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The Effects of Brand Familiarity on Perceived Risks, Attitudes, and Purchase Intentions toward Intimate Apparel Brands: The Case of Victoria's Secret

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Intimate Apparel Brands: The Case of Victoria's Secret

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By

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This thesis is approved for recommendation to the Graduate Council.

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ABSTRACT

The purpose of this research was to examine the effects of brand familiarity on reducing consumers' perceived risks in intimate apparel shopping, which in turn influence consumers' attitudes and purchase intentions toward intimate apparel brands. To predict relationships among perceptions of risk and consumer behaviors, the present study adopted the perceived risk theory (Cox, 1976) and a modified version of the theory of reasoned action (TRA; Fishbein & Ajzen, 1975).

An online survey was conducted by recruiting adult females through a large Mid-Southern university in the U.S. Reliable and valid measures from previous research were adopted and modified to assess the four variables (i.e., brand familiarity, perceived risk, attitudes, and purchase intentions). A pre-survey of college students was conducted to find the most familiar intimate apparel brand: Victoria's Secret. Then, throughout the final survey, participants were asked to think of their experiences (i.e. in-store, advertisements, purchase and use of products) and opinions about Victoria's Secret brand.

There were 384 surveys received, but 16 surveys were removed for missing data. A total sample of 368 respondents, 18 years and older, participated in the study. A majority of respondents (85%) were young Caucasian or European women and all respondents were highly-educated women completing partial college degrees (60%) or higher education (30%). The mean age was 25 years old. Linear regression analysis was conducted to test six proposed hypotheses using SPSS 22.0. All hypothesized paths were found to be significant. Results from this study showed that brand familiarity helps consumers perceive less risk toward a known intimate apparel brand, while increasing attitudes and purchase intentions for that brand. Perceived risks had the strongest impact on attitudes and purchase intentions toward an intimate apparel brand.

These findings suggested intimate apparel marketers targeting young female consumers should establish brand familiarity through marketing efforts to decrease consumers' perceived risks and increase purchase intensions.

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"I can't change the direction of the wind, but I can adjust my sails to always reach my destination." –Jimmy Dean. This quote is very apropos for describing the journey of my master's thesis. Every time I was blown off course, the Lord answered prayers and sent his earthly angels to guide me through this process.

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DEDICATION

This thesis is dedicated to my parents, Christopher and Nancy Rose, for encouraging me to change my life and apply for graduate school. Your steadfast love and reassurance has strengthened and supported me through every challenge and achievement throughout my life. Onward to the next great adventure!

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CHAPTER 1. INTRODUCTION

Intimate apparel is inevitable in daily life providing protection, comfort and support between the body and outerwear to enhance the physical appearance of body contours. Often synonymous with lingerie or underwear, most intimate apparel relates to discrete or inconspicuous garments worn close to the skin such as bras, panties, and sleepwear (Filipe, Montagna, & Carvalho, 2011; Hume & Mills, 2013; Law, Wong, & Yip, 2012). Most women have difficulty in finding well-fitting as well as aesthetically pleasant intimate apparel products. For instance, national consumer surveys conducted in North America and the United Kingdom revealed that the vast majority of women feel frustrated and frequently dissatisfied with intimate apparel purchases (Hart & Dewsnap, 2001; The North American Spine Society, 2006). A number of researchers have consistently found that female consumers often purchase multiple bras from the same store, at the same time, in the same color, style, and size (Filipe et al., 2011; Hart & Dewsnap, 2001; Risius, Thelwell, Wagstaff, & Scurr, 2012). Female consumers tend to perceive a high level of mis-purchase risks (e.g. financial loss and poor fit after washing) and to encounter unfavorable consequences such as inconsistent sizes and variation in fit across different brands and even within the same brand (Hart & Dewsnap, 2001). Unlike outerwear shopping, consumers have decreased hedonic and symbolic values (i.e. self-concepts) toward intimate apparel shopping (Laurent & Kapferer, 1985). This may suggest that the level of perceived risks is found to be greater for buying intimate apparel than buying other apparel products.

When consumers perceive risks, they are likely to assess stored information to reduce the amount of risk in order to increase certainty (Bauer, 1960). Prior research has found that consumers are likely to purchase apparel from well-known brands because they feel confident in their ability to evaluate product value (Park & Stoel, 2005). Compared to unknown brand names,

well-known brand names decrease a consumer's perception of risk, which increases positive perceptions of the brand that, in turn, increase purchase intentions (Park & Lennon, 2009). Findings also have shown that Britsh women tend to purchase bras from familiar brands for confident purchase decisions, which lead to favorable consequences (Hart & Dewsnap, 2001). Thus, it is plausible to suggest that brand familiarity can significantly influence perceived risk reduction for purchasing intimate apparel.

Most of the previous literature focused on studying how to reduce perceived risks and to increase purchase intentions for outer apparel shopping, while giving less attention to intimate apparel shopping. A qualitative study has addressed the importance of risk reduction in intimate apparel shopping (Hart & Dewsnap, 2001). There is still a lack of quantitative research examining factors that contribute to risk reduction in intimate apparel shopping. Thus, further quantitative investigation is needed to understand intimate apparel purchase behaviors and to find a way to reduce perceived risks in intimate apparel shopping.

The purpose of this research was to examine the effects of brand familiarity on perceived risks of intimate apparel shopping, which would affect attitudinal and behavioral responses toward intimate apparel brands. A well-known U.S. intimate apparel brand, Victoria's Secret, was used to explore consumers' real intimate apparel shopping behavior. The celebrity promotional strategies and media coverage of the brand through the "Angel" campaigns and televised fashion shows made the brand highly recognizable (Hume & Mills, 2013). The study applied perceived risk theory (Bauer, 1960; Cox, 1976) and theory of reasoned action (Fishbein & Ajzen, 1975) to investigate relationships among brand familiarity, consumers' perceived risks, attitudes, and purchase intentions toward Victoria's Secret.

Definition of Terms

The following definitions are included to clarify terminology used in this study.

Attitudes: The function of positive and negative beliefs about a behavior or object and the evaluation of outcomes (Ajzen & Fishbein, 1980).

Brand Familiarity: The number of direct and indirect experiences that consumers have accumulated in the consumption process (Kent & Allen, 1994; Park & Stoel, 2005).

Intimate Apparel: A garment worn close to the skin and typically under outerwear synonymous with underwear and lingerie. Typical product categories include bras, panties, and sleepwear (Hume & Mills, 2013; Law et al., 2012).

Perceived Financial Risk: The possibility that a product's price will potentially lead to money loss from a purchase (Forsythe, Liu, Shannon, & Gardner, 2006; Kim & Lennon, 2000).

Perceived Performance Risk: The probability a purchased product will fail to function properly (Kim & Lennon, 2000; Yu, Lee, Damhorst, 2012).

Perceived Psychological Risk: The probability a purchased product will conflict with a person's self-concept or self-image (Han & Chung, 2014; Kim & Lennon, 2000)

Perceived Risk: A dual variable based on consumer feelings about the degree of success or failure (i.e. uncertainty) combined with the amount at stake (i.e. possible consequences) (Cox & Rich, 1964; Kim & Lennon, 2000).

Perceived Time/Convenience Risk: The uncertainties a product purchase may result in time loss or delays for the consumer (Kim & Lennon, 2000; Park & Kim, 2007).

Purchase Intentions: A willingness of an individual to perform or not perform a behavior such as purchasing a product; typically used to assess marketing success (Fishbein & Ajzen, 1975; Park, Lennon, & Stoel, 2005).

CHAPTER 2. LITERATURE REVIEW

The following chapter summarizes relevant research and provides a theoretical framework for the present study. The first section presents a history of intimate apparel and interdisciplinary intimate apparel research. The second section discusses perceived risk theory and the theory of reasoned action (TRA), forming a theoretical framework for the present study. The third section presents a research model demonstrating six hypotheses. The model shows logical linkages among brand familiarity, perceived risks, attitudes, and purchase intentions toward intimate apparel brands (see Figure 2.1).

A History of Intimate Apparel

Prior to the 19th century, intimate apparel was vastly different from modern day form and function (Crawford & Crawford, 1952; Fontanel, 1997). The origins of European intimate apparel can be traced back to ancient Cretan times (i.e. 2000 B.C.) with body shaping garments shown in statues and art (Carter, 1992; Fontanel, 1997; Lim, Zheng, Yu, & Fan, 2006). During the Roman Empire, the primary role of intimate apparel was to hide the female figure with breast binding, which seemingly fell out of practice at the onset of the 12th and 13th centuries when defining the female body came into vogue again (Fontanel, 1997). Thus, began the reign of the corset.

During the 16th century, variations of a ridged corset became the primary body shaping garment that remained in fashion, with a few exceptions, until the beginning of the 20th century (Lim et al., 2006). World War I brought the demise of the corset, and the modern concept of the bra began to take shape in the 1920's (Fontanel, 1997). Although the form and function of intimate apparel has varied throughout the centuries, intimate apparel has consistently entailed

uses for protection, support, cleanliness, erotic use, and class distinction dependent on cultural norms (Cunnington & Cunnington, 1951).

Diversity of Intimate Apparel Research

Intimate apparel interdisciplinary research has focused on diverse subjects (e.g. body beauty, the human anatomy, pattern development, textile engineering, health science, consumer behavior) (Yu, Fan, Harlock, & Ng, 2006). This section briefly highlights some of the interdisciplinary studies pertaining to intimate apparel and concludes with an assessment of current research methods used to explore consumer behavior of intimate apparel.

Body beauty research. Cultural norms of each particular period determined the concepts considered to be beautiful. Individually subjective, body beauty has appeared throughout history with women subjecting themselves to torturous intimate apparel devices and practices (e.g. corsets, breast binding) to maintain ideal body shapes (Lim et al., 2006). Over time, cultural changes and new technology greatly improved the function, comfort, and fit of intimate apparel (Yu et al., 2006).

Physical anatomy research. Technology has played an important role in benefiting intimate apparel as related to the physical anatomy. Previously overlooked needs (i.e. physical and psychological) have resulted in developments such as prosthetic apparel for women who have undergone a mastectomy and wearable health systems to assess heart rate and postural alignment (Ho, Luo, Yu, & Chung, 2006; McRoberts, Cloud, & Black, 2013; Yip & Yu, 2006). Likewise, new innovations for intimate apparel have been shown to provide relief for severe mastalgia (i.e. breast pain) related to a monthly cycle, but studies were too limited to suggest that intimate apparel technology prevented breast sagging (i.e. the reduction of stretching in Cooper's ligaments and skin) (Ho et al., 2006).

Health science research. Psychological aspects of intimate apparel continue to improve with technology addressing hedonic (i.e. aesthetic) and utilitarian (i.e. performance) features of garments. Developments of high performance materials (e.g. brilliant color, UV and chlorine resistance, moisture absorbency, wicking) have added function and aesthetic appeal to intimate apparel garments (Kar, Fan, & Yu, 2006; Yip & Yu, 2006).

Consumer behavior research methods. Based on reviewed literature, intimate apparel studies have concentrated on exploratory research methods such as focus groups to find influential factors of intimate apparel purchase decisions (Hart & Dewsnap, 2001; Hume & Mills, 2013; Law, Wong, & Yip, 2012; Risius et al., 2012). In a sample of older women, five key dimensions were revealed as important factors in purchase decisions: "aesthetics, comfort, practicalities of bra purchase, breast support, and psychological aspects" (Risius et al., 2012). Using interviews and group forums, a study explored consumer behavior and perceptions of intimate apparel including factors on branding and self-image (Hume & Mills, 2013). Another investigative study using focus groups discovered several aspects relating to the purchase decision process such as a consumer's desire for brand loyalty and a reduction of perceived risks (Hart & Dewsnap, 2001).

Theoretical Framework

The perceived risk theory and the theory of reasoned action (TRA) were adopted to develop a conceptual framework. These two theories are most relevant in exploring how brand familiarity relates to perceived risks in intimate apparel shopping, which in turn influences attitudes and purchase intentions toward intimate apparel brands as shown in the proposed model.

Perceived risk theory

Perceived risk theory explains that consumers perceive undesirable consequences in the purchase decision process (Bauer, 1960). Perceived risk is "the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision" (Cox & Rich, 1964, p.33). Cox (1976) proposed that consumers cope with judgmental tasks by evaluating new or stored information in an attempt to reduce the expected negative consequences and to increase certainty. It is reasonable to expect that stored information (e.g. brand familiarity) may reduce perceived risk and enhance positive attitudes and purchase intentions.

Perceived risk theory has been frequently adopted by online apparel shopping research (Choi & Lee, 2003; Yu et al., 2012). Findings have shown that decreased perceived risks significantly increase consumers' purchase intentions from an online store (Choi & Lee, 2003; Park et al., 2005). Researchers have identified several types of perceived risks such as performance, physical, psychological, financial, and social risks in contexts of online shopping (Choi & Lee, 2003; Forsythe et al., 2006). In particular, a number of studies found that apparel is considered a complex product associated with multiple risks such as performance risk (Forsythe et al., 2006), psychological risk (Kwon, Paek, & Arzeni, 1991; Park & Stoel, 2005), and time and financial risk (Kwon et al., 1991). Previous research also has shown that intimate apparel shopping is associated with a high level of multiple risks (e.g., performance, psychological, time loss, and financial risks) since consumers perceive intimate apparel shopping as complex and engenders a high probability of mis-purchase (Hart & Dewsnap, 2001; Laurent & Kapferer, 1985).

Theory of reasoned action

Theory of reasoned action (TRA) is developed on the basis that beliefs about a behavior or object affect the attitudes and sub-sequential intentions regarding a particular behavior or object (Fishbein & Ajzen, 1975). Attitudes are comprised of beliefs used to evaluate positive or negative outcomes, which motivate behaviors (i.e. purchase intentions). In this research, TRA is expected to provide valid estimations of how consumers' cognitions predict intentions to purchase intimate apparel.

Brand Familiarity, Perceived Risks, Attitudes, and Purchase Intentions

Consumers become familiar with a brand through advertising and promotion exposures, in-store product display, trial, purchase, consumption, and online/offline referral communications (Alba & Hutchinson, 1987). These experiences with a brand contribute to building a high level of knowledge about the brand (Campbell & Keller, 2003), which increase consumers' confidence in the brand. Researchers have consistently found that familiarity with a brand affects a level of perceived risk; consumers who, are familiar with the brand, feel confident in the product attributes and benefits so that they perceive less risk (Laroche, Kim, & Zhou, 1996; Park & Stoel, 2005).

Familiar brands are more highly recognized and preferred by consumers than unfamiliar brands (Colombo & Morrison, 1989; Kent & Allen, 1994). Previous studies have shown that consumers are more likely to have positive attitudes and purchase intensions toward purchasing products from familiar apparel brands (Chen & Liu, 2004; Laroche et al., 1996; Park & Stoel, 2005). A recent study of intimate apparel shopping in Portugal found that more than 65% of women purchased the same bra from familiar intimate apparel brands because of their known expectations (Filipe et al., 2011). Likewise, well-known brands provide better recall (Kent &

Allen, 1994), in turn, a low level of risk perception, which may increase attitudes and purchase intentions toward the brand. The following three proposed hypotheses are:

Hypothesis 1: Brand familiarity will negatively relate to perceived risks toward an intimate apparel brand.

Hypothesis 2: Brand familiarity will positively relate to attitudes toward an intimate apparel brand.

Hypothesis 3: Brand familiarity will positively relate to purchase intentions toward an intimate apparel brand.

Perceived Risks, Attitudes, and Purchase Intentions

Numerous studies have confirmed that perceived risks affect consumers' attitudes (Featherman & Pavlou, 2003; Lee, Kim, & Fiore, 2010; Park & Kim, 2007; Verhagen, Meents, & Tan, 2006) and purchase intentions (Choi & Lee, 2003; Gaal & Burns, 2001; Han & Chung, 2014; Jarvenpaa & Tractinsky, 1999; Jin & Koh, 1999; Kwon et al., 1991; Park et al., 2005; Vijayasarathy & Jones, 2000). For instance, two online shopping studies found that perceived risks negatively influenced attitudes toward online retailers (Lee et al. 2010; Verhagen et al., 2006). Those researchers also provided empirical results showing a negative relationship among perceived risks and purchase intentions. Han and Chung (2014) indicated an influence of perceived financial risk on the purchase of organic cotton apparel. Similarly, Park et al. (2005) confirmed that reduced perceived risks augment consumers' intentions to purchase apparel from the internet. The following two proposed hypotheses are:

Hypothesis 4: Perceived risks will negatively relate to attitudes toward an intimate apparel brand.

Hypothesis 5: Perceived risks will negatively relate to purchase intentions toward an intimate apparel brand.

Attitudes and Purchase Intentions toward Intimate Apparel Brands

According to TRA, a person's attitude toward a behavior positively influences the behavior (Ajzen & Fishbein, 1980). The positive influence from attitudes on purchase intentions toward apparel shopping has been confirmed by numerous studies (Han & Chung, 2014; Kang & Kim, 2013; Lee et al., 2006; Park & Kim, 2007; Yoh, Damhorst, Sapp, & Laczniak, 2003). For instance, two studies (Park & Kim, 2007; Yoh et al., 2003) found that attitude directly influenced purchase intentions for online apparel shopping. Han and Chung (2014) found attitudes had a significant effect on consumers' intentions toward the purchase of organic cotton apparel. As the relationship among attitudes and purchase intentions was explored in an outer apparel shopping context, it was now plausible to suggest a positive relationship for intimate apparel shopping. The following proposed hypothesis is:

Hypothesis 6: Attitudes toward an intimate apparel brand will positively relate to purchase

intentions toward an intimate apparel brand.
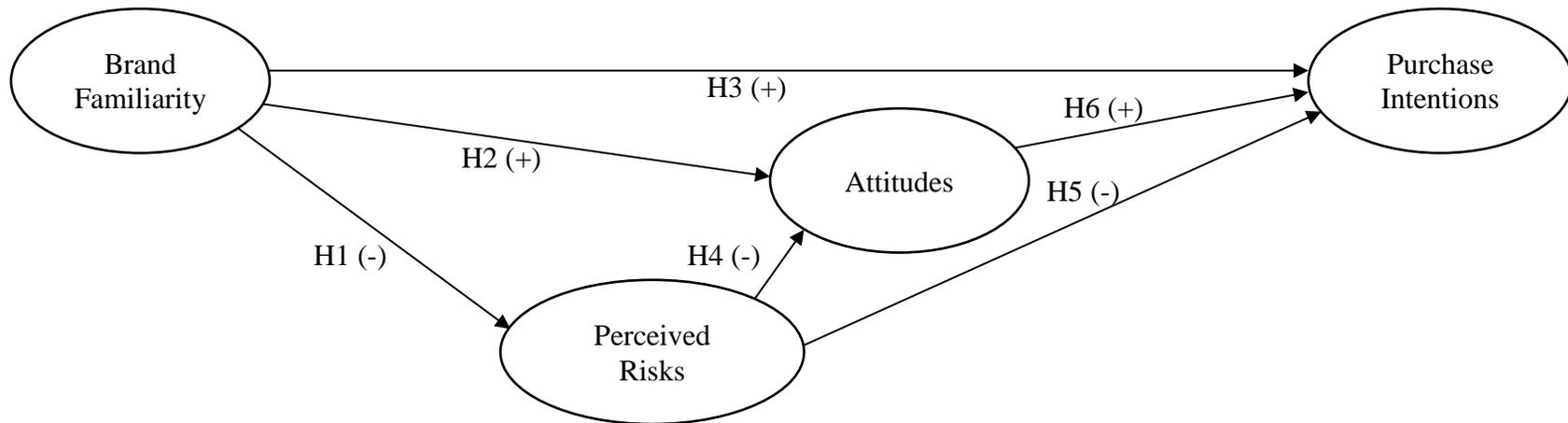
Figure 2.1. A proposed research model showing the hypothesized relationships among the variables.

CHAPTER 3. METHODS

This chapter describes procedures and methods used for data collection and data analysis. A quantitative research approach was used to examine relationships among constructs: (1) the relationships among brand familiarity and consumers' perceived risks in purchasing intimate apparel products, (2) the relationships among brand familiarity and consumers' attitudes toward the intimate apparel brand as well as among brand familiarity and purchase intentions toward the intimate apparel brand, (3) the relationships among perceived risks and consumers' attitudes toward the intimate apparel brand as well as perceived risks and purchase intentions toward the intimate apparel brand, and (4) the relationships among attitudes and purchase intentions toward the intimate apparel brand. The six proposed hypotheses in the research model were empirically tested through regression analysis. The following sections discuss sampling, survey instrument development, data collection, and data analyses.

Sample

Female undergraduate and graduate students and alumni over 18 years of age were recruited to conduct an online survey. The inclusion of students and alumni provided a wide range of ages and geographic locations, which enhanced the external validity of the analyses. The sample was drawn from alumni registered with the university's alumni association and students enrolled in spring 2015 at a major Mid-Southern university. An e-mail message was sent to invite students and alumni to participate in the survey through instructors and the alumni association.

Instrument

        A self-administered questionnaire was distributed online to test the hypothesized relationships in the proposed model. The survey instrument was developed by adopting and modifying existing scale items from previous consumer behavior literature.

        To construct authentic intimate apparel shopping situations, the researcher conducted a pre-survey to 73 students enrolled in the Apparel Merchandising and Product Development program. Students were asked two questions: "What is the first brand that comes to mind when you think of purchasing intimate apparel?" and "What is the second brand that comes to mind when you think of purchasing intimate apparel?" The majority of respondents (90%) indicated Victoria's Secret as the first brand followed by Aerie for American Eagle as the second brand. Victoria's Secret is a women's intimate apparel brand known for lingerie, pajamas, and loungewear; offering consumers, in-store, online, and mobile shopping experiences. Victoria's Secret has been ranked number 15 among the most valuable 100 U.S. retail brands (Carpenter & Defenbaugh, 2014). Therefore, the well-known Victoria's Secret brand was used to examine possible effects of brand familiarity on perceived risks and attitudinal and behavioral responses toward the brand.

        At the beginning of the survey, respondents were asked to think of their shopping experiences at Victoria's Secret. The questionnaire consisted of five sections: (1) respondents' level of brand familiarity, (2) their opinions about perceived risks (i.e. performance, psychological, financial) in purchasing intimate apparel at Victoria's Secret, (3) their attitudes toward Victoria's Secret, (4) their purchase intentions toward Victoria's Secret, and (5) demographic characteristics. The full version of the survey instrument is presented in Appendix A.

Brand familiarity

A reliable measure of brand familiarity with a 5-point Likert scale was adopted and modified from Kent and Allen (1994): *very inexperienced* (1)/*very experienced* (5), *very unfamiliar* (1)/*very familiar* (5)*, very unknowledgeable* (1)/*very knowledgeable* (5). The reported reliability of the scale items was above .85 (Kent & Allen, 1994).

Perceived risks

The 12 items assessing performance risk, psychological risk, financial risk, and time/convenience risk constructs were adopted from previous studies (Han & Chung, 2014; Kim & Lennon, 2000; Park & Kim, 2007; Yu et al., 2012). Items were modified to relate to the topic of intimate apparel and measured with customized scales.

Performance risk. Three items of performance risk, adopted from Yu et al. (2012), were measured with a 5-point Likert-type scale: *not sure at all* (1)/*very sure* (5)*, very little risk* (1)/*a great deal of risk* (5)*, not confident at all* (1)/*very confident* (5). The three items were originally adopted from two studies (Grewal, Gotlieb, & Marmorstein, 1994; Shimp & Bearden, 1982 [Cronbach's α = .73-.92]) and included: "How sure are you about the intimate apparel product's attributes to perform satisfactorily to your needs?", "How much risk would you say would be involved with purchasing intimate apparel from this brand?", and "How confident are you of the intimate apparel product's ability to perform as expected?" Yu et al.'s (2012) study reported that reliability of the three scale items was .89.

Psychological risk. Three items were adopted for psychological risk and employed a 5-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5). One item was, "The intimate apparel from this brand will not fit my style", adopted from Han and Chung (2014); and two other items were, "The intimate apparel from this brand will not look good on me" and "I

will not wear the intimate apparel from this brand" as adopted from Kim and Lennon (2000). The reliability of the scale ranged from .72 to .91 in the previous two studies.

Financial risk. Three scale items of financial risk were adopted from Kim and Lennon (2000), which included: "If I return the item, I will not be able to get a full refund", "I will find the very same item at another brand with a lower price", and "I will feel uncomfortable giving my credit card number when I order." The reliability for the three items was .87 (Kim & Lennon, 2000). A 5-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5), was used for financial risk.

Time/convenience risk. Three items measuring time/convenience risk were adopted from Park and Kim (2007) with a 5-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (5). Items included: "Intimate apparel purchases lead to time loss", "Intimate apparel shopping may take a long time", and "I may feel that I just wasted time shopping for intimate apparel." The reliability for these three items was .89 (Park & Kim, 2007).

Attitudes toward the intimate apparel brand

The seven items assessing attitudes toward the intimate apparel brand were adopted from Lee, Fiore, and Kim (2006), which included: "If I were actually shopping for intimate apparel, this brand would be…"good", "excellent", "interesting", "pleasant", "superior", "useful", and "worthwhile." These seven scale items were originally adopted from Bruner and Hensel (1996). A 5-point Likert scale was used: *strongly disagree* (1) and *strongly agree* (7). The reliability for these seven items was .98 (Lee et al., 2006).

Purchase intentions toward the intimate apparel brand

The five items of purchase intentions were assessed by the behavioral intention scale based on research by Lee et al. (2006). The three items were originally adopted from Engel,

Blackwell, and Miniard (1995) and two items were adopted from Wakefield and Baker (1998). To assess participants' probability of future purchases of the intimate apparel brand, the five items were used on a 5-point Likert-type scale, ranging from *strongly disagree* (1) to *strongly agree* (7). Sample items were "I would be willing to buy intimate apparel from this brand" and "I would be willing to recommend this brand to my friends." The Cronbach's *alpha* value for the scale was .97 (Lee et al., 2006).

Demographic questions, which included age, gender, ethnicity, annual household income, occupation, and education attainment, were asked at the end of the questionnaire. In addition, the last part of the questionnaire asked four questions about the respondent's intimate apparel shopping habits and three questions about overall satisfaction with Victoria's Secret products (i.e. fit, sizes, and quality).

Data Collection Procedure

The present study collected data over a five-day period in March 2015 after receiving approval for the use of human subjects from the Institutional Review Board (IRB) of the university (see Appendix D). All materials were evaluated including the questionnaire, consent document, and the invitational email message recruiting participants to the survey (see Appendixes A, B, and C). Participants were informed of the purpose of the study and their rights and benefits by the researcher's e-mail message and consent form before participating in the online survey. A link to the survey was attached to the e-mail. Qualtrics software was used to create an online survey. The first page of the survey included a consent form, description of procedures, participant rights, benefits, compensation, and confidentiality. Participants assessed their brand familiarity toward Victoria's Secret, perceived risks in purchasing intimate apparel products from Victoria's Secret, their attitudes and purchase intentions toward Victoria's Secret,

and, finally, their demographic information. As an incentive, participants were given the opportunity to win a drawing for one of thirty Walmart gift cards valued at $20 each.

To ensure wording clarity of questionnaire items, a pilot test was conducted with a convenience sample of 10 female college students at a Mid-Southern university. The pilot test verified word clarity, proper formatting, and the amount of time needed to complete the questionnaire (Churchill & Iacobucci, 2002). The pilot test participants were asked to comment on difficulties or problems in completing the questionnaire. A couple questionnaire items were modified based on participants' feedback, which included adding "currently" to "Where do you live?" and changing "In the future, I would very probably shop at this brand." to "In the future, I would likely shop at this brand."

Data Analyses

Data were collected through the online survey and were analyzed in three ways using the Statistical Package for the Social Sciences (IBM SPSS) version 22.0. First, descriptive analysis (i.e. frequency distributions, means, and standard deviations) was employed to summarize data for demographic variables. Second, exploratory factor analysis, correlation, and reliability was conducted to ensure factor loadings, relationships among variables, and internal consistency of variables. Cronbach's *alpha* value greater than or equal to .70 was used to assess reliability (Nunnally & Bernstein, 1994). Third, linear regression analysis was used to test the model.

CHAPTER 4. RESULTS

This chapter presents the sample description, exploratory factor analysis (EFA) results, and reliabilities for the variables. Also, this chapter discusses the results of correlations among variables and the results of hypothesis testing through simple linear regression.

Sample Characteristics

The sample comprised of female college students and alumni over 18 years of age at a major Mid-Southern university. A total of 384 participants (i.e. students N=275 and alumni N=109) responded to the online survey that was distributed through an email invitation. The survey was sent to 3,615 students and alumni with a response rate of 10.6%. The students majored in diverse disciplines, such as Apparel Merchandising and Product Development, Hospitality, Agricultural Education, Agricultural Mechanization, Human Environmental Sciences, and Human Nutrition and Hospitality Innovation. Of the 384 completed responses, 368 were usable since 16 surveys had missing or irrelevant data (e.g. incomplete, male gender, undisclosed gender). The majority of the sample was female students (73%) ranging in age from 18 to 24 years old with the mean age of the sample at 25 years old. Most of the participants (60%) were highly educated females having completed partial college degrees. The majority of participants were Caucasian or European (84.8%), followed by Hispanic or Latino (4.3%), and African American (3.5%); the remainder were either two or more races (3.3%), Asian American (1.9%), Native American (1.6%), or other (0.5%). Almost 32% of the participants reported less than $50,000 for annual household income, while the remaining 68% reported over $50,000 for annual household income. Students without incomes reported their parents' household income. Demographic characteristics of the sample are presented in Table 4.1.

Table 4.1 Demographic Characteristics of Sample (N=368)

Demographic Characteristics	Frequency[a]	Percent[b] (%)
Age		
18-24	270	73.4
25-29	33	9.0
30-39	21	5.7
40-49	10	2.7
50-59	22	6.0
60 or older	12	3.3
Ethnicity		
African American	13	3.5
Asian American	7	1.9
Caucasian or European	312	84.8
Hispanic or Latino	16	4.3
Native American	6	1.6
Two or more races	12	3.3
Other	2	0.5
Education		
Some college, no degree	220	59.8
Associate's degree	17	4.6
Bachelor's degree	81	22.0
Graduate or professional degree	50	13.6
Annual Income (Student could indicate parents' household income.)		
Less than $24,999	75	20.6
$25,000-49,999	40	11.0
$50,000-74,999	67	18.4
$75,000-99,999	57	15.7
$100,000 or more	125	34.3
Occupation		
Agriculture, forestry, fishing and hunting, etc.	19	5.2
Arts, entertainment, and recreation, etc.	14	3.8
College student	229	62.2
Educational services, and health care, etc.	34	9.2
Finance and insurance, real estate, etc.	7	1.9
Information and technology	2	0.5
Manufacturing	2	0.5
Professional, scientific, and management, etc.	14	3.8
Retail trade	21	5.7
Transportation and warehousing, etc.	1	0.3
Wholesale trade	3	0.8
Other services, except public administration	6	1.6
Unemployed	16	4.3

[a] Sum of total counts may not be equal to sample size due to missing data.
[b] Valid percentages were reported to account for missing data.

Almost 80% of the participants reported that they spent less than $300 annually for intimate apparel products. Approximately 30% of the participants spent less than $100 and 50% of the participants spent $101-$300 on intimate apparel annually. For individual product purchases, about 80% of the participants reported they spent $21-$60 on each bra.

For in-store purchases, 36% of participants reported shopping for intimate apparel every two or three months, while nearly 47% of participants went to a store one to three times a year. Conversely, there were fewer than 14% of participants shopping in-store more frequently than one or more times every month. With online intimate apparel shopping, about half of participants purchase intimate apparel online one to three times a year, but over 19% of participants selected other. Participants provided open-ended responses for other such as "Never, can't check fit," "I don't shop for intimates online at all," "I don't think I ever have shopped online for intimate apparel," or "Never, I always purchase intimate apparel in store." Detailed information regarding respondents' expenditures on intimate apparel products is presented in Table 4.2.

Regarding Victoria's Secret as a familiar intimate apparel brand, about 94% of participants have experience wearing the brand's intimate apparel products, and almost 6% reported having no experience wearing their products. Similarly, almost 93% of participants have purchased Victoria's Secret intimate apparel, compared to 7% of participants who have never purchased their products. Additionally, participants were asked about their overall satisfaction with products from Victoria's Secret. A majority of participants responded they were satisfied or very satisfied with the overall fit (72%), sizes (64%), and quality (77%) of Victoria's Secret products.

Table 4.2 Shopping Experiences for Intimate Apparel Products (N=368)

Demographic Characteristics	Frequency[a]	Percent [b] (%)
Amount of money spent on intimate apparel annually		
Less than $100	109	29.7
$101-300	174	47.4
$301-600	53	14.4
$601-900	15	4.1
$901-1,200	2	0.5
Over $1,201	3	0.8
Do not know	11	3.0
Average amount of money spent on a bra		
Less than $10	4	1.1
$11-20	31	8.4
$21-30	65	17.7
$31-40	82	22.3
$41-50	79	21.5
$51-60	73	19.8
$61-70	16	4.3
$71-80	10	2.7
$81-90	2	0.5
$91-100	1	0.3
Over $100	2	0.5
Do not know	3	0.8
Shopping frequency in-store		
More than once a week	1	0.3
Every week	9	2.4
Every month	41	11.1
Every two or three months	133	36.1
Two or three times a year	124	33.7
Once a year	52	14.1
Other	7	1.9
Shopping frequency online		
Almost every day	2	0.5
Every week	8	2.2
Every month	38	10.4
Every two or three months	63	17.2
Two or three times a year	89	24.3
Once a year	95	26.0
Other	71	19.4

[a] Sum of total counts may not be equal to sample size due to missing data.
[b] Valid percentages were reported to account for missing data.

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was conducted with oblique rotation (i.e. promax rotation) to extract one factor for items measuring brand familiarity, perceived risks, attitudes, and purchase intentions. An eigenvalue measuring greater than 1.0 determined the number of factors extracted for each construct. Items with factor loadings of .50 or higher on one factor and factor loadings of .30 or lower on the other factor were retained on one factor. Items were excluded for cross-loading on two or more factors (Nunnally & Bernstein, 1994). A Cronbach's *alpha* value above .70 was acceptable for internal consistency (Nunnally & Bernstein, 1994). The results for EFA and reliability tests are summarized in the following sections (see Table 4.3).

Brand familiarity

All three items were retained for the brand familiarity factor based on factor loadings. The items captured the participants' experience, familiarity, and knowledge of the brand. The three-item brand familiarity factor had an eigenvalue of 2.47 and explained over 82% of the variance for the items. Factor loadings for items ranged from .80 to .93. This factor had a Cronbach's *alpha* of .89.

Perceived risks

Four of the original 12 items were retained for the perceived risk factor, including all three items for psychological risks and one of three items for performance risk. No items were retained for financial risks or time/convenience risks. Retained items captured participants' risk perceptions regarding self-image (i.e. psychological risks) and possible product malfunctions (i.e. performance risk). Based on the eigenvalue greater than 1.0 criterion, two factors were extracted. One item from time/convenience risk ("I may feel that I just wasted time shopping for intimate apparel.") was eliminated for cross-loading above .50 for both factors. The perceived risks factor

had an eigenvalue of 4.69 and explained 39% of variance for the items. The four item perceived

risks factor had factor loadings that ranged between .55 and .82, and a Cronbach's *alpha*

coefficient of .84.

Attitudes

All seven items measuring attitudes were retained. The items captured the participants'

positive beliefs and evaluations about the brand. This seven-item factor on attitudes had an

eigenvalue of 5.15 and explained almost 74% of the variance for these items. Factor loadings

ranged between .74 and .91, and Cronbach's *alpha* indicated an internal consistency of .94.

Purchase intentions

The purchase intentions factor retained all five items. These items captured the

willingness of consumers to purchase products from the brand. The five items measuring

purchase intentions had an eigenvalue of 4.38 and explained nearly 88% of variance for the items.

Factor loadings were very high ranging between .87 and .95, and Cronbach's alpha was .96.

Table 4.3 Results of Exploratory Factor Analysis and Reliability for Variables (N=368)

Construct and items	Factor loadings
Brand Familiarity (α = .89)	
Regarding this intimate apparel brand, I am:	
1. Very inexperienced/very experienced	.80
2. Very unfamiliar/very familiar	.85
3. Very unknowledgeable/very knowledgeable	.93
Perceived Risk (α = .84)	
1. How much risk would you say would be involved with purchasing the intimate apparel from this brand?	.55
2. The intimate apparel from this brand will not fit my style.	.82
3. The intimate apparel from this brand will not look good on me.	.74
4. I will not wear the intimate apparel from this brand.	.81
Attitudes (α = .94)	
If I were actually shopping for intimate apparel, this brand would be:	
1. Excellent	.89
2. Good	.81
3. Interesting	.74
4. Pleasant	.84
5. Superior	.81
6. Useful	.82
7. Worthwhile	.91
Purchase Intentions (α = .96)	
1. I intend to buy the intimate apparel from this brand.	.93
2. I would be willing to buy the intimate apparel from this brand.	.87
3. I would be willing to recommend this brand to my friends	.90
4. I would visit this brand again.	.95
5. In the future, I would likely shop at this brand.	.95

Correlations among the Variables

A Pearson correlation coefficient was calculated to determine the direction and magnitude of the relationship among variables. The range of magnitude for correlations was from -1.0 to 1.0. A weak relationship among variables was indicated by a correlation coefficient between -.20 and .20; whereas, a moderate relationship was signified with a value between -.20 and -.50 or .20 and .50. A strong relationship was revealed with a coefficient between -.50 and -.70 or .50 and .70 (Urdan, 2010).

As predicted, the results showed strong relationships among the variables. Brand familiarity was strongly correlated with perceived risks and purchase intentions; and moderately correlated with attitudes. Perceived risks were strongly correlated with attitudes and purchase intentions. Attitudes were strongly correlated with purchase intentions. All hypothesized directions were supported (see Table 4.4).

Table 4.4 Correlation Results among the Variables

	1	2	3	4
1. Brand Familiarity	1			
2. Perceived Risks	-.55**	1		
3. Attitudes	.43**	-.56**	1	
4. Purchase Intentions	.59**	-.77**	.61**	1
Mean	3.92	2.00	3.84	4.10
SD	.85	.83	.85	.89

Note: significant; ** $p \leq .01$

Testing Hypotheses

Simple linear regression analysis was used to test six hypotheses. The results showed that all hypotheses were significantly supported as predicted in the proposed model. Table 4.5 shows a summary of these findings. Figure 4.1 displays the results of the regression analysis, including significant path coefficients for each relationship.

Hypothesis 1 proposed that brand familiarity negatively relates to perceived risks toward an intimate apparel brand. The results indicated that brand familiarity negatively influenced perceived risks toward an intimate apparel brand ($\beta = -.55$, $t = -12.42$, $p \leq .000$). The regression model was significant indicating that 30% of the variance in perceived risks toward the intimate apparel brand was explained by brand familiarity. This finding supports previous findings showing that consumers familiar with a brand are likely to have a lower level of perceived risks toward the brand (Park & Stoel, 2005).

Hypothesis 2 proposed that brand familiarity positively related to attitudes toward an intimate apparel brand. The results showed that brand familiarity positively affected attitudes toward an intimate apparel brand ($\beta = .43$, $t = 8.78$, $p \leq .000$). The regression model was significant indicating that 18% of the variance in attitudes toward the intimate apparel brand was explained by brand familiarity. Consistent with findings from prior empirical studies, the current study revealed that consumers are likely to have positive attitudes toward familiar brands (Chen & Liu, 2004; Laroche et al., 1996; Park & Stoel, 2005).

Hypothesis 3 proposed that brand familiarity positively influenced purchase intentions toward an intimate apparel brand. The results showed that brand familiarity positively affected purchase intentions toward an intimate apparel brand ($\beta = .59$, $t = 8.78$, $p \leq .000$). The regression model was significant indicating that 35% of the variance in purchase intentions toward the intimate apparel brand was explained by brand familiarity. This finding added to empirical research (Laroche et al., 1996; Park & Stoel, 2005) support for the positive effects of brand familiarity on purchase intentions.

Hypothesis 4 proposed that perceived risks negatively influenced attitudes toward an intimate apparel brand. The results indicated that perceived risks negatively influenced attitudes toward intimate apparel brand ($\beta = -.56$, $t = -12.36$, $p \leq .000$). The regression model was significant indicating that 31% of the variance in attitudes toward the intimate apparel brand was explained by perceived risks. Consistent with previous empirical studies (Lee et al. 2010; Park & Kim, 2007; Verhagen et al., 2006), this finding supports the negative effects of perceived risks on attitudes.

Hypothesis 5 proposed that perceived risks negatively influenced purchase intentions toward an intimate apparel brand. The results indicated that perceived risks negatively influenced

purchase intentions toward an intimate apparel brand ($\beta = -.77$, $t = -22.44$, $p \leq .000$). The

regression model was significant indicating that 59% of the variance in purchase intentions

toward the intimate apparel brand was explained by perceived risks. This evidence supports prior

research that found a negative relationship among perceived risks and intentions to purchase

products (Han & Chung, 2014; Park et al., 2005).

 Hypothesis 6 proposed that attitudes positively influenced purchase intentions toward an

intimate apparel brand. The results showed that attitudes positively affected purchase intentions

toward an intimate apparel brand ($\beta = .61$, $t = 14.24$, $p \leq .000$). The regression model was

significant indicating that 37% of the variance in purchase intentions toward the intimate apparel

brand was explained by attitudes. Similar to findings in research for outer apparel (Han & Chung,

2014; Kang & Kim, 2013; Lee et al., 2006; Park & Kim, 2007; Yoh et al., 2003), this study

provided empirical support for a positive relationship among attitudes and purchase intentions.

Table 4.5 Summary of Simple Linear Regression Analysis Results (N=368)

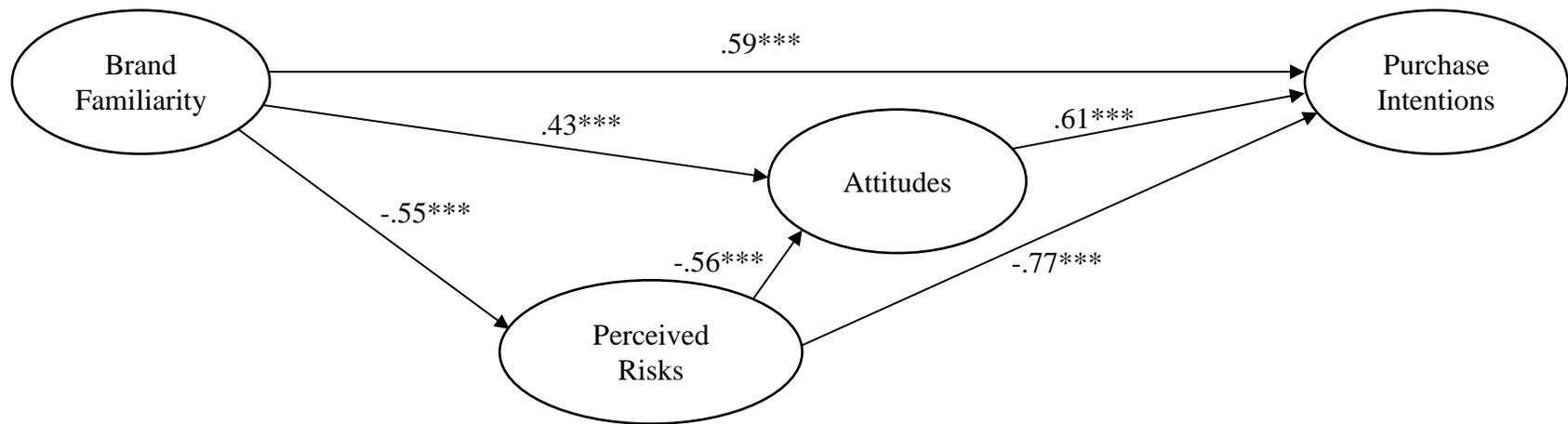| Variables	B	SE	β	F	R^2	p-value
H1. Brand Familiarity → Perceived Risks	-.54	.04	-.55	154.28	.30	.000
H2. Brand Familiarity → Attitudes	.42	.05	.43	77.13	.18	.000
H3. Brand Familiarity → Purchase Intentions	.62	.05	.59	195.46	.35	.000
H4. Perceived Risks → Attitudes	-.57	.05	-.56	152.84	.31	.000
H5. Perceived Risks → Purchase Intentions	-.83	.04	-.77	503.38	.59	.000
H6. Attitudes → Purchase Intentions	.64	.05	.61	202.77	.37	.000

Figure 4.1. Research model showing the relationships among the variables.
Note: *** $p \leq .000$

CHAPTER 5. DISCUSSION AND CONCLUSIONS

This chapter presents a summary of research, an interpretation of the findings and both theoretical and practical implications. Limitations of the present study and suggestions for future research are provided.

Summary of Research

Intimate apparel for women has improved considerably within the last century in aspects such as comfort and fit (Fontanel, 1997). Although intimate apparel has acquired considerable enhancements, the products still convey perceptions of risk for consumers based primarily on a fear of making a mis-purchase (Hart & Dewsnap, 2001). When the consumer invests time (i.e. time/convenience risk) and money (i.e. financial risk) on a product that may not perform as expected (i.e. performance risk) nor improve the shape of the body; thereby, leading to a poor self-concept (i.e. psychological risk) and, therein, the reason why many women purchase multiple intimate apparel garments of the same style, size, and brand at the same time (Filipe et al., 2011; Hart & Dewsnap, 2001; Risius, Thelwell, Wagstaff, & Scurr, 2012). Such experiences may dissuade consumers from purchasing intimate apparel more frequently.

There is scant literature regarding how to reduce perceived risks in order to improve consumer purchase intentions toward intimate apparel brands. To increase certainty of purchases, consumers refer to stored information about a brand to make confident decisions based on their prior experiences with the brand (Bauer, 1960; Park & Stoel, 2005). Being familiar to the consumer, a well-known brand name has been shown to increase purchase intentions toward that brand (Park & Lennon, 2009). Although these studies found that familiarity with a brand contributed to reducing risks and enhanced purchase intentions, little research explored the role of brand familiarity in decreasing risks and increasing purchase intentions toward intimate

apparel brands. To fill this gap, this study aimed to investigate and provide empirical evidence of the effects brand familiarity had on the reduction of perceived risks, in turn increasing positive attitudes and purchase intentions of intimate apparel.

The present study used an online survey to test the effects of each variable (i.e., brand familiarity, perceived risks, attitudes, and purchase intentions). Participants were recruited by email from students and graduates of a Mid-Southern university. A total of 368 completed surveys were collected. All participants were female. The total was comprised of almost 85% Caucasian or European Americans. Over 92% of participants had experience either wearing or purchasing intimate apparel from the familiar brand used in this study: Victoria's Secret.

Data analyses were comprised of two stages: preliminary statistics and hypothesis testing. The preliminary statistics included descriptive statistics, exploratory factor analysis, reliability testing, and correlation analysis. The hypothesized relationships among variables were tested by simple linear regression. The results of this study indicated that all hypotheses were statistically supported.

Discussion and Implications

The purpose of the present study was to examine the effects of brand familiarity on perceived risks of intimate apparel shopping, which affect attitudinal and behavioral responses toward intimate apparel brands based on the theory of perceived risk and a simplified version of TRA. To explore the relative impact of a particular brand on consumers' perceptions of risks, attitudes, and purchase intentions toward an intimate apparel brand, this study developed and analyzed a model that incorporated a branding variable (i.e. brand familiarity) related to consumer perceptions (i.e. perceived risks) and behaviors (i.e. attitudes and purchase intentions).

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The present study found (1) brand familiarity lowers perceived risks toward an intimate apparel brand, (2) brand familiarity raises attitudes toward an intimate apparel brand, (3) brand familiarity increases purchase intentions toward an intimate apparel brand, (4) perceived risks lower attitudes toward an intimate apparel brand, (5) perceived risks lower purchase intentions toward an intimate apparel brand, and (6) attitudes increase purchase intentions toward an intimate apparel brand. These findings implied that consumers familiar with a particular intimate apparel brand were likely to perceive a low level of risks, which would lead to positive and strong attitudes and purchase intentions toward the intimate apparel brand.

The present study revealed the importance of brand familiarity in decreasing perceived risks of intimate apparel brands. Specifically, findings from this study indicated that a familiar intimate apparel brand helped consumers reduce psychological risks and performance risks and increase positive attitudes and purchase intentions toward the familiar intimate apparel brand. Consumers who were familiar with a particular intimate apparel brand felt more confident buying intimate apparel from that brand than those who were unfamiliar with the intimate apparel brand. These results reinforced the findings from previous studies (Laroche, Kim, & Zhou, 1996; Park & Stoel, 2005) that found that prior positive experiences with a brand lowered risk perceptions and enhanced attitudes and purchase intentions. Therefore, it is essential that intimate apparel marketers develop strategies to cultivate strong relationships with consumers to increase brand familiarity; thus, lowering perceived risks, which consequently, per the results of this study, may lead to elevated attitudes and purchase intentions.

To reinforce the importance of lowering perceived risks, findings from this study showed consumers' perceptions of risk significantly decreased attitudes and intentions to buy an intimate apparel brand. These results were consistent with prior research (Forsythe et al., 2006; Han &

Chung, 2014; Park & Kim, 2007; Yu et al., 2012) that showed possible risks stimulated more negative attitudes and purchase intentions. In fact, this study found consumer's decisions to buy intimate apparel were impacted the most by perceptions of risks. Hence, marketers and retailers might promote the brand to bring more awareness of the product as a means to reduce risks.

Contributing to the literature, this study confirmed that both theory of perceived risk and TRA can effectively predict consumer behavior as related toward a brand of intimate apparel products. Unexpectedly, the strongest predictor of purchase intentions for intimate apparel in this study was perceived risks ($B = -.77$, $p \leq .000$). Likewise, attitudes ($B = .61$, $p \leq .000$) and brand familiarity ($B = .59$, $p \leq .000$) were highly influential on purchase intentions; thereby, explaining additional predicted outcomes. Further supporting the theoretical framework for this study's model, perceived risks also can be considered an effective predictor of attitudes ($B = -.56$, $p \leq .000$). To conclude, brand familiarity was still an influential factor in reducing perceived risks ($B = -.55$, $p \leq .000$) and increasing attitudes ($B = .43$, $p \leq .000$), but surprisingly it was least effective toward influencing attitudes for an intimate apparel brand.

In the preceding discussion, women were highly concerned about risks in buying intimate apparel products. This research could help intimate apparel companies. Based on this study's results, perceptions of risk were very influential in making purchase decisions for intimate apparel. As in the Cotton Incorporated Lifestyle Monitor™ (2015), Millennials desired a more individualized experience when shopping for intimate apparel such as specialists to help with fit and sizing (i.e. psychological and performance related risks). Consequently, the findings in this study agreed with the wants requested by young female consumers to reduce perceptions of risk. In summary, retailers can utilize these results to expand future marketing strategies that establish a high degree of brand familiarity and a low level of perceived risks for consumers.

Limitations and Recommendations for Future Research

Evaluations of this research should recognize several limitations. First, the sample was reduced to only female participants recruited from students and alumni of a Mid-Southern university; thus, the results may not represent females in the U.S. population in general. A majority of the sample was Caucasian or European Americans located primarily in the Mid-South; therefore, the results may not characterize women of diverse ethnicities and races or women living in different regions of the country. Future researchers should add clarification for specific differences perceived by cultures located in various locations with more diverse ethnicities and races. As the primary instrument for the collection of data, a self-reporting survey relied on the integrity of participants to respond honestly to the questions. Therefore, the results may not represent the participants' true opinions.

Additionally, a particular age group may affect a sample bias. The familiar brand, Victoria's Secret, used in this study had a brand extension that targeted collegiate-aged women in their late teens and early twenties (The Associated Press, 2013), which represented a sizable portion of this study's sample. Specifically, over 73% of the participants in this study were between the ages of 18 and 24 years old, and approximately 62% of the participants indicated they were college students. Thus, the results may not generalize to the greater U.S. population of women. Any future studies should explore a more diverse sample with various age ranges and geographic locations.

In this study, an interesting result was found in the participants' general background about shopping behavior for intimate apparel products. Participants indicated that they shop more frequently in-store than online for intimate apparel products because they want to touch the garments and assure a good fit for each product. This result might be influenced by financial

risks because most participants (80%) reported spending between $21 and $60 per bra. However, exploratory factor analysis did not find significant factor loadings for financial risk pertaining to opinions of Victoria's Secret products. The survey items measuring financial risk may not apply to Victoria's Secret because participants were not worried about providing credit card information, getting a full refund, or finding the same product for a lower price with a different brand. Therefore, future research should explore why consumers prefer in-store to online intimate apparel shopping, and what services could entice shoppers to purchase intimate apparel online.

This study examined the relationships among brand familiarity, perceived risks, attitudes, and purchase intentions of intimate apparel consumers. Future studies need to investigate perceived risk and consumer behaviors related to more facets of branding such as brand loyalty, brand image, and brand trust. In addition, future research could focus on more than one intimate apparel brand, or use a different research design to test a familiar brand compared to an unfamiliar brand of intimate apparel. Specifically, researchers could clarify if a specific brand is financially riskier for consumers than another intimate apparel brands. Furthermore, the perceived risks variable requires more individual identification of risk dimensions (i.e. performance risk, psychological risk, financial risk, time/convenience risk, social risk, and physical risk). Additional research might also expand this study to encompass consumers' satisfaction toward fit and sizing of intimate apparel products and how that may influence risk perceptions and consumer behaviors.

To conclude, intimate apparel provides the body with daily support, protection, and comfort. As a discrete garment, intimate apparel is meant to enhance and improve the body's shape for outer apparel. However, women frequently have difficulty in finding intimate apparel

that fits well, which leads to a fear of making a mis-purchase. As women have perceived high risks (i.e. mis-purchases) in buying intimate apparel (Hart & Dewsnap, 2001), this study aimed to identify a factor that reduces female consumers' perceived risks in intimate apparel shopping. Findings from this study showed that brand familiarity lowers risk perceptions and increases consumers' attitudes and intentions to buy intimate apparel products. This study also suggested retailers and marketers may develop strategies (i.e. loyalty programs, fit specialists available in-store and online) that will reduce risk perceptions for consumers that increase their intentions to purchase intimate apparel products.

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APPENDICES

APPENDIX A: SURVEY INSTRUMENT

Part I. Please think of all ***your experiences*** (i.e. in-store, advertisements, purchase and use of products) ***and opinions about Victoria's Secret brand*** for a few seconds before looking at the questionnaire. Please click on the number that best describes your opinions for each question.

1. Have you ever worn intimate apparel (bras, panties, sleepwear, shapewear, etc.) from Victoria's Secret? Yes____or No____

2. Have you ever purchased intimate apparel (bras, panties, sleepwear, shapewear, etc.) from Victoria's Secret? Yes____or No_____

Regarding Victoria's Secret intimate apparel brand, I am:

3. Very inexperienced—Inexperience— Neutral —Experienced—Very experienced
         1   2   3   4   5

4. Very unfamiliar — Unfamiliar — Neutral — Familiar — Very familiar
         1   2   3   4   5

5. Very unknowledgeable—Unknowledgeable—Neutral—Knowledgeable—Very knowledgeable
         1   2   3   4   5

Part II. Please click on the number that best describes ***your opinions about Victoria's Secret*** for each question.

1. How sure are you about the intimate apparel product's attributes to perform satisfactorily to your needs?
   Not sure at all — Not sure — Neutral — Sure — Very sure
         1   2   3   4   5

2. How much risk would you say would be involved with purchasing intimate apparel from this brand?
   Very little risk—Less than average risk—Average risk—More than average risk—A great deal of risk
         1   2   3   4   5

3. How confident are you of the intimate apparel product's ability to perform as expected?
   Not confident at all—Not confident—Neutral—Somewhat confident—Very confident
         1   2   3   4   5

4. The intimate apparel from this brand will not fit my style.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

5. The intimate apparel from this brand will not look good on me.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

6. I will not wear the intimate apparel from this brand.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

7. If I return the item, I will not be able to get a full refund.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

8. I will find the very same item with another brand with a lower price.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

9. I will feel uncomfortable giving my credit card number when I order.
   Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
         1   2   3   4   5

10. Intimate apparel purchases lead to time loss.
    Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
          1   2   3   4   5

11. Intimate apparel shopping may take a long time.
    Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
          1   2   3   4   5

12. I may feel that I just wasted time shopping for intimate apparel.
    Strongly Disagree — Disagree — Neutral — Agree — Strongly Agree
          1   2   3   4   5

Part III. Please click on the number that best describes ***your opinions about Victoria's Secret*** for each question.

Strongly Disagree—Disagree—Neutral—Agree—Strongly Agree
1   2   3   4   5

If I were actually shopping for intimate apparel, this brand would be:
1. Excellent
2. Good
3. Interesting
4. Pleasant
5. Superior
6. Useful
7. Worthwhile

Part IV. Please click on the number that best describes ***your opinions about Victoria's Secret*** for each question.

Strongly Disagree—Disagree—Neutral—Agree—Strongly Agree
1   2   3   4   5

1. I intend to buy intimate apparel from this brand.
2. I would be willing to buy intimate apparel from this brand.
3. I would be willing to recommend this brand to my friends.
4. I would visit this brand again.
5. In the future, I would likely shop at this brand.

Part V. The questions below ask about ***your general background information***. Please check the appropriate information.

1. What is your age?
_____ 18-24_____25-29_____30-34_____35-39_____40-44
_____45-49_____50-54_____55-59_____60 or more

2. What is your gender? _____ Male _____Female

3. What is your marital Status?
_____Single, never married
_____Married
_____Widowed
_____Divorced
_____Separated

4. What is your ethnicity? Please check one.
Native American____ Black or African-American ____Asian American____
Hispanic or Latino ____ Native Hawaiian or Pacific Islander ____
White or European _____ Two or more races ____ Other (Please specify _____)

5. What is the highest degree or level of school you have completed?

Less than high school
　　　　　High school graduate (includes equivalency)
　　　　　Some College, no degree
　　　　　Associate's degree
　　　　　Bachelor's degree
　　　　　Graduate or professional degree

6. What is your occupation?
　　　　Agriculture, forestry, fishing and hunting, and mining
　　　　Arts, entertainment, and recreation, and accommodation and food services
　　　　College student
　　　　Construction
　　　　Educational services, and health care and social assistance
　　　　Finance and insurance, real estate and rental, and leasing
　　　　Information and technology
　　　　Manufacturing
　　　　Professional, scientific, and management, and administrative and waste management services
　　　　Public administration
　　　　Retail trade
　　　　Transportation and warehousing, and utilities
　　　　Wholesale trade
　　　　Other services, except public administration
　　　　Unemployed

7. What is your household income level? (If you are a dependent student, please list your parent's income.)
　　　　　$0-24,999
　　　　　$25,000-49,999
　　　　　$50,000-74,999
　　　　　$75,000-99,999
　　　　　$100,000-or more

8. Where do you currently live? (Provide zip code)_____

9. How many children do you have? (Biological children only)
　　　　　0
　　　　　1-2
　　　　　3-4
　　　　　5 or more

10. How often on average do you go shopping for intimate apparel products in STORES to purchase intimate apparel?
　　Almost every day _____
　　More than once a week_____
　　Every week _____

Every month _____
Every two or three months _____
Two or three times a year _____
Once a year _____
Other, describe_____

11. How often on average do you go shopping for intimate apparel products ONLINE to purchase intimate apparel?
Almost every day _____
More than once a week_____
Every week _____
Every month _____
Every two or three months _____
Two or three times a year _____
Once a year _____
Other, describe_____

12. How much do you spend on intimate apparel per year?
Less than $100 _____ $101-300 _____$301-600 _____ $601-900 _____
$901-1,200 _____over $1,200-1,500_____ Do not know _____

13. How much on average do you spend on a bra?
Less than $10 ___ $11-20 _____ $21-30 _____
$31-40 ____ $41-50_____ $51-60____ $61-70_____
$71-80_____ $81-90_____ $91-100_____ over $100 _____ Do not know _____

14. What is your overall satisfaction with **apparel <u>fit</u> for Victoria's Secret brand** compared to other brands?
            Very Unsatisfied —Unsatisfied—Neutral—Satisfied—Very Satisfied
                          1   2   3   4   5

15. What is your overall satisfaction with **apparel <u>sizes</u> for Victoria's Secret brand** compared to other brands?
            Very Unsatisfied—Unsatisfied—Neutral—Satisfied—Very Satisfied
                          1   2   3   4   5

16. What is your overall satisfaction with **apparel <u>quality</u> for Victoria's Secret brand** compared to other brands?

Very Unsatisfied—Unsatisfied—Neutral—Satisfied—Very Satisfied

1   2   3   4   5

If you would like to be in **the drawing for one of thirty gift cards,** please provide your email address. (This information will only be used for sending a gift card.) _____

APPENDIX B: EMAIL INVITATION

Dear University of Arkansas (Student/Alumna),

We are surveying female (student/graduates) of the University of Arkansas to explore how brand knowledge affects women's intimate apparel shopping behavior. We would greatly appreciate if you could take 10 minutes or less to complete an **online survey.** It inquires about your shopping experience at **Victoria's Secret**. This is for independent, academic research not affiliated with the aforementioned brand.

By beginning the survey, you are providing consent for your responses to be included in this study. All information will remain confidential to the extent allowed by law and University policy and will be de-identified for all analyses. There are no known or anticipated risks from participation in this study. At the end of the survey, you may choose to participate in a drawing for a **$20 Walmart gift card.**

One out of every 12 participants entering the drawing is expected to win. Participation in the drawing is optional. All information collected for the drawing is separate from the study and will be destroyed after winners are contacted.

If you have any questions about this survey you can contact me, Jennifer Rose, (479) 575-XXXX or email at XXXXXX@uark.edu or my major professor, Eunjoo Cho, (479) 575- 4599 or email at ejcho@uark.edu.

Results from this survey will provide future researchers and intimate apparel brands valuable knowledge and strategies that can be used to enhance or extend branding and marketing for intimate apparel brands.

Click here for the survey and thank you for your participation.

Sincerely,

Jennifer Rose
Graduate Assistant
Apparel Merchandising & Product Development
University of Arkansas

APPENDIX C: CONSENT FORM

Informed Consent Document

The Effects of Brand Familiarity on Perceived Risks, Attitudes, and Purchase Intentions toward Intimate Apparel Brands: The Case of Victoria's Secret

Investigators:
Jennifer Rose will be conducting the survey and will be responsible for obtaining informed consent through this online survey under the mentorship of Dr. Eunjoo Cho, faculty advisor. Jennifer is a Master's student in the School of Human Environmental Sciences at the University of Arkansas.

Purpose:
This is an academic research project. The purpose of this research is to examine experiences consumers have when buying intimate apparel at Victoria's Secret. The researchers for this study are *not* affiliated with the company that operates the Victoria's Secret brand. You are invited to participate in this research. We appreciate your willingness to participate in this survey.

Procedures:
You will be asked to complete an online survey that will take approximately 10 minutes or less. The questions will consist of five parts asking your past and current shopping experiences at Victoria's Secret. The last part will ask you to provide your general background information including age, gender, and ethnicity. All the questionnaires will use numeric codes for analytical purpose. You will indicate your response by clicking the number from 1 (strongly disagree) to 5 (strongly agree) that best describes your experiences for each question. There are no risks from participating in this study.

Benefits:
Participating in this research study will provide important knowledge on consumer behaviors toward intimate apparel that retailers may utilize to improve their brands for consumers. This research assists the university with reaching their goal of becoming a top 50 public research university by 2021. As an incentive, one out of every twelve participants will win a $20 gift card.

Confidentiality:
All of your responses will be recorded anonymously, and all data collected will be kept confidential to the extent allowed by law and University policy. All interview data will be saved on password protected computers with access limited to the researchers. If results are published, only summary data rather than individual responses will be reported.

Participant Rights:
Your participation in this study is completely voluntary and you have the right to refuse to participate or leave the study at any time without any penalty. If you decide to not participate in the study or leave the study early, it is totally up to you. You can skip any question if you do not feel comfortable answering.

Contacts:
The primary investigator may be contacted at (479) 575-XXXX; XXXXXX@uark.edu. The primary investigator's advisor may be contacted at (479) 545-4599; ejcho@uark.edu. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's IRB Coordinator, at (479) 575-2208 or by e-mail at irb@uark.edu.

By beginning the survey, you acknowledge that you have read this information and agree to participate in this research. You are free to withdraw participation at any time without penalty. **Thank you for your time and participation.**

APPENDIX D: IRB APPROVAL

UNIVERSITY OF
ARKANSAS

Office of Research Compliance
Institutional Review Board

March 16, 2015

MEMORANDUM

TO: Jennifer Rose
                Eunjoo Cho

FROM: Ro Windwalker
                IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 15-02-543

Protocol Title: *The Effects of Brand Familiarity on Perceived Risks, Attitudes, and Purchase Intentions toward Intimate Apparel Brands: The Case of Victoria's Secret*

Review Type: ☒ EXEMPT   ☐ EXPEDITED   ☐ FULL IRB

Approved Project Period: Start Date: 03/16/2015 Expiration Date: 03/15/2016

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 2,500 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

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The University of Arkansas is an equal opportunity/affirmative action institution.

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