# The Influence of Image Congruence and Perceived Fit on e-Store Patronage Intention for Multichannel Apparel Retailers

by

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# Abstract

As online retail sales continue to grow, consumers are turning to the Internet in ever increasing numbers. Despite the prevalence of retailers' e-stores and the importance of online branding, there exist few studies on the relationship between a retailer's brand image and its estore image as it relates to the success of online branding. Therefore, the first goal of this study was to examine the effect of the congruence between a multichannel retailer's symbolic brand image and e-store image on consumers' e-store patronage intention, which is mediated by perceived e-store/brand fit.

Consumers tend to evaluate favorably brands which have similar (congruent) images to their self-images. This self-image congruence plays a pivotal role especially in fashion branding since clothing can be worn for symbolic and emotional expressions. Thus, the second goal of this study was to investigate the effect of the congruence between multichannel retailers' e-store image and consumer self-image on consumers' e-store patronage intention, which is mediated by perceived e-store/self fit.

Six hypotheses were tested using survey data from a national sample of 458 U.S female consumers. Results revealed that (1) a multichannel retailer's e-store-image/symbolic-brandimage congruence positively influenced consumers' e-store patronage intention; (2) perceived estore/brand fit offered a full mediation for relationship between e-store-image/symbolic-brandimage incongruence and e-store patronage intention; (3) the greater the e-store-image/self-image congruence, the higher the e-store patronage intention; (4) perceived e-store/actual-self fit completely mediated the relationship between e-store-image/actual-self-image congruence and estore patronage intention; (5) perceived e-store/ideal-self fit played only a partial mediating role between e-store/ideal-self incongruence and e-store patronage intention; and (6) perceived estore/self fit is a stronger predictor of e-store patronage intention than perceived e-store/brand fit.

This study expanded the findings of previous literature on the significant roles of image congruence and perceived fit in consumer behavior through providing empirical support for the applicability of the image congruence and perceived fit constructs in understanding consumers' patronage intention for a multichannel retailer's e-store. The current study expands the applicability of the stimulus-organism-response model by introducing image congruence as a stimulus variable and perceived fit as an organism variable which lead to e-store patronage intention (the response variable).

Through the findings of this study, multichannel apparel retailers can obtain an insight concerning how they should plan and develop their e-stores by integrating their offline and online store images as well as by designing their e-store images to match the self-image of their target consumers.

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# Table of Contents

Abstractii
Acknowledgmentsiv
List of Tablesiiiv
List of Figuresix
Chapter 1. Introduction1
Background1
Purpose and Objectives4
Definition of Terms
Chapter 2. Review of Literature
Stimulus-Organism-Response Model10
Symbolic Brand Image and Store Image12
e-Store-Image/Symbolic-Brand-Image Congruence15
Perceived e-Store/Brand Fit16
Self-Image Congruence19
e-Store-Image/Self-Image Congruence21
Actual- and Ideal-Self Congruencies
Perceived e-Store/Self Fit25
Chapter 3. Methodology
Research Design

Sampling and Data Collection Procedures	
Instruments	29
Symbolic Brand Image	
Perceived Fit Variables	32
e-Store Patronage Intention	
e-Store Image	33
Demographic Items	
Actual and Ideal Self-Images	
Chapter 4. Analyses and Results	36
Sample Characteristics	36
Measurement Preliminary Analysis Process and Results	
Image Variables	39
Image Incongruence	45
Perceived Fit and e-Store Patronage Intention	45
CFA	45
Convergent Validity	48
Discriminat Validity	48
Reliability	50
Hypothesis Tests and Results	52
Additional Analyses	67
Chapter 5. Discussion and Conclusions.	
Discussion	70
Image Congruence and Perceived Fit	70

e-Store Image and Symbolic Brand Image	71
e-Store Image and Self-Image	72
Perceived e-Store/Brand Fit versus Perceived e-Store/Self Fit	74
Implications	75
Theoretical Implications	
Managerial Implications	
Limitations and Recommendations for Future Research	78
References	81
Appendix 1 Information Page	90
Appendix 1 Questionnaire	92

# List of Tables

Table 1 Measurements	31
Table 2 Demographic Characteristics of the Sample	37
Table 3 Principal Components Analysis Results: Symbolic Brand Image	41
Table 4 Principal Components Analysis Results: e-Store Image	42
Table 5 Principal Components Analysis Results: Actual Self-Image	43
Table 6 Principal Components Analysis Results: Ideal Self-Image	44
Table 7 Factor Pair Correlations	50
Table 8 Discriminant Validity Check Chi-Square Difference Tests	51
Table 9 Results of Hypothesis Testing	66

# List of Figures

Figure 1 The Conceptual Framework for This Study	13
Figure 2 Confirmatory Factor Analysis Model of the Perceived Fit and e-Store Patronage Intention	47
Figure 3 Model 1: SEM Model Testing H1	52
Figure 4 Model 2: SEM Model Testing H2	54
Figure 5 Model 3: SEM Model Testing H3	55
Figure 6 Model 4a: SEM Model Testing H4(a)	57
Figure 7 Model 4b: SEM Model Testing H4(b)	58
Figure 8 Model 5a: SEM Model Testing H5(a)	59
Figure 9 Model 5b: SEM Model Testing H5(b)	60
Figure 10 Model 6a: SEM Model Testing H6(a)	63
Figure 11 Model 6b: SEM Model Testing H6(b)	64
Figure 12 Model 7a: SEM Model Testing Additional Question (Constrained Model)	67
Figure 13 Model 7b: SEM Model Testing Additional Question (Unconstrained Model)	68

# **Chapter 1. Introduction**

# Background

As the retail environment has become mature and offline store expansion has slowed, most firms have switched to multichannel retailing by opening websites and linking their offline store operations with e-commerce (Kim, Park, & Pookulangara, 2005; Kwon & Lennon, 2009a, 2009b; Mathwick, Malhotra, & Rigdon, 2000; Verhagen & Dolen, 2009). Multichannel retailing, which refers to providing retail services through diverse retailing formats such as brick-and-click stores (Kwon & Lennon, 2009a, 2009b; Verhagen & Dolen, 2009), may help retailers generate more sales and profits than a single-channel strategy (Bosnjak, Galesic, & Tuten, 2007; Kumar & Venkatesan, 2005).

Consumers are turning to the Internet in ever increasing numbers (Leggatt, 2009). Forrester projects that despite the economic recession, online retail sales in the U.S. will grow 11% in 2010 to \$156 billon and continue to rise to almost \$250 billion by 2014 (Leggatt, 2010). The growth in e-commerce has a significant impact on the apparel industry because apparel ranks in the top five product categories sold through online stores in the U.S. (Kim, Park, & Pookulangara, 2005). In 2006, online apparel sales outpaced computer hardware and software for the first time, evidencing the maturing e-commerce environment of apparel retailing (Mulpuru, Hult, & Johnson, 2007). Furthermore, most profits in the apparel sector are driven by multichannel retailers (Kim, Park, & Pookulangara, 2005).

1

However, multichannel retailers also face a number of challenges including channel conflicts, customer retention issues, and ability to integrate processes (Kim, Park, & Pookulangara, 2005). Among these challenges, one of the most critical issues for multichannel retailers is how to successfully integrate diverse retail formats and maintain an integrated concept (brand image) (Kim, Park, & Pookulangara, 2005). Verhagen and Dolen (2009) stressed that brick-and-click retailers should recognize the relationship between offline and online stores and that the seamless integration of both channels would benefit their operations. Rubinstein and Griffiths (2001) also argued that integrating offline and online experiences through all expressions of the brand is the key to successful online branding. Delivering a consistent online brand experience that maintains the retailers' symbolic brand image has become a cardinal rule for multichannel retailers can be derived from a strong commitment to delivering a consistent brand image between offline and online settings (Rubinstein & Griffiths, 2001).

Online stores (also called e-stores or retail websites) have received increasing attention in recent years as a medium for building and extending a retailer's brand image as well as a distribution channel (Dou & Krishnamurthy, 2007; Simmons, 2007). Despite the prevalence of retailers' e-stores and the importance of online branding (Dou & Krishnamurthy, 2007; Simmons, 2007), there exist few studies on the relationship between a retailer's existing brand image and its e-store image and how this relationship plays in the success of online branding.

Today's consumers tend to be multichannel shoppers, shopping in both traditional offline stores and e-stores, and thus are exposed to the same retailer in both channels (Kumar & Venkatesan, 2005). According to Kim, Park, and Pookulangara (2005), 78% of U.S. shoppers purchase from both online and offline stores. As a result, consumer purchasing behaviors in one

channel can be affected by experiences and perceptions from multiple channels of the retailer (Verhagen & Dolen, 2009). Therefore, consumers' online behavior needs to be understood within the multichannel retailing context (Kumar & Venkatesan, 2005). Especially, the effect of the congruence between a retailer's e-store image and its symbolic brand image formed from consumers' previous direct or indirect experiences with the retailer in various channels is an important topic that has been under-investigated. Therefore, the first goal of this study is to address this gap by examining the influence that the congruence of a retailer's e-store image with its symbolic brand image has on consumers' e-store patronage intentions for multichannel apparel retailers.

Sirgy (1985) and Graeff (1996) stressed that consumers tend to perceive brands which have similar (congruent) images to their self-images in a more favorable way. This positive evaluation leads consumers to approach the congruent brand and purchase products of the brand. Self-congruency has also been emphasized in store image literature. Consumers tend to patronize stores that are congruent with their self image (Chebat, Sirgry, & St-James, 2006; Heijden & Verhagen, 2003; Hongwei & Mukherjee, 2007; Lee, 2003; O'Cass & Grace, 2008). Self-image congruence plays a pivotal role in approaching or avoiding apparel stores, since clothing is worn for symbolic and emotional expression (Evans, 1989). Clothing is an ideal product for selfexpression (Fennis & Pruyn, 2007) because it allows people to communicate certain meanings between wearers and observers through symbolism (Evans, 1989). Thus, creating and maintaining a store image that matches target consumers' self-image is critical for the success of apparel retailers (Evans, 1989; Fennis & Pruyn, 2007). Despite the proliferation of e-stores, the issue of the congruence between e-store image and consumers' self-image has been rarely examined.

3

Many studies have sought to identify consumers' self-image dimensions that are relevant to brand marketing. Among the possible dimensions of self-image, actual self-image (how consumers view themselves) and ideal self-image (how consumers would like themselves to be) have been most studied in existing self-congruency literature (e.g., Jamal & Goode, 2001; Mehta, 1999; Sirgy, 1982). People purchase and use apparel brands to maintain or enhance their selfimage. That is, consumers may purchase apparel brands that reflect their own self-image (i.e., actual self-image) or an image that they desire to possess (i.e., ideal self-image) (Graeff, 1996). Previous studies have reported that ideal self-congruence matters more for publicly consumed products such as athletic shoes or cars than for privately consumed products such as shampoos (Graeff, 1996). Apparel is a publicly consumed product which is often purchased for the social meanings that the brand carries (Solomon, 1983), whereas the online store is a private shopping venue. Therefore, examining the relative importance of actual versus ideal self-congruence of a multichannel apparel retailer's e-store in generating consumers' approach or avoidance behavior toward the apparel retailer's e-store can render interesting insights. Thus, the second goal of this study was to address these issues by investigating how the congruence between consumers' actual and ideal self-image and a multichannel apparel retailer's e-store image influences the consumers' patronage intentions for an e-store and to identify which self-congruence (ideal vs. actual) holds more sway.

# **Purpose and Objectives**

Based on the aforementioned critical issues surrounding the congruence between symbolic brand image, e-store image, and consumer self-image in multichannel apparel retailing, the purpose of this study was to investigate the role of the congruence between a multichannel apparel retailer's e-store image and (1) its symbolic brand image and (2) consumers' actual and ideal self-images in forming the consumers' e-store patronage intentions. This study also considered perceived fit as a critical concept surrounding the aforementioned relationship. Perceived fit refers to the subjective global judgment of overall similarity between two objects (Lafferty, 2007). This study proposed perceived fit as a mediator between the image congruence and e-store patronage intention, since consumers' subjective global judgment on how well an apparel retailer's e-store reflects the retail brand and themselves will be influenced by the image congruence of each target component (i.e., brand, e-store, and the self). Additionally, the current study proposes that this subjective global judgment (i.e., perceived fit) will directly predict the consumers' patronage intentions for the e-store. Thus, the following four specific objectives were established for this study:

- To investigate the relationship between e-store-image/symbolic-brand-image (in)congruence (i.e., the (in)congruence between a multichannel apparel retailer's e-store image and its symbolic brand image) and consumers' e-store patronage intention.
- To examine the relationship between e-store-image/self-image (in)congruence (i.e., (in)congruence between a multichannel apparel retailer's e-store image and consumers' actual- and ideal self-image) and consumers' e-store patronage intention.
- To identify whether consumers' perceived e-store/brand fit (i.e., perceived fit of a multichannel retailer's e-store to its brand image) mediates the relationship between e-store-image/symbolic-brand image (in)congruence and e-store patronage intention.
- To investigate whether consumers' perceived e-store/self fit (i.e., perceived fit between a multichannel retailer's e-store and consumers' actual- and ideal self-

5

images) mediates the relationship between e-store-image/self-image (in)congruence and e-store patronage intention.

# **Definition of Terms**

Actual-Self: How one views him- or herself (Sirgy & Samli, 1985).

- Actual Self-Image: One's mental representation of characteristics that he or she views him- or herself to possess (Sirgy & Samli, 1985). In this study, actual self-image specifically addresses characteristics that are measured on a personality scale adapted from d'Astous and Levesque (2003).
- **Brand Image**: Consumers' perceptions of a brand, consisting of multiple associations about the brand, held in memory (Keller, 1993).
- **Brand Personality**: A set of brand associations addressing human-like characteristics of the brand (Aaker, 1997). In this study, brand personality will constitute symbolic brand image (see the definition of 'symbolic brand image').

Ideal-Self: How one would like to see oneself (Sirgy & Samli, 1985).

- **Ideal Self-Image**: One's mental representation of characteristics that he or she would like to see him- or herself possess (Sirgy & Samli, 1985). In this study, ideal self-image specifically addresses characteristics that are measured on a personality scale adapted from d'Astous and Levesque (2003).
- e-Store Image: Consumers' mental representation of an e-store that is similar to and reflects human-like characteristics (Poddar, Donthu, & Wei, 2009). In this study, e-store image specifically addresses human-like characteristics of an e-store that are measured on a personality scale adapted from d'Astous and Levesque (2003).

- e-Store-Image/Actual-Self-Image (In)congruence: (In)congruence between a multichannel apparel retailer's e-store image and a consumer's actual self-image. This construct is operationalized in the present study as the similarity (difference) between consumers' estore image and actual self-image scores measured on a set of items that use identical personality adjectives, adapted from d'Astous and Levesque (2003). The greater the difference between the scores, the more incongruent the consumer's e-store image and actual self-image.
- e-Store-Image/Ideal-Self-Image (In)congruence: (In)congruence between a multichannel apparel retailer's e-store image and a consumer's ideal self-image. This construct is operationalized in the present study as the similarity (difference) between consumers' estore image and ideal self-image scores measured on a set of items that use identical personality adjectives, adapted from d'Astous and Levesque (2003). The greater the difference between the scores, the more incongruent the consumer's e-store image and ideal self-image.
- e-Store-Image/Self-Image (In)congruence: (In)congruence between a multichannel apparel retailer's e-store image and a consumer's self-image.
- e-Store-Image/Symbolic-Brand-Image (In)congruence: (In)congruence between a multichannel apparel retailer's e-store image and its symbolic brand image. This construct is operationalized in this study as the similarity (difference) between consumers' e-store image and symbolic brand image scores about a multichannel apparel retailer measured on a set of items that use identical personality adjectives, adapted from d'Astous and Levesque (2003). The greater the difference between the scores, the more incongruent the retailer's e-store image and symbolic brand image.

7

- e-Store Patronage Intention: The consumer's willingness to consider, visit, recommend, or purchase from a multi-channel apparel retailer's e-store. This construct is operationalized in the present study as respondents' responses to an e-store patronage intention scale adapted from Fiore, Jin, and Kim (2005), Mathwick, Malhotra, and Rigdon (2000), and Wang, Baker, Wagner, and Wakefield (2007).
- **Patronage Intention**: "The customer's willingness to consider, recommend, or purchase from a retailer in the future" (Mathwick, Malhotra, & Rigdon, 2001, pp. 48-49).
- **Perceived e-Store/Brand Fit**: Consumers' subjective global judgment on how similar or compatible a multichannel retailer's e-store is to its brand image. This construct is operationalized in this study as respondents' responses to a perceived e-store/brand fit scale adapted from Becker-Olsen and Hill's (2006) fit measurement.
- **Perceived e-Store/Actual-Self Fit**: Consumers' subjective global judgment on how well a multichannel retailer's e-store represents their actual self. This construct is operationalized in this study as respondents' responses to a perceived e-store/actual-self fit scale adapted from Becker-Olsen and Hill's fit measurement (2006).
- **Perceived e-Store/Ideal-Self Fit**: Consumers' subjective global judgment on how well a multichannel retailer's e-store represents their ideal self. This construct is operationalized in this study as respondents' responses to a perceived e-store/ideal-self fit scale adapted from Becker-Olsen and Hill's fit measurement (2006).
- **Perceived e-Store/Self Fit**: Consumers' subjective judgment on the overall similarity between a multichannel retailer's e-store and themselves.
- **Perceived Fit**: Individuals' subjective judgment on the overall similarity or compatibility that exists between two objects (Lafferty, 2007).

- **Self-Image**: A set of knowledge and beliefs about one's self stored in memory (Graeff, 1996). In this study, self-image specifically refers to one's characteristics that are measured on a personality scale adapted from d'Astous and Levesque (2003).
- **Self-Image Congruency**: The degree to which the image of a brand, a product, or a store matches a consumer's self-image (Sirgy, Lee, Johar, & Tidwell, 2008).
- **Symbolic Brand Image**: "An aura of psychological attributes" of a brand linked to consumers' underlying needs for social approval or personal expression and outer-directed selfesteem (Martineau, 1958, p. 47; Keller, 1993; Solomon, 1983). In this study, symbolic brand image specifically refers to human-like characteristics of a brand that are measured on a personality scale adapted from d'Astous and Levesque (2003).

# **Chapter 2. Review of Literature**

This chapter first reviews Mehrabian and Russell's (1974) Stimulus-Organism-Response model as a theoretic foundation for establishing the conceptual framework for this study. Then, in order to help support the conceptual framework and specific hypotheses for this study, research related to brand image and store image are reviewed, followed by literature on e-storeimage/symbolic-brand-image congruence, perceived e-store/brand image fit, self-image congruence, e-store-image/self-image congruence, actual- and ideal-self congruence, and perceived e-store/self fit.

#### **Stimulus-Organism-Response Model**

Mehrabian and Russell's (1974) Stimulus-Organism-Response (SOR) model is a dominant theory that has been used to explain consumers' behavioral responses to store environments including both offline stores (e.g., Donovan & Rossiter, 1982; Donovan, Rossiter, Marcoolyn, & Nesdale, 1994; Sherman, Mathur, & Smith, 1997) and online stores (e.g., Chang & Chen, 2008; Eroglu, Machleit, & Davis, 2001; Fiore, Jin, & Kim, 2005; Manganari, Siomkos, & Vrechopoulos, 2008; Yun & Good, 2007; Wang, Baker, Wagner, & Wakefield, 2007). According to the SOR model, atmospheric cues of the store (S) impact consumers' shopping outcomes (R) such as approach and avoidance behaviors toward the store, through the consumers' emotional or cognitive state (O) as a mediator (Eroglu, Machleit, & Davis, 2001).

This study applies the SOR model as a theoretical framework in which image congruence in a multichannel apparel retailer's e-store is examined. First, in the SOR model, S or stimulus is conceptualized as an environmental cue that affects the individual's internal state (Eroglu, Machleit, & Davis, 2001; Sherman, Mathur, & Smith, 1997). In previous offline store environment studies, store image (external and internal impression of the store), store atmospherics (sight appeal, sound appeal, scent appeal, touch appeal, taste appeal), store theatrics (décor themes and store events) (Manganari, Siomkos, & Vrechopoulos, 2008), social factor (the presence of other people), design factors (layout, color, cleanliness), and overall store image (Sherman, Mathur, & Smith, 1997) have been used as stimulus variables. In online store settings, virtual layout and design (grid layout, free-form layout, racetrack layout), virtual atmospherics (background color, color scheme, percentage of white space), virtual theatrics (animation techniques, images, vividness, interactivity), virtual social presence (web counter, comments from other visitors, crowding) (Manganari, Siomkos, & Vrechopoulos, 2008), website quality and website brand name (Chang & Chen, 2008), and the online store environmental information cues (Eroglu, Machleit, & Davis, 2001) have been used as stimulus variables in previous studies. In this study, two image congruence concepts including (1) e-storeimage/symbolic-brand-image congruence and (2) e-store-image/self-image congruence represent the stimulus construct.

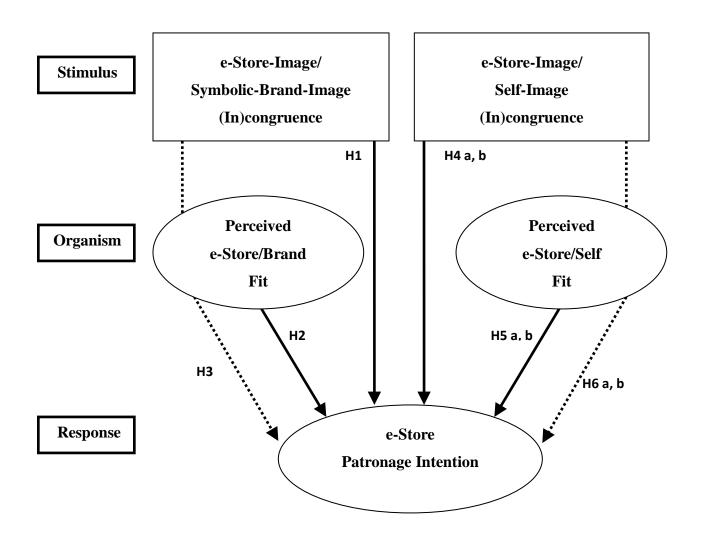
Second, in the SOR model, O or organism represents an individual's emotional or cognitive state which is an intermediary internal outcome upon exposure to the stimulus and links the stimulus and the individual's responses toward that stimulus (Eroglu, Machleit, & Davis, 2001; Sherman, Mathur, & Smith, 1997). To conceptualize the organism construct, attitude (Eroglu, Machleit, & Davis, 2001), trust and perceived risk (Chang & Chen, 2008), and pleasure and arousal (Sherman, Mathur, & Smith, 1997) have been used in previous online and offline store environment studies. For this study, the consumer's cognitive state characterized by

(1) perceived e-store/brand fit and (2) perceived e-store/self fit represents the organism construct of the SOR model.

Finally, R or response in the SOR model describes the individual's response to the stimulus, such as approach or avoidance behaviors, resulting from the emotional or cognitive state evoked by the stimulus (Chang & Chen, 2008; Eroglu, Machleit, & Davis, 2001; Manganari, Siomkos, & Vrechopoulos, 2008; Sherman, Mathur, & Smith, 1997). Approach behaviors refer to positive actions in regards to the stimulus. In store environments, approach behaviors can include entering and remaining in the store, spending money and time in the store, purchasing merchandise from the store, exploring the store, patronizing the store, and recommending the store to others (Chang & Chen, 2008; Donovan & Rossiter, 1982; Eroglu, Machleit, & Davis, 2001; Manganari, Siomkos, & Vrechopoulos, 2008; Mehrabian & Russell, 1974; Sherman, Mathur, & Smith, 1997). In this study, patronage intention for the multichannel retailer's e-store is conceptualized as the response variable. Figure 2.1 presents the conceptual model that illustrates constructs used in this study and their relationships based on the SOR framework.

# Symbolic Brand Image and Store Image

Brand image has often been studied for its strong connection to consumer psychology such as consumer decision making processes (Mazursky & Jacoby, 1986; Porter & Claycomb, 1997; Tidwell & Horgan, 1992). Brand image can be defined as consumers' perceptions of a brand consisting of multiple associations about the brand held in the consumers' memory (Keller, 1993). Brand associations may include brand attributes (product-related and nonproduct-related attributes), brand benefits (functional, experiential, and symbolic benefits), and brand attitudes (consumers' overall brand evaluations) (Keller, 1993).



Notes. In H4a, H5a, and H6a, self means actual self; in H4b, H5b, and H6b, self means ideal self. The mediating effects hypothesized by H3, H6a and H6b are noted in dotted paths.

Figure 2.1. Conceptual Framework

Consumers often associate brands with symbolic meanings beyond tangible benefits resulting from product features or performance (Keller, 1993; Plummer, 1984). A large part of the symbolic associations consumers make with a brand are linked to user imagery (i.e., an image about people who would buy and use the brand). The user imagery leads consumers to view the brand as if it were a person and associate the brand with human-like traits, or brand personality (Aaker, 1997; Keller, 1993, 1998; Okazaki, 2006; Wee & Ming, 2003). Aaker (1997) defined brand personality as "the set of human characteristics associated with a brand" (p. 347). Brand personality has been extensively examined in the context of the symbolic use of a brand, because this concept has a strong link with consumers' self- image congruence (Aaker, 1997; Malhotra, 1988), and it plays a pivotal role in driving consumer decision making (Ramaseshan & Tsao, 2007). Therefore, in this study, symbolic brand image specifically refers to human personality traits associated with a brand, and thus the terms symbolic brand image and brand personality are interchangeably used.

Researchers (e.g., Doyle & Fenwick, 1974-1975; Zimmer & Golden, 1988) have conceptualized store image as an overall impression of a store as perceived by a consumer. The original idea arguing that stores do possess an image appeared in Martineau (1958). Martineau (1958) described store image as "the way in which the store is defined in the shoppers' mind, partly by its functional qualities and partly by an aura of psychological attributes" (p. 47). Between functional and psychological attributes, Martineau (1958) argued that the subjectively judged psychological image ('store personality' or 'symbolic store image') may have a greater impact on shoppers' responses. Just as the symbolic image of a product brand consists of many human-like traits (brand personality), a symbolic store image or store personality also consists of human-like characteristics (e.g., elegant, modern, low-class, stylish) which consumers associate with a retail store (Martineau, 1958; Sirgy & Samli, 1985).

# e-Store-Image/Symbolic-Brand-Image Congruence

According to Rubinstein and Griffiths (2001), the power of companies in the Fortune 500 comes from their ability to build and develop strong brands. The critical role of branding may matter more on the Internet because the Internet is an open market that is fast and transparent. That is, in online settings, all consumer behaviors including visiting an online store, making a purchase decision, and transacting are much faster than in a brick-and-mortar setting, and the whole process of services and business operation of a company is directly and visibly delivered to consumers (Rubinstein & Griffiths, 2001). Rubinstein and Griffiths (2001) emphasized two factors for online branding success: "integrating all the expression of the brand" (p. 400) and "delivering a consistent brand experience" (p. 400). These factors address the congruence between a multichannel retailer's brand image and its e-store image in symbolic and functional aspects, respectively. Bringing cohesion to brand image in all channels is critical for a multichannel retailer to maintain the integrity of its brand image (Rubinstein & Griffiths, 2001). Kwon and Lennon (2009a) found a reciprocal relationship between multichannel retailers' offline and online brand images in that a consumer's online and offline brand attitudes were influenced by brand beliefs from both the respective channel and the other channel.

The existing literature on channel integration for multichannel retailers has mainly emphasized operational (functional) integration. For instance, Kim, Park, and Pookulangara (2005) argued that seamless integration across channels is critical for successful multichannel apparel retailing and stressed integration in various functional attributes of the retailer including merchandise accessibility, product availability, customer service, product quality, price, privacy, and security. Da silva and Syed Alwi (2008) recently argued that rather than mere functional integration across channels, brand image consistency across all channels in terms of intangible and emotional values associated with the brand may provide a more sustainable competitive advantage (Da silva & Syed Alwi, 2008). However, little research has been conducted on multichannel retail branding from a symbolic (intangible) image congruence perspective. Addressing this gap, this study identifies whether the congruence of a multichannel retailer's e-store image with its symbolic brand image (i.e., e-store-image/symbolic-brand-image congruence) would have a significant influence on consumers' response to the retailer's online store. e-Store image refers to the mental representation of an online store that reflects human-like characteristics of the online store (Poddar, Donthu, & Wei, 2008). The researcher suggests that like functional integration across various shopping channels, more seamless image integration between offline and online channels of a multichannel retailer would produce more positive responses among consumers. Thus, the following hypothesis is proposed.

**H1**: The greater the multichannel retailer's e-store-image/symbolic-brand-image incongruence, the lower the consumer's e-store patronage intention.

# **Perceived e-Store/Brand Fit**

Fit is defined as the connectedness, similarity, and unity between objects (Vuuren, Veldkamp, de Jong, & Seydel, 2007). Perceived fit, thus, can be considered as the degree of similarity or compatibility that consumers perceive to exist between two or more objects (Lafferty, 2007). A greater fit between two objects makes it easier for people to draw an associative link between the objects, and thus the presence of fit leads people to evaluate the objects more favorably than when the fit is lacking (Gupta & Pirsch, 2006).

The concept of perceived fit has been explored in a variety of marketing research contexts including brand extensions. In the brand extension literature, perceived fit has often been examined as a predictor or a moderator of consumer response to an extension of a parent brand (e.g., Aaker & Keller, 1992; Chowdhury, 2007; Laforet, 2008; Park, Milberg, & Lawson, 1991; Salinas & Perez, 2009; Wu & Lo, 2009). Brand extension is defined as the use of an existing brand name (i.e., parent brand) for a new product (i.e., extension) in order to facilitate entering new product categories or new market segments (Aaker & Keller, 1992). Perceived fit between the parent brand and the extension, or the perceived similarity or overlap between characteristics of the parent brand and the extension (Aaker & Keller, 1992; Wu & Lo, 2009), plays a critical role in determining the success of a brand extension strategy (Salinas & Perez, 2009; Wu & Lo, 2009). An extension with a poor perceived fit with its parent brand may hurt consumers' favorable associations or attitudes toward the parent brand and may transfer undesirable or harmful messages to the parent brand and the extension itself (Aaker & Keller, 1992; Chowdhury, 2007; Laforet, 2008). If the fit between a parent brand and an extension is perceived to be low, consumers may question the company's purpose of the extension and consider the extension as an unsuccessful strategy (Aaker & Keller, 1992). On the other hand, a high perceived fit between a parent brand and an extension produces favorable responses to the extension and the parent brand (Chowdhury, 2007; Laforet, 2008; Salinas & Perez, 2009; Wu & Lo, 2009) due to the cognitive consistency consumers experience (Becker-Olsen & Hill, 2006).

Researchers have considered offline retailers' expansion to the Internet to be analogous to a product brand's extension into another product category (Kwon & Lennon, 2009a, 2009b; Mui, 2007). Just as product brand extensions take advantage of the halo effect of the existing familiar name of their parent brands in fostering trust in new products (Aaker & Keller, 1992; Chowdhury, 2007; Fu, Saunders, & Qu, 2009), offline retailers have expanded to the new channel, the Internet, under the same retailer name that they have used offline (e.g., J.C. Penney opens J.C. Penney.com). In doing so, brick-and-click retailers have been able to reduce consumers' perceived risk and enhance trust in their online store (Kwon & Lennon, 2009b), leverage positive existing brand images to plant good evaluations on the online stores (Kwon & Lennon, 2009a), and save the costs of establishing new store concepts or images on the Internet.

Fit between a parent brand and an extension can be considered in two dimensions: category fit and image fit (Fu, Saunders, & Qu, 2009; Park, Milberg, & Lawson, 1991; Salinas & Perez, 2009; Wu & Lo, 2009). Category fit refers to the similarity between the parent brand and the extension's product/service categories, whereas image fit is defined as the degree to which the extension shares the global image of the parent brand (Salinas & Perez, 2009). Category fit may focus on functional similarity between the products/services provided by the parent brand and the extension, whereas image fit tends to stress congruency in intangible dimensions such as symbolic and experiential aspects of the brand or product (Fu, Saunders, & Qu, 2009). Wu and Lo (2009) operationalized category fit through the "product connection" between the original brand and an extended product, while conceptualizing image fit through the "brand association" between the core-brand image and an extended product or brand image. Fu, Saunders, and Qu (2009) argued that consumers' perception of the brand image consistency or image fit between the original brand and the brand extension would be a key consideration in the consumers' fit perceptions. Fu, Saunders, and Qu also identified that the consumer's perceived fit based on brand image consistency is the most significant factor to influence and predict consumers'

evaluations on brand extensions. Among offline retailers that have expanded into the online channel, consumers' perceived category fit may remain constant. However, consumers' perceived image fit may vary depending on how well the retailer's e-store reflects the original symbolic brand image (brand personality) of the retailer. Based on the Stimulus-Organism-Response (SOR) model, the researcher predicts that multichannel retailers' e-stores possessing similar or dissimilar images to the retailer's symbolic brand images (S) would evoke varying levels of perceived e-store/brand fit (O) to consumers. Higher perceived fit (O), generated from greater e–store-image/symbolic-brand-image congruence (S), would require less cognitive effort from consumers, which in turn would increase the consumers' patronage intention for the online store (R). Therefore, the following hypotheses are proposed.

- **H2**: The greater the perceived e-store/brand fit, the greater the e-store patronage intention.
- H3: Perceived e-store/brand fit mediates the relationship between e-storeimage/symbolic-brand-image (in)congruence and e-store patronage intention.

# **Self-Image Congruence**

Sirgy (1985) proposed the self-congruency theory that explains the effect of self-image congruency on consumer behavior. This theory postulates how psychological comparison between a product or brand's user image and a consumer's self-image affects the consumer's behavior toward the product or brand (Sirgy et al., 1997). If the consumer perceives that the product or brand would be used by people similar to his or her self-image, this high level of selfcongruency may lead to a positive reaction to the product or brand (Sirgy et al., 1997). Graeff (1996) also argues that consumers evaluate products and brands more favorably and thus are more likely to approach and purchase them when the products and brands are perceived to have similar (congruent) images to their self-image. Hong and Zinkhan (1995) found that consumers were more easily persuaded by advertising campaigns when the brand images were consistent (vs. inconsistent) with themselves. Based on the above literature, we can assume that a high discrepancy (incongruence) between self-image and brand image may motivate consumers to make a negative decision (not purchasing) about the brand (Mehta, 1999). For example, a man who thinks of himself as rugged and masculine would not buy Virginia Slims which have an image designed to appeal to modern, attractive women (Graeff, 1996).

Consumers purchase a brand not only for functional and utilitarian needs, but also for the social meanings that the brand carries (Solomon, 1983). Emphasizing the role of a brand or a product as a nonverbal communication medium of the owner or user's self-image, Swartz (1983) argued that consumers project a certain image about themselves through the products that they own and use. According to Graeff (1996), people purchase and use brands in ways to maintain and enhance their self-image. Brands can be perceived as reflecting consumers' own self-image (i.e., actual self-image) or an image that they desire to possess (i.e., ideal self-image). By using brands that have images consistent with their actual or ideal self-images, consumers may define, maintain, and/or develop their self-image (Parker, 2009). Understanding this brand-image/self-image congruency is especially vital for fashion brand managers and marketers, because people tend to express themselves by purchasing and wearing certain clothes and judge others by what they wear (Evans, 1989; Fennis & Pruyn, 2007). Planning, developing, and promoting brand image or product lines that are congruent with target consumers' self-images is pivotal for

fashion brand managers and marketers (Evans, 1989; Graeff, 1996). Therefore, the marketing strategies of many apparel companies are focused on value-expressive (intangible) aspects of the brand, such as symbolic associations with certain user imagery, rather than on the products' functional or informational (tangible) features.

## e-Store-Image/Self-Image Congruence

The self-congruence concept has long been emphasized in retailing literature since Martineau (1958) argued that consumers select a store with an image consistent with their selfimages. Consumers consciously or unconsciously compare a store's image with their own selfimage. If consumers experience self-congruence, this induces favorable attitudes toward the store and purchase decisions (Chebat, Sirgy, & St-James, 2006). Numerous studies have confirmed the positive relationship of consumer behavior with congruence between store image and consumer self-image in offline retail settings (Chebat, Sirgry, & St-James, 2006; Heijden & Verhagen, 2003; Hongwei & Mukherjee, 2007; Lee, 2003; O'Cass & Grace, 2008).

As online shopping has become adopted by more consumers, multichannel retailers have attempted to identify factors that can attract consumers to visit their e-stores and have tried to build online store environments to meet consumers' needs by creating favorable e-store images (Poddar, Donthu, & Wei, 2008). In spite of numerous studies on brand and store image in the brick-and-mortar environment (e.g., Doyle &Fenwick, 1974-1975; Keaveney & Hunt, 1992; Zimmer & Golden, 1988), e-store image research remains in a rudimentary stage. Pioneers in estore image research have explored the possible effect of e-store image on consumers' decision making in online shopping settings. For example, Heijden and Verhagen (2003) found direct influence of e-store image on consumers' intention to purchase online. Da Silva and Syed Alwi (2008) examined the links between e-store image, customer satisfaction, and loyalty intention and identified that e-store image had a positive and direct effect on online customers' satisfaction and loyalty intention.

Even though many image congruence studies have shown that self-congruency with a brand, a product, and a retail store has a positive influence on various consumer behaviors (e.g., Chebat, Sirgy, & St-James, 2006; Sirgy, 1982, 1985; Sirgy, Grewal, & Mangleburg, 2000), little research has been conducted so far concerning how self-image congruence affects consumer behavior in online shopping environments. Considering the importance of the congruency between retail store image and consumer self-image in offline consumer behavior (Chebat et al., 2006; Lee, 2003), it is plausible that this relationship would also carry over to online store settings. Thus, this study seeks to examine the influence of congruence between an e-store image and consumers' self-image (e-store-image/self-image congruence) on the consumers' e-store patronage intention.

# **Actual- and Ideal-Self Congruencies**

Due to the importance of self-image congruency in consumer responses to a brand's marketing activity, researchers have explored consumers' self-image as a way to understand their purchase decision making process. Self-image can be defined as "the totality of the individual's thoughts and feelings having reference to himself as an object" (Sirgy, 1982, p. 287) or a set of knowledge and beliefs about one's self stored in memory (Graeff, 1996). More simply, Metha (1999) described self-image as a person's perception of him- or herself. According to Hong and Zinkhan (1995), self-image is a driver of one's behavior. Jamal and Goode (2001) also argued that self-image is a basic cognitive structure which is associated with a person's feelings or behaviors. Self-image can influence consumers' decision making process, from the formation of attitudes or preferences toward brands and products to making purchases (Graeff, 1996).

Generally, self-image can be divided into four sub-dimensions: actual self, or how an individual perceives him- or herself; ideal self, or how an individual would like to see him- or herself; social self, or how an individual presents him- or herself to others; ideal social self, or how an individual would like others to see him or her (Jamal & Goode, 2001; Mehta, 1999; Sirgy, 1982). Self-image congruence researchers have selected self-image dimensions equivocally for their studies. The four dimensions of self-image have been studied in varying degrees and have been found to play different roles across consumer settings (i.e., Helgeson & Supphellen, 2004; Hongwei & Mukherjee, 2007). Some researchers chose to use only one selfimage dimension for their study. For example, Mehta (1999) used only actual self-image to investigate whether a commercial filled with suggestive brand images congruent with a consumer's actual self-image can induce the consumer's purchase intention toward the advertised brand. Metha (1999) found that the brand-image/actual-self-image congruency positively influenced the consumer's purchasing intention toward cosmetics and fragrance products. Jamal and Goode (2001) also selected actual self-image for their study and found that jewelry consumers were more satisfied with a brand and more likely to prefer and enjoy a brand when they perceived a higher level of congruency between their actual self-image and the brand's image.

There have also been some attempts to identify which dimensions of self-image have more impact on consumer behavior (i.e., Helgeson & Supphellen, 2004; Hongwei & Mukherjee, 2007). For instance, Hong and Zinkhan (1995) used both actual and ideal self-images to examine the relationship of brand-image/self-image congruency and consumer evaluations of products and brands, and found that ideal-self congruency had more impact than actual-self congruency on consumers' ad preference, brand preference, and purchase intention for two product classes (automobiles and shampoos). Furthermore, Malhotra (1988) tested relationships between product concepts for nine house attributes and three self-image dimensions—actual, ideal, and social self—and found that the ideal self-image was more relevant than the actual or social self-images to house preferences.

On the other hand, Graeff (1996) found that for a publicly consumed brand (e.g., Reebok athletic shoes), ideal self-congruency mattered more than actual self-congruency: whereas for a privately consumed brand (e.g., Budweiser beer), both actual and ideal self-congruencies had similar effects. These findings appear to imply that consumers are interested in managing the impression they portray to others by using publicly consumed products that match their ideal self-image. For privately consumed products (e.g., shampoo), the brand's congruence to their actual self matters as much as that to their ideal self because the product would be used in relatively private settings.

Apparel can be regarded as a publicly consumed product, while shopping on an online store can be a private activity. Exploring the effects of ideal and actual self-congruencies on consumer response to online apparel stores will render interesting insight into a new application of the self-congruency theory. Thus, given the above literature, this study examines the following hypotheses.

- **H4**: The greater the e-store-image/self-image incongruence, the lower the e-store patronage intention.
  - **H4a**: The greater the e-store-image/actual-self-image incongruence, the lower the e-store patronage intention.

**H4b**: The greater the e-store-image/ideal-self-image incongruence, the lower the e-store patronage intention.

# **Perceived e-Store/Self Fit**

The self-congruence literature has operationalized congruence between brand or store image and consumer self-image using two approaches: direct and indirect (Sirgy et al., 1997; Parker, 2009). Researchers who use the direct approach have assessed self-congruence by directly asking respondents to indicate how well they felt products, brands, stores, or organizations fit or were congruent with themselves (e.g., Helgeson & Supphellen, 2004; Vuurn et al., 2007). In this study, the concept of perceived e-store/self fit, which is defined as the consumer's subjective judgment on the overall similarity between an e-store and him- or herself, closely reflects the direct approach to self-congruency.

Conversely, other researchers have assessed self-congruence using indirect approaches by separately measuring consumers' self-image and the image of the products, brands, stores or organizations and then calculating how congruent the two image scores are (e.g., Hong & Zinkhan, 1995; Hongwei & Mukherjee, 2007; Martin & Bellizzi, 1982). This indirect approach corresponds to e-store-image/self-image congruence in this study, which is defined as the similarity observed between a consumer's mental representation of an e-store's characteristics and that of his or her own characteristics measured on a predetermined set of personality characteristics.

Sirgy et al. (1997) compared the direct and indirect measures of self-congruence in a variety of products and consumption settings and found a consistently larger predictive power of the directly measured self-congruence as compared to the indirectly assessed self-congruence in

explaining important outcome variables such as product or brand preference, attitude, satisfaction, and choice. This is because directly asking consumers' own perception of the congruence (fit) enables more inclusive and global assessment of self-congruence experienced by the consumers (Hongwei & Mukherjee, 2007; Sirgy et al., 1997). Applying Sirgy et al.'s (1997) findings to this study, the scope of congruence captured by e-store-image/self-image congruence is expected to be more limited than that of e-store/self fit, given that the nature of congruence captured by e-store-image/self-image congruence will be restricted to the image dimensions addressed by the measurements used to assess e-store image and self-image. On the other hand, perceived e-store/self fit will capture consumers' global perception of the congruence between the e-store and themselves encompassing all possible image dimensions the consumers might use to compare the e-store and themselves. Based on the aforementioned discussion, it is speculated that consumers' perceived e-store/self fit would be a more direct predictor of the consumer's e-store patronage intention than the e-store-image/self-image (in)congruence indirectly calculated from the difference between e-store image and self-image scores. Therefore, the following hypotheses are proposed.

- H5: The greater the perceived e-store/self fit, the greater the e-store patronage intention.H5a: The greater the perceived e-store/actual-self fit, the greater the e-store patronage intention.
  - **H5b**: The greater the perceived e-store/ideal-self fit, the greater the e-store patronage intention.
- H6: Perceived e-store/self fit mediates the relationship between e-store-image/self-image(in)congruence and e-store patronage intention.

- **H6a**: Perceived e-store/actual-self fit mediates the relationship between e-storeimage/actual-self-image (in)congruence and e-store patronage intention.
- **H6b**: Perceived e-store/ideal-self fit mediates the relationship between e-storeimage/ideal-self-image (in)congruence and e-store patronage intention.

## **Chapter 3. Methodology**

This chapter describes the research design, sample, instruments, and data collection procedure used in this study.

## **Research Design**

As a part of a larger research project on apparel brands' online store presentation, data for this study were collected from a national consumer sample using an online survey.

## **Sampling and Data Collection Procedures**

Data were collected using a random sample taken from an online consumer panel operated by a marketing research firm. The marketing research firm sent an email invitation to a random sample of their panel members that met three criteria: female, aged between 20 and 50 years, and having shopped for clothing online. Those who agreed to participate in the study clicked on the URL of the survey website on the invitation email. The survey website first showed an information page (see Appendix A) where the purpose of the study, the participation procedure, and a confidentiality statement were presented. After reading the information page, participants continued to the survey questionnaire page.

Although this study did not use an experiment, diversifying the contexts in which respondents fill out the questionnaire along with random assignment of respondents to the contexts was deemed necessary to augment the variance captured for each variable in order to conduct appropriate data analysis. Thus, respondents were assigned to one of six multichannel apparel retail brands as a context in which they completed the questionnaire. Respondents were first asked questions regarding their opinions about the assigned brand which included the symbolic brand image items relevant to this study. Then, they were given a link to the assigned brand's e-store and asked to visit the brand's e-store, simulating a browsing process to select a pants item they liked best from the e-store. Respondents then listed the code of the item they chose through this browsing step, and completed the remaining items on the questionnaire.

The six brands used in the survey included Abercrombie & Fitch, Gap, Coldwater Creek, Talbots, Michael Kors, and Burberry. As a previous phase to this study, content analysis on visual merchandising cues of multichannel apparel retailers' online stores was conducted on 18 non-luxury apparel brands selected from apparel brands whose retail websites were listed in the top 500 retail websites published by Internet Retailer (2008) and 13 luxury apparel brands selected from the 100 best-known apparel brands published by WWD (2007) based on a 2006 survey. Through the content analysis of the 31 brands' online stores, the six brands were selected because they were considered to have varying symbolic brand images and online store images based on (1) usage of different online visual merchandising cues, (2) the non-luxury versus luxury images the brands had, and (3) age groups the brands were generally believed to target.

A total of 458 respondents provided usable data, almost evenly distributed across the six brands: Talbot with 75 responses (16.4%), Coldwater Creek with 76 responses (16.6%), Abercrombie & Fitch with 80 responses (17.5%), Gap with 74 responses (16.2%), Michael Kors with 76 responses (16.6%), and Burberry with 77 responses (16.8%).

#### Instruments

Since data for this study were collected as a part of a larger research project, instruments for this study were mixed with other measures for the larger project in a self-administered web-

based questionnaire (see Appendix B for the questionnaire). The measurements relevant to this study included: (1) symbolic brand image, (2) perceived e-store/brand fit, (3) perceived e-store/actual-self fit, (4) perceived e-store/ideal-self fit, (5) e-store patronage intention, (6) demographic characteristics, (7) e-store image, (8) actual self-image, and (9) ideal self-image.

## Symbolic Brand Image

To measure symbolic brand image, this study adapted store personality dimensions from d'Astous and Levesque (2003). Including five personality dimensions, this 20-item scale has been confirmed as a valid and reliable tool for measuring store image and has been used for store personality studies (d'Astous & Levesque, 2003; Hongwei & Mukherjee, 2007) as well as apparel website personality research (Poddar, Donthu, & Wei, 2008). The five dimensions of the scale include enthusiasm (dynamic, enthusiastic, lively, welcoming), sophistication (chic, elegant, high class, stylish), genuineness (honest, reliable, sincere, true), solidity (hardy, reputable, solid, thriving), and unpleasantness (annoying, irritating, loud, superficial). The personality adjectives were modified into a sentence format (e.g., this brand is dynamic; see Table 3.1) to be rated on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The following direction was given to respondents prior to the statements to reflect the construct (symbolic brand image):

Sometimes people think of a brand as if it were a person. This may sound unusual, but think of human characteristics associated with [brand name]. We are interested in finding out which personality traits or human characteristics come to mind when you think of [brand name]. Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each of the human personality or characteristics associated with [brand name]. Table 3.1. Measurements

Constructs	Items
Symbolic Brand	This brand (this website) is dynamic.
Image (e-Store	This brand (this website) is superficial.
Image)	This brand (this website) is enthusiastic.
	This brand (this website) is loud.
	This brand (this website) is high class.
	This brand (this website) is truthful.
	This brand (this website) is annoying.
	This brand (this website) is reputable.
	This brand (this website) is chic.
	This brand (this website) is irritating.
	This brand (this website) is solid.
	This brand (this website) is sincere.
	This brand (this website) s reliable.
	This brand (this website) is thriving.
	This brand (this website) is elegant.
	This brand (this website) is lively.
	This brand (this website) is honest.
	This brand (this website) is welcoming.
	This brand (this website) is stylish.
	This brand (this website) is hardy.
Perceived	The impression of this website is similar to the brand's image.
e-Store/Brand Fit	The impression of this website is consistent with the brand's image.
	This web site represents the brand's image very well.
Perceived	Shoppers on this website would be similar to me.
e-Store/Actual-Self	This website's image is consistent with how I feel about myself.
Fit	The website well represents who I am.
Perceived	Shoppers on this website are probably similar to who I would like to
e-Store/Ideal-Self	be.
Fit	This website's image is consistent with the image of a person who I would like to be.
	This website well represents the image of a person who I would like
	to be.

(Continued)

Table 3.1. (Continued)

Constructs	Items
E-Store Patronage	The likelihood that I would make a purchase at this website in the
Intention	future is very high.
	I would be willing to purchase from this website.
	I would recommend this website to my friend.
	I would spend more time than planned at this website.
	I would visit this website again.
	I intend to shop at this website in the future.
	In the future, this website would be one of the first places I would
	look when I need to find clothing items.
Actual (Ideal) Self-	I am (would like to be) dynamic.
Image	I am (would like to be) superficial.
0	I am (would like to be) enthusiastic.
	I am (would like to be) loud.
	I am (would like to be) high class.
	I am (would like to be) trustful.
	I am (would like to be) annoying.
	I am (would like to be) reputable.
	I am (would like to be) chic.
	I am (would like to be) irritating.
	I am (would like to be) solid.
	I am (would like to be) sincere.
	I am (would like to be) reliable.
	I am (would like to be) thriving.
	I am (would like to be) elegant.
	I am (would like to be) lively.
	I am (would like to be) honest.
	I am (would like to be) welcoming.
	I am (would like to be) stylish.
	I am (would like to be) hardy.

# Perceived Fit Variables

For measuring perceived (1) e-store/brand fit, (2) e-store/actual-self fit, and (3) e-

store/ideal-self fit, this study adapted Becker-Olsen and Hill's (2006) perceived fit measurement.

Becker-Olsen and Hill originally developed this scale to measure perceived fit between brand

and sponsorship programs. The original scale used a semantic differential scale format

employing seven pairs of bipolar adjectives with a 7-point scale. In this study, three of the original seven items were adapted in a statement format along with a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to measure each of the three perceived fit variables (see Table 3.1). The perceived fit items were mixed with other measures for the larger project in a questionnaire section that addressed various dimensions of e-store evaluation.

## e-Store Patronage Intention

Patronage intention is defined as a consumer's "willingness to consider, recommend, or purchase from a retailer in the future" (Mathwick, Malhotra, & Rigdon, 2001, p. 49). In the online shopping context, Wang et al. (2007) suggested that a patronage intention for an online store encompasses an online shopper's likelihood to shop at the online store, willingness to buy from it, and willingness to recommend it to others in the future. Fiore, Jin, and Kim (2005) added the tendency of spending more time on the online store than planned as a facet of the patronage concept. In this study, respondents' patronage intention for the assigned e-store was measured with seven Likert-scale items adapted from the concepts and measurements used in the above three studies (see Table 3.1). The e-store patronage intention items were also given in the same section where perceived fit measures were along with other items for the larger project

## e-Store Image

To measure e-store image, this study adapted the same 20 personality items (see Table 3.1) used for the symbolic brand image measure. Each item was phrased in a statement format accompanying a 5-point Likert scale. To clarify the context for the items, the following direction was provided for respondents prior to the statements:

Sometimes people think of a store as if it were a person. This may sound unusual, but think of the impression you have of [brand name] online store from your experience today. We're interested in finding out which personality traits or human characteristics you feel describe [brand name] website (online store). Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each of the following statements.

## Demographic Items

Questions addressing demographic and socio-economic characteristics including age, education level, ethnicity, annual household income, and occupation were included in the demographic section of the questionnaire.

## Actual and Ideal Self-Images

Due to the sensitivity of the topic, items for actual and ideal self-images were located at the end of the questionnaire. Along with the symbolic brand image and e-store image measurements, the same 20 personality items from d'Astous and Levesque (2003) were again adapted into a statement form (rated on a 5-point Likert scale with 1 for Strongly Disagree and 5 for Strongly Agree) to gauge respondents' actual and ideal self-images (see Table 3.1). The selfimage questions were divided into two sets of statements with varying participant directions according to whether respondents were supposed to answer the questions about who they were (actual self-image) or who they wanted to be (ideal self-image). For actual self-image, the following direction was used:

The following set of statements relate to human characteristics or personality traits. We would like to learn how you see yourself in terms of these characteristics/traits. Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each statement.

For ideal self-image, the following direction was used:

People tend to have an ideal image of a person who they want to be. This ideal image may or may not be the same as who they actually are. For each of the following human characteristics or personality traits, please indicate, on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE), how much you would ideally like to have the characteristic/trait, if you could.

#### **Chapter 4. Analyses and Results**

This chapter presents descriptions of the data analysis procedures used for this study and results from the analyses. The data analysis consisted of descriptive statistics to profile the sample, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to validate the measurements, and structural equation modeling (SEM) to test the hypotheses.

## **Sample Characteristics**

The frequency statistics for each demographic item are presented in Table 4.1. All participants were female and aged from 20 to 50 with a mean age of 37.4 years (SD = 8.17). Among the 458 participants, the majority (87.6%) had a post-high school education. Most respondents were non-Hispanic white (74.0%), followed by non-Hispanic black (9.6%) and Hispanic (9.0%). The majority (61.8%) of the respondents' annual household incomes ranged between \$ 35,001 and \$100,000. Respondents were mostly working in professional and technical occupations (32.3%), followed by homemakers (20.5%), clerical workers (15.1%), and managers or administrators (12.2%).

A comparison with the U.S. population according to the U.S. Census Bureau in 2009 revealed that the sample of this study is similar to the U.S. consumer population distribution in respect to ethnicity. In terms of education and income, the sample of this study was somewhat skewed toward a higher level of education and clustered in the income level of \$50,001 to \$75,000 as compared to the 2009 census data of the entire U.S. population which was skewed more towards an annual household income over \$100,000. The six versions of the questionnaire

were almost evenly distributed among the participants as shown in Table 4.1. The demographic characteristics of the participants were very similar across all six versions except that consumers from versions 1 and 2 (Abercrombie & Fitch and Gap) were identified to be somewhat younger than consumers from the other versions through a comparison of the mean age.

Version <sup>a</sup>	Total	<b>V1</b>	V2	<b>V3</b>	V4	V5	V6
Ν	458	75	76	80	74	76	77
Categories	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)	f(%)
Age							
20-25	49 (11)	16 (21.3)	8 (10.7)	2 (2.5)	10 (13.9)	7 (9.5)	6 (7.8)
26-30	55 (12)	8 (10.7)	16 (21.3)	5 (6.3)	6 (8.3)	9 (12.1)	10 (14.3)
31-35	80 (18)	11 (14.7)	16 (32)	12 (15)	6 (8.3)	20(25.7)	16 (20.8)
36-40	86 (19)	11 (14.6)	15 (20)	19 (23.7)	16 (22.2)	10(13.5)	15 (19.4)
41-45	90 (20)	23 (30.7)	10 (13.3)	23 (28.8)	12 (16.6)	12(16.2)	10 (13)
46-50	93 (21)	6 (8)	10 (13.3)	19 (23.7)	22 (30.6)	17 (23.0)	19 (24.7)
М	37.4	35.04	35.48	40.24	38.57	37.50	37.61
SD	8.17	8.72	7.84	6.68	8.58	8.15	8.07
Education							
Some high school	6 (1.3)		1 (1.3)	2 (2.5)	1 (1.4)	1 (1.3)	1 (1.3)
High school degree	51(11)	10(13.3)	9 (11.8)	6 (7.5)	8 (10.8)	7 (9.2)	11 (14.3)
Some college or technical school	162(35)	30(40.0)	32 (42.1)	27 (33.8)	24 (32.4)	21(27.6)	28 (36.4)
College degree (4 yrs)	142(31)	24(32.0)	17 (22.4)	27 (33.8)	22 (29.7)	29(38.2)	23 (29.9)
Some graduate school	28 (6)	3 (4.0)	5 (6.6)	5 (6.3)	8 (10.8)	3 (3.9)	4 (5.2)
Graduate degree (master's, doctorate, etc.)	69 (15)	8 (10.7)	12 (1.58)	13(16.3)	11 (1.49)	15(19.7)	10 (13.0)
Ethnicity							
American Indian/ Alaskan Native	6(1.3)		3 (3.9)	2 (2.5)			1 (1.3)
Asian/Pacific Islander	26(6)	4 (5.3)	7 (9.2)	2 (2.5)	6 (8.1)	3 (3.9)	4 (5.2)
	44(10)	9(12.0)	11(14.5)	4 (5.0)	3 (4.1)	13(17.1)	4 (5.2)
Non-Hispanic Black	339(74)	52(69.3)	48(63.2)	70(87.5)	61(82.4)	49(64.5)	59 (76.6)
Non-Hispanic White	41(9)	9 (12.0)	6(7.9)	2 (2.5)	4 (5.4)	11(14.5)	9 (11.7)
Hispanic	1(.2)	1 (1.3)	0(,)	2 (2.2)	. (5.1)		> (11.7)
Other	-()	- ()					

Table 4.1. Demographic Characteristics of the Samp	ole
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(Continued)

Table 4.1. (Continued)

Version <sup>a</sup>	Total	V1	V2	V3	V4	V5	V6
Ν	458	75	76	80	74	76	77
Categories	f(%)	<i>f</i> (%)	f(%)	f(%)	f(%)	f(%)	f(%)
Annual Household Income							
< \$25,000	39 (8.5)	8 (10.7)	4 (5.3)	4 (5.0)	6 (8.1)	11(14.5)	6 (7.8)
\$25,001 to \$35,000	46 (10.0)	11 (14.7)	10 (13.2)	10 (12.5)	7 (9.5)	2 (2.6)	6 (7.8)
\$35,001 to \$50,000	76 (16.6)	16 (21.3)	9 (11.8)	10 (12.5)	17(23.0)	9 (11.8)	15 (19.5)
\$50,001 to \$75,000	121(26.4)	15 (20.0)	20 (26.3)	25 (31.3)	19(25.7)	18 (23.7)	24 (31.2)
\$75,001 to \$100,000	86 (18.8)	15 (20.0)	16 (21.1)	16 (20.0)	10(13.5)	18 (23.7)	11 (14.3)
\$100,001 to \$150,000	61 (13.3)	6 (8.0)	14 (18.4)	11 (13.8)	9 (12.2)	11 (14.5)	10 (13.0)
\$150,001 to \$200,000	14 (3.1)	1 (1.3)	2 (2.6)	3 (3.8)	2 (2.7)	4 (5.3)	2 (2.6)
> \$200,000	14 (3.1)	3 (4.0)	1 (1.3)		4 (5.4)	3 (3.9)	3 (3.9)
Current Occupation							
Professional or technical	148(32.3)	19 (25.3)	26 (34.2)	30 (37.5)	28 (37.8)	25 (32.9)	20 (26.0)
Manager or administrator	56 (12.2)	9 (12.0)	8 (10.5)	9 (11.3)	9 (12.2)	12 (15.8)	9 (11.7)
Sales worker	13 (2.8)	3 (4.0)	3 (3.9)	1 (1.3)	1 (1.4)	1 (1.3)	4 (5.2)
Clerical worker	69 (15.1)	6 (8.0)	11 (14.5)	15 (18.8)	10 (13.5)	14 (18.4)	13 (16.9)
Crafts worker	6 (1.3)	3 (4.0)		1 (1.3)			2 (2.6)
Machine operator or laborer	8 (1.7)		1 (1.3)	1 (1.3)	3 (4.1)	2 (2.6)	1 (1.3)
Farmer, farm manager, or farm laborer	1 (.2)	1 (1.3)					
Service worker or private	17 (3.7)	7 (9.3)	2 (2.6)				
household worker				1 (1.3)	4 (5.4)	2 (2.6)	1 (1.3)
Military	2 (.4)						
Homemaker	94 (20.5)	16 (21.3)	10 (00 5)			1 (1.3)	1 (1.3)
Student	14 (3.1)	4 (5.3)	18 (23.7)	13 (16.3)	16 (21.6)	13 (17.1)	18 (23.4)
Unable to work	9 (2.0)	2 (2.7)	4 (5.3)		2 (2.7)	2 (2.6)	2 (2.6)
Self-employed or small	9 (2.0)	2 (2.7)		3 (3.8)		2 (2.6)	2 (2.6)
business	11/2 4	2 (1 0)	2 (2 0)	5 (6.3)	1 /1 4	1 91.3)	1(1.3)
Other	11(2.4)	3 (4.0)	3 (3.9)		1 (1.4)	1 (1.3)	3 (3.9)

<sup>a</sup> V1 = Abercrombie & Fitch, V2 = Gap, V3 = Coldwater Creek, V4 = Talbots, V5 = Michael Kors, V6 = Burberry

## **Measurement Preliminary Analyses and Results**

## Image Variables

A principal components analysis with varimax rotation was used for the EFA to determine underlying dimensions and to reduce the number of items used for measuring the four image constructs -- symbolic brand image, e-store image, and actual and ideal self-images. Since the 20 items that measured these four image constructs were adapted from the same existing scale (d'Astou & Levesque, 2003), the EFA was conducted simultaneously for the four image constructs in order to extract components and retain items that are consistent across all four constructs. For identifying the appropriate items and components to retain, four criteria were adopted including 1) Kaiser's rule (eigenvalue > 1.0), 2) screeplot, 3) factor loadings from the rotated component matrix, and 4) the conceptual meaning of the items.

First, from the initial EFA, inconsistent outcomes were produced across the four images with respect to Kaiser's rule. According to the eigenvalue (> 1.0), three components were suggested for two image constructs (e-store image and ideal self-image), while four components were suggested for the other two image constructs (symbolic brand image and actual self-image). On the other hand, scree plots suggested four components across all image constructs. Thus, items with high component loadings from the three- and four-component solutions were all examined to determine the number of components and the final items retained under each component across all four image constructs. As a result, the four-component solution was judged to be better in order to achieve a consistent component structure across the four image constructs.

Next, to identify items to retain, only items that showed above .5 loadings consistently on the same component for at least three of the four images according to the four-component solutions were considered. d'Astou and Levesque's (2003) original scale proposed five components: enthusiasm, sophistication, genuineness, solidity, and unpleasantness. In the original scale, four items -- hardy, solid, reputable, and thriving -- constituted the solidity component, and welcoming was under the enthusiasm component. However, in this study, these five items were cross-loaded into different components across the four image constructs. This means that these items captured meanings similar to those of the other components, and the retention of these items would not add new meanings to the scale. Therefore, the five items were deleted. As a result, 15 items were retained in the final scale as the most parsimonious set of items that were consistently applied to the four image constructs. Therefore, the finalized 15-item scale eliminated the solidity component and one enthusiasm component item from d'Astou and Levesque's (2003) original scale. Among the 15 items, only two (stylish, enthusiastic) had a loading below .5 for one of the four images. All the other retained items showed above .5 loadings on their corresponding components, which matched those from the original scale, for all four image constructs.

Finally, another round of EFA using the 4-component, 15-item solution verified the goodness of this solution according to the aforementioned criteria used in the initial. The four components were labeled as enthusiasm, sophistication, genuineness, and unpleasantness, following the respective component names from d'Astou and Levesque's (2003) original scale. Tables 4.2 through 4.5 present the final EFA results.

Following the factor analysis, the reliability of the finalized image scale items was checked using Cronbach's *alphas*. All components for each image construct were determined to be reliable with Cronbach's *alphas* that were greater than .70 (Robinson, Shaver, & Wrightsman, 1991) (see Tables 4.2 through 4.5).

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T/		Compone	ent Loading	
Item	Enthusiasm	Sophistication	Genuineness	Unpleasantness
This brand is enthusiastic.	.806			
This brand is dynamic.	.757			
This brand is lively.	.757			
This brand is high class.		.810		
This brand is chic.		.520		
This brand is elegant.		.814		
This brand is stylish.		.360		
This brand is honest.			.827	
This brand is truthful.			.791	
This brand is sincere.			.854	
This brand is reliable.			.767	
This brand is annoying.				.833
This brand is irritating.				.790
This brand is superficial.				.660
This brand is loud.				.707
Eigenvalue	3.46	1.99	3.42	2.53
Variance explained	23.09%	13.25%	22.84%	16.92%
Cronbach's alpha	.72	.73	.74	.79

Table 4.2. Principal Components Analysis Results: Symbolic Brand Image

Ξ.	Component Loading						
Item	Enthusiasm	Sophistication	Genuineness	Unpleasantness			
This website is enthusiastic.	.735						
This website is dynamic.	.675						
This website is lively.	.693						
This website is high class.		.857					
This website is chic.		.849					
This website is elegant.		.773					
This website is stylish.		.770					
This website is honest.			.832				
This website is trustful.			.809				
This website is sincere.			.778				
This website is reliable.			.758				
This website is annoying.				.871			
This website is irritating.				.869			
This website is superficial.				.788			
This website is loud.				.586			
Eigenvlaue	2.17	3.31	3.36	2.86			
Variance explained	14.46%	22.11%	22.41%	19.04%			
Cronbach's alpha	.74	.74	.75	.81			

Table 4.3. Principal Components Analysis Results: e-Store Image

Itom	Component Loading						
Item	Enthusiasm	Sophistication	Genuineness	Unpleasantness			
I am enthusiastic.	.855						
I am dynamic.	.642						
I am lively.	.841						
I am high class.		.774					
I am chic.		.837					
I am elegant.		.852					
I am stylish.		.820					
I am honest.			.830				
I am trustful.			.821				
I am sincere.			.873				
I am reliable.			.855				
I am annoying.				.821			
I am irritating.				.852			
I am superficial.				.555			
I am loud.				.677			
Eigenvalue	2.15	2.01	2.00	2.27			
-	2.15	3.01	3.09	2.27			
Variance explained	14.33%	20.05%	20.60%	15.13%			
Cronbach's alpha	.78	.71	.75	.75			

# Table 4.4. Principal Components Analysis Results: Actual Self-Image

	<b>Component Loading</b>						
Item	Enthusiasm	Sophistication	Genuineness	Unpleasantness			
I would like to be enthusiastic.	.431						
I would like to be dynamic.	.628						
I would like to be lively.	.640						
I would like to be high class.		.804					
I would like to be chic.		.819					
I would like to be elegant.		.858					
I would like to be stylish.		.778					
I would like to be honest.			.888				
I would like to be trustful.			.864				
I would like to be sincere.			.862				
I would like to be reliable.			.885				
I would like to be annoying.				.867			
I would like to be irritating.				.868			
I would like to be superficial.				.703			
I would like to be loud.				.653			
Eigenvalue	1.43	2.97	4.18	2.64			
Variance explained	9.54%	19.81%	27.88%	17.58%			
Cronbach's alpha	.76	.75	.77	.80			

Table 4.5. Principal Components Analysis Results: Ideal Self-Image

## Image Incongruence

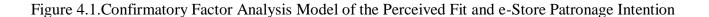
Scores for the three image incongruence variables – (1) e-store-image/symbolic-brand-image incongruence, (2) e-store-image/actual-self-image incongruence, and (3) e-store-image/ideal-self-image incongruence – were calculated by summing the absolute values of the differences computed between component scores from the respective image constructs. For example, to obtain the e-store-image/symbolic-brand-image congruence score for each respondent, the score of each of the four image components was calculated by averaging the scores of all items under the component. Then, the difference (in absolute value) between the respective component scores from the two image variables was calculated for each respondent. Finally, the different scores between the two image variables from all four components were added for each respondent to be used as an e-store-image/symbolic-brand image incongruence score for the respondent. Thus, smaller differences between two image scores mean higher congruence (lower incongruence) between the two images. First, for obtaining the e-store-image/symbolic-brand-image incongruence score, the score differences of each item scores were calculated. The same procedure was used for the other two incongruence score calculations as well.

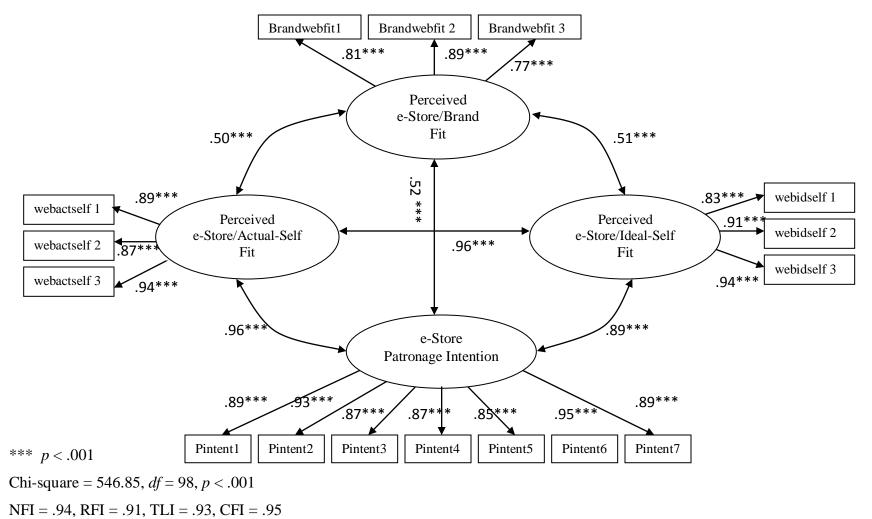
## Perceived Fit and e-Store Patronage Intention

To examine the measurement validity of perceived fit and e-store patronage intention variables, CFA was conducted, followed by a series of validity and reliability analyses. *CFA* 

A CFA was performed on a model (see Figure 4.1) including four factors (i.e., perceived e-store/brand fit, perceived e-store/actual-self fit, perceived e-store/ideal-self fit, and e-store patronage intention) and their indicators. In the CFA model, all error variances were specified to be uncorrelated, and all factor variances were identified to be 1 (while freeing all factor loadings).

The objective of the CFA was to determine whether the measurement models of these four variables provide an acceptable fit and to establish the construct validity (i.e., convergent and discriminant validity) of the measurements. The CFA was conducted using Analysis of Moment Structures (AMOS) 18 employing the Maximum Likelihood estimation method. To examine the model fit of this model, the chi-square statistics ( $\chi^2 = 546.85$ , df = 98, p < .001) was first evaluated. The chi-square statistic indicated an imperfect fit of the model to the data. However, since this statistics is rather sensitive to sample size (Hair et al., 2006), other fit indices such as a set of goodness-of-fit statistics, including incremental fit indices such as Comparative Fit Index (CFI), Normed Fit Index (NFI), Relative Fit Index (RFI), and Tucker-Lewis Index (TLI) as well as root mean square error of approximation (RMSEA) were used to infer the model fit. Incremental fit index values of .94 or greater are considered to indicate a good fit of the model, while those above .90 indicate a close fit (Hu & Bentler, 1992). Thus, the incremental indices from the CFA model indicated a good fit (CFI = .95, NFI = .94) or a close fit (RFI = .91, TLI = .93). According to MacCallum et al. (1996), RMSEA values less than .05 indicate a superior fit, and Bentler (1999) noted that RMSEA values ranging from .05 to .08 is a good fit. RMSEA values ranging from .08 to .10 are accepted as mediocre fit and those greater than .10 are considered as poor fit (MacCallum et al., 1996). Thus, the value of RMSEA (.10) also indicates an acceptable fit of this measurement model. The standardized estimates of factor loadings were reviewed to determine the appropriateness of items to their corresponding factors. The loadings of all indicators from the four factors were positive and higher than .50 (see Figure 4.1), suggesting acceptable practical significance of the indicators for their respective factors (Hair et al., 2006).





RMSEA = .100

*Convergent Validity.* For displaying convergent validity of scale items, items from the same scale should share a high proportion of the variance of the concept (Hair et al., 2006). Therefore, the convergent validity was evaluated using the average variance extracted (AVE) method. AVE proposed by Fornell and Larcker (1981) is the factor-based method for exhibiting discriminant validity of a scale and can be calculated using the following equation with factor X (latent variables) and indicators (items) x, x, ..., xn (Fornell & Larcker, 1981):

$$AVE = \frac{\sum [\lambda_i^2] Var(X)}{\sum [\lambda_i^2] Var(X) + \sum [Var(\epsilon_i^2)]}$$

where  $\lambda_i$  is the factor loading of  $x_i$  on X; Var means the variance;  $\varepsilon_i$  signifies the measurement error of  $x_i$ ; and  $\Sigma$  denotes a sum (Fornell & Larcker, 1981). Through the above equation, AVE is assessed as the sum of the squared item (indicator) loadings ( $\lambda_i$ ) on the factor X (the latent variable of the model) divided by this sum plus the sum of the variances of the item errors (Fornell & Larcker, 1981). AVE, ranging from 0 to 1, represents the ratio of the total variance of the indicators (i.e.,items) that is due to the latent variable (factor). According to Dillon and Goldstein (1984) and Bagozzi (1991), an AVE greater than .50 indicates the convergent validity of the scale items. The AVE of all three perceived fit measurements was .72, while that of e-store patronage intention was .68, all of which exceeded .50. Therefore, the convergent validity of the perceived fit and e-store patronage intention scale items was established.

*Discriminant Validity.* Discriminant validity indicates whether two factors are different (Bagozzi, Yi, & Phillips, 1991; Schreiber, Nora, Stage, Barlow, & King, 2006) enough so that

items of one factor (variable) measures a unique concept of the factor and do not contain any overlapped meaning of the other factor (Bagozzi et al., 1991; Peter & Churchill, 1986). That is, items for each of the three perceived fit variables and e-store patronage intention in the CFA model should measure the distinct meanings of each factor and should not reflect meanings of the other factor.

Discriminant validity was assessed through examining factor correlations and their confidence intervals (factor correlations plus and minus 2 x standard errors of the factor correlation) (Hair et al., 2006). Checking the correlation value between the two factors can be utilized as a less stringent method of discriminant validity assessment (Anderson & Gerbing, 1988). However, through more strict method using the confidence intervals, two factors having a higher correlation can also demonstrate the discriminant validity. When utilizing the confidence intervals of factor correlation, the factor correlation coefficients should not contain 1.0 (Anderson & Gerbing, 1988). According to the assessment of factor correlations and their standard errors, none of the confidence intervals from the factor correlation coefficients coefficients coefficients coefficients coefficients and their standard errors, none of the confidence intervals from the factor correlation coefficients coefficients

Discriminant validity was also assessed through chi-square difference tests between the original CFA model and each of six additional models with each factor correlation parameter constrained to be 1.0 (Anderson & Gerbing, 1988). All constrained models revealed a significantly poorer fit than the unconstrained model (original CFA model) (see Table 4.7). Thus, the discriminant validity among the perceived fit factors and e-store patronage intention was again confirmed through the chi-square difference testing method.

Table 4.6. Factor Pair Correlations

Factor Pair	Correlation Coefficient	Standard Error	Confidence Intervals
Perceived e-Store/Brand Fit	.498	.040	[.418, .578]
Perceived e-Store/Actual-Self Fit			
Perceived e-Store/Brand Fit	.507	.040	[.427, .587]
Perceived e-Store/Ideal-Self Fit		1010	[/,
Perceived e-Store/Brand Fit	.525	.038	[.449, .601]
e-Store Patronage Intention			
Perceived e-Store/Actual-Self Fit	.959	.008	[.799, .975]
Perceived e-Store/Ideal-Self Fit			
Perceived e-Store/Actual-Self Fit	.958	.007	[.944, .972]
e-Store Patronage Intention			
Perceived e-Store/Ideal-Self Fit	.886	.013	[.860912]
e-Store Patronage Intention		_	

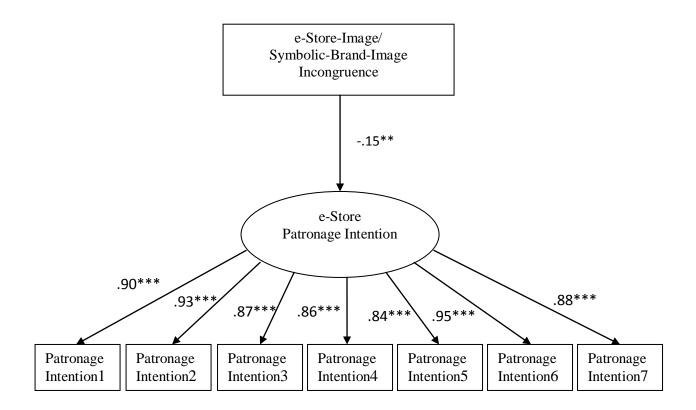
**Reliability.** Reliability tests were conducted through Cronbach's *alphas* for the three perceived fit variables -- perceived e-store/brand fit ( $\alpha = .848$ ), perceived e-store/actual-self fit ( $\alpha = .924$ ), and perceived e-store/ideal-self fit ( $\alpha = .919$ ) -- and e-store patronage intention ( $\alpha = .965$ ). All Cronbach's *alphas* were above .70, indicating the internal consistency of the scales.

Model	Factors whose correlation was constrained (ρ = 1)			Chi-square difference test against based model		
		$\chi^2$	df	$\Delta \chi^2$	$\Delta df$	Р
Base Model (Unconstrain	ed)	546.85	98			
Constrained Model 1	Perceived e-Store/Brand Fit Perceived e-Store/Actual-Self Fit	993.76	99	446.91	1	< .001
Constrained Model 2	Perceived e-Store/Brand Fit Perceived e-Store/Ideal-Self Fit	982.99	99	436.13	1	< .001
Constrained Model 3	Perceived e-Store/Brand Fit e-Store Patronage Intention	984.01	99	437.15	1	<.001
Constrained Model 4	Perceived e-Store/Ideal-Self Fit e-Store Patronage Intention	607.23	99	60.38	1	< .001
Constrained Model 5	Perceived e-Store/Brand Fit e-Store Patronage Intention	761.17	99	214.32	1	< .001
Constrained Model 6	Perceived e-Store Actual-Self Fit Perceived e-Store Ideal-Self Fit	580.33	99	33.48	1	< .001

4.7. Discriminant Validity Check Chi-Square Difference Tests

## **Hypothesis Testing Results**

A series of structural equation models (SEM) were conducted using AMOS 18 to test the hypotheses. First, a SEM model (Model 1, see Figure 4.2) was created to test whether the e-store image/symbolic-brand-image incongruence would negatively influence consumers' e-store patronage intention (H1). e-Store-image/symbolic-brand-image incongruence was placed as an observed exogenous variable, and e-store patronage intention was considered as a latent endogenous variable with its seven indicators. The Chi-square statistic ( $\chi^2 = 110.19$ , df = 20, p < .00) did not support a perfect fit of the model. However, chi-square is known to be affected by sample size (Hair et al., 2006). Thus, incremental fit indices such as NFI, CFI, RFI, and TLI and RMSEA estimate were considered to be better measures of fit of models used in this study. NFI (.97), CFI (.98), TLI (.96), and RFI (.95) of Model 1 were all over .94, indicating a good fit of the model (Hu & Bentler, 1992). The value of RMSEA (.099) also indicates an acceptable fit of the model (MacCallum et al., 1996). The regression path from e-store-image/symbolic-brandimage incongruence to e-store patronage intention was used to test H1. The regression coefficient showed a significant negative relationship ( $\beta^* = -.15$ , p < .01) between e-storeimage/symbolic-brand-image incongruence and e-store patraonge intention, which supports H1 (see Table 4.8).



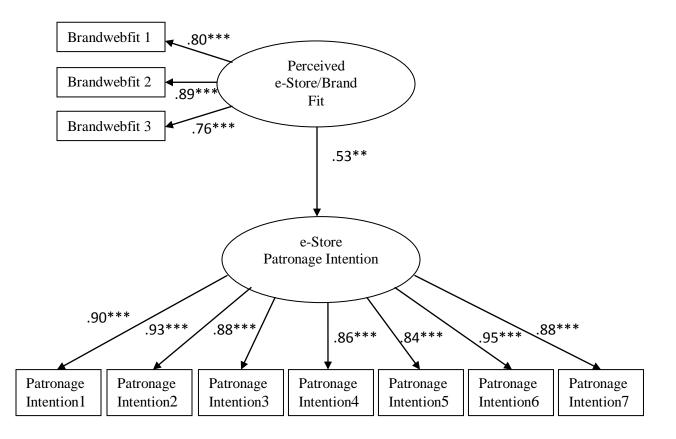
Chi-square = 110.19, *df* = 20, *p* < .001

NFI = .97, RFI = .95, TLI = .96, CFI = .98 RMSEA = .099

Figure 4.2. Model 1: SEM Model Testing H1

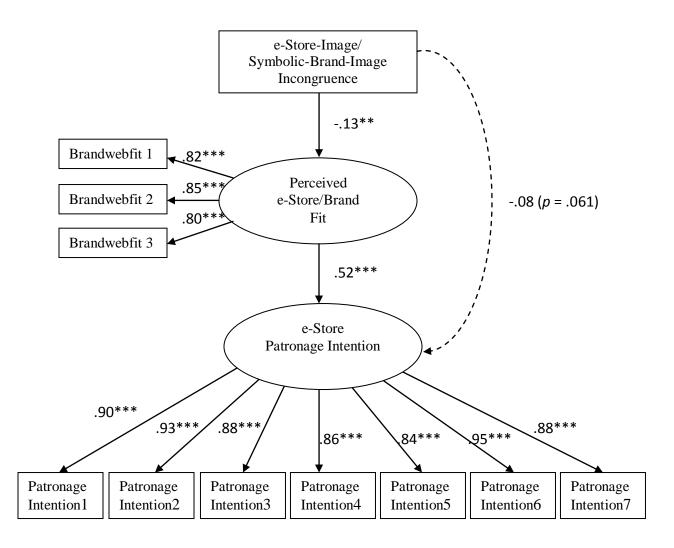
Next, a second SEM model (Model 2, see Figure 4.3) was developed to test H2 concerning the relationship between perceived e-store/brand fit and e-store patronage intention. Perceived e-store/brand fit was specified as a latent exogenous variable that had three indicators, and emitted a regression path to e-store patronage intention, a latent endogenous variable with seven indicators. Chi-square statistics of Model 2 was 218.07 (df = 36, p < .001). Although RMSEA (.105) did not indicate an acceptable fit, the incremental indices suggested an acceptable fit (RFI = .93 and TLI = .94) or a superior fit (NFI = .95 and CFI = .95) of Model 2 (Hu & Bentler, 1992). Thus, H2 was examined through the regression coefficient ( $\beta^* = .53$ , p < .01), which provided support for the hypothesis that perceived e-store/brand fit has a positive influence on e-store patronage intention.

H3 predicted that perceived e-store/brand fit would mediate the relationship between estore image/symbolic-brand-image incongruence and e-store patronage intention. Another SEM model (Model 3, see Figure 4.4) was created to test H4 by combining Models 1 and 2 and adding a regression path from e-store-image/symbolic-brand-image incongruence to perceived estore/brand fit. The Chi-square statistic of Model 3 was 231.23 (df = 44, p < .001). The incremental indices all indicated a good or close fit of the model (NFI = .95, CFI = 96, RFI = .92, TLI = .94), and the RMSEA (.096) indicated an acceptable fit. Therefore, the three regression paths of Model 3 were assessed for testing H3. To support the mediation of perceived estore/brand fit, the path from e-store-image/symbolic-brand-image incongruence to perceived estore/brand fit and that from perceived e-store/brand fit to e-store patronage intention should be significant, while the path from e-store/symbolic-brand-image incongruence to e-store patronage intention should become non-significant. This condition was met by the SEM results (see Figure 4.4). Thus, H3 was supported.



Chi-square = 218.07, *df* = 36, *p* < .001 NFI = .95, RFI = .93, TLI = .94, CFI = .96 RMSEA = .105

Figure 4.3. Model 2: SEM Model Testing H2



\*\* *p* < .01 \*\*\* *p* < .001

Note. A dashed line indicates non-significant relationships at the p = .05 level

Chi-square = 231.23, *df* = 44, *p* < .001 NFI = .95, RFI = .92, TLI = .94, CFI = .96 RMSEA = .096

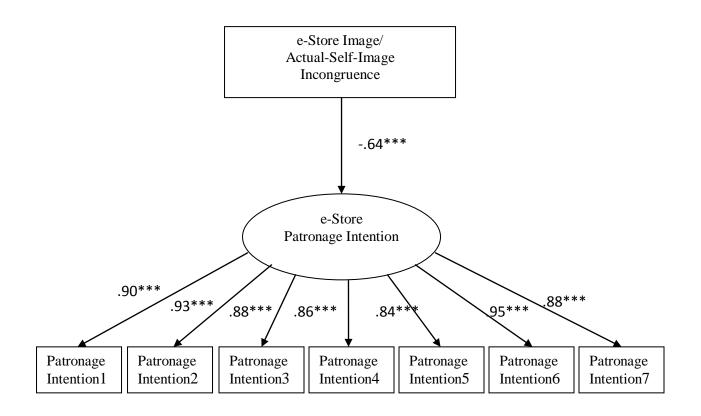
Figure 4.4. Model 3: SEM Model Testing H3

H4 predicted that the greater the incongruence between multichannel retailers' e-store image and consumers' (a) actual and (b) ideal self-image, the lower the consumers' e-store patronage intention. Two SEM models were created using each of the two e-store-image/selfimage incongruence exogenous variables -- (a) e-store-image/actual-self-image incongruence (Model 4a, see Figure 4.5) and (b) e-store-image/ideal-self-image incongruence (Model 4b, see Figure 4.6) – corresponding to H4(a) and H4(b), respectively. In both models, e-store patronage intention was used as a latent endogenous variable with seven indicators.

The Chi-square of Model 4a was 130.40 (df = 20, p < .001). Although the RMSEA estimate (.110) from Model 4a indicated a poor fit of the model, the incremental fit indices showed a good fit (NFI = .97, RFI = .94, TLI = 95, CFI = .97). Thus, the regression coefficient ( $\beta^* = -.64, p < .001$ ) for H4(a) was examined, which indicated that a higher e-store-image/actual-self-image incongruence would lead to a lower e-store patronage intention, supporting H4(a).

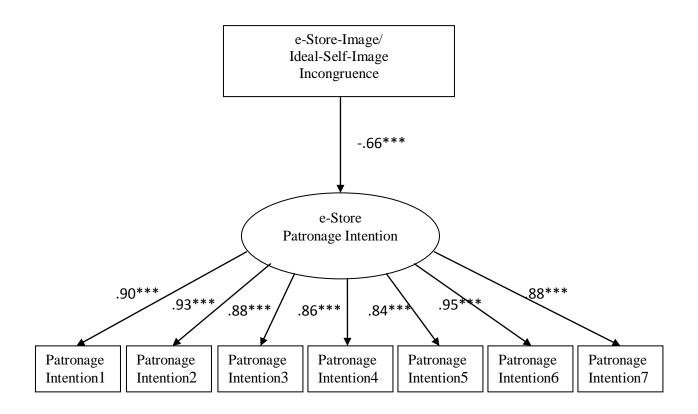
Similarly, Model 4b also generated inconsistent fit outcomes according to different indexes. The Chi-square statistic was 127.93 (df = 20, p < .001). Although the RMSEA (.109) indicated a poor fit, the incremental fit indices showed a good fit (NFI = .97, RFI = .94, TLI = .95, CFI = .97. The regression coefficient ( $\beta^* = -.66, p < .001$ ) indicated that the greater e-storeimage/ideal-self-image incongruence, the lower the e-store patronage intention. Thus, H4b was also supported (see Figure 4.6 and Table 4.8).

H5 predicted that perceived (a) e-store/actual-self fit and (b) e-store/ideal-self fit would positively influence e-store patronage intention. Two SEM models (Models 5a and 5b) were created for testing H5(a) and H5(b), respectively. In Model 5a (see Figure 4.7), perceived estore/actual-self fit was placed as an observed exogenous variable with three indicators and estore patronage intention as a latent endogenous variable with the seven items as indicators. The



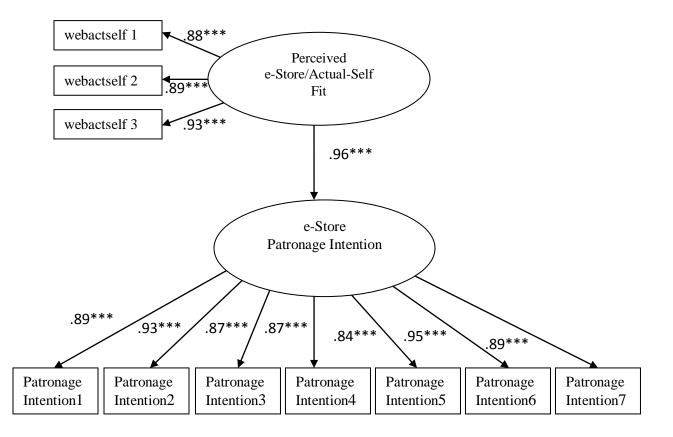
Chi-square = 130.40, *df* = 20, *p* < .001 NFI = .97, RFI = .94, TLI = .95, CFI = .97 RMSEA = .110

Figure 4.5. Model 4a: SEM Model Testing H4(a)



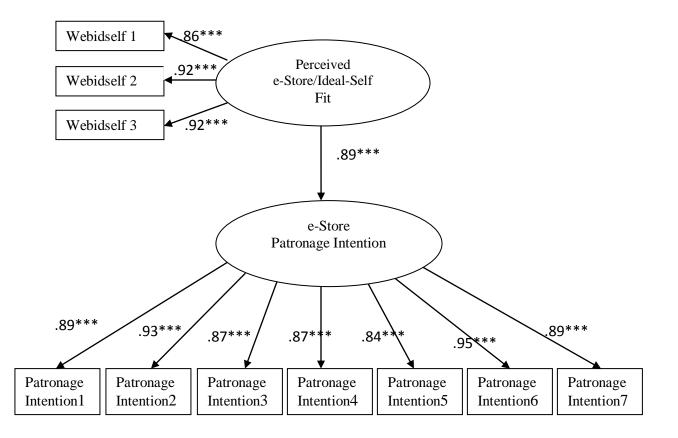
Chi-square = 127.928, *df* = 20, *p* < .001 NFI = .97, RFI = .94, TLI = .95, CFI = .97 RMSEA = .109

Figure 4.6. Model 4b: SEM Model Testing H4(b)



Chi-square = 240.71, *df* = 36, *p* < .001 NFI = .96, RFI = .94, TLI = .95, CFI = .96 RMSEA = .112

Figure 4.7. Model 5a: SEM Model Testing H5(a)



Chi-square = 230.65, *df* = 36, *p* < .001 NFI = .96, RFI = .94, TLI = .94, CFI = .96 RMSEA = .109

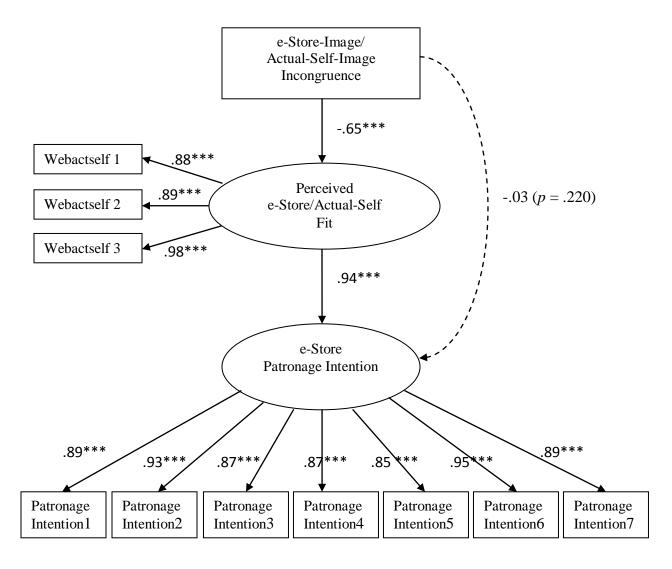
Figure 4.8. Model 5b: SEM Model Testing H5(b)

Chi-square statistic of Model 5a was 240.71 (df = 36, p < .001). Although RMSEA of .11 failed to show a good model fit, all incremental fit indices showed a good fit (NFI = .96, CFI = .96, RFI = .97, TLI = .95). The regression coefficient of perceived e-store/actual-self fit and e-store patronage intention was .96 (p < .001), supporting H5(a) that predicted a positive relationship between perceived e-store/actual-self fit and e-store patronage intention (see Table 4.8).

In Model 5b (see Figure 4.8), which was developed to test H5(b), perceived e-store/idealself fit was specified as a latent exogenous variable with three indicators which emitted a regression path to e-store patronage intention, a latent endogenous variable with seven indicators. RMSEA (.109) did not indicate an acceptable fit. However, the incremental indices suggested a good fit (RFI = .94, TLI = .95, NFI = .96, CFI = .96) of the model (Hu & Bentler, 1992). Thus, H5(b) was examined through the regression coefficient ( $\beta$ \* = .89, *p* < .001) for the path from perceived e-store/ideal-self fit to e-store patronage intention. The regression coefficient revealed a positive influence of perceived e-store/ideal-self fit on e-store patronage intention, supporting H5(b) (see Table 4.8).

H6 predicted that perceived e-store/self fit would mediate the relationship between estore-image/self-image incongruence and e-store patronage intention in both (a) actual and (b) ideal self contexts. To test the mediating role of perceived e-store/actual- and ideal-self fit, two SEM models were created. Model 6a (see Figure 4.9) combined Models 4a and 5a while Model 6b (see Figure 4.10) combined Models 4b and 5b, and then added a regression path from e-storeimage/(actual or ideal) self-image incongruence to perceived e-store/(actual or ideal) self fit. To support the role of perceived fit as a mediator between incongruence and e-store patronage intention, the regression path from e-store-image/self-image incongruence to e-store patronage intention should become non-significant, while the other two regression paths should be statistically significant. Regression coefficients from Model 6a confirmed the above prediction (see Figure 4.9), supporting H6(a) which predicted that perceived e-store/actual-self fit mediates the relationship between e-store-image/actual-self-image incongruence and e-store patronage intention. The regression coefficient from e-store-image/actual-self-image incongruence to perceived e-store/actual-self fit ( $\beta^* = -.65$ , p < .001) and that from perceived e-store/actual-self fit to e-store patronage intention ( $\beta^* = .94$ , p < .001) were significant, while the direct path from estore-image/actual-self-image incongruence to e-store patronage intention ( $\beta^* = -.03$ , p = .220) was non-significant (see Table 4.8). Although RMSEA (.109) of Model 6a failed to show a good model fit, the incremental fit indices showed an acceptable fit (NFI = .95, CFI = .96, RFI = .93, TLI = .94).

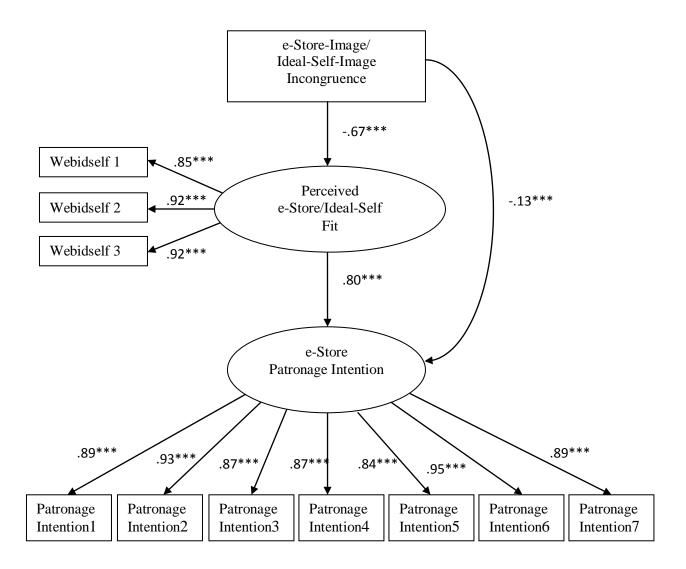
Results from Model 6b (see Figure 4.10 and Table 4.8), on the other hand, failed to confirm the full mediating role of perceived e-store/ideal-self fit, rejecting H6(b). The regression path from e-store-image/ideal-self-image incongruence to e-store patronage intention remained significant ( $\beta^* = -.13$ , p < .001) along with the regression coefficients for the incongruence  $\rightarrow$  perceived fit path and the perceived fit  $\rightarrow$ e-store patronage intention path. This result suggests that perceived e-store/ideal-self fit provided only partial mediation between the e-store-image/ideal-self-image incongruence and e-store patronage intention. RMSEA (.102) of Model 6b failed to show an acceptable fit, but the incremental fit indices showed a good fit (NFI = .96, CFI = .96, RFI = .94, TLI = .95).



\*\*\* *p* < .001

Note. A dashed line indicates non-significant relationships at the p = .05 level Chi-square = 284.765, df = 44, p < .001NFI = .95, RFI = .93, TLI = .94, CFI = .96 RMSEA = .109

Figure 4.9. Model 6a: SEM Model Testing H6(a)



\*\*\* *p* < .001

Chi-square = 251.23, *df* = 44, *p* < .001 NFI = .96, RFI = .94, TLI = .95, CFI = .96 RMSEA = .102

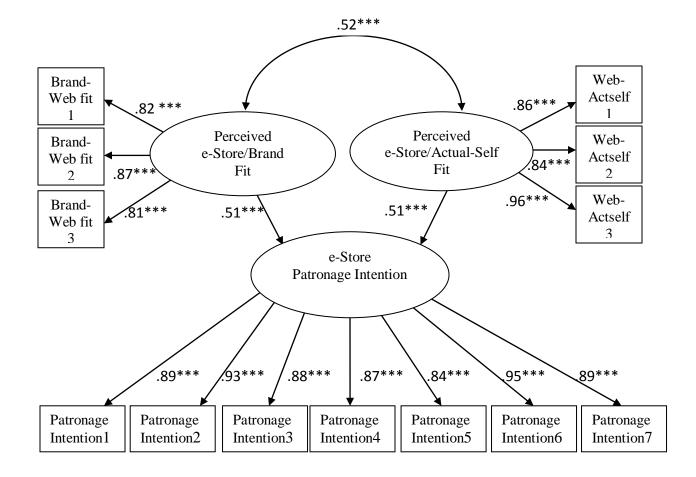
Figure 4.10. Model 6b: SEM Model Testing H6(b)

# Table 4.8. Results of Hypothesis Testing

	Variables		0			
Test	Independent Variables	Dependent Variables	- β	р		HP Test Result
H1	e-Store-Image/Symbolic-Brand-Image Incongruence	e-Store Patronage Intention	15	.002**	Sig.	supported
H2	Perceived e-Store/Brand Fit	e-Store Patronage Intention	.53	<.001***	Sig.	supported
I	Mediation tests for Perceived e-Store/Brand Fit					
H3	e-Store-Image/Symbolic-Brand-Image Incongruence	Perceived e-Store/Brand Fit	13	.007**	Sig	
	Perceived e-Store/Brand Fit	e-Store Patronage Intention	.52	<.001***	Sig.	
	e-Store-Image/Symbolic-Brand-Image Incongruence	e-Store Patronage Intention	08	.061	N.S.	supported
H4(a)	e-Store-Image/Actual-Self-Image Incongruence					
H4(b)	e-Store-Image/Ideal-Self-Image Incongruence	e-Store Patronage Intention	15	.002**	Sig.	supported
H5(a)	Perceived e-Store/Actual-Self Fit		.96	<.001***	Sig.	
H5(b)	Perceived e-Store/Ideal-Self Fit	e-Store Patronage Intention	.89	<.001***	Sig.	supported
1	Mediation tests for Perceived e-Store/Self Fit					
H6(a)	e-Store-Image/Actual-Self-Image Incongruence	Perceived e-Store/Actual-Self Fit	65	<.001***	Sig.	
	Perceived e-Store/Actual-Self Fit	e-Store Patronage Intention	.94	<.001***	Sig.	
	e- Store-Image/Actual-Self-Image Incongruence	e-Store Patronage Intention	03	.220	N.S.	supported
H6(b)	e-Store-Image/Ideal-Self-Image Incongruence	Perceived e-Store/Ideal-Self Fit	67	<.001***	Sig.	
~ /	Perceived e-Store/Ideal-Self Fit	e-Store Patronage Intention	.80	<.001***	Sig.	Not
	e-Store-Image/Ideal-Self-Image Incongruence	e-Store Patronage Intention	13	<.001***	Sig.	supported

#### **Additional Analyses**

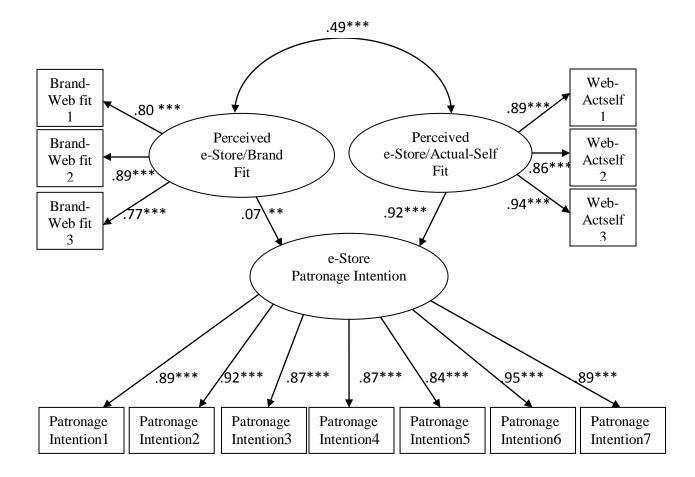
Additional data analysis was conducted to examine whether perceived e-store/brand fit or perceived e-store/self fit is a stronger predictor of consumers' e-store patronage intention. Since perceived e-store/actual-self fit (vs. perceived e-store/ideal-self fit) was found to have a greater effect on e-store patronage intention (see H5 testing results), only perceived e-store/actual-self was chosen to represent the e-store/self fit construct in these models. To answer this question, two SEM models were constructed as a constrained (Model 7a) and unconstrained (Model 7b) models. In both models, perceived e-store/brand fit and perceived e-store/actual-self fit were placed as latent exogenous variables and e-store patronage intention as a latent endogenous variable. The constrained model (Model 7a, see Figure 4.11) held the regression coefficients to be equal for the path from perceived e-store/brand fit to e-store patronage intention and that from perceived e-store/actual-self fit to e-store patronage intention. The unconstrained model (Model 7b, see Figure 4.12) allowed the two regression coefficients to be free. The chi-square difference test between the two models showed a significant fit difference between the constrained and unconstrained models ( $\Delta \chi^2 = 261.97$ ,  $\Delta df = 1$ , p < .001), indicating a superior fit of the unconstrained model. According to the unconstrained model, perceived e-store/actual-self fit ( $\beta^*$ = .92, p < .001) was found to have a greater influence on e-store patronage intention than perceived e-store/brand fit ( $\beta^* = .07, p < .01$ ).



\*\*\* *p* < .001

Chi-square = 602.31, *df* = 63, *p* < .001 NFI = .91, RFI = .87, TLI = .88, CFI = .92 RMSEA = .137

Figure 4.11. Model 7a: SEM Model Testing Additional Question (Constrained Model)



\*\* *p* < .01 \*\*\* *p* < .001

Chi-square = 340.34, *df* = 62, *p* < .001 NFI = .95, RFI = .92, TLI = .94, CFI = .96 RMSEA = .99

Figure 4.12. Model 7b: SEM Model Testing Additional Question (Unconstrained Model)

#### **Chapter 5. Discussion and Conclusions**

This chapter discusses findings related to the relationships among the three main constructs of this study -- image congruence, perceived fit, and e-store patronage intention. The theoretical and managerial implications of the findings and the limitations of this study are also explained, followed by suggestions for future research.

#### Discussion

#### **Image Congruence and Perceived Fit**

Two significant psychological concepts, image (in)congruence and perceived fit, are applied in this study. Traditionally, image (in)congruence has been defined as the (in)consistency between objects in terms of intangible or emotional values (Da silva & Syed Alwi, 2008; Metha, 1999). In this study, image congruence concept was conceptualized as consistent symbolic meanings, specifically in terms of four dimensions of personality (enthusiasm, sophistication, genuineness, and unpleasantness), shared by a multichannel retailer's e-store and the retailer's brand image (e-store-image/symbolic-brand-image congruence) or the consumer's self-image (estore-image/[actual- and ideal-]self-image congruence). On the other hand, the concept of perceived fit addresses a global, subjective judgment of the degree to which an e-store is similar to the retailer's brand (e-store/brand fit) or to a consumer's self (e-store/[actual- and ideal-]self fit), which is directly measured through the consumer's self-report. This study reveals that image congruence, which is an indirectly calculated estimate of similarity in the four personality dimensions, significantly explains consumers' holistic perceived fit, which in turn influences the consumers' patronage intention.

This result indicates the importance of consistency between its original retail brand image, and its customers' self-image with respect to the four personality dimensions. Although perceived fit is a more direct and holistic measure of similarity perceived by consumers, it does not render insight as to what specific dimensions of image is of importance to consumers in evaluating an e-store's fit with them or with its original retail brand image. By showing the intimate connection between the congruence in the four personality dimension (i.e., enthusiasm, sophistication, genuineness, solidity, and unpleasantness) scores and consumers' perceptions of fit, this study provides an insight into symbolic factors of an e-store image that influence consumers' perceived fit of the e-store with themselves or the e-store's original retail brand image.

#### e-Store Image and Symbolic Brand Image

This study reveals that multichannel apparel retailers' e-store image/symbolic-brandimage incongruence negatively influences consumers' approach tendency as indicated by patronage intention for the e-store. Furthermore, perceived e-store/brand fit influences e-store patronage intention by mediating the relationship between e-store-image/symbolic-brand-image incongruence and e-store patronage intention. The positive impact of e-store image/symbolicbrand-image congruence and perceived e-store/brand fit on e-store patronage intention provides empirical evidence that multichannel retailers' seamless integration across channels should be implemented not only in functional/operational areas but also in maintaining consistent brand images.

71

#### e-Store Image and Self-Image

This study shows that the incongruence between an e-store image and consumers' selfimage has a negative impact on the consumers' e-store patronage intention. That is, the greater the incongruence of e-store image and consumers' self-image, the lower the e-store patronage intention. This finding expands the application of the classic self-congruence theory (e.g., Sirgy, 1985; Sirgy et al., 1997; Chebat, Sirgry, & St-James, 2006) by showing that the notion of the self-congruence theory which is the positive impact of self- congruence on consumers' approach behaviors towards a product or a brand, remains true in the online shopping context as well. In spite of the well-documented importance of self-congruence in consumers' store patronage or choice behavior (e.g., Chebat, Sirgry, & St-James, 2006; Heijden & Verhagen, 2003; Hongwei & Mukherjee, 2007; Lee, 2003; O'Cass & Grace, 2008), little research has examined the selfcongruence issue in online retail settings. This study addresses this gap by providing empirical evidence for the critical role of self-congruence in enhancing consumers' e-store patronage intention.

This study also showes that e-store-image/self-image incongruence negatively influences e-store patronage intention mainly by reducing consumers' perceptions of the overall fit between the e-store and themselves. This study further reveals that perceived e-store/actual-self fit fully mediates the relationship between e-store-image/actual-self-image incongruence and e-store patronage intention. On the other hand, perceived e-store/ideal-self fit plays only a partial mediating role between e-store-image/ideal-self-image incongruence and e-store patronage intention. This means that e-store-image/ideal-self-image incongruence influences consumers' estore patronage intention in two ways: indirectly through mediation of perceived fit and directly without any mediating steps.

These different mediating roles perceived fit plays for the ideal- versus actual-self congruence effects, along with the greater effect (regression coefficient) of perceived estore/actual(vs. ideal)-self fit on e-patronage intention, indicate that the global perception of actual-self fit influences consumers' e-store patronage to a larger degree than does perceived ideal-self fit. This finding shows that although apparel is one of the publicly consumed products which generally emphasize ideal self-image fit (Graeff, 1996), when consumers privately shop for apparel through online stores, actual self-image fit more strongly influences their purchase intention than does ideal self-image fit. This may be because consumers do not need to show their purchasing or decision making behaviors publicly when using online shopping channels. As a result, this private characteristic of online stores may enhance the importance of actual-self fit. This finding suggests that multichannel apparel retailers need to differentiate their retailing strategies according to the store types: offline versus online settings. As suggested in the previous studies, ideal self-image congruence matters more in offline apparel retailing than does actual self-image congruence (Graeff, 1996). Thus, multichannel apparel retailers should try to match the offline store image with the ideal self-image of their target consumers. However, in the context of online shopping, multichannel apparel retailers increasingly need to focus on identifying their target consumers' actual self-image and to match their e-store image to the actual self-image of their target consumers when designing their websites and planning online retailing strategies.

In regard to ideal-self image, this study shows that the congruence of an e-store image with consumers' ideal self-image in the four personality dimensions has its own impact on estore patronage, separate from that of perceived ideal-self fit. This result seems to imply that it is

73

still important to create an e-store image congruent with target consumers' ideal self-image, at least in the four personality dimensions used in this study.

#### Perceived e-Store/Brand Fit versus Perceived e-Store/Self Fit

Numerous previous studies identified that perceived fit between the parent brand and the extension plays a critical role in consumers' responses toward and purchase intention for the extension (Chowdhury, 2007; Gupta & Pirsch, 2006; Laforet, 2008; Salinas & Perez, 2009; Wu & Lo, 2009). This study reveals that the perceived fit effect also exists in the context of multichannel retailing where the original retail format (e.g., offline stores) is considered as a parent brand and the e-store is viewed as an extension (Kwon & Lennon, 2009a). In addition to the perceived fit of an e-store to its original retail brand, this study also reveals the importance of the perceived fit of an e-store to the consumer's self image. Thus, this study contributes to the current perceived fit research by comparing the relative roles of these two perceived fit constructs in influencing consumers' e-store patronage intention, a topic no published research has examined.

Perceived e-store/self fit is shown to be a better predictor of e-store patronage intention than perceived e-store/brand fit. It may be because of the unique characteristics of online shopping. When shopping online, consumers contact retailers' e-stores in a private way. Without any interruptions of other environmental or psychological cues, only three main entities are needed: consumers' self, e-store itself, and a computer (as a medium for online shopping). During the process of this highly private shopping experience, the most significant fit is that between e-store and I. This result recommends that multichannel apparel retailers need to design their e-stores to maintain an image consistent with their consumers' self-image, while they still keep the seamless image integration of their brand image and e-store image.

## Implications

## **Theoretical Implications**

There are two main contributions of this study. First, the present study expands findings of previous literature on the significant roles of image congruence and perceived fit on consumer behaviors. Although previous image congruence and perceived fit studies have been conducted with a brand, a product, and a retail store and showed a positive effect on various consumer behaviors (e.g., Chebat, Sirgy, & St-James, 2006; Chowdhury, 2007; Laforet, 2008; Salinas & Perez, 2009; Sirgy, 1982, 1985; Sirgy, Grewal, & Mangleburg, 2000; Wu & Lo, 2009), little research has been done so far concerning how image congruence and perceived fit affect consumer behavior in online shopping environments. Considering the important roles of image congruence and perceived fit in the offline shopping context, it is plausible that they would have a similar influence in online store settings. This study provides empirical support for the applicability of the image congruence and perceived fit constructs in understanding consumers' patronage intention for a multichannel retailer's e-store. This study confirms (a) that the seamless integration of symbolic brand image and e-store image of a multichannel retailer enhances consumers' e-store patronage intention and (b) that the image congruence between e-store image and consumer self-image has a strong impact on e-store patronage intention. Additionally, this study shows the significant role of perceived fit in accounting for the impact of the aforementioned image congruencies on consumers' e-store patronage intention.

Second, this study expands the applicability of the SOR model by introducing image congruence as a stimulus variable and perceived fit as an organism variable which lead to e-store patronage intention (the response variable). In past literature, image congruence and perceived fit have been sporadically examined separately (e.g., Helgeson & Supphellen, 2004; Hong &

Zinkhan, 1995; Hongwei & Mukherjee, 2007; Martin & Bellizzi, 1982; Vuurn et al., 2007) or treated as if they were the same construct measured in two ways (Parker, 2009; Sirgy et al., 1997). However, by integrating the two constructs into the SOR model, the research provides a perspective to examine different roles they play in forming consumers' e-store patronage intention. The researcher conceptualizes image congruence as the objective similarity/difference between two images (i.e., e-store image and symbolic brand image or self-image). Since consumers form each of these images separately, the objective similarity/difference between two images (as calculated by the difference in the two image scores) can be construed as a stimulus characteristic which consumers cognitively process. As a result of the cognitive processing, consumers perceive a fit, or a subjective judgment of the overall similarity/difference between two objects (i.e., e-store and brand or self). Therefore, perceived fit is conceptualized to represent the organism construct of the SOR model. Several previous studies have adapted the SOR model in their online store research through utilizing various online store environmental cues, including virtual layout and design (Manganari, Siomkos, & Vrechopoulos, 2008), website quality and brand name of the website (Chang & Chen, 2008), and online store informational cue (Eroglu, Machleit, & Davis, 2001) as the stimulus state. To conceptualize the organism construct, the consumers' cognitive states, including attitude (Eroglu, Machleit, & Davis, 2001), trust and perceived risk (Chang & Chen, 2008), and pleasure and arousal (Sherman, Mathur, & Smith, 1997) have been used in previous online and offline store environment studies. However, little research has applied image congruence as the stimulus and perceived fit as the organism state. This study addresses this gap in the literature and contributes a new insight into the image congruence literature as well as the SOR literature.

## **Managerial Implications**

There are two managerial implications in relation to both concepts: image congruence and perceived fit. First, the finding of this study shows that the seamless integration across estore image, symbolic brand image, and consumer self-image is critical for successful online branding of multichannel apparel retailers. It is identified that the significant role of image congruence among them to induce consumers' e-store patronage intention. Thus, multichannel apparel retailers need to maintain the consistent images of e-store and brand, while trying to match their e-store image with consumer self-image.

Second, with regard to perceived fit concept, the current study provides insights for multichannel apparel retailers' e-store development by confirming that consumers' perceived fit of the e-store with the retailer brand and the consumers' self-image will positively influence their e-store patronage intention. This study indicates that multichannel apparel retailers should examine their brand image, their customers' (actual and ideal) self-image, and develop their estores by integrating the brand image and target customers' self-image into their e-store design. Previous research identified that consumer ideal-self image matters when shopping through offline scores (Graeff, 1996), while this study identified that actual-self image has more impact on patronage intention for e-stores. Applying these outcomes, multichannel marketers need to identify their target consumers' actual- and ideal-self images and try to build the desired image for each shopping channel.

#### Limitations and Recommendations for Future Research

Although every effort was made to ensure the validity of the study, several limitations exist that should be accounted for when interpreting the findings of this study. Limitations and suggestions for ways to overcome these limitations in future research are discussed below.

First, this study adapted and used only three items to measure each of the three perceived fit variables-- perceived e-store/brand fit, perceived e-store/actual-self fit, and perceived estore/ideal-self fit. This might have posed a potential validity issue for the fit measurements. Additionally, the lack of many alternative items limited the researcher's ability to solve the problem related to high correlations between perceived e-store/actual-self fit and e-store patronage intention (r = .96), between perceived e-store/actual-self fit and perceived estore/ideal-self fit (r = .96), and between perceived e-store/ideal-self fit and e-store patronage intention (r = .89). Although the discriminant validity among these measures was all established through relevant statistical procedures, the high correlation values still leaves a concern for a potential discriminant validity issue. Using more items to measure the fit constructs might have given the researcher an opportunity to improve the measurements' construct validity, which might have led to a more accurate examination of the hypothesized structural relationships. Therefore, future research is recommended to examine the research problems discussed in this study using different measures for the perceived fit constructs, so that the validity of the findings of this study can be enhanced.

Second, this study would be enhanced through an expanded conceptual model by adding other related concepts and relationships. Because the study did not control for the effect of existing preference for the retail brand (or brand/self fit, brand attitude) or existing brand familiarity, these confounding variables might have existed in the sample and inadvertently influenced the results of this study. Therefore, adding a brand-related construct is desired to refine the present study. Specifically, adding symbolic-brand-image/self-image (in)congruence and/or perceived brand/self fit into the current conceptual model might provide additional insight related to the present findings. For example, this study found that perceived e-store/self fit had a greater influence on e-store patronage intention than did perceived e-store/brand fit. However, this result might have been qualified if the effect of perceived brand/self fit was simultaneously examined in addition to the other two perceived fit variables. Besides, the effect of perceived e-store/brand fit might have been moderated by perceived brand/self fit in that consumers who perceive high brand/self fit might place more importance on e-store/brand fit than consumers who perceive low brand/self fit. Future research examining these issues may shed more accurate light on the role of e-store/brand fit in influencing consumers' e-store patronage intention.

Third, the sample and the stimulus websites used in this study also pose limitations. This study used a national sample of 20-50 year-old U.S. female consumers and six stimulus websites that were believed to target various age groups and markets. Because this study used only a female sample and included only certain age groups, findings from this study may not be generalized to the other populations. Likewise, caution is needed in generalizing the findings to e-stores beyond the six stimulus websites used in this study. Thus, future research is recommended in extending this study to other populations and other e-store contexts, so that the external validity of the findings can be enhanced. The limited selection of brands and sample characteristics represented in this study also pose an issue related to the potential confounding effects of pre-existing brand associations and familiarity. For instance, if an older generation consumer was assigned to an apparel brand website that targets young consumers, their e-store/self congruence might not be a function of how the e-store is designed, but of the pre-

existing brand/self congruence, which makes it hard to interpret results with regard to the estore/self congruence effect.

Finally, findings from this study suggest that multichannel apparel retailers may need to focus on ideal-self image congruence for their offline stores and actual-self image congruence when designing their e-stores, while they need to keep a consistent brand image across all shopping channels. Future research is needed to identify how a multichannel retailer can integrate actual-self image and ideal-self image of their target consumers to maintain an overall brand image across all channels, while satisfying different self-image congruence goals for its offline and online stores.

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Appendix A

**Information Page** 

## COLLEGE OF HUMAN SCIENCES DEPARTMENT OF CONSUMER AFFAIRS 308 Spidle Hall Auburn, AL 36849-5601 (334) 844 4011

## INFORMATION PAGE for a Research Study entitled

"Validation of Taxonomies of Online Visual Merchandising - Phase 1"

You are invited to participate in a research study to examine apparel online stores' visual merchandising features that influence consumers' impressions about the website. The study is being conducted by Dr. Wi-Suk Kwon, Assistant Professor, in the Department of Consumer Affairs, Auburn University. You were selected as a possible participant because you are an Internet user and an apparel consumer, and you are 19 years of age or older.

If you decide to participate in this research study, you will be asked to complete a questionnaire. Your total time commitment will be approximately 30 minutes. There are no foreseen risks associated with participating in this study.

Findings from this study are hoped to increase understanding of online store visual merchandising factors that may help enhance consumers' online shopping experiences.

If you change your mind about participating, you can withdraw at any time during the survey. Your participation is completely voluntary. If you choose to withdraw in the middle of the survey, your data will not be recorded and not be used for the study. You may withdraw as long as your data is identifiable. After you submit the survey and the code has been removed from your data, the data will not be able to be withdrawn since it will be anonymous. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Consumer Affairs.

Any data obtained in connection with this study will remain anonymous. Information collected through your participation may be presented at professional meetings and published in professional journals.

If you have questions about this study, please contact Dr. Wi-Suk Kwon by email, <u>kwonwis@auburn.edu</u> or telephone, 334-844-4011.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at <u>hsubjec@auburn.edu</u> or <u>IRBChair@auburn.edu</u>.

## HAVING READ THE INFORMATION PROVIDED ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE "CONTINUE TO SURVEY" BUTTON BELOW.

## TO ACCESS THE SURVEY: <u>CONTINUE TO SURVEY</u> YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

The Auburn University Institutional Review Board has approved this document for use from **1/11/09 to 1/27/10** Protocol # 08-011 EX 0801 Appendix B

Questionnaire

## Apparel Brand and Website Evaluation Survey

## Section 1: Apparel Brand Evaluation

Other items for the larger project were presented here.

## Section 2: Apparel Brand Personality

## [Brand logo]

Sometimes people think of a brand as if it were a person. This may sound unusual, but think of human characteristics associated with *[brand name]*. We're interested in finding out which *personality traits or human characteristics* come to mind when you think of *[brand name]*. Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each of the human personality or characteristics associated with *[brand name]*.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
This brand is dynamic.	1	2	3	4	5
This brand is superficial.	1	2	3	4	5
This brand is enthusiastic.	1	2	3	4	5
This brand is loud.	1	2	3	4	5
This brand is high class.	1	2	3	4	5
This brand is truthful.	1	2	3	4	5
This brand is annoying.	1	2	3	4	5
This brand is irritating.	1	2	3	4	5
This brand is solid.	1	2	3	4	5
This brand is sincere.	1	2	3	4	5
This brand is reliable.	1	2	3	4	5
This brand is thriving.	1	2	3	4	5
This brand is elegant.	1	2	3	4	5
This brand is lively.	1	2	3	4	5
This brand is honest.	1	2	3	4	5
This brand is welcoming.	1	2	3	4	5
This brand is stylish.	1	2	3	4	5
This brand is hardy.	1	2	3	4	5

## Section 3: Apparel Website Evaluation

This part of the survey asks your opinions about [brand name] online store (hyperlinked brand website).

We would like you to evaluate this web site as a consumer. For your accurate evaluation, first, we'd like you to browse the web site as if you were actually shopping on it, and find a pants items you like the best. Then, please type in below the name or code of the pants item you selected. PLEASE DO NOT CLOSE THIS SURVEY WINDOW WHILE BROWSING THE BRAND WEB SITE!

Please click <u>HERE</u> (hyperlinked website) to browse the web site. The web site will show up on a new window. *When you find the pants item you like the best and are done reviewing the brand web site, please come back to this survey window to answer the following questions.* 

1. Please type in the name or code of the pants items you liked the best on this website.

THE NAME (OR CODE) OF THE PANTS I LIKED THE BEST IS \_\_\_\_\_

2. Have you been to this website (brand website) before? YES\_\_\_\_\_ NO\_\_\_\_\_

3. Other items for the larger project were presented here.

4. The following set of statements relates to what consumers may think or feel about [brand website]. Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each of the following statements about [brand name] web site based on what you felt from your browsing experience today.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	
Other items for the la	irger projec	t were prese	ented here.			
Shoppers on this website are probably similar to who I would like to be.	1	2	3	4	5	
Other items for the larger project were presented here.						
The impression of this website is similar to the brand's image.	1	2	3	4	5	
The likelihood that I would make a purchase at this website in the future is very high.	1	2	3	4	5	

Other items for the la	rger projec	t were pres	ented here.				
Shoppers on this website would be similar to me.	1	2	3	4	5		
I would visit this website again.	1	2	3	4	5		
Other items for the la	Other items for the larger project were presented here.						
The impression of this website is consistent with the brand's image.	1	2	3	4	5		
I would be willing to purchase from this website.	1	2	3	4	5		
Other items for the la	rger projec	t were pres	ented here.				
I would recommend this website to my friend.	1	2	3	4	5		
Other items for the la	rger projec	t were pres	ented here.				
This website's image is consistent with how I feel about myself.	1	2	3	4	5		
I intend to shop at this website in the future.	1	2	3	4	5		
Other items for the la	Other items for the larger project were presented here.						
I would spend more time than planned at this website.	1	2	3	4	5		
Other items for the larger project were presented here.							
This website's image is consistent with the image of a person who I would like to be.	1	2	3	4	5		
Other items for the la	rger projec	t were pres	ented here.				
In the future, this website would be one of the first palaces I would look when I need to find clothing items.	1	2	3	4	5		
Other items for the larger project were presented here.							
This website well represents the image of a person who I would like to be.	1	2	3	4	5		
Other items for the larger project were presented here.							

5. Sometimes people think of a store as if it were a person. This may sound unusual, but think of the impression you have of [brand name] online store (brand website) from your experience today. We're interested in finding out which personality traits or human characteristics you feel describe [brand name] web site (online store). Please select a number on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE) to indicate your level of agreement with each of the following statements.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
This website is dynamic.	1	2	3	4	5
This website is honest.	1	2	3	4	5
This website is hardy.	1	2	3	4	5
This website is annoying.	1	2	3	4	5
This website is reliable.	1	2	3	4	5
This website is enthusiastic.	1	2	3	4	5
This website is high class.	1	2	3	4	5
This website is stylish.	1	2	3	4	5
This website is lively.	1	2	3	4	5
This website is welcoming.	1	2	3	4	5
This website is sincere.	1	2	3	4	5
This website is trustful.	1	2	3	4	5
This website is loud.	1	2	3	4	5
This website is reputable.	1	2	3	4	5
This website is solid.	1	2	3	4	5
This website is thriving.	1	2	3	4	5
This website is chic.	1	2	3	4	5
This website is irritating.	1	2	3	4	5
This website is elegant.	1	2	3	4	5
This website is superficial.	1	2	3	4	5

## Section 4: Demographic & Other Information

1. How old are you? \_\_\_\_\_ years old.

2. What is the highest level of education you have completed?

8 <sup>TH</sup> GRADE OR LESS
SOME HOGH SCHOOL
HIGH SCHOOL DEGREE
SOME COLLEGE OR THECHNICAL SCHOOOL

I	COLLEGE DEGREE (4 YEARS)
	SOME GRADUATE SCHOOL
	GRADUATE DEGREE (MASTER'S, DOCTORATE, ETC.)

3. Which of the following ethnic group do you consider yourself to be a member of?

AMERICAN INDIAN/ALASKAN NATIVE
ASIAN/PACIFIC ISLANDER
NON-HISPANIC BLACK
NON-HISPANIC WHITE
HISPANIC
OTHER (please specify:)

4. Which of the following ranges includes your total annual household income from all sources before taxes in 2008?

UNDER \$25,000	
\$25,000 TO \$35,000	
\$35,001 TO \$50,000	
\$50,001 TO \$75,000	
\$75,001 TO \$100,000	
\$100,001 TO \$150,000	
\$150,001 TO \$200,000	
OVER \$200,000	

5. Which of the following best describes your current occupation?

PROFESSIONAL OR TECHNICAL (e.g., accountant, artist, computer specialist,
engineer, nurse, doctor, teacher)
MANAGER OR ADMINISTRATOR (NON-FARM)
SALES WORKER (e.g., insurance salesperson, real estate salesperson, sales clerk,
stockbroker)
CLERICAL WORKER (e.g., bank teller, bookkeeping, office clerk, postal worker,
secretary, teacher's aide)
CRAFTS WORKER (e.g., barber, carpenter, electrician, foreman, jeweler, mechanic,
plumber, tailor)
MACHINE OPERATION OR LABORER (e.g., bus driver, conductor, factory worker,
truck diver)
FARMER, FARM MANAGER, OR FARM LABORER
SERVICE WORKER OR PRIVATE HOUSEHOLD WORKER (e.g., barber, bartender,
cook, firefighter, police officer, waiter)
MILITARY
HOMEMAKER

STUDENT
UNABLE TO WORK
OTHER (Please specify:)

6. The following set of statements relate to human characteristics or personality traits. We would like to learn *how you see yourself* in terms of these characteristics/traits. Please select a number on a 5-point scale (1 =STRONGLY DISAGREE, 5 =STRONGLY AGREE) to indicate your level of agreement with each statement.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I am enthusiastic.	1	2	3	4	5
I am lively.	1	2	3	4	5
I am superficial.	1	2	3	4	5
I am dynamic.	1	2	3	4	5
I am loud.	1	2	3	4	5
I am thriving.	1	2	3	4	5
I am high class.	1	2	3	4	5
I am irritating.	1	2	3	4	5
I am honest.	1	2	3	4	5
I am reliable.	1	2	3	4	5
I am sincere.	1	2	3	4	5
I am trustful.	1	2	3	4	5
I am hardy.	1	2	3	4	5
I am reputable.	1	2	3	4	5
I am solid.	1	2	3	4	5
I am stylish.	1	2	3	4	5
I am annoying.	1	2	3	4	5
I am elegant.	1	2	3	4	5
I am welcoming.	1	2	3	4	5
I am chic.	1	2	3	4	5

7. People tend to have an ideal image of a person who they want to be. This ideal image may or may not be the same as who they actual are. For each of the following human characteristics or personality traits, please indicate, on a 5-point scale (1 = STRONGLY DISAGREE, 5 = STRONGLY AGREE), how much you would ideally like to have the characteristic/trait, if you could.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
I would like to be thriving.	1	2	3	4	5
I would like to be elegant.	1	2	3	4	5
I would like to be reliable.	1	2	3	4	5
I would like to be welcoming.	1	2	3	4	5
I would like to be chic.	1	2	3	4	5
I would like to be honest.	1	2	3	4	5
I would like to be dynamic.	1	2	3	4	5
I would like to be stylish.	1	2	3	4	5
I would like to be sincere.	1	2	3	4	5
I would like to be superficial.	1	2	3	4	5
I would like to be high class.	1	2	3	4	5
I would like to be trustful.	1	2	3	4	5
I would like to be hardy.	1	2	3	4	5
I would like to be lively.	1	2	3	4	5
I would like to be loud.	1	2	3	4	5
I would like to be reputable.	1	2	3	4	5
I would like to be annoying.	1	2	3	4	5
I would like to be irritating.	1	2	3	4	5
I would like to be enthusiastic.	1	2	3	4	5
I would like to be solid.	1	2	3	4	5