The Implications of Model Body Size and Self-Congruity on Consumer Attitudes & Purchase Intention in Women's Lingerie Advertisements

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The Implications of Model Body Size and Self-Congruity on Consumer Attitudes & Purchase Intention in Women’s Lingerie Advertisements

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Departmental Honors Research Project
Abstract

“Real” advertising, or advertising products using more “realistically” sized models, has recently become a notable trend within the fashion and beauty industries. However, little research has been done thus far to reveal the implications of such advertising tactics on consumer attitudes and purchase intention. In other words, this study intends to answer the following question: is this emerging advertising strategy truly effective? The idea of featuring models with body dimensions that more accurately represent the consumer’s body size taps into the concept of self-congruity. Self-congruity, or the level of likeness between consumer self-concept and the typical brand-user image, presents the theoretical framework of this study. In other words, does “real” advertising, or using larger and thus more realistically-sized models, work most effectively when the consumer perceives likeness to the model? This study included 406 adult women between the ages of 18-79 with a mean age of 31.4 years. An online survey was used to investigate the hypotheses. Major findings of the study include evidence to support that using models that participants found to be medium-sized does not result in poor outcomes in advertising effectiveness as measured in purchase intention, brand attitude and attitude towards advertisement. Rather, advertisements featuring models perceived as medium-sized by the participants correlated with more favorable outcomes in term of attitudes toward the advertisement and brand. The results of the data analyses also suggested that self-congruity, particularly actual self-congruity and ideal self-congruity, can be useful in predicting purchase intention, attitude towards advertisement and attitude towards brand.
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The Implications of Model Body Size and Self-Congruity on Consumer Attitudes & Purchase Intention in Women’s Lingerie Advertisements

Introduction

In 2004, the Unilever-owned brand Dove launched “Real Beauty,” a marketing campaign with messaging intended to showcase women that are more diversely sized. The curvy women within the advertisements boldly challenged the long-standing norm of using amazingly thin, digitally retouched, and seemingly flawless female models. Since the launch of the advertising campaign, the brand has won a myriad of awards, increased sales, and women are beginning to define beauty on a wider scale (Neff, 2014). Similarly, in 2014, Aerie launched “Aerie Real,” a marketing campaign that differentiated itself within the lingerie industry by featuring images of models that were free of any Photoshop editing. The “real” women within the advertisements weren’t “pencil thin” and showed skin with dimples, tattoos, stretch marks, beauty marks, and other features that most advertisers may traditionally deem as brand-damaging imperfections. From body soap to lingerie, even the American magazine Glamour has been using larger models (Martin & Xavier, 2010).

While a typical consumer can be exposed to as many as 3,000 ads each day, it has been suggested that only 5% of women could achieve the thin ideal portrayed in them (Sohn and Youn, 2013). Moreover, the literature suggests that being exposed to the thin ideal in advertising results in body dissatisfaction, increased self-consciousness, reduced self-
esteem, negative mood, and levels of depression (e.g., Bessenoff, 2006; Bush, Hitchon, Reaves, Park, & Yun, 2002; Grogan, Williams, & Conner, 1996; Harrison & Cantor, 1997; Irving 1990). In addition, the role of new technology that can alter images to portray the image of thin, “perfect” models has been found to worsen the rising health issue of eating disorders (e.g., Andersen & DiDomenic, 1992; Bellafante, 2003; Botta, 1999; Harrison & Cantor, 1997; Thompson & Heinberg, 1999). Thus, it come as no surprise that bout 50% of girls and undergraduate women report being dissatisfied with their bodies (e.g., Bearman, Presnell & Martinez, 2006; Monteath & McCabe, 1997). In sum, numerous studies have suggested that changing the way we advertise to women could potentially minimize body image disturbances in the women who see such advertisements.

In addition to this issue being one that threatens the mental wellness of female consumers, this issue also expands to question whether this damaging method of advertising is even effective. To explain, it has been found that about 60% of the women in America are obese or overweight (Ng et al., 2013). This shocking figure suggests the need to reevaluate if the outdated “thin sells best” mentality allows marketers to create advertisements that relate to their consumers. For example, Peck, Joann and Loken (2004) found that exposure to larger-sized models made female consumers feel that the advertisement was more relatable to them. Is such relatability beneficial to sales? In other words, what are the business outcomes for featuring models that appear to be relatable to consumers in advertisements versus models that appear much thinner?
Furthermore, evidence of this expanding market can be seen in the fact that the plus-size women's clothing market achieved a whopping $17.5 billion in sales for the fiscal year that ended in April 2014 (NPD Group 2014b). This was indicative of 5% growth, versus only 4% growth for the women’s apparel market overall (NPD Group 2014b, NPD Group 2014a). Plus-sized female apparel retailer Lane Bryant attempted to capitalize on this growth with their #ImNoAngel campaign in 2015. This brand claimed that the initiative celebrates women of all shapes and sizes by redefining society’s traditional meaning of “sexy” (Stampler, 2015). The brand, which targets women seeking sizes 14 to 28, presented the ad as a jab to Victoria’s Secret’s “angel” campaigns (Advertising Age, 2015). The uptick in producing advertisements with more diversely sized models suggests that doing so must be more beneficial from a business perspective. Otherwise, businesses such as Dove would not consistently waste their marketing dollars on impotent ads. Instead, a 2014 article in Adweek claimed that Dove almost doubled its sales from $2.5 billion to $4 billion since the launch of Campaign for Real Beauty as of that year (Ciambriello, 2014).

**Purpose**

The purpose of this study is two-fold. First, it is intended to test the advertising effectiveness of advertisements showing a perceived medium-sized (i.e., “average-sized”) model versus using one perceived as the more traditional, thin-sized model. The study will also determine whether using a female model whom the consumer perceives as having a body size congruent to herself may be correlated with greater advertising effectiveness. A supporting theoretical model will be explored to explain the relationship
between model body size and consumer attitudes. In other words, not only does this study seek to validate the results of previous studies that have postulated that larger model body size does not result in poor consumer attitudes, but also to indicate the theoretical construct that would explain these prior findings. The theoretical construct explored is self-congruity theory. Of note, the term body size in this context can be defined as the physical measurements of the human body including only height and weight.

**Literature Review**

**Model Body Size, Advertising Effectiveness and Internalization**

Among the recent research pertaining to model’s body size and advertising effectiveness was a study conducted by Halliwell & Dittmar (2004). This study constructed the exposure conditions of no model, a traditional thin-sized model and an average-sized model using computer imaging software to stretch the models’ body size. The sample consisted of 202 non-student women with an age range from 19-67. Also, 96% of participants were white. Advertising effectiveness was measured by attitude towards the brand, purchase intention and attitude towards the advertisement. The study found that that an average-sized, attractive model was equally effective as a very slim model.

Diedrichs & Lee (2011) sought to further expand on the generalizability of Halliwell & Dittmarr’s results by using a research group of young adult males and females (aged 17-25) in Australia. This study also aimed to utilize thin and average-sized professional models, rather than digitally retouched commercial imaging to alter the body size of the
models. The research predicted that advertisements depicting average-sized models would be rated as equally effective as those featuring thin models or no models. The sample size was comprised of 291 female participants and 120 male participants. Three conditions were constructed for this experiment: control (viewed advertisements with no models), thin model (viewed advertisements with thin models) and average-sized (viewed advertisements with average-sized models). The results concluded that the size of the model, as well as the presence of a model, had no significant effect on the ratings of advertisements for women. Overall, the study implied that average-sized female models can appeal to consumers just as well much as thin models can. The study’s findings also suggested that average sized models also promote positive body image for women with average and high levels of internalization of the thin ideal.

Sohn & Youn (2013) utilized a similar methodology as Halliwell & Dittmar (2004) to answer the following question: how do different body sizes of a female model influence advertising effectiveness? To elaborate, Sohn & Youn (2013) designed their research to control for facial attractiveness by using a computer-based method to manipulate the body sizes of the models while maintaining their level of facial attractiveness. On the other hand, Sohn & Youn (2013) used three body sizes (thin, average, or large) rather than the two (thin and average) used in previous studies (Halliwell & Dittmar 2004, Deidrichs & Lee 2011). In sum, 201 undergraduate and graduate students were recruited for the study, with 96% between the ages of 18-28 and 59% being female. In total, six different versions of advertisements were generated. Three versions of the same model (thin, average or large-
sized) were depicted for each of the two products used: an alarm clock and a make-up kit. The results of the study concluded that participants exposed to the average-sized model produced a more favorable attitude toward the brand than those exposed to the thin model condition and large-sized model condition. Average-sized models also elicited more positive effects of advertising on persuasion-related measures in comparison with the other two conditions as well.

As reviewed above, traditional view that “thin sells best” is beginning to falter. The fact that average-sized models are being shown to induce either the same, or better, positive advertising outcomes than thin-sized models is an idea that is radically incompatible with how most women’s fashion brands are still advertising. However, the ambiguity of the phrase “average-sized” that has been used in the studies reviewed leaves out the importance of perception. Thus, this research will concern itself more with the consumer’s perceptions of “average-sized”, rather than assuming what consumers perceive as “average” based on census statistics. While the use of the word “average” is thus erroneous in this case, as it is not being used to represent mean body size, “medium-sized” will rather be used to describe the condition in which three successive images are used and the body size is smaller than the “large-sized” model but larger than the “small-sized” model.

To further validate the findings of the studies reviewed, as well as allow the participants to decide which advertisement condition depicts a “medium-sized” model rather than the researcher, the following hypotheses will be tested:
H_{1a}: Advertisements showing what consumers perceive as a medium-sized model will correlate with higher purchase intention compared to advertisements showing what consumers perceive as a small-sized model.

H_{1b}: Advertisements showing what consumers perceive as a medium-sized model will correlate with more positive attitude towards the advertisement compared to advertisements showing what consumers perceive as a small-sized model.

H_{1c}: Advertisements showing what consumers perceive as a medium-sized model will correlate with more positive attitude towards brand compared to advertisements showing what consumers perceive as a small-sized model.

While some examples of prior studies have already tested similar hypotheses, as noted, an important question remains. Does a women’s perception of her own body size play a role in how she evaluates advertisements with varying model sizes? More specifically, do more women favor brands using “medium-sized” models over “thin-sized” or “large-sized” models because they evaluate themselves as being “medium-sized” as well? Is it then this resulting “likeness” that contributes to the positive brand evaluations? Unfortunately, no known previous studies have required participants to classify how they perceive their body size, so this potential relationship has not been explored. Despite this, there has been extensive research on a theory that has the potential to test this idea – the self-congruity theory.
Self-Congruity Theory

Self-congruity is a construct that has been used to explore many topics in consumer behavior, including topics such as e-mass customization, video gaming usage, hotel brand preferences, internet retailing, cruise ship experiences, and the brand positioning of perfume/cologne brands (Minjung & Jungmin, 2016; Davis & Lang, 2013; Su, 2017; Aguirre-Rodriguez & Boveda-Lambie, 2014; Hosney & Martin, 2012; Hamilton & Sun, 2005). Sirgy (1982) initially introduced the concept as the extent to which a consumer’s self-image matches the image of a typical brand user. Kim (2015) similarly described self-congruity as “…the congruence between self-image and a brand’s user-imagery” and noted its effects on brand evaluation that have been “robust and valid” (Kim, 2015). In other words, self-congruity can be thought of as the level of “sameness” that a consumer perceives between herself and her idea of the typical user of a certain brand. Self-congruity is impactful on business outcomes since the consumer creates, reinforces and communicates his or her self-image by purchasing from brands with self-congruent images (Sung & Choi, 2010).

As there are several dimensions to the self-image, including actual self, ideal self, social self, and ideal social self, there are also several corresponding types of self-congruity. These are actual self-congruity, ideal self-congruity, social self-congruity and ideal social self-congruity. Actual self-congruity is a congruent comparison regarding the typical brand user as depicted by the model and the consumer’s actual self or current, true self. On the other hand, ideal self-congruity is a congruent comparison between the
consumer’s *ideal* self, or who they want to be, and the typical brand user. As actual and ideal self-concept effects have stronger effects than the other self-concepts (e.g., social self) on brand evaluation, these are the only types of self-congruity that will be studied (Kim & Hyun, 2013).

Recent research has further expanded the definition of self-congruity as, “...the congruence between self-image and a variety of images related to a brand” (Kim 2015). As the clothing and beauty advertisements that are shown to female consumers can be thought of as images relating to their respective brand, it can be assumed that the models showcased in such ads contribute to the consumer’s perceived image of the typical user of that brand. To explain, if brand images help shape the consumer’s perception of the typical brand user, then the body size of the model used in such brand images should contribute to how the consumer perceives the body size of the typical brand user of that image to be. In other words, if a brand uses a thin sized model then the consumer should subsequently perceive the typical brand user of that brand to be thin. This typical brand user perception is what the consumer uses to formulate her level of self-congruity with a brand as previously defined. Thus, it can be concluded that when the consumer sees an advertisement of what she interprets as a medium-sized model, and she perceives herself as medium-sized, she will find herself feeling congruent to the typical brand user of the advertisement. Similarly, sameness between the consumer’s ideal body size, such as “small-sized”, should equate to ideal self-congruity. To avoid making an erroneous
assumption about this, however, the following hypothesis will be tested to set a foundation for the proposed research model.

H2a: Sameness between the respondent’s self-identified body size and the participant’s perception of the model’s body size will correlate with higher actual self-congruity.

H2b: Sameness between the respondent’s self-identified ideal body size and the participant’s perception of the model’s body size will correlate with higher ideal self-congruity.

The reason for the motivation to seek congruity between a product-user image and an actual self-concept is fulfillment of needs such as self-esteem, self-consistency, social consistency, and social approval (Sirgy & Johar, 1992). This can be referred to as the actual self-concept effect. Previous literature states that this effect, specifically, is most induced by the self-consistency motive. This motive is described as a consumer’s tendency to behave (i.e., purchase) in a way that is consistent with his or her present self-image (i.e., actual self-concept) in order to preserve his or her identity (Sirgy, Grewal & Mangleburg, 2000). In accordance with these statements from the literature, the following additional hypotheses will be explored:

H3a: Actual self-congruity will correlate with higher purchase intention.
H₃₉: Actual self-congruity will correlate with more positive attitudes towards advertisement.

H₃ₐ: Actual self-congruity will correlate with more positive attitudes towards brand.

Ideal self-concept, or ideal self, refers to how a person desires to see themselves (Sirgy, 1982 p. 287). If a consumer feels unsatisfied with present self-image, she may aspire to enhance her personal identity by attempting to upgrade herself to an ideal state (Kim, 2015). The subsequent ideal self-congruity effect is induced by the self-esteem motive, or the consumer’s drive to increase his or her self-esteem by reaching his or her ideal state (Hong & Zinkhan, 1995).

H₄₉: Ideal self-congruity will correlate with higher purchase intention.
H₄₉: Ideal self-congruity will correlate with more positive attitudes towards advertisement.
H₄₉: Ideal self-congruity will correlate with more positive attitudes towards brand.

**Research Model**

Figure 1. The Body Size Congruity Effect Model

*Hypothesis 1 is not included as it does not pertain to this overarching influence model.*

*Rather, it predicts the outcome of using medium-sized models specifically.*
Methods

Participants and Recruitment

The data for this research was obtained through an online survey that was taken by a sample of women over the age of 18. Demographic information was collected including age, height, weight and race. Age and height was used to calculate each respondent’s Body Mass Index (BMI, a commonly used metric to measure weight in relation to height). Age and race was used to demonstrate the diversity of the sample, and subsequently indicated the generalizability of results.

The sample (n=406) was diverse with adult women that ranged in age from 18-79 with a mean age of 34 years. In terms of race, 72% of participants identified themselves as white, 13% as black or African American, 6% as Asian and 1% as American Indian or
Alaska Native. About 9% did not wish to identify. The average BMI of the sample was 27.2 with a mean height of 63.8 inches and a mean weight of 158.3 pounds. A sufficient sample of each self-identified body size was reached with 102 (25%) small-sized women, 186 medium-sized women (46%) and 118 large-sized women (29%). Interestingly, there was also a slight majority of women who reported that their ideal body size is medium-sized (50%), with 48% small-sized and only about 1% large-sized. The slight majority of the sample reported being “somewhat satisfied” with their body (53%) while 36% reported being “not satisfied” and only 10% said they were “very satisfied” (1% selected “Don’t know/not sure”).

The researcher recruited through chain-referral sampling that began with a group of six, trusted females to take the survey. The first group then reached out to six more trusted females, and the cycle repeated indefinitely until the survey was closed. Communication materials for recruited were using in the form of e-mail as well as messaging through social media channels such as LinkedIn and Facebook.

**Experimental Design**

Each of the three experimental conditions was represented by a lingerie advertisement featuring a female model that was perceived as having one of the body sizes (small-sized, medium-sized or large-sized). To explain, Photoshop was used to alter the appearance of each differently sized model, creating one in which the model was the slimmest, another with a model that was somewhat proportionately larger, to create a medium-sized model,
and lastly one in which the model was somewhat proportionally larger than the medium-sized model, to create a large-sized model. Body width was expanded in each alteration but body height was kept constant. Stretching an image (i.e., proportionally enlarging the model’s body in the advertisement), rather than using three different advertisements with varied models, was purposeful in keeping attractiveness constant as adopted by the procedure utilized by Halliwell & Ditmar (2004).

Participants were given the ability to classify each model’s body size as either small, medium or large based off each of their individual perceptions. As expected, there were some discrepancies between the intended model sizes set by the researcher and the model sizes perceived by the participant. For example, some participants perceived the largest sized model as medium-sized. The perceived model sizes were then used to differentiate the conditions rather than the originally separated categories. In other words, the participant perceptions rather than the perceptions of the researcher were used to sort the responses in terms of which condition they induced.

The conditions were created and the data was collected though the online survey platform Qualtrics. Participants were given an introduction with some information regarding the study’s purpose including that the results would be used to better understand how women perceive advertisements. Participants, remaining anonymous, were then exposed to each successive advertisement and were asked follow-up questions afterwards that related to the advertisement and associated brand. Each advertisement was associated with a
disparate fictitious brand: the smallest sized model with Brand X, the larger model with Brand Y and the largest with Brand Z. False brand names were created to avoid any preconceived bias regarding established brands.

Measures

**Actual Body Size, Ideal Body Size and Body Satisfaction**

Actual body size was self-identified by the respondent as either (1) small-sized, (2) medium-sized or (3) large-sized after being inquired, “How do you classify your current body size?” This was used to compare how the participants identifies her body size versus how she identifies the body size of each model in the three conditions. Body satisfaction was measured by asking the question, “How do you feel about your body size right now?” which has been used in prior studies (Millstein et al., 2008). Ideal body size will also be directly self-identified by the respondent after they are asked, “How would you classify your ideal body size.”

**Consumer Attitudes**

Attitude towards the advertisements in each condition will all be measured by asking, How do you describe your reaction to the advertisement?” as adopted by procedures used by Halliwell & Ditmar (2004) and Mackenzie & Lutz (1989). Participants will respond on a 6-point semantic differential from unfavorable-favorable (1-6). Similarly, attitude towards the brand (either fictitious Brand X, Brand Y or Brand Z as identified in the survey) will also be collected on a 6-point semantic differential from negative-positive
(1-6) after being asked, “What is your initial response to the brand described in the ad?” This question is also adopted from the procedure utilized by Halliwell & Ditmar (2004) and Mackenzie & Lutz (1989).

**Purchase Intention**

Purchase intention will be measured by a series of three questions as adapted from procedure by Sohn (2006) with responses that are on a 7-point Likert scale from strongly disagree to strongly agree (1-7). Respondents will indicate their level of agreement regarding the following statements: (1) “I will consider purchasing the advertised product”, (2) “I will most likely purchase the advertised product within the next six-month period” and (3) “I will recommend the advertised product to my friends”. The average value from these three responses will be used as the data point for purchase intention as similarly done by Sohn (2006).

**Actual and Ideal Self-Congruity**

Measures for actual self-congruity will also include a set of three questions that will be measured on a 7-point Likert scale from strongly disagree (1)-strongly agree (7) as adopted from similar procedure by Kim & Hyun (2012). The respondents will indicate their level of agreement on the following statements: (1) “The image of this typical user of Brand X is highly consistent with how I see myself”, (2) “People who use Brand X rather than other brands are more similar to how I see myself” and (3)“People who prefer Brand X to other brands are more identifiable with myself in the present”. The average
value from these three responses will be used as the data point for actual self-congruity as also done prior by Kim & Hyun (2012).

Ideal self-congruity will also be measured on a 7-point Likert scale from strongly disagree (1)-strongly agree (7) also as adapted from previous procedure by Kim & Hyun (2012). The questions selected in which the respondents level of agreement will be measured are: (1) “People who use Brand X rather than other brands are more similar to how I see myself”, (2) “People who use Brand X rather than other brands are more identifiable with my ideal self-image” and (3) “The image of a typical Brand X user is highly consistent with how I would like to see myself” (Scales: 0.85, 0.84) (Kim & Hyun, 2012). The average value from these three responses will be used as the data point for ideal self-congruity as done prior by

**Respondent-Model Body Size “Sameness”**

Any instances in which the respondent classifies herself as the same body type as any of the given models will be measured by two questions. The respondents body size, as stated prior, will be measured by the response of “How do you classify your current body size?” The respondent’s classification of each model with be measured in the same exact way, with the same choices (small-sized, medium-sized and thin-sized) to the question, “How do you classify the body size of this model?”. This data was used to compare the conditions in which the participant identifies her actual body size or ideal body size as the same by body size as the model versus when the participant does not.
Results

Table 1

Summary of intercorrelations for scores on attitude towards advertisement, brand attitude, purchase intention, actual self-congruity and ideal-self congruity

<table>
<thead>
<tr>
<th></th>
<th>Attitude Towards Advertisement</th>
<th>Brand Attitude</th>
<th>Purchase Intention</th>
<th>Actual Self-Congruity</th>
<th>Ideal Self-Congruity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Towards Advertisement</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Attitude</td>
<td>0.77</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.61</td>
<td>0.58</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual Self-Congruity</td>
<td>0.44</td>
<td>0.41</td>
<td>0.56</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Ideal Self-Congruity</td>
<td>0.45</td>
<td>0.37</td>
<td>0.52</td>
<td>0.58</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Hypothesis 1**

Hypothesis 1 postulated that using a model with a body size that consumers perceive as “medium-sized” would correlate with greater advertising effectiveness compared to using a model consumers perceive as “small-sized”. Advertising effectiveness was determined with three measures including attitude towards advertisement, attitude towards brand and purchase intention. A Mann-Whitney U test was utilized to determine significance between the two samples (instances in which the participant labeled the model as small-sized versus medium-sized). This test was chosen because the data was not normally distributed.

According to data analyses, the results weakly supported H1a which predicted that the use of a medium-sized would correlate with higher purchase intention. Advertisements depicting a model that participants perceived as being medium-sized (n=709, M=494.28)
did rate slightly higher on purchase intention (n=260, M=459.71) than advertisements with a model perceived as small-sized, however the null hypothesis was not rejected (p=.088). Of note, a relatively small sample of participants perceived any of the three conditions as large-sized and thus the results are inconclusive for determining advertising effectiveness using what consumers perceive as large-sized models.

Chart 1. Advertising Effectiveness and Perceived Model Body Sizes

The group of responses that identified a model in any of the three given conditions as medium-sized scored higher on attitude towards advertisement (n=818, M=552.20) than the responses that identified a model as small-sized (n=260, M=499.53) as hypothesized in H1b. The null hypothesis was rejected with a p-value of .014. Thus, H1b was supported.
Lastly, $H_{1c}$ was supported as well with higher scores on brand attitude for perceived medium-sized models ($n=817, M=552.12$) than for perceived small-sized models ($n=260, M=497.78$). The null hypothesis was rejected again with a p-value of .011.

**Hypothesis 2**

$H_{2a}$ estimated that perceived “sameness” between the consumer and the model, in terms of body size, would positively correlate with greater actual self-congruity. The mean actual self-congruity value, based off the Likert scale values assigned (1-7), was higher for those that had “sameness” with the model ($M=4.62, n=436$) than those who perceived that they did not ($M=3.65, n=780$). P-value of <.001 was calculated and thus null hypotheses was rejected. $H_{2a}$ was supported.

Similar to what $H_{2a}$ hypothesized, $H_{2b}$ predicted that “sameness” between the perception that the participant had about her ideal body type and about the model in the advertisement would correlate with higher ideal-self-congruity as measured on a Likert scale. $H_{2b}$ was also supported with a higher mean for ideal-self congruity when there is “sameness” ($M=4.73, n=547$) versus no “sameness” ($M=3.91, n=667$). The null hypothesis was rejected with $p < .001$.

**Hypothesis 3**

Hypothesis 3 states that actual self-congruity will positively correlate with advertising effectiveness measured by purchase intention, attitude towards advertisement and attitude
towards brand. To reiterate, advertising effectiveness was measured in three ways: attitude towards advertisement, attitude towards brand and purchase intention. Simple linear regression was used to determine if actual self-congruity is an explanatory variable of any or all of the three measures of advertising effectiveness.

**Chart 4.**

![Chart 4: The Relationship Between Actual Self-Congruity and Purchase Intention](image)

H3a hypothesized that greater actual-self congruity would correlate with greater purchase intention. With an R value of .57, the two variables are significantly, positively correlated. The simple linear regression also indicated an r² value .32, thus about 32% of the variation in purchase intention can be explained by the level of actual self-congruity. The regression equation appears to be useful to predict purchase intention. F-test method uses a p-value of <.001 to determine that the null hypothesis is rejected (F=571.930).

**Chart 5.**
H3b hypothesized that greater actual-self congruity would correlate with more positive attitudes towards the advertisement. Data analyses yielded an R-value of .44 which indicates that the two variables are positively correlated. Simple linear regression further indicated a coefficient of determination of .19, thus about 19% of the variation in attitude towards advertisement can be explained by level of actual self-congruity. The regression equation subsequently seems somewhat useful in predicting attitude towards advertisement based on a coefficient greater than 0 and a p-value that enables the rejection of the null hypotheses per F-test (p<.001, F=290.629). H3b was supported.
H3c was also supported with an R value of .41 which indicates that the variables are positively correlated. An $r^2$ value of .17 indicates that 17% of the variation in attitude towards brand can be explained by level of actual self-congruity. The p-value can be used to rejected the null hypothesis as indicated by the F-test ($p<.001$, $F=250.774$).

**Hypothesis 4**

Hypothesis 4 states that ideal self-congruity will correlate with advertising effectiveness measures including purchase intention ($H_{4a}$), attitude towards advertisement ($H_{4b}$) and attitude towards brand ($H_{4c}$).
H4a was supported by the results of the data analysis. To explain, simple linear regression indicated an R value of 0.52 which suggests positive correlation between ideal self-congruity and purchase intention. Moreover, about 27% of the variation in purchase intention could be accounted for by the level of ideal self-congruity ($r^2=0.27$). The null hypothesis was rejected by results of an F-test ($F=447.661$, $p<.001$).

**Chart 7.**

**Chart 8.**
H4b was supported by the results of the data analysis. Simple linear regression indicated an R value of .46 which suggests positive correlation between ideal self-congruity and attitude towards advertisement. Furthermore, 21% of the variation in attitude towards advertisement could be accounted for by the level of ideal self-congruity ($r^2=.210$). The null hypothesis was rejected by results of an F-test ($F=332.311$, $p<.001$).

**Chart 9.**

H4c was supported by the results of the data analysis. Simple linear regression indicated an R value of .39 which suggests positive correlation between ideal self-congruity and attitude towards brand. Furthermore, 15% of the variation in attitude towards brand could be accounted for by the level of ideal self-congruity ($r^2=.15$). The null hypothesis was rejected by results of an F-test ($F=213.473$, $p<.001$).
Discussion

Implications of Findings

*Does Small Sell Best?*

The results of this study, compounded with those reviewed, suggest that there is evidence to reject the long-standing notion that “thin sells best.” Rather, using a larger, “medium-sized” models may have the same effects on purchase intention and the same, if not better, effects on attitude towards advertisement and attitude towards brand. Considering that most advertisements are still featuring very slim models, the growing consensus upon researchers that thin may not necessarily “sell best” should not be ignored. Rather, the results of this study should be considered by lingerie retailers and marketers alike to use larger-sized models to induce better consumer attitudes. After all, doing so could not only create greater advertising effectiveness but such advertising strategy would also be more socially responsible. Thus, the benefits could be twofold. After all, corporate social responsibility based advertisements has been found to result in more positive brand attitude and product evaluations (Bulut, 2011).

In sum, the results induce a very troubling question: if small-sized models do not provide greater advertising outcomes in women’s lingerie then why use them? In other words, if models perceived as medium-sized could produce at the least the same advertising effectiveness as models perceived as small-sized models, then what is the gain of featuring lingerie advertisements that may induce body image disturbances and low self-esteem in women? Without substantial evidence that ultra-thin models are more effective than larger
models, the adverse effects of using unattainably skinny models should be avoided. Further reason to use more realistically sized models also emerged from the results regarding self-congruity effects.

The Implications of Self-Congruity on Advertising Strategy

As hypothesized, actual self-congruity was strongly correlated with purchase intention (R=0.56). Actual self-congruity (r²=0.32) was also found to be a somewhat greater influencer on purchase intention than ideal self-congruity. This supports the idea that consumers are motivated by the self-consistency motive which states that consumers tend to exhibit purchasing behavior that enables them to remain consistent with his or her identity (i.e., buying from a brand that he or she finds congruent with his or her own self-concept). In other words, the data suggests that a female consumer would be more likely to purchase a product that is advertised with a model she perceives as having a body size that is more representative of the perception she has of her own. After all, when the participant identified the model as having the same body size as her, she was about 26.6% more likely to experience greater actual self-congruity then when she identified the body size as bigger or smaller. In turn, the resulting actual-self congruity heightened the likelihood that the participant intended to purchase the lingerie product. In sum, the findings regarding actual self-congruity showed that “sameness” between model and consumer body type effected actual self-congruity which induced greater scores on advertising effectiveness. Compounded with the knowledge that most women are not size zero, this comes with interesting implications.
To elaborate, this study provides evidence that actual-self congruity can effect purchasing behavior. But, what does that mean for advertising strategists and marketers in the lingerie business? It means that real women may experience more actual self-congruity when they view lingerie advertisements that feature other real women. In this context, the word real is used to represent body sizes that are more commonly maintained by women. Simply put, our societies lingerie advertisements may be more effective if they accurately represented the women who wear the lingerie. By replacing ultra-thin models with models that female consumers perceive as having the same body size themselves, marketers might optimize the actual-self congruity experienced by their target market. After all, how can a woman know how the product will look on her by observing it on a model that is two-thirds her size? Further research may be able to uncover how the relatability between consumer and model effects business outcomes and consumer emotion. In conclusion, it is a substantial finding that actual self-congruity could attribute for higher purchase intention, a more positive attitude towards the advertisement \( (r^2=0.19) \) and a more positive attitude towards the brand \( (r^2=0.17) \). This should pull researchers towards the idea of using more relatable models over more unrelatable ones.

Although actual self-congruity appeared to be a slightly more impactful predictor of advertising effectiveness than ideal self-congruity, ideal body size did not lag far behind in terms of its effects on purchase intention \( (R=0.52, \ r^2=0.27) \). Moreover, about 50% of the women that participated in this study reported having an ideal body size that is medium-sized versus 46% with an ideal body size that is small. This is counterintuitive as
the traditional basis for using thin models has been that doing so motivates women to purchase the lingerie or clothing in effort to become more like the thin model. Thus, even when participants intended to purchase the product because of the effects of ideal self-congruity, her ideal body size was more likely to be medium-sized than thin sized. Although this data is not strongly suggestive that using medium-sized models may induce more self-congruity effects, it is substantial enough to hint at the fact that the use of medium-sized models is at least as effective as using thin-sized models.

**Limitations and Future Research**

This study includes some limitations. To explain, it is important to note the many moderators that have emerged through the literature regarding the relationship between self-congruity and brand evaluation (Barone, Shimp, & Sprott, 1999). Such moderators have included internalization of the thin ideal, self-motives, impression-formation process and product stimulus abstraction as well as factors including self-construal, product conspicuousness, and response mode and were not considered in this study (Diedrich’s & Lee, 2011; Aguirre-Rodriguez, Bosnjak, and Sirgy, 2012). Kim 2015 presents an integrative model on self-congruity that encompasses myriad moderators including self-monitoring, time pressure, product ownership, involvement, information processing, self-monitoring, co-shopping and many more (Kim, 2015). Such considerations may be involved in any future research pertaining to the topic of self-congruity in consumer research.
In addition, this study utilized a snowballing recruitment method which may have resulted in bias or lack of representativeness of the sample to the population. This is to be considered when interpreting the generalizability of the results of this study. The generalizability of this study may also be questioned in terms of what kinds of products that these findings represent. To elaborate, this study specifically pertained to women’s lingerie. Thus, the results of the study may not be generalizable to other products marketed towards women such as cosmetics, bathing suits, dresses, pants, etc. Rather, further research is encouraged to expand on which products the hypotheses of this study may be supported for.

Lastly, body size was simplified to being either small-sized, medium-sized or large-sized within this study’s design. Certainly, body size has the capacity to be perceived as not fitting into any of these categories but rather between them or beyond them. Additional aspects of the model's body could be considered in terms of their influence on self-congruity that were not included in this study. Such traits include body type, skin color, hair color, hip-to-waist ratio, and others. Research that goes beyond body size and incorporates other perceived similarities between consumer and model that may influence self-congruity and thus advertising effectiveness is thus encouraged.
Appendix A. Survey

Please fill out the following information about yourself:

- Height (e.g., 5'7") ________________________________
- Weight (lbs.) ________________________________
- Age (years) ________________________________

How do you describe yourself?

- Male
- Female
- Other

Are you of Hispanic, Latino, or Spanish origin?

- Yes
- No

Which of the following best describes your race?

- American Indian or Alaska Native
- Asian
- Black or African American
- Hawaiian Native or Other Pacific Islander
- White
What is your ideal weight? (lbs.)
________________________________________________________________

How do you feel about your body size right now?

  ○ Very satisfied
  ○ Somewhat satisfied
  ○ Not satisfied
  ○ Don't know/not sure

How would you classify your current body size?

  ○ Small-sized
  ○ Medium-sized
  ○ Large-sized

How would you classify your ideal body size?

  ○ Small-sized
  ○ Medium-sized
  ○ Large-sized

The following questions will show various advertisements for women's lingerie. The advertisements will be separated into three fictitious brands referred to as “Brand X”, “Brand Y” and “Brand Z”, respectively. After each advertisement, you will be asked a series of questions in regards to the advertisement and brand represented.
The following questions are based on the advertisement above which depicts an advertisement for Brand X in which the model is wearing Brand X lingerie.
How do you describe your reaction to this advertisement?

- Extremely favorable
- Moderately favorable
- Slightly favorable
- Neither favorable nor unfavorable
- Slightly unfavorable
- Moderately unfavorable
- Extremely unfavorable

What is your initial response to the brand described in the ad?

- Extremely positive
- Moderately positive
- Slightly positive
- Neither positive nor negative
- Slightly negative
- Moderately negative
- Extremely negative
I will consider purchasing the advertised lingerie

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

I will most likely purchase the advertised product within the next six-month period

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
I will recommend the advertised product to my friends

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

How would you classify the body size of this model?

- Small-sized
- Medium-sized
- Large-sized
The image of this typical brand user of Brand X is highly consistent with how I see myself

- [ ] Strongly agree
- [ ] Agree
- [ ] Somewhat agree
- [ ] Neither agree nor disagree
- [ ] Somewhat disagree
- [ ] Disagree
- [ ] Strongly disagree

People who use Brand X rather than other brands are more similar to how I see myself

- [ ] Strongly agree
- [ ] Agree
- [ ] Somewhat agree
- [ ] Neither agree nor disagree
- [ ] Somewhat disagree
- [ ] Disagree
- [ ] Strongly disagree
People who prefer Brand X to other brands are more identifiable with myself in the present

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand X rather than other brands are more identifiable with my ideal self-image

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
The image of a typical Brand X user is highly consistent with how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand X rather than other brands are more similar to how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
Brand Y

The following questions are based on the advertisement above which depicts an advertisement for Brand Y in which the model is wearing Brand Y lingerie.
How do you describe your reaction to this advertisement?

- [ ] Extremely favorable
- [ ] Moderately favorable
- [ ] Slightly favorable
- [ ] Neither favorable nor unfavorable
- [ ] Slightly unfavorable
- [ ] Moderately unfavorable
- [ ] Extremely unfavorable

What is your initial response to the brand described in the ad?

- [ ] Extremely positive
- [ ] Moderately positive
- [ ] Slightly positive
- [ ] Neither positive nor negative
- [ ] Slightly negative
- [ ] Moderately negative
- [ ] Extremely negative
I will consider purchasing the advertised lingerie

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

I will most likely purchase the advertised product within the next six-month period

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
I will recommend the advertised product to my friends

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

How would you classify the body size of this model?

- Small-sized
- Medium-sized
- Large-sized
The image of this typical brand user of Brand Y is highly consistent with how I see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who use Brand Y rather than other brands are more similar to how I see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
People who prefer Brand Y to other brands are more identifiable with myself in the present

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand Y rather than other brands are more identifiable with my ideal self-image

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
The image of a typical Brand Y user is highly consistent with how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand Y rather than other brands are more similar to how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
Brand Z

The following questions are based on the advertisement above which depicts an advertisement for Brand Z in which the model is wearing Brand Z lingerie.
How do you describe your reaction to this advertisement?

- Extremely favorable
- Moderately favorable
- Slightly favorable
- Neither favorable nor unfavorable
- Slightly unfavorable
- Moderately unfavorable
- Extremely unfavorable

What is your initial response to the brand described in the ad?

- Extremely positive
- Moderately positive
- Slightly positive
- Neither positive nor negative
- Slightly negative
- Moderately negative
- Extremely negative
I will consider purchasing the advertised lingerie

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

I will most likely purchase the advertised product within the next six-month period

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
I will recommend the advertised product to my friends

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

How would you classify the body size of this model?

- Small-sized
- Medium-sized
- Large-sized
The image of this typical brand user of Brand Z is highly consistent with how I see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who use Brand Z rather than other brands are more similar to how I see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
People who prefer Brand Z to other brands are more identifiable with myself in the present

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand Z rather than other brands are more identifiable with my ideal self-image

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
The image of a typical Brand Z user is highly consistent with how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

People who prefer Brand Z rather than other brands are more similar to how I would like to see myself

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree
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