the results.

Discussion

In sum, study 1 revealed a full serial mediation between model size and attitudes, behavioral intentions, and purchase likelihood through opinion of the model and perceived persuasion intent. The one-way ANOVAs revealed significant (attitudes) or marginally

significant (behavioral intentions, purchase likelihood) main effects of model size, and these effects became non-significant in the serial mediations.

In the serial mediation, the plus-size model was evaluated more negatively by participants (β 1) than the thin model, but this evaluation resulted in a more positively perceived persuasion intentions (β 2), resulting in more positive attitudes, intentions, and purchase likelihood towards the promoted brand (β 3). Interestingly, when looking at the separate effects of each mediator, even if the plus-size model was evaluated more negatively (β 1), she was seen as having more positive persuasion intentions (β 5). These findings highlight the importance of considering the role of both variables when assessing consumers' responses to body diversity, which could also help explain why prior work has found conflicting effects of body diversity (Borau & Bonnefon, 2017; Diedrichs & Lee, 2011; Dittmar & Howard, 2004; Lieberson & Bizer, 2021; Ridgway, 2016).

Building on these exploratory findings, I modified my pre-registered hypotheses for Study 2, as it aimed to confirm the results of Study 1. These exploratory results thus served as a foundation for the hypotheses presented as part of my conceptual framework. The main effects of model size found in this study served as the basis for H1, and the serial mediation served as the foundation for H2-H4. Next, Study 2a and 2b will test these hypotheses and attempt to replicate the serial mediation uncovered through exploratory analyses in Study 1.

Study 2a

The aim of Study 2 was to closely (Study 2a) and conceptually (Study 2b) replicate the exploratory findings from Study 1. Study 2a's hypotheses and analyses were pre-registered using AsPredicted (see Appendix I). Specifically, the aim of Study 2a was to closely replicate Study 1 using the same product (i.e., carry-on luggage) and social media posts (featuring the same thin

and plus-sized female models) as stimuli. The main differences between Studies 1 and 2a are the inclusion and order of presentation of (some of) the measures.

Methods

Two hundred twenty-nine U.S. participants were recruited from Amazon Mechanical Turk through CloudResearch and compensated US\$1.00 for a 6-minute study. After applying the same pre-registered exclusion criteria as in Study 1, 223 participants were included in the analyses ($M_{Age} = 45.12$, SD = 12.63; 43.90% Male).

The procedure was identical to Study 1 except that (1) the order of presentation of the measures was kept consistent, such that participants saw the process measures before seeing the outcome measures, (2) the self-esteem measure was not included in the study. See Appendix J for stimuli.

Results and Discussion

Factor Analyses

Factor analyses were conducted for the perceived persuasion intent measure, three outcome measures, and opinion of the model measure. For instance, a factor analysis of the two opinion of the model items (attractiveness and general opinion of the model) revealed one factor with an Eigenvalue greater than 1. Indices were created for applicable measures by averaging the related items. Table 10 shows the Eigenvalues and Cronbach's alphas for each variable, with correlations and p-values when the variable included only 2 items. As an aside, the factor analysis for the perceived persuasion intent items revealed two factors with Eigenvalues greater than 1 but, for the sake of consistency, a mean index was created for all the items ($\alpha = .890$).

Table 10. Factor Analyses – Study 2a

	Eigenvalue / r	α/p					
Opinion of the Model (Mediator 1	Opinion of the Model (Mediator 1)						
Factor 1: Attractiveness of the Model, General Opinion of the Model	.78	<.001					
Perceived Persuasion Intent (Mediate	or 2)						
Factor 1: Convincing, Persuasive, Informative, Entertaining	4.35	.78					
Factor 2: Authentic, Sincere, Not Manipulative	1.04	.90					
Combined factors	-	.89					
Outcome Measures							
Attitudes Factor 1: "My opinion of the TravelMate luggage is…bad-good, negative-positive, and unfavorable-favorable"	2.85	.97					
Behavioral Intentions Factor 1: "After seeing this post, I would…like to know more about TravelMate; be interested in learning more about the luggage; look for more information about TravelMate; recommend this luggage to other people."	3.47	.95					
Purchase Likelihood "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?"	-	-					

Main Effects of Model Size

Following the pre-registered analyses, one-way ANOVAs were conducted to test for the effects of model size on the process and dependent measures. Table 11 presents the results for these analyses along with the mean ratings for the thin and plus-size conditions. The main effect of model size was significant for opinion of the model (F(1,221) = 4.87, P < .001), such that participants had more positive opinions of the thin model (M = 4.87, SE = .12) than the plus-size

model (M = 4.21, SE = .12). No other main effects were significant (all $ps \ge .20$). These main effects of model size do not provide support for H1.

Table 11. One-Way ANOVAs for Model Size – Study 2a

Model Size	df	F	p	M _{Thin} (SE)	$M_{ m Plus}$ (SE)
Attitudes	1, 221	.01	.90	4.63 (.13)	4.60 (.12)
Behavioral Intentions	1, 221	.05	.83	3.75 (.16)	3.70 (.16)
Purchase Likelihood	1, 221	.02	.89	4.15 (.15)	4.17 (.15)
Persuasion Knowledge	1, 221	1.65	.20	4.00 (.13)	3.77 (.12)
Opinion of Model	1, 221	14.91	<.001	4.87 (.12)	4.21 (.12)

Main Effects of Model Size with Covariates

I conducted exploratory analyses of the one-way ANOVAs for model size on the process and dependent measures by including the same covariates as in Study 1 (i.e., gender, age, body type and, body satisfaction). These results can be found in Appendix K. Opinion of the model remained the only significant main effect.

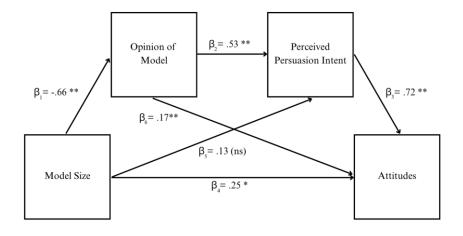
Serial Mediation Analyses

Serial mediation analyses were conducted using PROCESS Model 6 with model size as the independent variable (coded as 0 = thin and 1 = plus-sized model), opinion of the model as the first mediator (continuous), perceived persuasion intent as the second mediator (continuous) and attitudes, behavioral intentions and purchase likelihood as the dependent variables. Each dependent variable was analyzed separately.

As shown in Figure 3, with attitudes as the dependent variable, the effects of the indirect path of (1) model size on opinion of model ($\beta = -.67$, SE = .17, t = -3.86, p < .001), (2) opinion of model on perceived persuasion intent ($\beta = .53$, SE = .06, t = 9.16, p < .001), and (3) perceived

persuasion intent on attitudes (β = .72, SE = .05, t = 14.85, p < .001) were all significant. There was a significant direct effect of model size on attitudes (4; β = .25, SE = .11, t = 2.26, p = .02) when the serial mediators were included in the model. The effect of (5) model size on perceived persuasion intent (β = .13, SE = .15, t = .85, p = .40) was not significant whereas (6) that of opinion of model on attitudes (β = .17, SE = .05, t = 3.39, p = .0008) was significant. The mediation effect through opinion of model (95% CI [-.22; -.03]) was significant, whereas through perceived persuasion intent (95% CI [-.24; .32]) was not. The serial mediation (95% CI [-.41; -.12]) was significant. These findings provide support for H2 and H4, but not H3. Table 12 outlines the findings for all three dependent variables.

Figure 3. Serial Mediation – Study 2a



Note. * indicates significant differences at p < .05; ** indicates significant differences at p < .001.

Table 12. Serial Mediations – Study 2a

	Opinion of Model Perceived Persuasion Intent		Attitudes
Model Size	β =67, SE = .17, t = -3.86, p < .001	β = .13, SE = .15, t = .85, p =.40	$\beta = .25, SE = .11, t = 2.26, p = .02$
Opinion of Model	-	$\beta = .53$, $SE = .06$, $t = 9.16$, $p < .001$	$\beta = .17, SE = .05, t = 3.39, p < .001$
Perceived Persuasion	-	-	$\beta = .72, SE = .05, t = 14.85, p < .001$

Intent				
Mediation 95% CI	[22;03]	[14; .32]	[41;12]	
	Opinion of Model	Perceived Persuasion Intent	Behavioral Intentions	
Model Size	β =67, SE = .17, t = -3.86, p < .001	β = .13, SE = .15, t = .85, p =.40	β = .30, SE = .14, t = 2.12, p = .035	
Opinion of Model	-	β = .53, SE = .06, t = 9.16, p < .001	β = .21, SE = .06, t = 3.33, p = .001	
Perceived Persuasion Intent	-	-	β = .94, SE = .06, t = 15.23, p < .001	
Mediation 95% CI	[25;04]	[18; .41]	[54;16]	
	Opinion of Model	Perceived Persuasion Intent	Purchase Likelihood	
Model Size	$\beta =67$, $SE = .17$, $t = -3.86$, $p < .001$	$\beta = .13$, $SE = .15$, $t = .85$, $p = .40$	$\beta = .35$, $SE = .13$, $t = -2.61$, $p = .01$	
Opinion of Model	-	β = .53, SE = .06, t = 9.16, p < .001	β = .21, SE = .06, t = 3.51, p < .001	
Perceived Persuasion Intent	-	-	$\beta = .81, SE = .06, t = 13.89, p < .001$	
Mediation 95% CI	[25;04]	[15; .38]	[48;13]	

Serial Mediations with Covariates

The serial mediation analyses were run again including the same four covariates and can be found in Appendix L. Adding the covariates age, gender, body type, and body satisfaction did not change the results.

Discussion

Contrary to Study 1, I found a suppression effect of opinion of the model and perceived persuasion intent rather than a full mediation, because the main effects of model size became more (vs. less) significant when the serial mediators were added in the model. The one-way ANOVAs revealed non-significant main effects of model size on the three outcome measures (i.e., attitudes, behavioral intentions, and purchase likelihood), but these effects became significant when the serial mediators were added to the analyses.

Overall, the pattern of results was consistent with Study 1. The plus-size model was evaluated more negatively by participants (β 1) than the thin model, but this evaluation resulted in a more positively perceived persuasion intent (β 2), resulting in more positive attitudes, intentions, and purchase likelihood towards the promoted brand (β 3). When looking at the separate effects of each mediator, the plus-size model was perceived as having more positive persuasion intent, but these effects were not significant for any of the three outcome measures (β 5). These findings provide support for H2 and H4, but not H3.

Although Study 2a was a close replication to Study 1, the former ended up slightly differing from the latter. Notable differences included the gender composition of the sample (Study 1 = 52.30% male; Study 2a = 43.90% male) and the removal of the self-esteem items, which could have impacted the results of Study 2a. I will discuss the implications of the points further in the general discussion.

Study 2b

Study 2b was a conceptual replication of Study 1 and 2a, with the aim of testing whether the serial mediation findings would replicate when using a different product. The stimuli in Studies 1 and 2a featured a carry-on luggage and, based on the qualitative comments gathered in the pre-test, this product can be considered higher involvement as it requires more money, time, and efforts to purchase. Study 2b thus instead featured a low-involvement product: a mobile game app. Study 2b's hypotheses and analyses were pre-registered using AsPredicted (see Appendix I).

Methods

Two hundred thirty-three U.S. participants were recruited from Amazon Mechanical Turk through CloudResearch and compensated US\$1.00 for a 6-minute study. After applying the same

pre-registered exclusion criteria as Studies 1 and 2a, 222 participants were included in the analyses ($M_{Age} = 44.82$, SD = 14.09; 47.30% Male). The procedure was identical to Study 2a, except that the product featured in the sponsored social media post was a mobile game app. See Appendix J for stimuli.

Results and Discussion

Factor Analyses

Factor analyses were conducted for the perceived persuasion intent measure, three outcome measures, and opinion of the model measure (attractiveness and general opinion of the model). For instance, perceived persuasion intent revealed one factor with Eigenvalue greater than 1. Mean indices were created for all applicable measures. Table 13 shows the Eigenvalues and Cronbach's alphas for each factor, with correlations and p-values when the factor included 2 items.

Table 13. Factor Analyses – Study 2b

	Eigenvalue / r	α / p					
Opinion of the Model (Mediator	Opinion of the Model (Mediator 1)						
Factor 1: Attractiveness of the Model, General Opinion of the Model	.74	<.001					
Perceived Persuasion Intent (Mediate	Perceived Persuasion Intent (Mediator 2)						
Factor 1: Sincere, Authentic, Not Manipulative, Convincing, Persuasive, Informative, Entertaining	4.64	.91					
Outcome Measures							
Attitudes Factor 1: "My opinion of the TravelMate luggage is…bad-good, negative-positive, and unfavorable-favorable"	2.86	.98					
Behavioral Intentions Factor 1: "After seeing this post, I would…like to know more about TravelMate; be interested in	3.57	.96					

learning more about the luggage; look for more information about TravelMate; recommend this luggage to other people."		
Purchase Likelihood "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?"	1	-

Main Effects of Body Size

Following the pre-registered analyses, one-way ANOVAs were conducted for model size on the process and dependent measures. Table 14 presents the results for these analyses along with the mean ratings for the thin and plus-size conditions. The main effect of model size was significant for the opinion of the model (F(1,221) = 4.87, p < .001), such that participants had more positive opinions of the thin model (M = 4.73, SE = .12) than the plus-size model (M = 3.78, SE = .12). No other main effects were significant.

Table 14. One-Way ANOVAs for Model Size – Study 2b

Model Size	df	F	p	M _{Thin} (SE)	M _{Plus} (SE)
Attitudes	1, 220	1.05	.31	3.79 (.16)	4.01 (.15)
Behavioral Intentions	1, 220	.51	.48	2.75 (.17)	2.92 (.16)
Purchase Likelihood	1, 220	.02	.89	3.03 (.180)	3.06 (.17)
Persuasion Knowledge	1, 220	.02	.88	3.81 (.13)	3.83 (.13)
Opinion of Model	1, 220	30.62	<.001	4.73 (.12)	3.78 (.12)

Main Effects of Body Size with Covariates

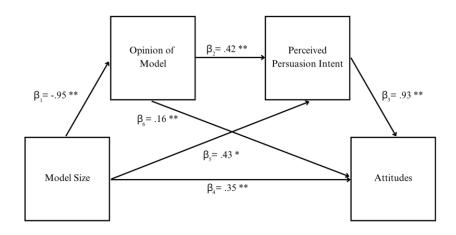
I continued with exploratory analyses of the one-way ANOVAs for model size on the process and dependent measures with the same covariates included in Studies 1 and 2a (i.e., gender, age, body type, and body satisfaction). These results can be found in Appendix M. Opinion of the model remained the only significant main effect.

Serial Mediation Analyses

Serial mediation analyses were conducted using PROCESS Model 6 with model size as the independent variable (coded as 0 = thin and 1 = plus-sized model), opinion of the model as the first mediator (continuous), perceived persuasion intent as the second mediator (continuous) and attitudes, behavioral intentions and purchase likelihood as the dependent variables. Each dependent variable was analyzed separately.

As shown in Figure 4, with attitudes as the dependent variable, the effects of the indirect path of (1) model size on opinion of model (β = -.95, SE = .17, t = -5.53, p < .001), (2) opinion of model on perceived persuasion intent (β = .42, SE = .07, t = 6.29, p < .001), and (3) perceived persuasion intent on attitudes (β = .93, SE = .05, t = 19.50, p < .001) were all significant. There was a significant direct effect of model size on attitudes (4; β = .35, SE = .13, t = 2.68, p = .01) when the serial mediators were included in the model. The effect of (5) model size on perceived persuasion intent (β = .43, SE = .18, t = 2.35, p = .02) and (6) opinion of model on attitudes (β = .16, SE = .05, t = 3.05, p = .003) were significant. Mediation effects through either opinion of model (95% CI [-.28; -.05]) or perceived persuasion intent (95% CI [.07; .71]) were both significant, as well as the serial mediation (95% CI [-.55; -.21]). Table 15 outlines the findings for all three dependent variables. A full serial mediation was found for purchase likelihood, where the direct effect of model size on purchase likelihood was not significant (β = .20, SE = .17, t = 1.14, p = .26) but all other effects were. These findings provide support for H2-H4.

Figure 4. Serial Mediation – Study 2b



Note. * indicates significant differences at p < .05; ** indicates significant differences at p < .001.

Table 15. Serial Mediations – Study 2b

	Opinion of Model	Perceived Persuasion Intent	Attitudes
Model Size	$\beta =95$, $SE = .17$, $t = -5.53$, $p < .001$	β = .43, SE = .18, t = 2.35, p = .02	β = .35, SE = .13, t = 2.68, p = .01
Opinion of Model	-	β = .42, SE = .07, t = 6.29, p < .001	$\beta = .16$, $SE = .05$, $t = 3.05$, $p = .003$
Perceived Persuasion Intent	-	-	$\beta = .93$, $SE = .05$, $t = 19.49$, $p < .001$
Mediation 95% CI	[28;05]	[.07; .71]	[55;21]
	Opinion of Model	Perceived Persuasion Intent	Behavioral Intentions
Model Size	$\beta =95$, $SE = .17$, $t = -5.53$, $p < .001$	β = .43, SE = .18, t = 2.35, p = .02	$\beta = .36$, $SE = .17$, $t = 2.14$, $p = .03$
Opinion of Model	-	β = .42, SE = .07, t = 6.29, p < .001	$\beta = .23$, $SE = .07$, $t = 3.43$, $p = .001$
Perceived Persuasion Intent	-	-	β = .84, SE = .06, t = 13.56, p < .001
Mediation 95% CI	[39;09]	[.07; .64]	[51;19]
	Opinion of Model	Perceived Persuasion Intent	Purchase Likelihood
Model Size	$\beta =95$, $SE = .17$, $t = -5.53$, $p < .001$	β = .43, SE = .18, t = 2.35, p = .02	β = .20, SE = .17, t = 1.14, p = .26
Opinion of Model -		$\beta = .42$, $SE = .07$, $t = 6.29$, $p < .001$	β = .20, SE = .07, t = 2.93, p = .004
Perceived Persuasion Intent	-	-	β = .97, SE = .06, t = 15.33, p < .001
Mediation 95% CI	[35;05]	[.07; .74]	[57;23]

Serial Mediation Analyses with Covariates

The serial mediation analyses were run again including the same four covariates and can be found in Appendix N. Adding age, gender, body type, and body satisfaction to the analyses did not change the results.

Discussion

Contrary to Study 1 but similar to Study 2a, I found a suppression effect of opinion of the model and perceived persuasion intent, rather than a full mediation, because the main effects of model size became more (vs. less) significant when the serial mediators were added in the model. The one-way ANOVAs revealed non-significant main effects of model size on the three outcome measures, attitudes, behavioral intentions, and purchase likelihood, but these effects became significant when included in the serial mediation.

Overall, in the serial mediation, the plus-size model was evaluated more negatively by participants (β 1) than the thin model, but this evaluation resulted in a more positively perceived persuasion intent (β 2), resulting in more positive attitudes, intentions, and purchase likelihood towards the promoted brand (β 3). Similar to Study 1, when looking at the separate effects of each mediator, the plus-size model was evaluated more negatively (β 1), but was seen as having more positive persuasion intentions (β 5). These findings provide support for H2-H4. In addition, the results of Study 2b suggest that the findings of Studies 1 and 2a generalize to a different product (i.e., lower involvement mobile game app vs. higher involvement carry-on luggage).

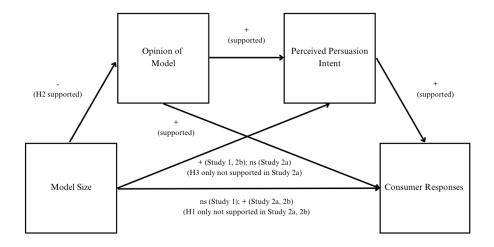
General Discussion

As many consumers demand more diversity in marketing communications, brands need to better understand when and why they may respond more positively (vs. negatively) to body diverse models, among other types of representation (e.g., race/ethnicity, gender/sexual

orientation, disability). Overall, the aim of this thesis was to better understand how showcasing models of different body sizes in sponsored social media posts impacted consumers' responses to the advertised brand and product.

The pre-test established that there was no significant effect of participant-model gender matching, identified attractiveness as a variable worthy of further exploration, and determined that a carry-on luggage was perceived as a more neutral product than a fitness watch. Study 1 explored the effects of model size (i.e., thin vs. plus) on consumers' responses (i.e., attitudes, behavioral intentions, purchase likelihood). In addition to identifying a significant main effect of model size on attitudes and marginally significant main effects on behavioral intentions and purchase likelihood, this study revealed a serial mediation effect of model size on the three outcome measures through participants' opinion of the model and their perceived persuasion intent of the post. Study 2 aimed to replicate and confirm Study 1's findings, with Study 2a being a close replication (using the same stimuli; i.e., carry-on luggage) and Study 2b being a conceptual replication (using a lower-involvement product; i.e., a mobile game app). Both Study 2a and 2b replicated the serial mediation effects found in Study 1. Figure 5 offers a summary of the findings and hypotheses.

Figure 5. Summary of Findings



Theoretical Contributions

My thesis offers theoretical contributions to the literature on marketing communications, on influencer marketing, and on body diversity. First, the current research identified that consumers' opinion of the model played a role in the effects of featuring a more (vs. less) body diverse model in marketing communications, as the plus size (vs. thin) model was evaluated more negatively across all studies. This result is in line with prior research on the use of celebrities in advertising and how their evaluations by consumers tend to transfer to the brand (Centeno & Wang, 2017; Hussain et al., 2023; Thwaites et al., 2012; Till & Shimp, 1998; White et al., 2009). My findings thus suggest that such transference may also occur with unknown models (or spokespersons).

Second, the current research identified that marketing communications' perceived persuasion intentions played a role in the effect of featuring a more (vs. less) body diverse model in marketing communications, as the plus size (vs. thin) model was perceived as having more positive persuasion intentions across the studies. This may be because it still is relatively less common to see body diverse models in marketing communications such that, when they are featured, the ads are seen as more authentic, sincere, etc. (Brewster & Sklar, 2022).

Lastly, the current research identified that both consumers' opinion of the model and their perceived persuasion intentions of the marketing communications played a sequential role in the effect of featuring a more (vs. less) body diverse model in marketing communications, as serial mediations were found across the studies. Not only did the addition of opinion of the model in the analyses make the effects of consumer responses significant, but it also made the effects related to perceived persuasion intent significant. My findings therefore contribute to prior research that has shown the role of a salesperson's attractiveness on their perceived persuasion

intentions (Reinhard et al.; 2008), by extending this effect to consumers' opinions of a model featured in a sponsored social media post.

Limitations and Future Research Directions

My thesis has several limitations that offer avenues for future research. First, the serial mediation effects found across the studies differed in their nature, as they were mediation effects in Study 1 and suppression effects in Studies 2a and 2b (as the main effects became more, rather than less, significant in the serial mediation analyses). This means that the roles of opinion of the model and perceived persuasion intent, though important, remain somewhat unclear. On one hand, these variables could be psychological processes underlying the relationship between model size and consumer responses (based on the mediation effects found in Study 1). On the other hand, they could instead be confounding factors that increase the magnitude of the effects of model size on consumer responses once they are controlled for (based on the suppression effects found in Studies 2a and 2b; MacKinnon et al., 2000). The exact roles of these variables are thus still unclear based on my findings and warrant further investigation.

The different serial mediation versus suppression effects found across studies could be due to changes in experimental procedures between Study 1 and Studies 2a and 2b. For instance, Study 1 included a state self-esteem measure, which was not included in Studies 2a and 2b. Even if there was no effect on or of self-esteem in Study 1 (hence why it was not included in subsequent studies; more on this below), completing this scale may still have impacted participants' answers on other questions due to a mere measurement effect (Morwitz et al., 1993). Future research may want to investigate whether merely making self-esteem (or related constructs) salient impacts how consumers respond to body diversity. For example, past research has linked negative mood to negative evaluations of the self (Brown & Mankowski, 1993).

Future research can investigate whether increased self-esteem salience impacts mood and, in turn, results in a negative evaluation of others via negative affect transference. Additionally, assessing self-esteem could have been perceived as a threat by some participants (e.g., who have a lower self-image), leading them to react to the measure (rather than or in addition to the stimuli), thus impacting their evaluations (VanDellen et al., 2011). Future research could test whether measuring self-esteem (vs. not) plays a role in consumers' evaluations in decision contexts related to their self-image.

In addition, although there are mixed findings in the literature regarding how consumers react to body diversity (Diedrichs, Lee, & Kelly, 2011; Hallberg, 2023), in the current research, participants had a more negative opinion of the plus-size (vs. thin) model, but they ascribed more positive persuasion intentions to a sponsored social media post featuring such model. Investigating why this may be the case was beyond the scope of this thesis, but future research could attempt to unpack these findings. For instance, the positive effect of body diversity on the perceived persuasion intentions of marketing communications could be because plus-size (vs. thin) models may be seen as more genuine, as they do not fit with common beauty standards, or because it still is relatively less common to see body diverse models in advertisements, and thus may still seem more novel to consumers, among other potential reasons that could be investigated in future work. Relatedly, this thesis found that the plus-sized model generated more negative opinions but more positive persuasion intentions (based on the direct effects), while positive opinions generated more positive persuasion intentions (based on the correlations between the two mediators). For the effects to correspond, seeing the plus-size model should have either generated *positive* opinions of the model or *negative* perceived persuasion intentions.

Future research could attempt to unpack these conflicting findings by, for instance, investigating whether one of the effects may be "overpowering" the other.

Fourth, contrary to prior research on body diversity (e.g. Borau & Bonnefon, 2015; Dittmar & Howard, 2004; Grabe, Ward, & Hyde, 2008; Polivy & Herman, 2002), the current research did not find any significant effects of exposure to body diversity on participants' self-esteem, nor any significant role of self-esteem. It could be because participants in my studies were exposed to only one social media post featuring body diversity (vs. not), which may not be enough to have an effect. Prior research that has found effects of body diversity on body (dis)satisfaction has mostly used surveys or qualitative methods (Diedrichs, Lee, & Kelly, 2011; Ridgway, 2016), such that their participants may have had longer and/or more repeated exposure to body diversity. Future research could further investigate how much exposure (in terms of both duration and frequency) to body diversity is needed to impact (positively or negatively) consumers' self-image.

Self-esteem may also be more likely to play a role in consumption that is more (vs. less) related to self-image. In my studies, I only used relatively "weight-neutral" products (i.e., carry-on luggage and mobile game app), but the pre-test suggested that other products (i.e., fitness watch) may be perceived differently when being paired with body diversity (vs. not). Future research could thus investigate whether self-esteem is more likely to play a role for products more closely associated to one's appearance or attractiveness (e.g., clothes, swimwear, lingerie) or to one's body size (e.g., activewear, fitness accessories, health foods), and whether the effects of body diversity differ for these versus more neutral product categories.

Further, the stimuli employed in the studies only included female models. Although the pre-test revealed that (mis)matching the gender of the model to that of participants' did not

impact the results in my thesis, gender (mis)matching may play a role for product categories other than the ones used in my studies (similar to the above point). Since body diversity is only one of many forms of representation in marketing communications, future research should also further investigate the effects of intersecting identities such as race or ethnicity, age, (dis)ability, as well as the effects of featuring more (vs. less) models each representing the same (vs. different) identities. In a similar vein, the stimuli employed in the studies only used still images, as they aimed to replicate Instagram's aesthetics. However, videos have become consumers' preferred way of consulting content across major social media platforms (Thimothy, 2019), such that future research might want to investigate whether the effects of body diversity in marketing communications differ depending on their format (as video includes additional cues, such as a model's voice and body language). Lastly, the stimuli employed in the studies featured hypothetical brands, in order to minimize potential confounding effects from participants' attitudes and opinions towards real brands. Therefore, although my findings may be relevant to new brands or product launches, it is unclear whether similar effects would be found with existing brands. Anecdotal examples from the marketplace suggest that a brand's history with body diversity greatly impacts whether integrating it in its marketing communications will garner positive (vs. negative) responses from consumers (Bennett, 2022; Hagy, 2023; McKinnon, 2023; Wilson, 2020; Wingard, 2019). For example, Dove was one of the first brands to embrace and champion body diversity, whereas Victoria's Secret waited almost two decades to do so, which demonstrates varying levels of commitment to the issue (Ellen, 2023; Neff & Nudd, 2024). Future research may thus want to consider the interplay of a brands' history or perceived commitment to body diversity and how consumers respond to it.

Managerial Implications

My thesis also offers practical implications for marketers. My findings suggest that consumers' opinion of a model featured in marketing communications plays an important role in how they react to body diversity. Although choosing which celebrity should endorse a brand tends to be an important decision for marketers given the well-known consequences that can come with negative publicity or backlash associated with that celebrity (Centeno & Wang, 2017; Hussain et al., 2023; Thwaites et al., 2012; Till & Shimp, 1998; White et al., 2009), my findings suggest that similar care should be put into selecting unknown models, as consumers' opinion of them can also impact their responses to marketing communications. In a similar vein, marketers wanting to include body diversity in their marketing communications should better understand the opinions of their customer base and/or of consumers that are part of a desired market of body diverse models, as it could impact how receptive (vs. not) they might be to such an initiative.

Conclusion

In summary, the findings presented in this thesis advance our understanding of how a model's size impacts consumers' responses towards a brand featuring body diversity in their marketing communications. Across one pre-test and three studies, I found that consumer's opinion of the model and the perceived persuasion intentions of the advertisement both play key roles in this relationship. Although further research is necessary to fully understand the boundaries of these effects, the current research provides an important step towards a better understanding of the effects of body diversity in marketing communications.

References

- BBC. (2023, March 3). What is the history of body positivity? BBC Bitesize. https://www.bbc.co.uk/bitesize/articles/z2w7dp3
- Bennett, C. (2022, October 4). *Victoria's secret is all about diversity now -- but I still won't shop there thestreet*. TheStreet. https://www.thestreet.com/investing/victorias-secret-is-all-about-diversity-now-but-i-still-wont-shop-there
- Boerman, S. C., Van Reijmersdal, E. A., & Neijens, P. C. (2012). Sponsorship disclosure:

 Effects of duration on persuasion knowledge and brand responses. Journal of

 Communication, 62(6), 1047–1064. https://doi.org/10.1111/j.1460-2466.2012.01677.x
- Borau, S., & Bonnefon, J. F. (2017). The advertising performance of non-ideal female models as a function of viewers' body mass index: a moderated mediation analysis of two competing affective pathways. *International Journal of Advertising*, 36(3), 457-476.
- Brewis, A. A., Wutich, A., Falletta-Cowden, A., & Rodriguez-Soto, I. (2011). Body norms and fat stigma in global perspective. *Current anthropology*, *52*(2), 269-276.
- Brewster, M. L., & Sklar, M. (2022). 'Brand, community, lifestyle': Fashioning an authentic, body positive influencer brand on Instagram. *Fashion, Style & Popular Culture*, 9(4), 501-521.
- Brown, J. D., & Mankowski, T. A. (1993). Self-esteem, mood, and self-evaluation: changes in mood and the way you see you. *Journal of personality and social psychology*, 64(3), 421.
- Centeno, D., & Wang, J. J. (2017). Celebrities as human brands: An inquiry on stakeholder-actor co-creation of brand identities. Journal of Business Research, 74 (May), 133–138. https://doi.org/10.1016/j.jbusres.2016.10.024

- Chu, S. C., & Chen, H. T. (2019). Impact of consumers' corporate social responsibility-related activities in social media on brand attitude, electronic word-of-mouth intention, and purchase intention: A study of Chinese consumer behavior. *Journal of Consumer Behaviour*, 18(6), 453-462.
- Cramer, P., & Steinwert, T. (1998). Thin is good, fat is bad: How early does it begin?. *Journal of applied developmental psychology*, 19(3), 429-451.
- Diedrichs, P. C., & Lee, C. (2011). Waif goodbye! Average-size female models promote positive body image and appeal to consumers. *Psychology & Health*, 26(10), 1273-1291.
- Diedrichs, P. C., Lee, C., & Kelly, M. (2011). Seeing the beauty in everyday people: A qualitative study of young Australians' opinions on body image, the mass media and models. *Body Image*, 8(3), 259-266.
- Dittmar, H., & Howard, S. (2004). Professional hazards? The impact of models' body size on advertising effectiveness and women's body-focused anxiety in professions that do and do not emphasize the cultural ideal of thinness. *British Journal of Social Psychology*, 43(4), 477-497.
- Durkin, S. J., Paxton, S. J., & Sorbello, M. (2007). An integrative model of the impact of exposure to idealized female images on adolescent girls' body satisfaction 1. *Journal of Applied Social Psychology*, 37(5), 1092-1117.
- Ellen, B. (2023, October 22). Sorry, Victoria's secret, your "woke" rebrand failed because it was just performative pants. The Guardian.

 https://www.theguardian.com/commentisfree/2023/oct/22/sorry-victorias-secret-your-woke-rebrand-failed-because-it-was-performative-pants

- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: a meta-analysis of experimental and correlational studies. *Psychological bulletin*, 134(3), 460.
- Hagy, P. (2023, November 6). Victoria's secret, the hypersexualized iconic Millennial brand, tried to remake itself as feminist-and gen Z saw right through it. Fortune. https://fortune.com/2023/11/04/victorias-secret-lingerie-rebranding-campaign-feminism-gen-z/
- Hallberg, A. (2023). Generation Z Consumers' Attitudes towards Body Diversity in Fashion Advertisements: A quantitative study on the effect of consumers' own body size to their attitude.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social psychology*, 60(6), 895.
- Hussain, S., Pascaru, O., Priporas, C. V., Foroudi, P., Melewar, T. C., & Dennis, C. (2023).
 Examining the effects of celebrity negative publicity on attitude to, and reputation of, brand and corporation, directly and based on moderating factors. *European Business Review*, 35(4), 469-499.
- Krouwer, S., Poels, K., & Paulussen, S. (2017). To disguise or to disclose? The influence of disclosure recognition and brand presence on readers' responses toward native advertisements in online news media. Journal of Interactive Advertising, 17(2), 124–137. https://doi.org/10.1080/15252019.2017.1381579
- Leung, F. F., Gu, F. F., & Palmatier, R. W. (2022). Online influencer marketing. *Journal of the Academy of Marketing Science*, 50(2), 226-251.

- Lieberson, N., & Bizer, G. (2021). The effect of model and product type on advertising effectiveness: Comparing fitness and fashion brands.
- Lou, C., Ma, W., & Feng, Y. (2020). A sponsorship disclosure is not enough? How advertising literacy intervention affects consumer reactions to sponsored influencer posts. Journal of Promotion Management, 27(2), 278–305. https://doi.org/ 10.1080/10496491.2020.1829771
- Machleit, K. A., Madden, T. J., & Allen, C. T. (1990). Measuring and Modeling Brand Interest as an Alternative Aad Effect with Familiar Brands. *Advances in Consumer Research*, 17(1).
- MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of marketing*, 53(2), 48-65.
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention science*, *1*, 173-181.
- Mañas-Viniegra, L., Veloso, A. I., & Cuesta, U. (2019). Fashion promotion on Instagram with eye tracking: curvy girl influencers versus fashion brands in Spain and Portugal.

 Sustainability, 11(14), 3977.
- Martínez-López, F. J., Anaya-Sánchez, R., Fernández Giordano, M., & Lopez-Lopez, D. (2020).

 Behind influencer marketing: key marketing decisions and their effects on followers' responses. *Journal of Marketing Management*, *36*(7-8), 579-607.
- McKinnon, T. (2023, October 31). How Rihanna's Fenty brand is leading in Diversity & Inclusion. Indigo9 Digital Inc.

https://www.indigo9digital.com/blog/fentydiversityinclusion

- Morwitz, V. G., Johnson, E., & Schmittlein, D. (1993). Does measuring intent change behavior?. *Journal of consumer research*, 20(1), 46-61.
- Mull, A. (2018, June 5). *Body positivity is a Scam*. Vox. https://www.vox.com/2018/6/5/17236212/body-positivity-scam-dove-campaign-ads
- Myers, S., Sen, S., Syrdal, H., & Woodroof, P. (2024). The impact of Persuasion knowledge cues on social media engagement: a look at pet influencer marketing. *Journal of Marketing Theory and Practice*, 32(1), 43-60.
- Neff, J., & Nudd, T. (2024, April 10). *Dove's campaign for Real beauty: How its 20 years* ...

 AdAge. https://adage.com/article/marketing-news-strategy/doves-campaign-real-beauty-how-its-20-years-changed-marketing/2552441
- Obermiller, C., & Spangenberg, E. R. (1998). Development of a scale to measure consumer skepticism toward advertising. *Journal of consumer psychology*, 7(2), 159-186.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of advertising*, 19(3), 39-52.
- Park, J., Spence, C., Ishii, H., & Togawa, T. (2021). Turning the other cheek: Facial orientation influences both model attractiveness and product evaluation. *Psychology & Marketing*, 38(1), 7-20.
- Pick, R. (2023, June 8). *Ozempic has won, body positivity has lost. and I want no part of it.* The Guardian. https://www.theguardian.com/lifeandstyle/2023/jun/08/ozempic-weight-loss-body-positivity

- Plotkina, D., & Saurel, H. (2021). Show me the real world: reactions of American female consumers to more realistic and diverse human models in e-commerce. *Journal of Marketing Theory and Practice*, 29(2), 250-269.
- Polivy, J., & Herman, C. P. (2002). Causes of eating disorders. *Annual review of psychology*, 53(1), 187-213.
- Powderly, H. (2024, May 17). Digital Marketing & Advertising Industry: Current Trends, major players, latest data. EMARKETER. https://www.emarketer.com/insights/digital-advertising-market-trends-predictions/
- Rahmani, V. (2023). Persuasion knowledge framework: Toward a comprehensive model of consumers' persuasion knowledge. *AMS Review*, *13*(1), 12-33.
- Reingen, P. H., & Kernan, J. B. (1993). Social perception and interpersonal influence: Some consequences of the physical attractiveness stereotype in a personal selling setting. *Journal of Consumer Psychology*, 2(1), 25-38.
- Reinhard, M. A., Messner, M., & Sporer, S. L. (2008). Explicit persuasive intent and its impact on success at persuasion—The determining roles of attractiveness and likeableness. *Journal of Consumer Psychology*, 16(3), 249-259.
- Ridgway, J. L. (2016, November). Depicting thin, average, and plus size models in fashion advertisements: Exploring social comparisons, body image satisfaction, purchase intentions, and memory. In *International Textile and Apparel Association Annual Conference Proceedings* (Vol. 73, No. 1). Iowa State University Digital Press.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2011). Children's understanding of advertisers' persuasive tactics. International Journal of Advertising, 30(2), 329–350. https://doi.org/10.2501/IJA-30-2-329-350

- Shoenberger, H., Kim, E. A., & Johnson, E. K. (2020). # BeingReal about Instagram ad models:

 The effects of perceived authenticity: How image modification of female body size alters advertising attitude and buying intention. *Journal of Advertising Research*, 60(2), 197-207.
- Sohn, S. H., & Youn, S. (2013). Does she have to be thin? Testing the effects of models' body sizes on advertising effectiveness. *Atlantic Journal of Communication*, 21(3), 164-183.
- Summerfield, P. (2022, June 20). *Digital continues to be the driving force in Canadian ad spend*.

 Media In Canada keeping media and marketing execs up to speed on the Canadian media scene. https://mediaincanada.com/2022/06/20/digital-continues-to-be-the-driving-force-in-canadian-ad-spend/
- Thimothy, S. (2019, August 8). *Videos vs. images: What should you be promoting on social media?*. inc.com. https://www.inc.com/young-entrepreneur-council/videos-vs-images-what-should-you-be-promoting-on-social-media.html
- Thwaites, D., Lowe, B., Monkhouse, L. L., & Barnes, B. R. (2012). The impact of negative publicity on celebrity ad endorsements. *Psychology & Marketing*, *29*(9), 663-673.
- Till, B. D., & Shimp, T. A. (1998). Endorsers in advertising: The case of negative celebrity information. *Journal of Advertising*, *27*(1), 67-82.
- Trampe, D., Stapel, D. A., Siero, F. W., & Mulder, H. (2010). Beauty as a tool: The effect of model attractiveness, product relevance, and elaboration likelihood on advertising effectiveness. Psychology & Marketing, 27(12), 1101–1121.
- White, D. W., Goddard, L., & Wilbur, N. (2009). The effects of negative information transference in the celebrity endorsement relationship. *International Journal of Retail & Distribution Management*, 37(4), 322-335.

- Wilson, A. (2020). The Popularity of Fenty Beauty and How It Reflects the Online Beauty Community. *Makeup in the World of Beauty Vlogging: Community, Commerce, and Culture*, 37.
- Wingard, Dr. J. (2019, August 2). *Rihanna's "Fenty Beauty": A leadership case for customer inclusivity*. Forbes. https://www.forbes.com/sites/jasonwingard/2019/08/02/rihannasfenty-beauty--a-leadership-case-for-customer-inclusivity/?sh=69d481f63460
- Wojdynski, B. W. (2016). The deceptiveness of sponsored news articles: How readers recognize and perceive native advertising. *American Behavioral Scientist*, 60(12), 1475–1491. https://doi.org/10.1177/0002764216660140
- VanDellen, M. R., Campbell, W. K., Hoyle, R. H., & Bradfield, E. K. (2011). Compensating, resisting, and breaking: A meta-analytic examination of reactions to self-esteem threat. *Personality and Social Psychology Review*, 15(1), 51-74.

Appendix A: Pre-Test Stimuli and Measures

Evaluation of the Model









Condition 1: Thin Female Model

Condition 2: Plus-Size Female Model

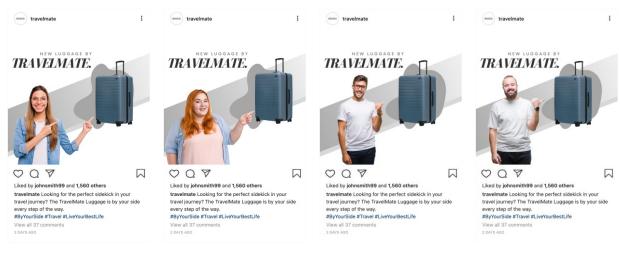
Condition 3: Thin Male Model

Condition 4: Plus Male Model

"I think the individual is..." on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree)

- Likable
- Attractive
- Credible
- Believable
- Similar to Me
- Trustworthy
- Authentic
- Genuine
- Representative of Me

Evaluation of Product 1



Condition 1: Thin Female Model with Luggage

Condition 2: Plus-Size Model with Luggage

Condition 3: Thin Male Model with Luggage

Condition 4: Plus-Size Male Model with Luggage

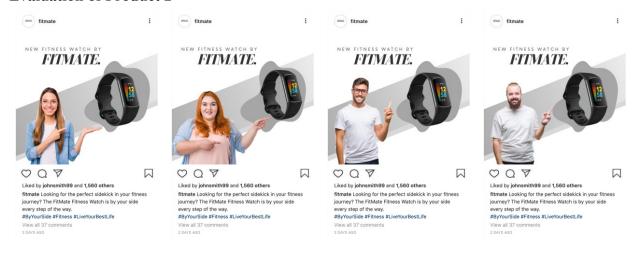
"I think the social media post is..." on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree)

- Visually Appealing
- Pleasant
- Credible
- Believable
- Persuasive
- Convincing
- Trustworthy
- Authentic
- Genuine
- Inclusive

"I believe the individual is with the product advertised." on 7-point bipolar scales.

- Appropriate Inappropriate
- Well-aligned Not well-aligned
- Consistent Inconsistent
- A good fit A bad fit

Evaluation of Product 2



Condition 1: Thin Female Model with Fitness Watch Condition 2: Plus-Size Model with Fitness Watch Condition 3: Thin Male Model with Fitness Watch

Condition 4: Plus-Size Male Model with Fitness Watch

Questions were the same as Product 1.

Additional Questions

"The individual featured in the social media post was..." on a 7-point scale from Very thin to Very plus-size (midpoint: Average weight).

"How often do you use the following social media platforms?" on a 7-point scale from Never to Multiple times a day.

- Instagram
- Tiktok
- Facebook

"Are most of the models or influencers you see on social media the same or opposite gender as you?" on a 7-point scale from Mostly the same gender as me to Mostly the opposite gender as me (midpoint: Both genders equally).

"How often do you see body diversity on social media?" on a 7-point scale from Never to Multiple times a day.

"How often do you see paid or sponsored posts featuring body diversity on social media?" on a 7-point scale from Never to Multiple times a day.

"How does seeing models of various body sizes in advertisements make you feel?" on 7-point bipolar scales.

- Good Bad
- Positive Negative
- Happy Sad

"Briefly explain your answer to the above question." *Participants were given an empty textbox to write their answer.*

"Do you think there are products for which it is more or less appropriate to use models of various body sizes to advertise them?" *Participants were asked to select one of the following*.

- No, all products can be advertised by people of all shapes and sizes.
- Yes, some products are more/less appropriate for different body shape and size (Please briefly explain). *Participants were given an empty textbox to explain their answer*.

Appendix B: Study 1 AsPredicted





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Study 1 Body Diversity Jan 2024 (#159966)

Created: 01/29/2024 10:51 AM (PT)

This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) should be made available by the authors when the work it supports is made public.

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

How does a spokesperson's body size in a sponsored social media post impact consumers' responses to the advertised brand/product? Does self-esteem mediate this relationship?

We hypothesize that more (vs. less) body diversity will have a positive effect on consumers' self-image and, in turn, produce more positive attitudes toward the featured brand/product and higher behavioral intentions.

3) Describe the key dependent variable(s) specifying how they will be measured.

Self-esteem (process measure) will be measured using the appearance dimension of the State Self-Esteem scale (Heatherton & Polivy, 1991) on a 1-7 scale (strongly disagree/strongly agree).

Behavioral intentions (DV) will be measured using items adapted from Chu and Chen (2019; consider/suggest) and items adapted from Machleit and colleagues (1990; know more/interested) on a 1-7 scale (strongly disagree/strongly agree).

Brand Attitude (DV) will be measured using items adapted from Chu and Chen (2019) using 7-point bipolar scales (bad/good, negative/positive, and unfavorable/favorable).

4) How many and which conditions will participants be assigned to?

Between-subject design. Participants will be assigned to one of two experimental conditions. The stimuli will consist of a sponsored social media post advertising a luggage. One condition will feature a thin female model and the other condition will feature a plus-size female model.

We will also randomize the order of presentation of the mediator and the DVs.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

We will run two-way ANOVAs (2 (body size: thin vs. plus size) X 2 (order of presentation: DVs first vs. mediator first)) to test for potential order of presentation effects. Assuming there is no order effects, we will:

- Run one-way ANOVAs to compare the means of the process and outcome measures between the two experimental conditions.
- Conduct mediation analyses using PROCESS Model 4 to understand the role of self-esteem in the effect (body type as IV, self-esteem as mediator, and attitudes/behavioral intentions as DVs).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude participants who: i) failed any of the attention checks; ii) incorrectly answered specific questions (e.g., indicate a nonsensical year that they were born in); iii) indicated a low level of English proficiency (less than 4 on a 1-7 scale); iv) encountered technical issues while completing the survey; and/or v) indicated that their data should not be included in the analyses.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined

We will aim for 100 participants per cell. Given the 2 (body size) x 2 (order of presentation) design, we will thus aim for 400 participants after data exclusions. To account for data exclusions, an extra 15 participants per condition will be recruited. We will therefore recruit 460 participants in total.

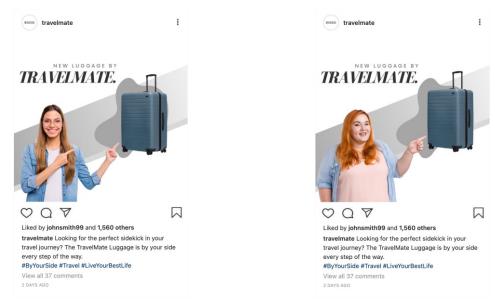
8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?) We will also measure perceived persuasion intent (manipulative, convincing, persuasive) and authenticity (sincere, authentic) and will explore their

We will also measure perceived model attractiveness, responses to body diversity, and own body image to explore their potential roles in the effect.

Available at https://aspredicted.org/N51_5WN

Appendix C: Study 1 Stimuli and Measures

Stimuli



Condition 1: Thin Female Model with Luggage

Condition 2: Plus-Size Model with Luggage

Self-Esteem Measure

"Please answer the following questions based on how you feel right now:" Four statements on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree).

- "I feel satisfied with the way my body looks."
- "I feel good about myself."
- "I am pleased with my appearance."
- "I feel unattractive."

Perceived Persuasion Intent Measure

"This post seems..." on 7-point bipolar scales.

- Insincere Sincere
- Inauthentic Authentic
- Manipulative Not Manipulative
- Unconvincing Convincing
- Not Persuasive Persuasive
- Uninformative Informative
- Not Entertaining Entertaining

Outcome Measures

Attitudes: "My opinion of the TravelMate luggage is:" on 7-point bipolar scales.

- Bad Good
- Negative Positive
- Unfavorable Favorable

<u>Behavioral Intentions:</u> "After seeing this post, I would..." on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree).

- "...like to know more about TravelMate."
- "...be interested in learning more about the luggage."
- "...look for more information about TravelMate."
- "...recommend this luggage to other people."

<u>Purchase Likelihood:</u> "What is the likelihood that you would consider TravelMate the next time you are looking for a luggage?" on a 7-point scale from Extremely unlikely to Extremely likely (midpoint: Neither likely nor unlikely).

Control Questions and Additional Questions

"I found the female model featured in the social media post attractive." on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree).

"What was your overall opinion of the female model featured in the social media post?" on a 7-point scale from Extremely negative to Extremely positive (midpoint: Neither positive nor negative).

"What is your body type?" on a 7-point scale from Very thin to Very plus-size (midpoint: Average weight).

"Overall, I am satisfied with how I look." on a 7-point scale from Strongly disagree to Strongly agree (midpoint: Neither agree nor disagree).

Appendix D: Factor Analyses, Two-Way ANOVAs and One-Way ANOVAs for Self-Esteem – Study 1

Factor Analysis for Self-Esteem – Study 1

	Eigenvalue	α
Self-Esteem (Process)		
Factor 1: "I feel satisfied with the way my body looks," "I feel good about myself," "I am pleased with my appearance," "I feel unattractive" (reverse coded)	3.37	.94

Two-Way ANOVAs with Order of Presentation for Self-Esteem – Study 1

	Model Size	Order	Model Size x Order
Self-Esteem	F(1,431) = .33, p = .57	F(1,431) = 3.94, p = .05	F(1,431) = .16, p = .69

Two-Way ANOVAs with Order of Presentation and Including Covariates for Self-Esteem – Study 1

	Model Size	Order	Model Size x Order	Age	Gender	Body Satisfactio n	Body Type
Self-	F(1,431) = .12,	F(1,431) = .26,	F(1,431) = .56,	F(1,431) = .95,	F(1,431) = .18,	F(1,431) = 1278.10, p < .001	F(1,431) = .67,
Esteem	p = .73	p = .61	p = .45	p = .33	p = .67		p = .41

One-Way ANOVAs for Self-Esteem – Study 1

Model Size	df	F	p	$M_{ m Thin}$ (SD)	M _{Plus} (SD)
Self-Esteem	1, 433	.36	.55	4.76 (1.54)	4.85 (1.46)

One-Way ANOVAs Including Covariates for Self-Esteem – Study 1

	Model Size	Age	Gender	Body Satisfaction	Body Type
Self- Esteem	F(1,433) = .12, p = .73	F(1,433) = 1.02, p = .31	<i>F</i> (1,433) = .14, <i>p</i> = .71	F(1,433) = 1288.96, p < .001	<i>F</i> (1,433) = .76, <i>p</i> = .38

Appendix E: Two-Way ANOVAs with Order of Presentation – Study 1

	Model Size	Order	Model Size x Order			
Dependent Variables						
Attitudes	F(1,431) = 4.03, p = .05	F(1,431) = 6.01, p = .01	F(1,431) = 2.05, p = .15			
Behavioral Intentions	F(1,431) = 2.74, p = .10	F(1,431) = 5.85, p = .02	F(1,431) = .55, p = .46			
Purchase Likelihood	F(1,431) = 2.27, p = .13	F(1,431) = 9.42, p = .002	F(1,431) = 4.51, p = .03			
	Proc	ess Variables				
Perceived Persuasion Intent	F(1,431) = .04, p = .83	F(1,431) = 2.91, p = .09	F(1,431) = .25, p = .61			
Opinion of Model	F(1,431) = 91.36, p < .001	F(1,431) = 2.45, p = .12	F(1,431) = .85, p = .36			

 $Appendix \ F\hbox{:}\ Two\hbox{-}Way\ ANOVAs\ with\ Order\ of\ Presentation\ and\ Including\ Covariates-Study\ 1$

	Model Size	Order	Model Size x Order	Age	Gender	Body Satisfaction	Body Type
			Depender	nt Variables			
Attitudes	F(1,431) = 3.97, p = .05	F(1,431) = 7.78, p = .01	F(1,431) = 1.40, p = .24	F(1,431) = .43, p = .51	F(1,431) = 13.85, p < .001	F(1,431) = 28.15, p < .001	F(1,431) = 19.09, p < .001
Behavioral Intentions	F(1,431) = 2.40, p = .12	F(1,431) = 8.68, p = .003	F(1,431) = .22, p = .64	F(1,431) = .87, p = .35	F(1,431) = 11.97, p < .001	F(1,431) = 16.49, p < .001	F(1,431) = 17.51, p < .001
Purchase Likelihood	F(1,431) = 1.87, p = .17	F(1,431) = 12.30, p < .001	F(1,431) = 3.40, p = .07	F(1,431) = .04, p = .84	F(1,431) = 2.59, p = .11	F(1,431) = 5.85, p = .02	F(1,431) = 12.37, p < .001
			Process	Variables			
Perceived Persuasion Intent	F(1,431) = .03, p = .86	F(1,431) = 3.94, p = .05	F(1,431) = .16, p = .69	F(1,431) = 1.75, p = .19	F(1,431) = 13.78, p < .001	F(1,431) = 19.67, p < .001	F(1,431) = 13.93, p < .001
Opinion of Model	F(1,431) = 97.25, p < .001	F(1,431) = 2.87, p = .09	F(1,431) = .37, p = .55	F(1,431) = .10, p = .76	F(1,431) = 18.88, p < .001	F(1,431) = 15.78, p < .001	F(1,431) = 14.63, p < .001

Appendix G: One-Way ANOVAs Including Covariates – Study 1

	Model Size	Age	Gender	Body Satisfaction	Body Type	
Dependent Variables						
Attitudes	F(1,433) = 5.01, p = .03	F(1,433) = .97, p = .33	F(1,433) = 12.84, p < .001	F(1,433) = 29.80, p < .001	F(1,433) = 18.12, p < .001	
Behavioral Intentions	F(1,433) = 3.14, p = .08	F(1,433) = .36, p = .55	F(1,433) = 10.84, p = .001	F(1,433) = 17.88, p < .001	F(1,433) = 16.32, p < .001	
Purchase Likelihood	F(1,433) = 2.84, p = .09	F(1,433) = .05, p = .82	F(1,433) = 2.12, p = .15	F(1,433) = 6.86, p = .01	F(1,433) = 11.41, p < .001	
	Process Measures					
Perceived Persuasion Intent	F(1,433) = .11, p = .74	F(1,433) = 1.22, p = .27	F(1,433) = 13.05, p < .001	F(1,433) = 20.83, p < .001	F(1,433) = 13.34, p < .001	
Opinion of Model	F(1,433) = 100.66, p < .001	F(1,433) = .26, p = .61	F(1,433) = 18.27, p < .001	F(1,433) = 16.71, p < .001	F(1,433) = 14.21, p < .001	

Appendix H: Serial Mediation Analyses Including Covariates – Study 1

	Opinion of Model	Persuasion Knowledge	Attitudes
Model Size	$\beta = -1.07, SE = .11, t =99, p < .001$	$\beta = .59$, $SE = .11$, $t = 5.34$ $p < .001$	β =02, SE = .08, t =23, p = .81
Opinion of Model	-	$\beta = .57, SE = .04, t = 13.02, p < .001$	$\beta = .19, SE = .04, t = 4.91, p < .001$
Perceived Persuasion Intent	-	-	$\beta = .58, SE = .03, t = 16.54, p < .001$
Age	$\beta = .004, SE = .005, t = .88, p = .38$	β =01, SE = .004, t = -1.31, p = .19	$\beta = .01, SE = .003, t = 2.16, p = .03$
Gender	β =20, SE = .06, t = -3.17, p = .002	β =02, SE = .06, t =33, p = .74	β =12, SE = .04, t = -2.88, p = .004
Body Type	$\beta = .21, SE = .06, t = 3.79, p < .001$	$\beta = .11, SE = .05, t = 1.98, p = .05$	$\beta = .07, SE = .04, t = 1.89, p = .06$
Satisfied with Body	$\beta = .14, SE = .04, t = 3.85, p < .001$	$\beta = .10, SE = .03, t = 2.91, p = .004$	$\beta = .07, SE = .03, t = 2.95, p = .003$
Mediation 95% CI	[30;11]	[.22; .46]	[46;26]
	Opinion of Model	Persuasion Knowledge	Behavioral Intentions
Model Size	$\beta = -1.07, SE = .11, t =99, p < .001$	$\beta = .59, SE = .11, t = 5.34, p < .001$	$\beta = .04$, $SE = .12$, $t = .32$, $p = .75$
Opinion of Model	-	$\beta = .57, SE = .04, t = 13.02, p < .001$	$\beta = .26, SE = .06, t = 4.58, p < .001$
Perceived Persuasion Intent	-	-	$\beta = .73, SE = .05, t = 14.03, p < .001$
Age	$\beta = .004, SE = .005, t = .88, p = .38$	β =01, SE = .004, t = -1.31, p = .19	β =001, SE = .005, t =18, p = .86
Gender	β =20, SE = .06, t = -3.17, p = .002	β =02, SE = .06, t =33, p = .74	β =14, SE = .06, t = -2.23, p = .03
Body Type	$\beta = .21, SE = .06, t = 3.79, p < .001$	$\beta = .11, SE = .05, t = 1.98, p = .05$	$\beta = .10, SE = .06, t = 1.64, p = .10$
Satisfied with Body	$\beta = .14$, $SE = .04$, $t = 3.85$, $p < .001$	$\beta = .10, SE = .03, t = 2.91, p = .004$	$\beta = .05$, $SE = .04$, $t = 1.42$, $p = .16$
Mediation 95% CI	[41;14]	[.27; .59]	[59;32]
	Opinion of Model	Persuasion Knowledge	Purchase Likelihood
Model Size	$\beta = -1.07, SE = .11, t =99, p < .001$	$\beta = .59, SE = .11, t = 5.34, p < .001$	$\beta = .10, SE = .11, t = .93, p = .36$
Opinion of Model	-	$\beta = .57, SE = .04, t = 13.02, p < .001$	$\beta = .29, SE = .05, t = 5.66, p < .001$
Perceived Persuasion Intent	-	-	$\beta = .56, SE = .05, t = 11.91, p < .001$
Age	$\beta = .004, SE = .005, t = .88, p = .38$	β =01, SE = .004, t = -1.31, p = .19	$\beta = .002, SE = .004, t = .58, p = .56$
Gender	β =20, SE = .06, t = -3.17, p = .002	β =02, SE = .06, t =33, p = .74	β =03, SE = .06, t =46, p = .65

Body Type	$\beta = .21, SE = .06, t = 3.79, p < .001$	$\beta = .11, SE = .05, t = 1.98, p = .05$	$\beta = .05, SE = .05, t = .94, p = .35$
Satisfied with Body	$\beta = .14, SE = .04, t = 3.85, p < .001$	$\beta = .10, SE = .03, t = 2.91, p = .004$	β =01, SE = .03, t =39, p = .70
Mediation 95% CI	[44;19]	[.21; 47]	[46;25]

Appendix I: Study 2 AsPredicted





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Study 2 Body Diversity Apr 2024 (#169735)

Created: 04/08/2024 07:21 AM (PT)

This is an anonymized copy (without author names) of the pre-registration. It was created by the author(s) to use during peer-review. A non-anonymized version (containing author names) should be made available by the authors when the work it supports is made public.

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

Study 2a: Close replication

- Will test if the serial mediation effect found through exploratory analyses in Study 1 can be replicated.
- We hypothesize that the relationship between model size (plus vs. thin) and the dependent variables (attitudes, behavioral intentions, and purchase likelihood) will be serially mediated through opinion of the model and perceived persuasion intent.

Study 2b: Conceptual replication

- Will test if the above serial mediation effect also replicates for a low-involvement product (a mobile app).

3) Describe the key dependent variable(s) specifying how they will be measured.

- Perceived persuasion intent (process measure) will be measured using 7-point bipolar items (sincere, authentic, not manipulative, convincing, persuasive, informative, entertaining). All items will be averaged into a single measure for the analyses.
- Opinion of the model will be measured using an item measuring model attractiveness on a 1-7 scale (attractive: strongly disagree/strongly agree) and an item measuring general opinion of the model on a 1-7 scale (extremely negative/extremely positive). These items will be averaged into a single measure for the analyses.
- Attitudes (DV) will be measured using 7-point bipolar scales (bad/good, negative/positive, and unfavorable/favorable). All items will be averaged into a single measure for the analyses.
- Intentions (DV) will be measured using four items adapted from Chu and Chen (consider/suggest/know more/interested) on a 1-7 scale (strongly disagree/strongly agree). All items will be averaged into a single measure for the analyses.
- Purchase likelihood (DV) will be measured using one item on a 1-7 scale (extremely unlikely/extremely likely).

4) How many and which conditions will participants be assigned to?

Between-subject design. Participants will be assigned to one of four experimental conditions:

- Half the participants will be assigned to one of two stimuli featuring a model advertising a luggage. One condition will feature a thin female model and the other condition will feature a plus-size female model.
- The other half of participants will be assigned to one of two stimuli featuring a model advertising a mobile app. Again, one condition will feature a thin female model and the other a plus-size female model.

Even if both studies 2a and 2b will be simultaneously run through the same Qualtrics link, we will treat them as two separate studies rather than one moderation study, as we do not have any theoretical rationale for the potential role of product type (high- vs. low-involvement) as a moderator.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

- One-way ANOVAs, to compare the means of the process and outcome measures between the two experimental conditions for each product type.
- Serial mediation analyses using PROCESS Model 6, to attempt to confirm the roles of opinion of the model and perceived persuasion intent found in study
- 1 (i.e., model type as IV, opinion of the model and perceived persuasion intent as serial mediators, and attitudes/intentions/purchase likelihood as DVs).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude participants who: i) failed any of the attention checks; ii) incorrectly answered specific questions (e.g., indicate a nonsensical year that they were born in); iii) indicated a low level of English proficiency (less than 4 on a 1-7 scale); iv) encountered technical issues while completing the survey; and/or v) indicated that their data should not be included in the analyses.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

We will aim for 100 participants per cell. Given the four conditions across the two experiments (product: luggage or app; model size: thin or plus), we will thus aim for 400 participants after data exclusions. To account for data exclusions, an extra 15 participants per condition will be recruited. We will therefore recruit 460 participants in total.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

Although we generally did not find effects of gender, age, participants' body size, and their satisfaction with how they look when included as covariates in

ersion of AsPredicted Questions: 2.00

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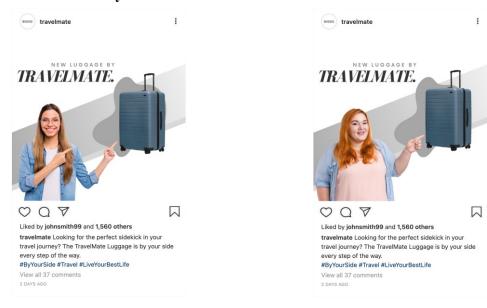




the analyses of study 1, we will again explore whether they impact the results of study 2a and 2b.

Appendix J: Study 2 Stimuli and Measures

Stimuli for Study 2a



Condition 1: Thin Female Model with Luggage

Condition 2: Plus-Size Model with Luggage

Stimuli for Study 2b



Condition 1: Thin Female Model with App



Condition 2: Plus-Size Model with App

Questions in Study 2 were the same as in Study 1.

Appendix K: One-Way ANOVAs Including Covariates – Study 2a

	Model Size	Age	Gender	Body Satisfaction	Body Type		
	Dependent Variables						
Attitudes	F(1,213) = .004, p = .95	F(1,213) = 1.58, p = .21	F(1,213) = 3.86, p = .05	F(1,213) = 3.08, p = .08	F(1,213) = 6.67, p = .01		
Behavioral Intentions	F(1,213) = .03, p = .87	F(1,213) = 1.89, p = .17	F(1,213) = 4.50, p = .03	F(1,213) = 4.70, p = .03	F(1,213) = 2.73, p = .10		
Purchase Likelihood	F(1,213) = .09, p = .77	F(1,213) = 1.05, p = .31	F(1,213) = 1.48, p = .23	F(1,213) = 2.33, p = .13	F(1,213) = 1.94, p = .17		
	Process Measures						
Perceived Persuasion Intent	F(1,213) = 1.13, p = .29	F(1,213) = .001, p = .97	F(1,213) = 4.20, p = .04	F(1,213) = 4.08, p = .05	F(1,213) = 3.31, p = .07		
Opinion of Model	F(1,213) = 14.44, p < .001	F(1,213) = .59, p = .44	F(1,213) = 9.93, p = .002	F(1,213) = 4.23, p = .04	F(1,213) = 1.95, p = .16		

Appendix L: Serial Mediation Analyses Including Covariates – Study 2a

	Opinion of Model	Persuasion Knowledge	Attitudes
Model Size	β =63, SE = .17, t = -3.68, p < .001	$\beta = .15, SE = .15, t = .97, p = .33$	$\beta = .24, SE = .11, t = 2.18, p = .03$
Opinion of Model	-	$\beta = .51, SE = .06, t = 8.50, p < .001$	$\beta = .16, SE = .05, t = 3.29, p = .001$
Perceived Persuasion Intent	-	-	$\beta = .71, SE = .05, t = 14.78, p < .001$
Age	$\beta = .01, SE = .01, t = .81, p = .42$	$\beta =002, SE = .01, t =37, p = .71$	$\beta = .01, SE = .004, t = 1.86, p = .06$
Gender	β =22, SE = .09, t = -2.48, p = .014	β =14, SE = .08, t = -1.78, p = .08	$\beta = .04, SE = .06, t = .65, p = .52$
Body Type	$\beta = .09, SE = .073, t = 1.26, p = .21$	$\beta = .08, SE = .06, t = 1.29, p = .20$	$\beta = .08, SE = .05, t = 1.71, p = .09$
Satisfied with Body	$\beta = .10, SE = .06, t = 1.77, p = .08$	$\beta = .06, SE = .05, t = 1.17, p = .24$	$\beta = .002, SE = .03, t = .07, p = .94$
Mediation 95% CI	[20;02]	[12; .33]	[40;10]
	Opinion of Model	Persuasion Knowledge	Behavioral Intentions
Model Size	β =63, SE = .17, t = -3.68, p < .001	$\beta = .15, SE = .15, t = .97, p = .33$	$\beta = .27, SE = .14, t = 1.90, p = .06$
Opinion of Model	-	$\beta = .51, SE = .06, t = 8.50, p < .001$	$\beta = .20, SE = .06, t = 3.12, p = .002$
Perceived Persuasion Intent	-	-	$\beta = .93, SE = .06, t = 15.04, p < .001$
Age	$\beta = .01, SE = .01, t = .81, p = .42$	$\beta =002, SE = .01, t =37, p = .71$	$\beta = .01, SE = .01, t = 2.07, p = .04$
Gender	β =22, SE = .09, t = -2.48, p = .014	β =14, SE = .08, t = -1.78, p = .08	$\beta = .003, SE = .07, t = .05, p = .96$
Body Type	$\beta = .09, SE = .073, t = 1.26, p = .21$	$\beta = .08, SE = .06, t = 1.29, p = .20$	$\beta = .01, SE = .06, t = .21, p = .83$
Satisfied with Body	$\beta = .10, SE = .06, t = 1.77, p = .08$	$\beta = .06, SE = .05, t = 1.17, p = .24$	$\beta = .03$, $SE = .0445$, $t = .64$, $p = .53$
Mediation 95% CI	[23;04]	[15; .44]	[51;12]
	Opinion of Model	Persuasion Knowledge	Purchase Likelihood
Model Size	β =63, SE = .17, t = -3.68, p < .001	$\beta = .15, SE = .15, t = .97, p = .33$	$\beta = .33, SE = .14, t = 2.42, p = .02$
Opinion of Model	-	$\beta = .51, SE = .06, t = 8.50, p < .001$	$\beta = .21, SE = .06, t = 3.45, p < .001$
Perceived Persuasion Intent	-	-	$\beta = .82, SE = .06, t = 13.78, p < .001$
Age	$\beta = .01, SE = .01, t = .81, p = .42$	$\beta =002, SE = .01, t =37, p = .71$	$\beta = .01, SE = .01, t = 1.35, p = .18$

Gender	β =22, SE = .09, t = -2.48, p = .014	β =14, SE = .08, t = -1.78, p = .08	$\beta = .06$, $SE = .07$, $t = .81$, $p = .42$
Body Type	$\beta = .09, SE = .073, t = 1.26, p = .21$	$\beta = .08$, $SE = .06$, $t = 1.29$, $p = .20$	β =01, SE = .06, t =09, p = .93
Satisfied with Body	$\beta = .10, SE = .06, t = 1.77, p = .08$	$\beta = .06, SE = .05, t = 1.17, p = .24$	β =005, SE = .04, t =12, p = .91
Mediation 95% CI	[24;04]	[13; .39]	[45;11]

Appendix M: One-Way ANOVAs Including Covariates – Study 2b

	Model Size	Age	Gender	Body Satisfaction	Body Type		
	Dependent Variables						
Attitudes $F(1,213) = .31, p = .58$ $F(1,213) = .03, p = .86$ $F(1,213) = 5.30, p = .02$ $F(1,213) = 3.18, p = .08$ $F(1,213) = .04, p = .84$							
Behavioral Intentions	F(1,213) = .05, p = .83	F(1,213) = .26, p = .61	F(1,213) = 1.82, p = .18	F(1,213) = 4.79, p = .03	F(1,213) = .12, p = .73		
Purchase Likelihood	F(1,213) = .04, p = .84	F(1,213) = .19, p = .66	F(1,213) = 6.22, p = .01	F(1,213) = 1.69, p = .19	F(1,213) = .15, p = .70		
	Process Measures						
Perceived Persuasion Intent	F(1,213) = .26, p = .61	F(1,213) = .004, p = .95	F(1,213) = 3.98, p = .05	F(1,213) = 5.91, p = .02	F(1,213) = 3.14, p = .08		
Opinion of Model	F(1,213) = 30.97, p < .001	F(1,213) = .05, p = .82	F(1,213) = 2.51, p = .11	F(1,213) = 2.49, p = .12	F(1,213) = .77, p = .38		

Appendix N: Serial Mediation Analyses Including Covariates – Study 2b

	Opinion of Model	Persuasion Knowledge	Attitudes
Model Size	β =98, SE = .17, t = -5.64, p < .001	$\beta = .36, SE = .18, t = 1.97, p = .05$	$\beta = .38$, $SE = .13$, $t = 2.92$, $p = .004$
Opinion of Model	-	$\beta = .40, SE = .07, t = 5.94, p < .001$	$\beta = .16, SE = .05, t = 3.03, p = .003$
Perceived Persuasion Intent	-	-	$\beta = .94, SE = .05, t = 19.55, p < .001$
Age	β =001, SE = .02, t =21, p = .83	$\beta = .0005, SE = .01, t = .09, p = .93$	β =002, SE = .004, t =39, p = .70
Gender	β =26, SE = .16, t = -1.65, p = .10	β =16, SE = .16, t =98, p = .33	$\beta =05, SE = .11, t =46, p.64$
Body Type	$\beta = .07, SE = .08, t = .84, p = .40$	$\beta = .13, SE = .08, t = 1.61, p = .11$	$\beta =13, SE = .06, t = -2.40, p = .02$
Satisfied with Body	$\beta = .09, SE = .06, t = 1.55, p.12$	$\beta = .11, SE = .06, t = 2.06, p = .04$	β =02, SE = .04, t =58, p = .56
Mediation 95% CI	[29;04]	[.01; .65]	[55;21]
	Opinion of Model	Persuasion Knowledge	Behavioral Intentions
Model Size	β =98, SE = .17, t = -5.64, p < .001	$\beta = .36, SE = .18, t = 1.97, p = .05$	$\beta = .38, SE = .17, t = 2.23, p = .03$
Opinion of Model	-	$\beta = .40, SE = .07, t = 5.94, p < .001$	$\beta = .23$, $SE = .07$, $t = 3.50$, $p < .001$
Perceived Persuasion Intent	-	-	β = .84, SE = .06, t = 13.53, p < .001
Age	β =001, SE = .02, t =21, p = .83	$\beta = .0005, SE = .01, t = .09, p = .93$	$\beta = .004, SE = .01, t = .66, p = .51$
Gender	β =26, SE = .16, t = -1.65, p = .10	β =16, SE = .16, t =98, p = .33	$\beta = .15, SE = .15, t = 1.06, p = .29$
Body Type	$\beta = .07, SE = .08, t = .84, p = .40$	$\beta = .13, SE = .08, t = 1.61, p = .11$	β =18, SE = .07, t = -1.48, p = .14
Satisfied with Body	$\beta = .09, SE = .06, t = 1.55, p.12$	$\beta = .11, SE = .06, t = 2.06, p = .04$	$\beta = .02, SE = .05, t = .47, p = .64$
Mediation 95% CI	[40;09]	[.01; .59]	[50;19]
	Opinion of Model	Persuasion Knowledge	Purchase Likelihood
Model Size	β =98, SE = .17, t = -5.64, p < .001	$\beta = .36, SE = .18, t = 1.97, p = .05$	$\beta = .25, SE = .17, t = 1.48, p = .14$
Opinion of Model	-	$\beta = .40, SE = .07, t = 5.94, p < .001$	$\beta = .20, SE = .07, t = 2.92, p = .004$
Perceived Persuasion Intent	-	-	$\beta = .98, SE = .06, t = 15.59, p < .001$
Age	β =001, SE = .02, t =21, p = .83	$\beta = .0005, SE = .01, t = .09, p = .93$	$\beta =005, SE = .01, t =82, p = .41$

Gender	β =26, SE = .16, t = -1.65, p = .10	β =16, SE = .16, t =98, p = .33	β =10, SE = .15, t =67, p = .50
Body Type	$\beta = .07, SE = .08, t = .84, p = .40$	$\beta = .13$, $SE = .08$, $t = 1.61$, $p = .11$	β =21, SE = .07, t = -2.83, p = .005
Satisfied with Body	$\beta = .09, SE = .06, t = 1.55, p.12$	$\beta = .11, SE = .06, t = 2.06, p = .04$	β =05, SE = .05, t = -1.01, p = .31
Mediation 95% CI	[36;05]	[.02; .68]	[57;22]