[Research Paper]

The Effects of "Me-model" Body-size Discrepancy on Young Korean Consumer's Shopping Mood, Store Satisfaction, and Intention to Revisit Online Apparel Stores

Ji Young Lee[†] · Kim K. P. Johnson*

Textiles, Apparel and Merchandising, Louisiana State University
*Retail Merchandising Program, University of Minnesota

Abstract

This study examined the effects of "me-model" body-size discrepancy on consumer's shopping mood, store satisfaction, and intention to revisit two types of online apparel stores (one featuring thin models and one featuring average-sized models). A convenience sample of women (n = 528) participated. Structural equation modeling was used to analyze the data. Participants who were thinner or similar to the models indicated positive shopping moods, a high level of online store satisfaction, and intended to revisit the stores when compared to participants who were larger than the models. Participants preferred the 'average-sized' model. This preference was attributed to the familiarity of the model and ability to effectively evaluate merchandise. The results revealed how models can influence apparel consumers in an online context.

I. Introduction

Apparel is one of the most popular product categories sold online (Corcoran, 2007). In the second quarter of 2012, apparel was the second-largest e-commerce category following travel/reservation service (Statistics Korea, 2012). Due to the general growth in online shopping, the effect of an online store's atmosphere has garnered both managerial and research attention (Eroglu et al., 2003). In particular, product presentation plays an important role in the context of online apparel shopping because consumers tend to make their purchase decision based on this feature (Ha & Lennon, 2009; Kim & Lennon, 2008). Methods designed to display apparel products effectively and induce consumer purchasing include using human models (Kim et al., 2009), moving images of products (Park et al., 2005), and 2D and 3D views

(Kim & Malkewitz, 2009). Among the different methods of product presentation in online shopping, Kim et al. (2009) found that product presentation using human models is more effective than other types of presentation for influencing customer's emotional responses. Particularly in South Korea, using a human model is recognized as one of the important factors for a successful online fashion business. In fact, some Korean researchers have studied the effect of the use of human models in an online apparel store on consumer's decision making. For example, Lee and Noh (2006) in their research with Korean consumers who shopped for apparel online found use of human models influenced product trust (e.g., trust in the quality of the apparel that models wore), product appeal (e.g., attention paid to the apparel worn by models), and excitement (e.g., enjoyment experienced by viewing models).

Investigations of the influence of fashion models on women's behaviors have typically focused on how exposure to models impacts women's body image and

[†]Corresponding author
 E-mail: jylee@lsu.edu

other thoughts about the self (Groesz et al., 2002). The primary theory used to frame these investigations is social comparison (Festinger, 1954). The outcome of women making comparisons to fashion models is generally a reduction to their self-esteem and other negative self evaluations (e.g., body dissatisfaction) (Tiggemann, 2012). Less research has been conducted on how the use of online fashion models and possible consumer-model comparisons may influence consumption behaviors. Outcomes from the experience of a consumer-model body discrepancy as a result of social comparison with an online model may be complicated because this experience could influence both psychological (e.g., self-esteem, mood, attitudes toward the store) and behavioral responses (e.g., purchase intention, intention to revisit the store).

Models used in an online store serve as stimuli that enhance presentation of the products featured as well as the store's image. The model provides another utilitarian benefit.Typically, consumers do not try on merchandise prior to purchase from an online apparel store (Kim & Lennon, 2008). Based on the product presentation, consumers must evaluate products and make their decision whether or not to purchase them. Thus, using models that are similar to customers can help customers make judgments concerning the fit or appropriateness of a style for their body type. This idea led to the hypothesis that similarity between a consumer's and a model's body size could directly influence consumer's purchase decisions.

A brief review of online stores developed by Korean marketers suggested that the body type and level of facial beauty of models featured is inconsistent. Some online fashion retailers show a preference for using ultra thin models with exceptional facial beauty while others use amateur models with average-sized bodies and ordinary faces.

As mentioned earlier, similarity or dissimilarity between a consumer's and model's body size could influence an array of reactions by customers including psychological, emotional, and behavioral responses. For example, less similarity with a featured model's body size could result in negative self perceptions (e.g., reduced body image, body satisfaction) as well

as could reduce the consumer's ability to make judgments concerning fit or appropriateness of an apparel style. This reduced ability to infer how a garment might look on oneself might result in reluctance to buy apparel items from the site and reduce desire to return to the shopping site. Because the effect of consumer's comparison of their body to fashion model's body on their consumption behavior is an under investigated area and because these comparisons can influence purchase decisions, the purpose of this study was to investigate the effects of perceived "me-model" body-size discrepancy on consumer's mood, store satisfaction, and intention to revisit a store in the context of online apparel shopping. Specifically, this study investigated the effect of difference between consumer's and different types of model's body (e.g., thin, average-sized model) on consumer responses. This purpose provides insight into how a fashion model's body size, as a component of online store atmospherics, influences consumer's mood and consequent shopping behaviors.

II. Literature Review and Theoretical Framework

1. "Me-model" Body-size Discrepancy and Social Comparison in Online Shopping

Consumer preference for a certain appearance or apparel style can be motivated by consumers' desire to meet the ideal images created by fashion marketing practitioners (Park & Kim, 2004; Solomon, 2002). In general, marketing practitioners use attractive and thin models to present their merchandise. However, problems have been associated with using thin models such that viewing thin models typically elicits negative results (Bessenoff, 2006; Kim & Lennon, 2007). These negative results may stem from a "me-model" body-size discrepancy between the model and the customer. A "me-model" body-size discrepancy occurs when an individual experiences a difference between the body of the model and their own body. Experiencing this discrepancy can serve as a motivation for negative and positive self-thoughts. For example, Stice

et al. (1994) found that female undergraduates who were exposed to a thin model reported dissatisfaction with their bodies and negative moods as compared to individuals exposed to an average-sized model. Similarly, Groesz et al. (2002) documented that young women felt more anxiety after they were exposed to a thin model in advertising rather than to a non-thin model. Correspondingly, Halliwell and Dittmar (2004) found women did not experience body anxiety when they observed average-sized models while shopping. Halliwell et al. (2005) also found that women who were exposed to average-sized models experienced low levels of body anxiety and felt relieved. Similarly, Peck and Loken (2004) found women held positive attitudes toward average-sized models and comparisons made resulted in positive body evaluations. Thus, it appears that it is exposure to thin models rather than to models in general that can evoke a me-model body-size discrepancy.

Festinger's (1954) social comparison theory assists in understanding both the negative and positive outcomes experienced from exposure to fashion models. Festinger proposed that humans have a need to see how they measure up to other humans on a variety of attributes. In the absence of external objective standards, individuals can compare themselves to others to determine how they measure up. Individuals can make comparisons between themselves and similar others as well as dissimilar others.

Two types of social comparison exist: upward and downward. An example of an upward comparison is selecting an individual to compare to that demonstrates a high level of the comparison attribute. According to Collins (1996), there are two possible outcomes to upward social comparisons: one outcome is some types of negative experience (e.g., negative mood, lowered self-esteem, body dissatisfaction) and the other is increased motivation to engage in activities to develop oneself.

Downward social comparisons entail comparing oneself to another individual who are worse off to make themselves feel better about their self. Researchers have documented that comparison to less attractive others generally results in positive evaluations of

one's attractiveness (Brown et al., 1992; Thornton & Moore, 1993).

Upward or downward comparisons result in both self-directed and other-directed responses (Major et al., 1991). A self-directed response occurs if there is a change in one's self-evaluation or self-esteem (Major et al., 1991). Other-directed responses are associated with a change in attitude toward a target of comparison after social comparison. In the context of an online store, a self-directed response evoked by social comparison with a model could be an emotional response (e.g., liking, hating). An other-directed response could be an individual's attitude toward the model that could ultimately impact store satisfaction and intention to revisit the store. For example, social comparison processes have been documented as mediators in the relationship between exposure to thin models and negative consequences. For example, Kim and Damhorst (2010) found that body-related self-discrepancy as a result of comparison with a model influenced American female college student's body dissatisfaction, concerns with fit and size of garments featured on the model, and resulted in low purchase intentions in an online apparel shopping context.

The presentation of merchandise using models is part of the atmosphere of an online store that can provide consumers with experiential or hedonic benefits (Eroglu et al., 2003) that also impact their purchase intentions (Ha & Lennon, 2009). For example, consumers can derive pleasure from viewing attractive models wearing the merchandise. Kim et al. (2009) found that product presentations that specifically used human models evoked positive emotional responses (e.g., happiness) in consumers that subsequently influenced buying intentions.

In summary, models as an aspect of online store atmospherics and the body size discrepancy evoked by social comparison to such models can influence not only consumers' affective responses (e.g., shopping mood) but also their cognitive responses (e.g., consideration to buy, evaluation of the product). They may also impact other attitudinal or behavioral responses (e.g., satisfaction with the store, buying intention, intention to revisit the store).

2. Store Satisfaction and Intention to Revisit the Store

Store satisfaction refers to "the outcome of the subjective evaluation that the chosen store meets or exceeds expectations" (Engel et al., 1990, p. 481). Variables influencing store satisfaction are important to identify because consumers' store satisfaction can affect their attitude toward the store and behavioral intentions relative to the store. Researchers have documented links between online store atmospherics, consumer's emotions, and their attitudes, satisfaction, and behavioral intentions. Eroglu et al. (2003) found that online store environment (e.g., image, product information description) influenced customer's emotional states (e.g., pleasure), which then affected customer's satisfaction with the store and their approach/avoidance behaviors (i.e., looking around or exploring the site). In earlier research Suh and Kim (2002) also found that store atmospherics (e.g., products, website contents) influenced emotions experienced by both Korean men and women customers during their online shopping. These emotions subsequently affected customers' store satisfaction, intention to revisit the store, and time spent shopping but not the amount of money spent. Building on the foregoing discussion, hypotheses were formulated as follows in the context of an online apparel store:

H1. In a store that featured 'thin' models, the effects of "me-model" body-size discrepancy on consumer's shopping mood, store satisfaction, and intention to revisit the store varies between two consumer groups (thinner than or similar to the model, larger than the model).

H2. In a store that featured 'average-sized' models, the effects of "me-model" body-size discrepancy on consumer's shopping mood, store satisfaction, and intention to revisit the store varies between two groups (thinner or similar to the model, larger than the model).

III. Methods

1. Data Collection

The sample was comprised of undergraduate women enrolled at a South Korean university. Undergraduates were recruited because they tend to be Internet shoppers (Lee & Johnson, 2002). Individuals were approached during the final minutes of a class, asked to volunteer for a research project concerning online shopping for apparel, and informed of the parameters of the research. Individuals were offered a pen as compensation. Male volunteers were excluded. This process resulted in a convenience sample of 590 undergraduates.

2. Stimulus Development and Design

Pictures of models to serve as stimuli were selected from Korean online apparel stores targeting young women. Selection was based on the researcher's judgment about the model's body size and information about their actual body size contained in the website. The pictures were copied into the questionnaire. Any information about the stores was eliminated.

A within-subjects design was used to test relationships between variables. Stimulus sampling was done such that each participant viewed three models wearing apparel for each body type. Stimuli were randomly presented to each participant. Information about the average height, weight, bust size, and waist size of the models was provided. The means of the height and weight of the thin models were 172cm and 46kg and of the average models were 163cm and 53kg.

After viewing the first set of stimuli, participants were instructed to imagine that they had visited an online apparel store featuring that model type and then to respond to the measurements. The process was repeated by each participant for the second model type.

3. Measurements

The paper and pencil questionnaire consisted of three parts. In the first part, the Body Image Figure Rating Scale (Stunkard et al., 1983) was used to capture a self-assessment of each participant's body figure. The scale has a reported reliability of $a = .87$ for current body figure and $a = .83$ for ideal figure. Participants were also asked to supply their height, weight, waist size, and bust size. In the second part, par-

ticipants viewed one of the two sets of stimuli (i.e., thin, average) after which they rated the featured model's body figure using the body image figure scale. Next, participants reported their mood using Park and Kang's (2005) mood scale. This scale contains 18 items measuring four moods: excitement ($a = .82$), trust ($a = .76$), anxiety ($a = .75$), and displeasure ($a = .74$). The excitement and displeasure scales each contained five items. The trust and anxiety scales included four items each.

Subsequently, participants reported their online store satisfaction using three items. These items were adopted from a satisfaction scale developed by Kim and Chung (2006). Kim and Chung (2006) did not report the reliability of their measure. Participants were asked to describe the reasons for their ratings (e.g., "Why you are satisfied (or dissatisfied) with this store?"). To assess intention to revisit the store, participants were asked to indicate their degree of agreement with the following statement: "I will revisit this store again". This single item was adopted from Zeithaml et al.'s (1996) behavioral intention items. Participants were again asked to supply their rationale for their rating. Participants responded to mood, satisfaction, and revisit items using 5-point Likert scales (e.g., 1 = strongly disagree, 5 = strongly agree). Participants then viewed the second set of stimuli and completed the measures of shopping mood, store satisfaction, and intention to revisit the store again.

In the final part, items were included to collect demographic information about participants (e.g., age, major, school year). Also, information was gathered about experiences with online shopping (e.g., weekly frequency of visiting online apparel stores, time spent during a visit, and whether a participant had a preferred online apparel store).

4. Data Analyses

Internal reliability of the multiple items scales were assessed using Cronbach's alpha (Krathwohl, 1998). Structural equation modeling was used to test relationships between me-model body-size discrepancy, shopping mood, store satisfaction, intention to revisit the store. Descriptive statistics were used to analyze demographic variables.

IV. Results

1. Sample Characteristics

Eliminating incomplete questionnaires resulted in a final convenience sample of 528 women. Participants were female undergraduate students between the ages of 18 to 30 ($m = 22.22$). They were primarily art (56.4%) and human and social science majors (36.9%). Participants visited an online apparel store 1 to 2 times a week (27.7%), shopped in that store for one hour or less (57.8%), and had an online store that they preferred to visit (57.0%). Participants average height and weight ranged from 150cm to 173cm and 34kg to 80kg ($m = 162.5$cm; $m = 52.3$kg). Our sample's average height and weight were similar to those of 20's Korean women ($m = 160.5$cm; $m = 52.2$kg) (Size Korea, 2010).

As compared to the thin model, on average participants were about 9.5cm shorter and 6.3kg heavier. As compared to the average model, on average participants were about the same size.

2. Preliminary Data Analysis

1) Evaluation of Measurements
The results of confirmatory factor analysis indicated that the measurements had acceptable construct validity and convergent validity. All item loadings of the respected constructs were higher than 0.50 ($p < .001$) and there were no cross loadings. Therefore, the results showed that each factor was a unidimensional construct. All Cronbach's alpha coefficients were higher than 0.74, indicating an acceptable level of reliability (Bagozzi & Yi, 1988). The overall fit statistics ($\chi^2(230) = 627.751$; CFI = .96; NNFI = .95; IFI = .96) suggested that the measurement model had a good fit with the data.

2) Category Classification
The participants were divided into a thinner or similar-to and larger-than the model category based on the difference between participant's own ratings of

their body and their ratings of a model's body. When this difference resulted in a 'negative number' or a '0', participants were placed into the 'thinner or similar-to-the model category. When the difference in ratings resulted in a 'positive number', participants were placed into the 'larger-than-the model' category. For example, if a participant's body figure rating was '5' and they rated a model's body figure as a '3', the difference between these two ratings is +2. This participant was placed into the 'larger-than-the model' category. Because each participant viewed two model types (thin, average) this categorization was done twice resulting in two sets of data. For each data set, a participant could be in the same group or could appear in one category in one data set and another category in the other data set depending upon the stimuli. This process resulted in two data sets that always contained two categories of body-size discrepancy.

3) Order Effect Test

To test for order effects concerning stimuli presentation, MANOVA was conducted with presentation order as the independent variable and all other variables as dependent variables. Results revealed no significant differences in the dependent variables between the two presentation order groups (p>.05).

4) Test for Metric Invariance

Before comparing key paths across groups, the test for metric invariance was conducted. In order to compare parameters across groups, the condition that a measurement model is equivalent across groups should be achieved. If the model is equivalent, this means that participants in each group understood and responded to the measures in an equivalent manner (Steenkamp & Baumgartner, 1998). To test model equivalency, the invariance of the factor pattern and the equality of factor loadings were assessed (Childers et al., 2001). The result of CFA indicated a reasonably good fit for the stacked model (χ^2(230) = 627.141; CFI = .959; NNFI = .945; IFI = .959). Therefore, the factor pattern of the model was invariant between the two groups.

To test the equality of factor loadings, a chi-square difference test was conducted between the baseline model where free parameters among factors were allowed and the full metric invariance model that contained fixed parameters. The full metric invariance model was not supported as the chi-square difference between the baseline model and the full metric invariance model was significant (χ^2d(16) = 39.767, p<.001). Following the recommended procedures of Steenkamp and Baumgartner (1998), the invariance constraints were assessed one at time by testing the chi-square difference between the model in which the parameters were allowed to differ (free parameters) and the restricted model with the parameters set to be equal (fixed parameters). As a result, a partial metric invariance model was supported with thirteen of the sixteen parameters fixed. In addition, the chi-square difference between the baseline model and the partial metric invariance model was tested. The chi-square difference between two models was insignificant (χ^2d(12) = 9.665, p>.05), thus, the partial invariance model was used in subsequent analyses.

5) Test for Alternative Model

In the initial hypothesized model "me-model" body-size discrepancy was hypothesized to influence shopping mood and shopping mood was hypothesized to influence consumer's store satisfaction. The alternative hypothesized model suggested that "me-model" body-size discrepancy directly influenced consumer's store satisfaction because use of a model is one type of product presentation and Park et al. (2005) found a direct relationship between product presentation and purchase intention, a different but related shopping outcome variable. The chi-square difference between the original model (nested model) and the alternative model (unconstrained model) with the added path was compared (Gerbing & Anderson, 1988). The chi-square difference between original and alternative models was significant (χ^2d(2) = 6.051, p<.05). All path coefficients were significant in the original model (p< .001), however, one of the path coefficients between the "me-model" body-size discrepancy and consumer's store satisfaction was not significant in the alternative model (p>.05). These findings suggest that shopping mood mediated the effects of "me-model" body-size discrepancy on consumer's store satisfaction, providing support for the initial model.

3. Primary Analysis

A structural analysis was conducted using the maximum likelihood estimation method. To compare the path coefficients between the two groups, a multiple-group analysis was used (Jöreskog & Sörbom, 1996).

1) Online Apparel Store that Featured 'thin' Models

The measures of goodness of fit for the model were satisfactory (CFI = .917; NNFI = .902; IFI = .918; RMSEA = .050). Figs. 1 and 2 reveal the significant path coefficients from the structural analysis for each group. For the thinner or similar to the 'thin' model group (i.e., a downward social comparison), as "me-model" body-size discrepancy increased so did participants reported feelings of excitement ($\beta_1 = 0.378$, $p<.05$). Participants who reported experiencing excitement were satisfied with the store ($\beta_5 = 0.393$, $p<.05$) and intended to revisit the store ($\beta_9 = 1.000$, $p<.001$) (Fig. 1). These results are consistent with Bui and Pelham's (1999) study that found people experienced both positive moods and self-evaluations when making downward social comparisons.

For the larger-than-the 'thin' model group, as the "me-model" body-size discrepancy increased, participant's reported trust decreased ($\beta_2 = -.231$, $p<.001$) but their anxiety ($\beta_3 = .226$, $p<.001$) and displeasure ($\beta_4 = .175$, $p<.001$) increased. Participants who reported experiencing anxiety ($\beta_7 = -.445$, $p<.001$) and low trust ($\beta_6 = .316$, $p<.001$), indicated they were less satisfied with the online store and did not intend to revisit the store ($\beta_9 = 1.000$, $p<.001$) (Fig. 2).

Next, to evaluate whether these differences in parameter estimates were statistically significant, a chi-square difference test between the two groups was conducted. If the result shows an insignificant p-value ($p>.05$), it means that the difference in parameter estimates are not statistically significant (Hooper et al., 2008). In the nested model, a particular path was fixed to be equal across groups. The baseline model was estimated by allowing all model parameters to be free estimates. The difference in the chi-square value was compared between the baseline and the restricted model. Regarding the path from the "me-model" body-size discrepancy to excitement, participants who were thinner or similar to the 'thin' models experienced a greater sense of excitement as compared to participants who indicated they were larger than the models ($\chi^2 d(1) = 5.208$, $p<.05$). Furthermore, participants who were thinner or similar to the 'thin' models indicated greater store satisfaction and intention to revisit the store than participants who were larger than the 'thin' models ($\chi^2 d(1) = 6.825$, $p<.01$) (Table 1). Other differences in parameter estimates were not statistically significant. Thus, Hypothesis 1 was partially
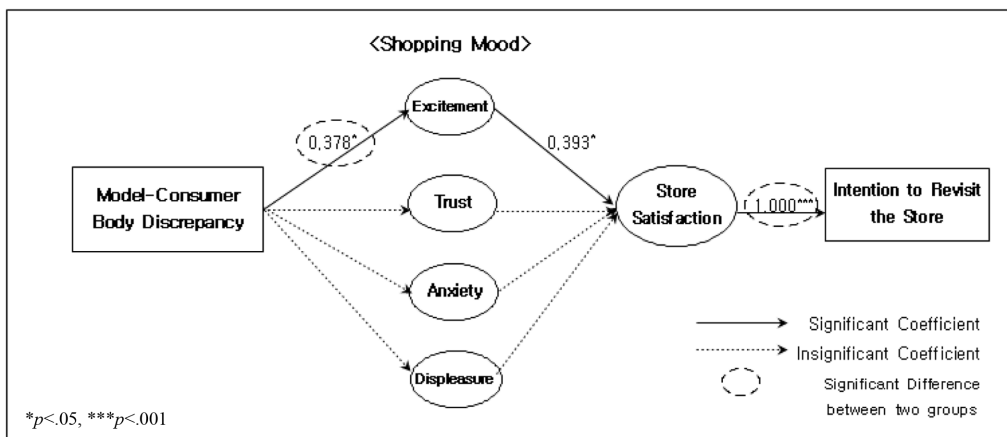

Fig. 1. For online stores that featured 'thin' models - this figure depicts relationships among "me-model" body-size discrepancy, consumer's shopping mood, store satisfaction, and intention to revisit the store for the thinner-/similar-to-the model group.
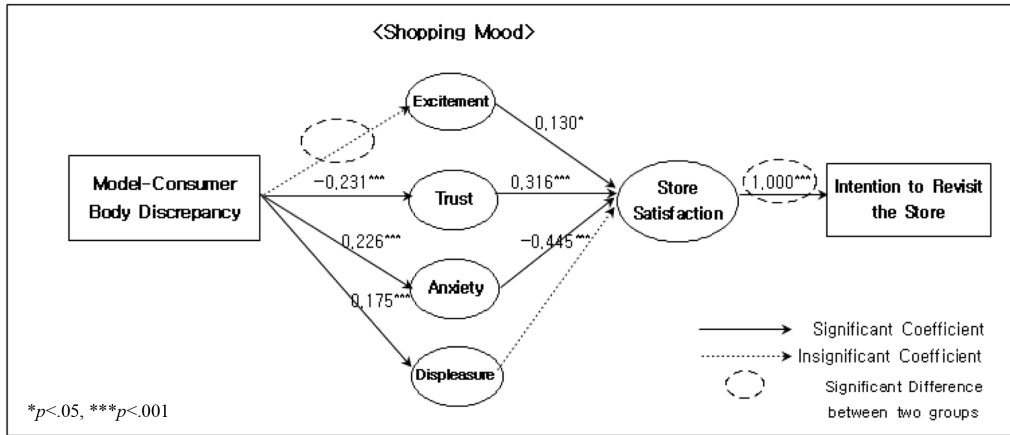
Fig. 2. For online stores that featured 'thin' models - this figure depicts relationships among "me-model" body-size discrepancy, consumer's shopping mood, store satisfaction, and intention to revisit the store for the larger-than-the model group.

Table 1. For online stores that featured 'thin' models - Chi-Square differences between two groups (thinner-/similar-to-the model versus larger-than-the model group)

Path	χ^2 (Chi-square)	df	Chi-square difference
(Unconstrained Model)	593.656	258	
"Me-Model" Body Discrepancy → Excitement	598.864	259	$\chi^2(1) = 5.208*$
Store Satisfaction → Intention to Revisit the Store	600.481	259	$\chi^2(1) = 6.825**$

*$p<.05$, **$p<.01$

supported.

2) Online Apparel Stores that Featured 'average' Models

The measures of goodness of fit for the model revealed satisfactory goodness of fit (CFI = .936; NNFI = .924; IFI = .937; RMSEA = .050). <Fig. 3>–<Fig. 4> provide the results of the structural analysis for each group with significant coefficients. For participants who were thinner or similar to the 'average-sized' models, the greater the "me-model" body-size discrepancy, the more participants felt excitement (β_1 = 0.168, $p<.01$), trust (β_2 = 0.361, $p<.001$), low levels of anxiety (β_3 = –0.184, $p<.01$), and displeasure (β_4 = –0.160, $p<.01$). Participants who reported trust (β_6 = 0.608, $p<.001$) and low anxiety (β_7 = –0.260, $p<.05$) were satisfied with the store. As store satisfaction increased, so did intention to revisit the online store (β_9 = 1.000, $p<.001$) (Fig. 3).

For participants who were larger than the 'average-sized' models, as the "me-model" body-size discrepancy increased, participants reported trust decreased (β_2 = –0.217, $p<.05$) and their displeasure increased (β_4 = 0.181, $p<.05$). As participant's trust decreased (β_6 = 0.480, $p<.001$) and anxiety increased (β_7 = –1.034, $p<.001$), the less satisfied participants were with the store and the less they intended to revisit the store (β_9 = 1.000, $p<.001$) (Fig. 4). Overall, participants who had a larger body than the models featured tended to report experiencing negative affective, attitudinal, and behavioral responses. This result may be explained by a contrast effect or as a result of engaging in upward comparisons.

A chi-square difference test between the two groups was conducted to evaluate whether differences in parameter estimates were statistically significant. Regarding the path from the "me-model" body-size discrepancy to trust ($\chi^2 d(1) = 26.555$, $p<.001$), anxiety ($\chi^2 d(1) = 6.128$, $p<.05$), and displeasure ($\chi^2 d(1) = 10.110$, $p<.01$), there were significant differences between the
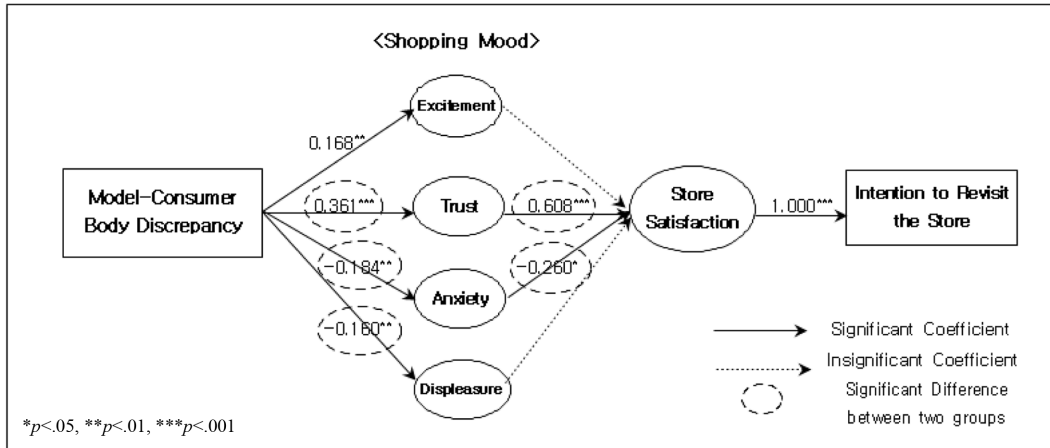
Fig. 3. For online stores that featured 'average-sized' models - this figure depicts relationships among "me-model" body-size discrepancy, consumer's shopping mood, store satisfaction, and intention to revisit the store for the larger-than-the model group.
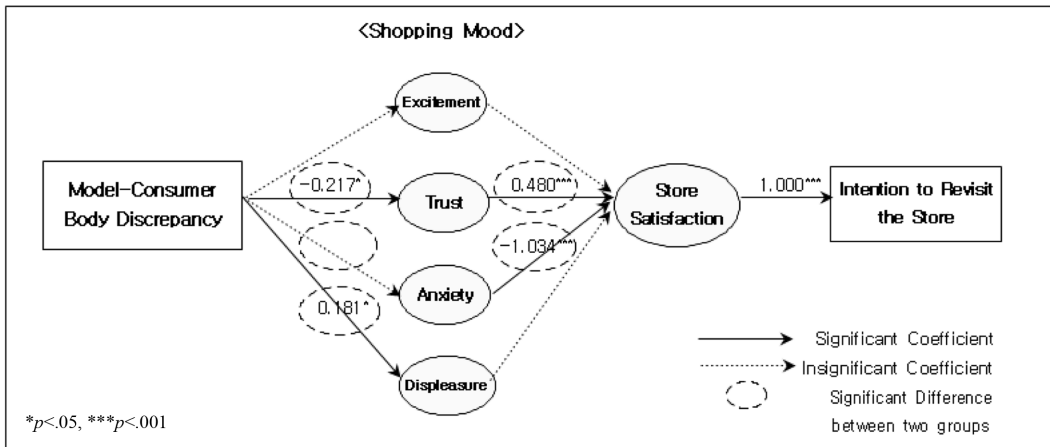

Fig. 4. For online stores that featured 'average-sized' models - this figure depicts relationships among "me-model" body-size discrepancy, consumer's shopping mood, store satisfaction, and intention to revisit the store for the thinner-than/similar-to-the model group.

Table 2. For online stores that featured 'average-sized' models - Chi-Square differences between two groups (thinner-/similar-to-the model versus larger-than-the model group)

Path	χ^2 (Chi-square)	df	Chi-square difference
(Unconstrained Model)	594.731	258	
"Me-Model" Body Discrepancy → Trust	621.386	259	$\chi^2(1) = 26.655$***
"Me-Model" Body Discrepancy → Anxiety	600.859	259	$\chi^2(1) = 6.128$*
"Me-Model" Body Discrepancy → Displeasure	604.841	259	$\chi^2(1) = 10.110$**
Anxiety → Store Satisfaction	603.256	259	$\chi^2(1) = 8.525$**

*p<.05, **p<.01, ***p<.001

two groups. In addition, the path from anxiety to store satisfaction was found to be significantly different across groups (χ^2d(1) = 8.525, p<.01) (Table 2).

Participants who were larger than the 'average-sized' models may have reported less trust as a result of their uncertainty that the sizes the store provided would actually fit them (e.g., would the waistline actually fall at the waist). Also, they may have reported negative shopping moods as a result of making upward social comparisons to the average models. Other differences in parameter estimates were not statistically significant. Thus, Hypothesis 2 was partially supported.

4. Additional Analyses

1) Retailers Featuring a Thin Model

If the store featured 'thin' models, many participants (56.6%) indicated a low level of store satisfaction and several (36.0%) indicated low intention to revisit the store. To provide an explanation for these answers, participants' responses to the open-ended question that asked them to supply their rationale for their ratings of store satisfaction and intention to revisit the stores were content analyzed. Among participants who indicated they were satisfied and intended to revisit the store, the primary reasons were holding positive attitudes toward thin models (36.3%) (e.g., "I get vicarious satisfaction from a thin model") and holding positive attitudes toward the clothing displayed (30.0%) (e.g., "The apparel that the thin-model wore looks attractive").

Among those participants who indicated they were dissatisfied with the store and had no intention to revisit the store reasons for their responses included holding negative attitudes toward the use of thin models (46.6%) and the discrepancy between the size of the model and the participant (26.4%). Representative comments included "I think a thin model's body is unrealistic," "I feel a sense of incompatibility and inferiority from viewing a model's ideal body," and "I cannot make a guess about the actual size, fit, and style of clothing that is sold in this store because the model is too thin."

2) Retailers Featuring an Average Model

Primary reasons shared for being satisfied with and intending to revisit a store featuring an average model were holding positive attitudes toward the use of average-sized models (45.9%) and the perceived similarity between the model's and participant's body (41.1%). Representative comments included "I feel a sense of closeness toward the average-sized model," "The model's body figure is realistic," and "Choosing a size of apparel is easy in this store because the model's body size is similar to mine."

Some participants indicated low store satisfaction (38.0%) as well as low intention to revisit the store (30.1%). Primary reasons for store dissatisfaction and having no intention to revisit this store were aversion toward the use of average-sized models (68.9%) (e.g., "I do not like to watch a model who does not have an attractive figure", "I worry that I will look as large as the model if I wear the same clothing that she is wearing") and negative attitudes toward the clothing that the average-sized model displayed (28.0%). Representative comments included "I cannot be interested in the clothing because the apparel worn by the large model is not attractive."

V. Discussion and Managerial Implications

The purpose of this study was to examine whether a "me-model" body-size discrepancy influenced consumer's shopping mood, store satisfaction, and intention to revisit an online apparel store. Two different selling contexts were used: stores using 'thin' models and stores featuring 'average-sized' models. Compared to the larger-than-the model group, participants who were thinner than or similar to the models showed positive shopping moods (e.g., excitement and trust), a high level of store satisfaction, and intention to revisit the store. This result is consistent with several researchers who investigated the effects of upward and downward social comparisons with a model on perceiver's self-evaluations and mood (e.g., Halliwell & Dittmar, 2004; Peck & Loken, 2004). The positive mood experience by thin participants resulting

from comparison to either the thin models or the average models could have been a result of a comparison process that revealed they were meeting or exceeding the ideal body form. Their experience is an instance of a downward comparison. For the average-sized participants who viewed the average models and their comparison resulted in being the same or thinner, they may have been excited because they experienced relief. Both groups of participants may have been satisfied with the store and intended to revisit the store because use of these models for them made it easier to assess and evaluate the fit of the apparel. Likewise for those participants who were larger than the thin models or the average models, their negative shopping mood and low store satisfaction could have been as a result of their inability to effectively evaluate the apparel and the recognition that they were not meeting physical ideals for women. Their experience was an upward social comparison.

These finding suggests first, that online apparel retailers and marketing practitioners should pay close attention to the selection of models for their online fashion businesses. Thin models may provide hedonic benefits (Kahle & Homer, 1985) for some customers but viewing thin models can also evoke negative emotions and fail to provide an important utilitarian benefit (i.e., the ability to evaluate the garment) for other customers.

Second, results supported the idea that a model is part of the store atmospherics that influences consumer's mood and attitude which consequently impacts satisfaction with and intention to revisit a store. Online apparel retailers can recognize that models are a component of store atmospherics and as such, are another aspect to their marketing strategy that can be capitalized on to facilitate consumer's decision making as well as customer's store experience.

VI. Limitations and Suggestions for Future Research

The present study has limitations and raises questions for future research. First, a within-group design was utilized. All participants viewed both sets of apparel Web pages depicting both types of models (e.g.,

thin, average-sized) and shared their reactions. With such a design, participants' judgments of one type of model might have been influenced by exposure to the other type of model or might have only occurred as a result of exposure to the other type of model (contrast effect). Future researchers interested in related hypotheses might want to conduct both within and between-subjects designs to determine if differences hold up or if they are an artifact of the study design. Second, additional research methods should be applied to understand the influence of model type on consumption decisions. In this study, apparel Webpages were presented as stimuli. However, various other methods of providing stimuli (e.g., a virtual online shopping store) could be used to effectively assess the effects of different models on consumer responses. As in any study, further research is needed to extend the proposed model. For example, additional individual differences that might moderate the effects of 'model-consumer' body-size discrepancy on consumer responses (e.g., body satisfaction, shopping orientation) could be tested as moderators.

References

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74–97.

Bessenoff, G. R. (2006). Can the media affect us? Social comparison, self-discrepancy, and the thin ideal. *Psychology of Women Quarterly, 30*(3), 239–251.

Brown, J. D., Novick, N. J., Lord, K. A., & Richards, J. M. (1992). When Gulliver travels: Social context, psychological closeness, and self-appraisals. *Journal of Personality and Social Psychology, 62*(5), 717–727.

Bui, K. V. T., & Pelham, B. W. (1999). Cognitive and affective reactions to social comparison. *Journal of Social Behavior and Personality, 14*(4), 569–583.

Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing, 77*(4), 511–535.

Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin, 119*(1), 51–69.

Corcoran, C. T. (2007, May 14). Apparel now no. 1 online. *Women's Wear Daily.* Retrieved April 21, 2012, from http://www.wwd.com

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1990). *Con-*

sumer behavior (6th ed.). Chicago: The Dryden Press.

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & Marketing, 20*(2), 139–150.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117–140.

Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research, 25*(2), 186–192.

Groesz, L. M., Levine, M. P., & Murnen, S. K. (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, *31*(1), 1–16.

Ha, Y., & Lennon, S. (2009). *Effects of website atmospheric stimuli on pleasure and perceived risk: Role of atmospheric responsiveness*. Paper presented at the annual meeting of the International Textiles and Apparel association, Bellevue, WA.

Halliwell, E., & Dittmar, H. (2004). Does size matter? The impact of model's body size on women's body-focused anxiety and advertising effectiveness. *Journal of Social and Clinical Psychology, 23*(1), 104–122.

Halliwell, E., Dittmar, H., & Howe, J. (2005). The impact of advertisements featuring ultra thin or average-size models on women with a history of eating disorders. *Journal of Community & Applied Social Psychology*, *15*(5), 406–413.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods, 6*(1), 53–60.

Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.

Kahle, L. R., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research, 11*(4), 954–961.

Kim, H., & Damhorst, M. L. (2010). The relationship of body-related self-discrepancy to body dissatisfaction, apparel involvement, concerns with fit and size of garments, and purchase intentions in online apparel shopping. *Clothing and Textiles Research Journal, 28*(4), 239–254.

Kim, J. H., Kim, M., & Lennon, S. J. (2009). Effects of web site atmospherics on consumer responses: Music and product presentation. *Journal of Research in Interactive Marketing, 3*(1), 4–19.

Kim, J. H., & Lennon, S. J. (2007). Mass media and self-esteem, body image, and eating disorder tendencies. *Clothing and Textiles Research Journal, 25*(1), 3–23.

Kim, M., & Lennon, S. (2008). The effects of visual and verbal information on attitudes and purchase intentions in Internet shopping. *Psychology & Marketing*, *25*(2), 146–178.

Kim, M., & Malkewitx, K. (2009). *The effects of thumbnail page design on consumer response in e-retailing.* Paper presented at the annual meeting of the International Textiles and Apparel association, Bellevue, WA.

Kim, S. J., & Chung, M. S. (2006). The effect of store satisfaction about fashion store and alternative store attraction on switching barrier perception-Focusing on the moderating effect of variety seeking orientation-. *Journal of the Korean Society of Clothing and Textiles, 30*(7), 1044–1053.

Krathwohl, D. R. (1998). *Methods of educational and social science research: An integrated approach* (2nd ed.). New York: Longman.

Lee, M. Y., & Johnson, K. K. P. (2002). Exploring differences between Internet apparel purchasers, browsers, and non-purchasers. *Journal of Fashion Marketing and Management, 6*(2), 146–157.

Lee, S. H., & Noh, Y. N. (2006). The effects of Internet fashion shopping celebrity advertising model on consumers' WOM. *The Research Journal of the Costume Culture, 14*(5), 850–863.

Major, B., Testa, M., & Bylsma, W. M. (1991). Responses to upward and downward social comparisons: The impact of esteem relevance and perceived control. In J. Suls & T. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 237–260). New Jersey: Erlbaum.

Park, E. J., & Kang, E. M. (2005). Effects of shopping value, fashion shopping mall attributes, emotions and purchasing intention on purchasing behavior in Internet fashion shopping malls. *Journal of the Korean Home Economics Association, 43*(7), 117–128.

Park, H. J., & Kim, H. J. (2004). Cultural and consumption values in the Korean fashion industry: Integrating macro-level perspectives of fashion system in marketing and clothing areas. *Journal of the Korean Society of Clothing and Textiles, 28*(1), 1–11.

Park, J., Lennon, S. J., & Stoel, L. (2005). On-line product presentation: Effects on mood, perceived risk, and purchase intention. *Psychology & Marketing, 22*(9), 695–719.

Peck, J., & Loken, B. (2004). When will larger-sized female models in advertisements be viewed positively? The moderating effects of instructional frame, gender, and need for cognition. *Psychology & Marketing*, *21*(6), 425–442.

Size Korea. (2010). Body measurement data. *Size Korea*. Retrieved November 18, 2012, from http://sizekorea.ats.go.kr/

Solomon, R. M. (2002). *Consumer behavior* (5th ed.). New Jersey: Prentice Hall.

Statistics Korea. (2012). E-commerce and cyber shopping survey. *Statistics Korea*. Retrieved August 15, 2012, from http://kostat.go.kr

Steenkamp, J. B. E. M., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research, 25*(1), 78−90.

Stice, E., Schupak-Neuberg, E., Shaw, H. E., & Stein, R. I. (1994). Relation of media exposure to eating disorder symptomatology: An examination of mediating mechanisms. *Journal of Abnormal Psychology, 103*(4), 836−840.

Stunkard, A. J., Sørenson, T., & Schulsinger, F. (1983). Use of the Danish adoption register for the study of obesity and thinness. In S. Kety, L. P. Rowland, R. L. Sidman, & S. W. Matthysse (Eds.), *The genetics of neurological and psychiatric disorders* (pp. 115−120). New York: Raven Press.

Suh, M. S., & Kim, S. H. (2002). The effect of consumer's emotion experienced during Internet shopping according to gender. *Journal of Global Academy of Marketing Science, 9*, 1−28.

Thornton, B., & Moore, S. (1993). Physical attractiveness contrast effect: Implications for self-esteem and evaluations of the social self. *Personality and Social Psychology Bulletin, 19*(4), 474−480.

Tiggemann, M. (2012). Sociocultural perspectives on human appearance and body image. In T. Cash & L. Smolak (Eds.), *Body image* (pp. 12−19). New York: Guilford Press.

ZeithamI, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31−46.