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By

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To the Faculty of Washington State Universi	ity:
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AN EMPIRICAL STUDY OF U.S. CONSUMER PURCHASE INTENTION OF CASUAL

**ACTIVEWEAR** 

Abstract

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In recent years, the athletic apparel industry has become a lucrative avenue of business

worldwide. Growing consumer interest in healthy lifestyles has heralded an increased demand

for apparel to meet their needs in style, performance, and functionality. Regardless of one's

intent to play sports or simply look sporty, activewear has become a staple in consumers'

wardrobes that extends beyond the gym. Aiding in the momentum of the activewear industry's

growth is the popularity of casual activewear. The casual activewear phenomenon is

characterized by exercise or physical activity facilitating apparel (activewear) being worn for

casual/daily wear. This study determines the key factors influencing U.S. consumers' intentions

to purchase casual activewear.

First, this study reviewed the existing social psychology theory (i.e., Theory of Planned

Behavior) to propose an enhanced consumer purchase intention model for casual activewear.

Second, an online survey instrument was developed based on existing consumer behavior

scales to gather primary data on both latent constructs and consumers' demographic variables. A

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total of 146 eligible responses were collected. The psychometric properties of the proposed model were examined using survey data. Factor analysis and multiple regression analysis were utilized for data analysis and hypothesis testing. The significant factors influencing the U.S. consumers' intentions to purchase casual activewear were determined. Attitude, perceived behavioral control, past purchase behavior, and lifestyle orientation had positive effects on intention to purchase casual activewear. Managerial implications were imparted based on the findings of this study.

In addition, the correlations between demographic variables (including gender, age, education level, personal annual income level, and ethnicity) and investigated latent constructs were determined. The effects of the demographic variables on the investigated latent constructs were insignificant except the positive relationship between age and consumer attitude towards purchasing casual activewear

Future studies should include the measurement of actual purchase of casual activewear.

Qualitative methods might be used in future studies to provide a comprehensive picture on the purchase intention of casual activewear.

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#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Context for Topic

In recent years, the athletic apparel industry has become a lucrative avenue of business worldwide (Euromonitor International, 2014). Growing consumer interest in healthy lifestyles has heralded an increased demand for apparel to meet their needs in style, performance, and functionality. Regardless of one's intent to play sports or simply look sporty, activewear has become a staple in consumers' wardrobes that extends beyond the gym. From yoga pants in the supermarket to sneakers in the boardroom, activewear is accepted in many facets of life not necessarily associated with participation in physical activity (Friedman, 2015).

This merging of the markets comes with increasing consumer demands for a greater array of products with increased versatility and functionality. More styles and innovations coupled with increasing consumer demand have generated considerable growth for the activewear industry. Euromonitor International (2014) reports that in 2013, activewear claimed global worth of US \$255.1 billion, up by 12% since 2008. This includes sales of athletic apparel (US \$162.0 billion) and athletic footwear (US \$93.1 billion) (Euromonitor International, 2014).

# 1.2 Importance of the Topic

It is important to understand how and why activewear is consumed and the conscious and subconscious processes that guide purchase decisions. Despite the seemingly unstoppable growth of the activewear industry and contrary to imagery of the unstoppable athlete, there remains limited insight into the forces that guide consumers towards the purchase of clothing endowed

with properties intended for participation in physical activity without having the need for, or the intention to utilize those performance characteristics (Horton, Ferrero-Regis, & Payne, 2016). Through this study, this necessary insight into the factors influencing consumer purchase intent that usually leads to purchase behavior will be made more apparent.

Due to changes in consumers' behavior related to trends in health-conscious behaviors and wellness and various other factors and conditions, the need for activewear is at an all-time high. One of the primary drivers in the consumption of activewear is a growing emphasis on a health-conscious active lifestyle; 49.6% of Americans report exercising for at least 30 minutes a day 3 or more days a week (Statistic Brain, 2015). Whether watching or participating, athletic activities are some of the most popular leisure activities in the U.S. Consumers are gaining more interest in more physically demanding forms of exercise such as high-intensity interval training and body weight training; meanwhile, Pilates, Zumba, indoor cycling, and balance training have lost favor (Thompson, 2014). The decline of latter could be due to consumer's unwillingness to spend money on expensive equipment and classes. Yoga maintains its popularity in 2015 after many years of favorability with consumers and currently resides among the top 10 forms of exercises preferred by Americans (Thompson, 2014). About 9.5% of Americans use yoga as a form of exercise; this figure is up from 5.1% in 2002 (Clarke, Black, Stussman, Barnes, & Nahin, 2015).

Running, jogging, and walking have gained popularity for regular exercise. Marathons, charity walks, and themed running events are experiencing an increase in attendance and participation. The 2014 Boston Marathon was the second largest in the race's 118-year history (Euromonitor International, 2015a). Female participation in the Tough Mudder obstacle race has grown by 30% since 2010 and participation in the Color Run exploded in size to 1 million

runners in its second year in 2013 (Jessop, 2014). Sales for running shoes in the U.S. increased by 2% in 2013 to \$3.09 billion (Jessop, 2014). Women ages 25 to 34 are the largest demographic of running and jogging participants (Running USA, 2014). Individual sports such as running are becoming increasingly popular with women under 30 with 62% of women claiming they participate in individual sports at least once a month (Euromonitor International, 2015b).

Consumers are also making eating healthy a priority as seen in organic and locally produced food movements. Pollock Communications and Today's Dietician conducted a survey to discover trends in consumers' consumption of healthy food and found an "increased consumption of nuts/seeds, gluten free food, ancient grains, and a continued focus on low carb food products as trends for 2015 (as cited in Euromonitor, 2015a)." However, despite an increased awareness of healthy living, obesity in the U.S. is still on the rise. Almost one-half of Americans will be obese by 2020.

#### 1.3 Activewear

For the athletic apparel industry, the terms outerwear, sportswear, and activewear are commonly used and seemingly interchangeable as descriptors for apparel in this market. In their own ways, they all facilitate participation in physical activity. However, there are distinct differences between the three terms. Outerwear is a general term to describe jackets, coats, and capes used as a protective outermost layer (Frings, 2008). These products can be worn while participating in physical activity, but their purpose is not solely for this use which is not aligned with the purpose of this study.

The term sportswear is most often used as a substitute for activewear. Sportswear is the combination of separates including shorts, pants, skirts, shirts, blouses, and jackets, priced and

sold separately to be mixed and matched any way the consumer sees fit (Frings, 2008). Similar to outerwear, sportswear includes products not necessarily intended for exercise.

Despite the growth of the market, activewear remains an ambiguous term with little consistency in its definition among literature reviewed for this study. Activewear is worn by Olympic athletes, yet sneakers walk down the runway in couture shows such as Dior and Chanel. It is important to begin by clarifying activewear for the purpose of this study. Powered by fitness, activewear is worn by people participating in physical activity or sports (Frings, 2008). Friggs (2008) further explains that activewear products include leggings, sweat suits, T-shirts, bike shorts, and unitards. These apparel products are defined as activewear because the garments are, "specifically engineered to deliver a pre-defined performance or functionality to the user, over and above its normal functions" (Gupta, 2011). Innovations in textiles and technology give activewear protective and comfort-focused qualities which facilitate participation in physical activity. In addition to their high-performance qualities, the use of activewear by a user signifies intent to exercise. The National Heart, Lung, and Blood Institute (What is Physical, 2015) describes exercise as a planned and structured activity. In this study, the market for this type of apparel will only be referred to as activewear.

#### 1.4 Casual Activewear

For the athletic apparel industry, activewear was once an all-encompassing term for clothing worn with the intent to perform athletic activities. However, as casual, comfort-focused clothing gains popularity, consumers adopt activewear into their everyday wardrobe (Fowler, 1999; Ko, Taylor, Sung, Lee, Wagner, Navarro, & Wang,, 2012; Wray & Hodges, 2008). As a result, the line between activewear and casualwear has blurred.

To understand why activewear is unusual in a casual setting, casualwear must be defined and its importance made known. Prior to the 20<sup>th</sup> century, clothing susceptible to the public gaze was not synonymous with comfort and practicality; yet in the past century, casual clothing in the United States has been almost exclusively driven by those two factors (Clemente, 2014). Clemente (2014) explains that, "To dress casual is quintessentially to dress as an American and to live, or to dream of living fast and loose and carefree" (pg. 2). Casualwear is the art of dressing down while exuding an approachable aura and freeness or spirit and body (Rubinstein, 2001).

As seen in a protest in 1930 by Dartmouth male students who lobbied for the freedom to wear gym shorts in public, activewear worn outside the gym arguably began on Dartmouth college campus, a successful endeavor which saw a spike in shorts sales of local merchants (Clemente, 2014). As clothing intended for participation in physical activity left the gyms, a marriage between casualwear and activewear emerged. The ideals of casualwear and activewear meld with each other exceptionally well and create a harmonious relationship as the unrestrained and carefree foundations of casualwear and the youthful play of activewear are closely related (Salazar, 2008).

To identify this phenomenon for this study, activewear worn casually in non-athletic settings will be referred to as casual activewear. Today, casual activewear is evident in apparel products such as yoga pants, tracksuits, basketball shorts, and sports bras. These items are often worn for their comfort by non-participants of physical activity. No longer are there clear distinctions between apparel for work or play (Ko et al., 2012). Casual activewear *is* activewear made for the gym, yet it is increasingly observed outside of it due to this fusion of fashion and fitness (Fromm, 2016; Horton et al., 2016). Moreover, there no way of knowing whether or not

wearers of casual activewear on the street have ever worked out at all. Horton et al. (2016) argue that activewear "is a highly ambiguous form of contemporary fashionable dress that signals a healthy body and a leisured lifestyle devoted to the improvement of the self." Activewear worn casually signifies the casualization of dress and the idolization of a healthy and physically fit body as a fashion aesthetic (Horton et al., 2016). While some activewear companies, such as Nike, have previously contested the value of this trend, others embrace it as a reflection of the changing cultural environment of the world we live in (Friedman, 2015). Designer Derek Lam supports casual activewear and believes that the use of activewear for casual purposes "has to do with a modern reflection of urban and suburban activities" (as cited in Friedman, 2015). Regardless of retailers' approval of this concept, the increasing momentum of the casual activewear movement has proven to a lucrative segment. Consumer spending on apparel, footwear, and accessories rose by 1% from 2013 to 2014 which is largely attributed to a \$2 billion increase in sales of activewear (Euromonitor International, 2015a). Much of this is due to the rise of casual activewear trend. According to the research firm NPD group, the current estimated market for activewear is \$44 billion in the U.S., a 16% increase from 2014 (Banjo, 2016). Overall, total apparel sales in the U.S. grew by a sluggish 2% in 2015. However, without the activewear category, NPD reports that the U.S. would have experienced a 2% decrease. With 0.2% growth from 2008-2015, the non-athletic apparel category significantly lags behind the growth of athletic apparel, which is up 4.1% in the same timeframe (Molina, 2016). This gap between the two categories is predicted to widen in the future.

The casual consumption of activewear is not a new concept to recent times. However, the growing momentum of this market is undeniable. The casual activewear phenomenon is characterized by exercise or physical activity facilitating apparel being worn on the streets, to

work, restaurants, PTA meetings, or shopping (Kasriel-Alexander, 2015). Consumers want clothing to be able to transition from activity to activity, without the need to go home and change. The casual activewear trend is a socially acceptable way to accomplish this. As sports apparel is accepted into the everyday wardrobe of Americans, consumer demand has led to an increase in the products, product variety, and retail locations made available for them. Many retailers have responded to this growing demand including notable brands such as Nike, Under Armour, Gap, and Lululemon. Athleta, an activewear brand owned by Gap Inc., has opened 100 stores in 2014 alone with an additional 30 planned for 2015 (Euromonitor International, 2015a). With the expansion of the brand has come a surge in the variety of colors and styles produced. This growing variety of stylish sports apparel is also evident in the unveiling of Net-a-Sporter in 2014 by parent company online retailer Net-a-Porter which will offer fashion forward garments with high performance sport characteristics (Lamont-Djite, 2014). Lamont-Djite (2014) reported that this designer activewear, though capable of assisting and facilitating physical activity, is equally intended to be worn all day long.

## 1.4.1 Athleisure

In the world of fashion exists a trending style comprised of combinations of highperformance athletic apparel and casualwear which embodies a union of leisure, sports, and
lifestyle (Horton, Ferrero-Regis, & Payne, 2016). This style phenomenon has been dubbed
'athleisure' by Worth Global Style Network trend forecasting service (WGSN, 2007). Also
recently added to the Merriam-Webster dictionary, 'athleisure' is defined as "casual clothing
designed to be worn both for exercising and for general use" (Athleisure, 2015). However,
despite its popularity, it is difficult to discern a consistent definition for this trend. For some

retailers and consumers, it encompasses high-performance activewear worn casually (Chen, 2016; Entis, 2016). And for others, clothing which visually imitates activewear (Verry, 2017). Since perceptions on the meaning of athleisure vary widely, the term athleisure will not be used in this study. The aforementioned term of casual activewear will be the term used in this study to be defined as activewear purchased and worn primarily for casual/daily wear.

# 1.5 Activewear Industry

Aggressive competition drives the activewear industry as numerous competitors desire market share. These companies within the industry fuel competition with innovative products and services, advertising campaigns, high-profile endorsements, strategic pricing, and valuable extrinsic brand image. Current top competitors in the industry identified by Textiles Intelligence (2013), Nike, Adidas, and Under Armour, all generate competition which shapes the industry.

# 1.5.1 Leading Companies

# 1.5.1.1 Nike

Headquartered near Beaverton, Oregon, Nike is the largest seller of activewear in the world with sales revenue of \$27.8 billion in 2014 (Nike, Inc., 2014). The athletic apparel retail giant's success can be largely attributed to successful execution of three factors in its business strategy: innovation, marketing, and endorsements.

Innovation is at the forefront of the company, overtaking the core value that other apparel retailers hold so closely, fashionability. Nike's products are a marriage between technology and art, but without their dedication to being a leader in performance technology, they would lose

their competitive edge. In addition to advances in the performance of athletic apparel, Nike found success in introducing wearable technology like the FuelBand.

Regardless of the growing success of the company, Nike has directed a decreasing amount of funds towards traditional marketing channels such as television, print, and radio by 40% (Cendrowski, 2012). Instead, focus has been given to untraditional marketing channels like social media and online communities. Cendrowski (2012) reported that in 2011, Nike spent \$113 million in traditional media advertising which pales in comparison to the \$771 million spent on nontraditional media. Closely related to marketing, Nike's endorsement of individual athletes and sport teams has proven to be an integral part of their strategy by increasing the visibility of the brand and enriching the bond with the consumer. Celebrity endorsements target the athletic consumer and speak to the value of the products, ultimately making the purchase decision less risky for the consumer (Biswas, Biswas, & Das, 2006).

In a report for Market Realist, Soni (2015) discusses how Nike, with 13% of the activewear market share in the U.S., is a leader in athletic apparel with Under Armour trailing behind at 6%. In the footwear market, Nike dominates with 62% of the share (Soni, 2015). In his article he elaborates that competitors are far from catching up to Nike's explosive performance; the closest being Sketchers with 5% of the market share. Nike is able to accomplish such control of the athletic apparel market because of the brand's implemented strategies. Internally, Nike maintains a near flawless inventory management system and is renowned for their ability to strike remarkable deals with retailers (Soni, 2015). Coupled with their well known, marketing, sponsorship, and retail presence, Nike has pushed a growing emphasis on technology and innovative product design. Innovation is an investment in the future of Nike. As Nike moves forward, technology is increasingly at the forefront of their strategy and it has helped push the

company further towards its 2020 revenue target of a \$20 billion increase to \$50 billion; a daring financial declaration made by CEO Mark Parker (Lashinsky, 2015). The integration of technology into all aspects of the business including product design, manufacturing, and retailing will be crucial to achieving \$50 billion revenue. This goal could possibly prove to be obtainable if Nike continues on the path of astronomical growth it is currently set on as seen in its steady 8.5% annual sales growth (Lashinsky, 2015). If the company can increase their annual sales growth to 10% and maintain it, they can undoubtedly obtain Parker's goal (Lashinsky, 2015).

Nike also approaches their consumer segmentation in a way that they believe gives them an edge. Consumers are grouped by sporting activities rather than other factors in what Nike calls "category offense" (Lashinsky, 2015). Sport categories are defined and catered to as opposed to apparel categories. By bringing the focus to specific sports and athletic activities such as basketball, running, or golf, Nike is able to provide fresh designs, new technology, and appropriate performance attributes to the products offered for each category (Carr, 2014). This has been met with resounding success for the company with a reported 70% increase in sales since this strategy was launched in 2008 (Lashinsky, 2015). Segmentation of sports is also seen in how they sell their products. To avoid stifling oversaturation and repetition of products in retail locations that carry their products, Nike methodically chooses which store gets certain products. Golf products can be found at golf shops, where you will not see any of Nike's tennis products (Lashinsky, 2015).

# **1.5.1.2** Adidas

German-owned Adidas has long been a prominent presence in the activewear industry with sales revenue of \$19.9 billion in 2014 (Adidas Group, 2015). However, unlike Nike, fashion

plays an important role in the business strategy of Adidas. Creating products for the mass market as well as athletes is vital to their strategy; a strategy with the stressed purpose of obtaining the most value for their stakeholders as possible (Adidas Group, 2015). Representatives for Adidas have stated that the company is primarily an athletic apparel brand with deep roots in sports heritage but it is uniquely fused with fashion and pop culture (Emmerentze Jervell & Germano, 2015). Adidas does not cater solely to the athlete. They also extend their reach to the casual activewear market as well as high-end fashion-enthusiasts through three distinct product groups: Adidas Performance for the athletes, Adidas Originals for casual activewear, and Adidas Style Essentials for the fashion market. Once criticized for being out-of-touch with the American consumer, Adidas has turned its focus to younger generations to revitalize the company's image and so, in addition to pro-athletes, the company collaborates with celebrities and designers such as Stella McCartney and Kanye West to design and market products (Emmerentze, Jervell & Germano, 2015).

Adidas has long had limited success in the U.S. in comparison to its business abroad. Through an increased focus through spending, Adidas hopes to improve their current position in the U.S. market. 2014 proved to be a difficult year in the U.S. for the German activewear company as they lost their second place market share position to Under Armour (Cazin, 2015). To combat this, Adidas moved their U.S. headquarters to Portland, Oregon: Nike's backyard. From here, they will focus their marketing strategy on American sports. In an increasing effort to square-up with Nike, three top designers from Nike were recruited to Adidas's ranks (Rovell, 2014). Positive but slow initial improvement has been made as seen in a 7% increase in North American sales for the quarter ending March 31<sup>st</sup>, 2015 (Cazin, 2015). However, this growth is not solely contained to Adidas but to the activewear market as a whole (Cazin, 2015).

Adidas will also continue to grow its brand portfolio to service a variety of lifestyles and activity levels and ultimately welcome all consumers from the fitness-lover to the fitness-chic. Currently existing are designer collaborations and products lines featuring celebrities such as Kanye West and Stella McCartney.

#### 1.5.1.3 Under Armour

Recently surpassing Adidas as the second most popular activewear brand in the U.S., Under Armour is a self-declared underdog brand who is taking Nike's strategy and executing it in an anti-Nike way (Schlossberg, 2015a). Schlossberg (2015a) describes Under Armour as a brand that endorses pro-athletes, similar to Nike, but selects who they consider to be the overlooked and underappreciated. This includes dancers, boxers, or those who were not first draft picks for professional teams. Under Armour uses this underdog mentality to push a lifestyle of athleticism with passion; a "do whatever it takes" mentality encouraging consumers to be relentless and push themselves to their limits (Schlossberg, 2015a). Still a relatively new company, Under Armour pursues those who participate in athletic activities more so than the casual consumer of activewear and offers a range of functional performance activewear. The company holds a strong advantage over other activewear retailers in terms of its presence in the app world. The MyFitnessPal, Endomondo, MapMyFitness, and UARecord apps track fitness progress and help promote a healthy lifestyle and are the most used fitness apps for smart phones and mobile devices (Schlossberg, 2015a). This accessibility to consumers and authenticity in marketing has helped in Under Armour's rapid growth to the top of the activewear market.

Second to Nike, Under Armour accounts for 6% of the U.S. market share of activewear; a position until recently held by Adidas (Soni, 2015). The company recently achieved \$1.20 billion

in revenue, up by 28% from recent years which overshot the original target revenue of \$1.17 billion (Much, 2015a). Much of the company's recent success can be attributed to the acquisition of popular fitness mobile apps, MyFitnessPal and Endomondo (Much, 2015a). Recently, the brand has begun to expand into new sporting markets such as golf and hunting as well as new products like bags. Though these are not new or unique areas for activewear, they were previously untapped by Under Armour who has held on tightly to their basic core apparel that helped to launch the brand. Now that a strong foothold in the activewear market has been established, product variability and greater inclusiveness for different athletic activities will prove to be essential to their growth (Much, 2015a).

Footwear has also become a surging force of profits for Under Armour with a 40% growth in footwear in 2015 Q3 sales and more recently, sales jumped by 155% for the week ending November 7<sup>th</sup> (Much, 2015b. For comparison, Nike rose 0.2%, Sketchers 17.4%, and Adidas 10.6% (Much, 2015b). Under Armour's ability to out-perform Nike makes one of their goals more apparent: beat Nike. In order to compete with Nike, Under Amour will need sportsgeared footwear, celebrity and athlete endorsements, limited-edition styles, and a wider array of available designs; a process which is under-way for the brand (Potts, 2015a).

# 1.5.2 Current and Emerging Product Categories

The activewear industry is a hotspot for technological innovations driven by the need for increased functionality to achieve greater performance through the use of technical fabrics and materials (O'Mahoney & Braddock, 2002). Science and engineering bring forth new product categories and products to elevate the physically active to a higher realm of performance. Some of these innovations are groundbreaking; the likes of which had been unheard of in the past

including wearable technology for physical activity participation or high-tech textiles. Others innovations are more subtle, filling a demand held by consumers that was unmet.

### 1.5.2.1 Wearable Technology

Many activewear companies are beginning to offer wearable technology to their consumers along with traditional apparel. In order to help consumers meet their fitness goals and maintain active lifestyles, brands are using smartphones, smart watches, mp3 players, and activity monitoring devices. As of October 2014, 64% of Americans own a smartphone (Smith, 2015). One of the most popular wearable technology innovations is the wrist accessory fitness tracker which, in most cases, syncs to a smartphone app. Two of the most recognizable fitness trackers currently on the market are the FitBit and the Nike FuelBand (Yarow, 2013). Yarow (2013) explains in a review of the products, that these trackers monitor steps taken, calories burned, sleep patterns, and time. With the ability to sync to a smartphone via Bluetooth, the experience continues in an app where one can log their food and water intake, connect with other users, map running our walking routes, and ultimately track and evaluate progress. The sophistication and capabilities of fitness related technology is only expected to increase. University of Phoenix executive dean at the college of information systems and technology Dennis Bonilla detailed his predictions on the role of wearable technology in fitness:

"In the future, your smartwatch will instantly access your medical records, diet and training logs, then sync them with sensors in the supermarket and mall to provide real-time shopping and health advice. Your smart shoes and biometric shirts will remind you to straighten your posture, hydrate and run and walk with correct form to protect your back and knees. A smart bandage will tell diabetics when their blood sugar is running low. Haptic technology will give you intimacy at a distance; when your wife on the phone 1,000 miles away squeezes her Fitbit, your Under Armour will tighten up." (as cited in Wallack, 2015)

#### 1.5.2.2 Women's Activewear

In the first quarter of the 2016 fiscal year, Nike saw 14% growth in revenue worldwide with 9% in the U.S. (Kissane, 2015). A key component attributed to this success is the company's growing attention towards their female consumers through trend-conscious apparel; a component that Nike hopes will be worth \$7 billion in 2017, a \$2 billion increase from 2014 (Kissane, 2015). The activewear giant has made an increasingly visually attractive assortment of apparel available to women with a large array of styles and colors aimed towards the woman athlete. Nike introduced the Metcon 1 training shoe for women in early 2015, preceded by innovations such as Pro Base Layer apparel and the Air Max. Nike Pro Tights and Dri-fit fabrics are currently popular with women according to Nike president Trevor Edwards (Wahba, 2015).

Nike is not the only activewear company to realize opportunity in the women's segment of the market; brands such as Under Armour and Lululemon have set their sights on the female customer as well (Townsend, 2013). Previously focusing primarily on men's apparel, Under Armour has created a new line of products specially designed for women; an accomplishment that has eluded them in the past (Townsend, 2013). This line of clothing includes compression shorts, footwear, training gear, and, most importantly, sports bras. The new Armour Bra collection is the highlight of their triumphant breakthrough in the women's activewear market and is at the forefront of advertisements aimed towards women. The variety of sports bras offered fall under three categories which cater to women of different activity levels: low-impact activity, mid-impact activity, and high-impact activity. Women can choose a bra from the category that fits their physical activity needs from walking to cycling to team sports. The unique bra features gel straps and gel-encased underwire along with a mesh back, hook and eye closure,

molded cups and aesthetically pleasing design. This focus on women's activewear generated US \$600 million for Under Armour in 2014 and is expected to grow (Fitzpatrick, 2015)

Lululemon, on the other hand, has always made women's activewear the emphasis and crux of their company. The yoga-based lifestyle brand generated a craze for stretchy yoga pants that did the unthinkable, dethrone the denim as women's preferred pants. Levi Strauss & Co reported a dip in sales over the past years from \$7 billion to \$4.8 billion due to their unwillingness to adapt to the changing desires of consumers (Lutz, 2015). Established in 1998, Lululemon's success in such a short amount of time can be attributed to branding rooted in wellbeing, empowerment, and spiritualism coupled with technical athletic fabrics (Lavrence & Lozanski, 2014). Many have questioned the technical qualities of the brand arguing that the products do not differ in from other brands in regards to innovative textiles and design (Peterson, 2014). Their products are more accurately defined as stylish athleisure-wear; and style is where the brand excels. Products, like their famous yoga pants, claim to make the wearer look more athletic by sculpting the legs and lifting the posterior. Along with attractive prints and a variety of cuts, the products encourage women to wear the apparel from the gym to the wherever else their daily routine may take them. However, the sheer yoga pant recall gaffe in 2013 beckoned financial hardships for the company allowing Under Armour to overtake their position in the market (Sullivan, 2014). Under Armour is now worth three times more than Lululemon. Only three years ago, Lululemon was worth twice more than Under Armour (Schlossberg, 2015b).

#### **1.5.2.3 Textiles**

The activewear market has found itself responding quickly to the needs of consumers in regards to the environment. The polar vortex weather phenomenon of late 2013 to early 2014 and

the following year's harsh winter in the U.S. affected the majority of the country with extreme low temperatures and unforgiving conditions. Euromonitor International (2015a) explained that this in turn caused a great consumer need for apparel with high performance aspects in cold weather from activewear companies; a need that may not have been a priority in previous years for many Americans. In response, activewear companies have been manufacturing and selling apparel that can meet this demand through elements such as sealed seams, water resistance, temperature regulation, and anti-odor properties (Euromonitor International, 2015a). The use of specialty textiles and strategic designs has allowed the creation of warm garments without added bulk. (Euromonitor International, 2015a).

# 1.5.2.4 Sustainability

The activewear industry is prone to high levels of waste and emissions caused by high consumption rates, short product lifecycles, and mass production. To combat this issue, activewear companies can adopt sustainable practice business models to keep their manufacturing process aligned with ethical and business norms. Key concerns still exist in the manufacturing process when it comes to the process and the materials (Subic A, Shabani B, Hedayati M, & Crossin E., 2012). Some companies have made great strides by introducing products that are eco-friendly.

Environmental concern now drives much innovation within the apparel and textile industry, including the activewear segment (Potts, 2015b). Potts (2015b) reported that legislative actions in the U.S. and the European Union prevent the usage of certain harmful materials and processes leading to the need for innovations in environmentally-friendly alternatives. She offers the example of the elimination of perfluorinated chemicals (PFC); a chemical finishing used on

fabrics as a water repellent. After the ban on this chemical in the apparel industry, Potts explains, Gore released the Gore-Tex C-knit Backer which uses layers comprised of a waterproof membrane and knitted PFC-free textiles. They have also recently announced their intention to invest US\$15 million alternative materials. Similarly, The Chemours Company released the PFC-free Teflon EcoElite finish for textiles (Potts, 2015b).

Learning from their previous public mishaps with corporate social responsibility (CSR), Nike, along with most other activewear companies, publishes yearly reports detailing their CSR activities. In their 2007-2009 report, Nike (2009) expresses a commitment to creating safe environments for factory workers in manufacturing locations abroad and a continued exploration into sustainable manufacturing. This represents a testament to the modern power of the suppliers within the activewear industry. The manufacturing limitations placed as dictated by CSR and sustainability practices on Nike, and other brands, commands the products that they can manufacture and sell. This will dictate price and quality for Nike products.

# 1.6 Gaps in the Literature and Contributions of this Study

Little research has been conducted concerning the casual consumption of activewear. As suggested by Chi and Kilduff (2011), future research is needed to explore purchase intentions for casual activewear. This study could generate depth of knowledge and a greater understanding of the consumers driving the success of the casual activewear trend. Information from this study could be used by activewear companies to align marketing strategies to encourage more purchases of casual activewear and to strengthen relationships with current consumers.

# 1.7 Purpose of this Study

Activewear is a booming apparel market which seeks to provide consumers with clothing endowed with special characteristics in order to facilitate physical activity. This market is important in its massive size to the apparel industry as \$255.1 billion came from the activewear sector in 2013 alone (Euromonitor International, 2014). However, despite reoccurring fitnessinspired fashion trends, little is known about the consumer of casual activewear. The current fashion craze of athleisure is centered on wearing activewear intended to be worn for physical activity participation during non-active activities (Horton et al., 2016). This can account for the recent \$2 billion sales increase in the activewear segment from 2013 to 2014 in the U.S. (Euromonitor International, 2015a). Despite this substantial growth, not much is known about this influential consumer of casual activewear products and their purchasing intentions. This lack of consumer identification and understanding within the activewear market is a potential pitfall for apparel retailers and manufacturers. Failing to determine what influences a casual activewear consumer's intent to purchase can only result in a loss of potential profit due to the misguided targeting and marketing strategies. This study proposes to determine what key factors influence U.S. consumers' purchase intensions of casual activewear leading to the behavior of purchase and use. To investigate this, an empirical study of determinants using an extended TPB model as the theoretical framework will be conducted. Information from study can be used by retailers and brands to align marketing strategies to better service the consumer of casual activewear, reinforce and encourage repeat behaviors, and strengthen the relationship between brands and their consumers.

#### 1.8 Definition of Terms

**Activewear:** Powered by fitness and worn by people participating in physical activity or sports (Frings, 2008); Garments that are "specifically engineered to deliver a pre-defined performance or functionality to the user, over and above its normal functions" (Gupta, 2011).

**Attitude:** A positive or negative response to an object or behavior which is the result of the evaluation of outcomes (Ajzen, 1985)

**Behavior:** "[T]he manifest, observable response in a given situation with respect to a given target" (Ajzen, 2006).

**Casual activewear:** Activewear purchased and worn primarily for casual/daily wear. Though these garments can be worn for physical activity, their main use is casual.

**Casualwear:** A broad range of apparel at any price point worn for comfort and practicality (Clemente, 2014); The act of dressing-down (Rubinstein 2001).

**Intention:** [A]n indication of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior" (Ajzen, 2006).

**Perceived behavioral control:** The perceived barriers or facilitators to performing the behavior, whether they are internal or external factors (Ajzen, 1991).

**Sportswear:** "[A]ny combination of tops and bottoms, such as jackets, skirts, pants, shorts, blouses, and shirts, that are priced separately so that the customer can combine them as desired" (Frings, 2008, p. 76).

**Subjective norm:** An individual's perception of how other important figures in their lives, such as family, friends, and peers, would want them to participate in the behavior (Ajzen, 1985).

#### **CHAPTER TWO**

#### LITERATURE REVIEW AND MODEL AND HYPOTHESIS DEVELOPMENT

#### 2.1 Theoretical Foundation

#### 2.1.1 Theory of Planned Behavior

As the goal of this study is to determine consumers' intentions to purchase activewear for casual use, a theoretical framework is needed to examine what factors govern human intentions. This study utilizes one of the most well-known and used social psychology theories, the theory of planned behavior (TPB) (Ajzen, 1985 & 1991), to examine the determinants of consumers' purchase intentions of activewear for casual purposes which influence their future purchase behavior. The prediction of behavior will not be examined in this study. This theoretical framework and its myriad of variations are exceedingly popular amongst researchers in numerous fields seeking to predict behavior through the identification of motivating factors of a reasoned process (Knowles, Hyde & White, 2012; Lac, Crano, Berger & Alvaro, 2013; Norman, 2011; Yoon, 2011). Among these research fields, apparel, retailing, and consumer studies find relevancy in the model to examine purchase intent and motivators (Cowan & Kinley, 2014; Kim & Karpova, 2010; Kim & Trail, 2010; Norris & Myers, 2013). Related to activewear, physical activity participation can also be examined through TBP (Bozionelos, & Bennett, 1999; Chatzisarantis & Hagger, 2009; Rhodes, Courneya, & Hayduk, 2002). Building upon the previous theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), Ajzen (1991) explores the depth to which intention determines behavior. For without the intention to perform a certain behavior, there can be no execution of the behavior (Ajzen, 1991). From

intention, we learn the degree of motivation one possesses to perform a behavior; their willingness to attempt resulting in a greater chance to carry out the behavior.

As seen in Figure 1, behind intention and behavior lay powerful forces of persuasion: attitudes, subjective norms (Ajzen & Fishbein, 1973), and perceived behavioral control (Ajzen, 1991). The concepts of attitudes and subjective norms are carried over from Ajzen and Fishbein's (1973) theory of reasoned action in which behavioral intention is influenced by the two independent variables.

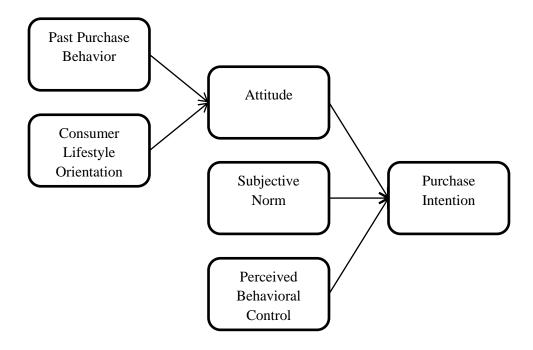


Figure 1. Consumer purchase intention model for casual activewear

# 2.2 Components of TPB

#### **2.2.1 Attitude**

Ajzen (1985) describes attitude towards the behavior as a positive or negative response to an object or behavior which is the result of the evaluation of outcomes. Attitude is strongly

related to behavior as supported by studies that focused on purchase intention of apparel and footwear through the use of TPB, including attitude (Kim & Karpova, 2010; Wang, 2014; Yan, Ogle, & Hyllegard, 2010). In a study of the footwear purchase intention of female Taiwanese consumers, Wang (2014) found that attitude within the TPB framework significantly impacted purchase intention. The author concluded that the retail atmosphere and environment when purchasing shoes may affect a consumer's intent to purchase shoes. The research of Kim and Karpova (2010) concerning consumers' purchase intention of counterfeit goods primarily focused on attitudes as a determinant, which proved to be positively related to purchase intent. Attitude was significantly influenced by product appearance, value-consciousness, and past purchase behavior; past purchase behavior will be discussed in the extended model of this study. Yan, Ogle, and Hyllegard (2010) investigated the purchase intentions and attitudes of Generation Y consumers toward American Apparel as influenced by message appeal and sources. They discovered through their study that participants held positive attitudes and an increased intention to purchase American Apparel products when exposed to messages containing fair labor appeals. Females in their study described more positive attitudes towards the brand and its advertisements containing fair labor appeals than male participants. In this study, consumers may hold positive attitudes towards the consumption of activewear for casual purposes which could increase their intention to purchase as seen in the following hypothesis:

**H1:** There is a significantly positive relationship between U.S. consumers' attitude toward casual activewear purchase and their intention to purchase casual activewear.

# 2.2.2 Subjective Norm

Subjective norm reflects an individual's perception of how other important figures in their lives, such as family, friends, and peers, would want them to participate in the behavior (Ajzen, 1985). With the growing popularity of the athleisure trend in mainstream fashion, it is reasonable to assume in this study that consumers will feel the need to conform to the current fashion trends through the purchase of activewear for casual purposes. Empirical research has found that purchase intention of apparel can be effectively explained through subjective norm (Budiman & Wijaya, 2014; Jabari, Othman, & Mat, 2012; Jin & Kang, 2011; Kalafatis, Pollard, East, & Tsogas, 1999; Yan, Hyllegard, & Blaesi, 2012) In addition to following the rise of the athleisure trend, consumers may feel pressured by society's positive perceptions of individuals who are physically active and subsequently purchase casual activewear to project an athletic image to others. As found in Martin, Sinden, and Fleming's (2000) study, people who identify as regular participators in physical activity are regarded more favorably by others. Their findings hold relevance to our study as it is probable that consumers seek approval from important people and groups in their lives through the projection of an athletic image. The consumption of casual activewear may facilitate the projection of said image. Another study conducted by Jabari et al. (2012) determined subjective norms significantly impacted Jordanian consumers' intention to shop online. Data for this study was collected from the staff of multiple Jordanian universities and recorded using self-administered questionnaires containing 7-point Likert scales. From the collection of this data, they concluded that online purchase behavior is more likely to be influenced by family, friends, and peers rather than positive attitudes. Thus, I propose hypothesis 2 below:

**H2:** There is a significantly positive relationship between U.S. consumers' subjective norm and their intention to purchase casual activewear.

#### 2.2.3 Perceived Behavioral Control

Perceived behavioral control (PBC) accounts for the perceived barriers or facilitators to performing the behavior, whether they are internal or external factors (Ajzen, 1991). PBC can also have a direct influence of behavior, bypassing intention, as the behavior may not be under volitional control of the individual (Ajzen, 1991). If one lacks the resources (money, time, information, etc.) or the self-confidence to perform a behavior, the intent is largely valueless. However, this study does not seek to observe behavior. In empirical research studies, purchase intention has been found to positively relate to PBC (Jin & Kang, 2010; Shim, Estlick, Lotz, & Warrington, 2001). In this study, we may observe consumers who hold a positive attitude towards casual activewear, but feel that they lack the money to afford such products or they feel that their lifestyle does not support the use of the products effectively dissuading their intention to purchase. Additionally, consumers' lack of self-confidence as a result negative body-image may inhibit their intention to purchase casual activewear if they are unwilling to wear clothing that is close-fitting to the body or does not adhere to their self-image. Wasilenko, Kulik, and Wanic (2007) observed similar avoidance behavior in women with low body-satisfaction who exercised less often than women with high body-satisfaction. The amount of social distance one feels between those who dress in athletic styles and themselves may also be a significant influencer in the observation of PBC (St-James, de Man, & Stout, 2006). St-James et al. (2006) observed that this can manifest as a desire to not identify with athletes due to perceived negative characteristics and stereotypes an individual holds against the social group. A consumer's

acceptance of negative stereotypes of athletes may be a barrier to the intention to purchase casual activewear because of their unwillingness to identify with the athletic social group making adoption of activewear more difficult. Consequently, I propose hypothesis 3 below:

**H3:** There is a significantly positive relationship between PBC and U.S. consumers' intention to purchase casual activewear.

# 2.3 Expanding the TPB Model

The TPB model is, in some cases, found lacking in its multidimensionality and requires an expansion to the classic variables when investigating purchase intention of apparel (Cowan & Kinley, 2014; Kim & Karpova, 2010; Ling, 2009; Muzaffar, 2015). Ajzen (1991) details that the model is open to elaboration with the presence of important identifiable variables by saying that, "The theory of planned behavior is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a significant proportion of the variance in intention or behavior after the theory's current variables have been taken into account" (p. 199). To best determine what influences U.S. consumers' purchase intention of casual activewear, an expanded model will be necessary.

### 2.3.1 Past Casual Activewear Purchase Behavior

Past behavior is arguably a significant determinant in future behaviors (Ajzen, 1991; Connor & Armitage, 1998). Numerous studies employ the use of past behaviors as an influence on attitudes and a predictor for behavior intention (d'Astous, Colbert, & Montpetit, 2005; Kim & Karpova, 2010). To elaborate, past behavior is the execution of a behavior or reaction to overt or covert stimuli in the past (Sommer, 2011). d'Astous, Colbert, and Montpetit (2005) found that

consumers tend to use their previous experiences in performing a behavior to justify their decision to perform again. They believe that attitudes are defined by the information drawn from past experiences. A study which examined consumers' purchase intention of fashion counterfeit goods, researchers Kim and Karpova (2010) found that those who had previous experience in purchasing fashion counterfeit goods held more positive attitudes towards the behavior of purchasing those products. The authors also described the purchases as habitual due to the reoccurrence of the behavior. Dean, Raats, and Shepherd (2012) found that in a study of 499 participants, past behavior predicted the purchase behavior of organic food. Similarly, a study conducted by Knowles, Hyde, and White (2012) was able to identify past behavior as a strong indicator of future donations given to charity by young people. In the realm of fashion, U.S. college student were found to be more willing to purchase fashion counterfeit products in the future based off of previous purchases (Lee, 2009). These college students were generally more fashion-conscious and experienced higher intention to repeat their purchases in the future than students who had not purchased counterfeit products in the past (Lee, 2009). Hypothesis 4 relating to past purchases is as follows:

**H4:** There is a significantly positive relationship between past purchase behavior of casual activewear and U.S. consumers' attitude towards casual activewear.

## 2.3.2 Consumer Lifestyle Orientation

Behavior models can be enhanced with the inclusion of the concept of lifestyle with consideration to personal characteristics, society, habits, and value (Kucukemiroglu, 1999).

Bourdieu (1984) discussed in his book *Distinction: A Social Critique of the Judgment of Taste* how lifestyle results from sophisticated actions rather than by random and reckless actions. He

believed that the constitution of the individual is greatly related to consuming behaviors, which forms the lifestyle and tastes of the individual. This lends itself to the formation of consumer segmentations through the identification of differences relative to others.

Individuals with strong health values place a higher level of importance on exercise and are more willing to accept exercise behavior (Bephage, 2000). Moreover, individuals who highly value exercise and wellness behaviors are more likely to adopt visual symbols of dress in order to project the lifestyle to others (St-James et al., 2006). Those with a higher regard for a wellness-based lifestyle are more likely to wear activewear in daily life than consumers without this lifestyle regard. Health consciousness has been found to motivate consumption as seen in First and Brozina's (2001) study which examined cultural differences in West European countries and their impact on organic food consumption. Though cultural elements were found to vary between participants, they identified health as the most influential factor for consumption. A study (Honkanen, Verplanken, & Olsen, 2006) conducted on Norwegian consumers observed environmental consciousness as a powerful influencer in the consumption of organic food. Positive attitudes towards a behavior are determined in part by concerns over an issue, such as personal health. The importance that an individual places on the value of participation in physical activity could hold influence over the consumption of activewear. Unlike healthconsciousness manifested through diet, the effect of health-consciousness expressed through physical activity has not been well investigated by studies.

In a study aimed to predict consumers' intentions to shop in sustainable retail environments, Ogle, Hyllegard, and Dunbar (2004) employed the use of consumer lifestyle orientation as a variable in an extended model of the Theory of Reasoned Action. Consumer lifestyle orientation, a variable influencing attitude, measured participation in outdoor activities,

degree of involvement in outdoor recreational activities, outdoor organization membership, membership in a retailer's consumer cooperative, and past purchase behavior from the retailer (Ogle et al., 2004). Participants from their study chose activities from a provided list and completed a self-rating questionnaire which, after analysis, determined that consumer lifestyle orientation was positively related to intention to shop in sustainable retail stores.

Similar to the study conducted by Ogle et al. (2004), Kraft and Goodell (1993) determined that consumer lifestyle orientation is an important factor when investigating health related behaviors. In an effort to provide clarity in health and wellness studies, Kraft and Goodell (1993) developed a wellness scale to construct psychographic profiles for market segmentation. They believe that lifestyle has a significant impact on attitude towards health-related behaviors because those who are currently proactive in their health would have a more positive outlook on healthy behaviors. The wellness scale measures personal health attitudes and behaviors through the dimensions of health environment sensitivity, physical fitness, personal health responsibility, and nutrition and stress management (Kraft & Goodell, 1993). The authors believe that the orientation towards a health-conscious lifestyle is indicative of consumption preferences and subsequently recommend that the scale be used for future studies regarding health-related products. Therefore, the dimensions of this scale will be used explore consumer lifestyle orientation in this study. Our study will employ this approach to observing the relationship between lifestyle and attitude towards the purchase of casual activewear as seen in the hypothesis below:

**H5:** There is a significantly positive relationship between the consumer lifestyle orientation and U.S. consumers' attitude towards casual activewear.

# 2.4 Proposed Research Model

The proposed conceptual model (presented in Figure 2) developed from the literature review reflects the hypothesized relationships between the variables.

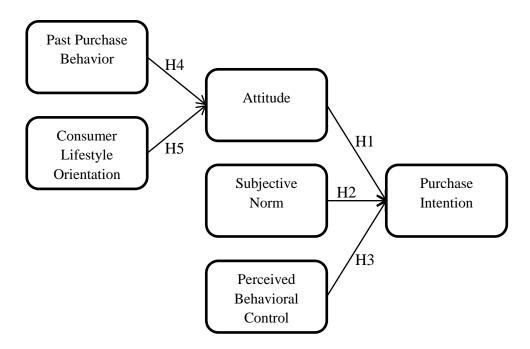


Figure 2. Research framework

### **CHAPTER THREE**

#### **METHODOLOGY**

This chapter explains the research methodology used in this study. It includes the research model, the sampling plan and data collection procedure, constructs and scales, and statistical analysis method.

### 3.1 Sampling Plan and Procedure

For this research, a quantitative study using a survey was used to distribute an online questionnaire instrument deployed through Amazon Mechanical Turk. Deploying the questionnaire in such a manner will allow me to capture consumers who consume activewear for casualwear purposes with a wide array of demographic variables including age, ethnicity, income level, education level, and gender.

The questionnaire was pre-tested by 10 U.S. consumers. These consumers were asked to complete the questionnaire and provide an evaluation and assessment of the contents. Based on their feedback, minor revisions were made. This preliminary study was used to ensure that the content and quality of the questionnaire was appropriate for this research study. Based on preliminary study results, the flow and sequence of questions were evaluated for efficiency.

## 3.2 Survey Questionnaire Development

The questionnaire was constructed to include both questions to gather demographic information and information related to the constructs of attitudes, past purchase behavior,

consumer lifestyle orientation, subjective norms, perceived behavioral control, and purchase intention.

## 3.2.1 Demographics

The demographic variables presented in the questionnaire include gender, ethnicity, age, education level, annual discretionary income, and annual expenditure on casual activewear.

### 3.2.2 Scales for Investigated Constructs

For each construct, multiple questions (i.e., measurement items) are adapted from prior relevant studies (e.g., Ajzen, 2013). Five-point Likert scales ranging from "Strongly disagree=1" to "Strongly agree=5" are often used for constructs related to TPB (Niaura, 2013; Stanec, 2009). Five-point Likert scales are also be used for expanded TPB components of past purchase behavior and consumer lifestyle orientation (Chaudary, Ahmed, Gill, & Rizwan, 2014; Kraft & Goodell, 1993; Sparks & Shepherd, 1992; Tom, Garibaldi, Zeng, & Pilcher, 1998). Participants were asked to select the number located on the scale that best represents their opinions, feelings, and experiences.

## 3.2.3 Theory of Planned Behavior

With reference to the questionnaire constructed by Ajzen (2013), survey items is stated thusly as seen in following examples and measured with five-point scales. For the construct of attitude, five-point scales ranging from 1= "strongly disagree" to 5= "strongly agree" adapted from previous studies (Khalek & Ismail, 2015; Kim & Karpova, 2010; Zheng, 2013) will record the following items: 1) Purchasing casual activewear for me would be a good idea; 2) I like the

idea of purchasing casual activewear; 3) I have a favorable attitude toward the behavior of purchasing casual activewear. Reliability will be verified by computing the Cronbach's alpha. The Cronbach's alpha values for attitude items from previous studies all met a minimum apha of 0.7 as suggested by Nunally (1978): 0.883 (Khalek & Ismail, 2015); 0.92 (Kim & Karpova, 2010); 0.882 (Zheng, 2013). From measurement scales adapted from Fitzmaurice (2005) and Khalifa and Shen (2008), subjective norms will be measured by five-point Likert at 1= "strongly disagree" to 5= "strongly agree". Subjective norms items from Khalifa and Shen (2008) met a Cronbach's alpha of 0.897. The measurement items include: 1) Most people important to me think that I should purchase casual activewear; 2) Close friends and family think that it is acceptable for me to purchase casual activewear; 3) People I listen to could influence me to purchase casual activewear.

PBC is measured through the following items by five-point Likert scales (1= "strongly disagree" to 5= "strongly agree"), which are adapted from Kim and Karpova (2010) and Hansen, Jensen, and Solgaard (2004). In previous studies, construct reliability for this item was found to meet Cronbach's alpha values of 0.67 (Kim & Karpova, 2010) and 0.76 and 0.77 for Hansen at al.'s (2004) study containing two surveys. The measurement items include: 1) In general, shopping for casual activewear is difficult; 2) It is hard to find the products I want when shopping for casual activewear; 3) I have the resources to purchase casual activewear; 4) If I want to, I have complete control of purchasing casual activewear.

To measure purchase intention, statements adapted from Huang, Lee, and Ho (2004) are presented. The measurement items will be captured by five-point scales of "1= strongly disagree" to "5= strongly agree". In the 2004 study by Huang et al., the authors measured the purchase intention towards three different products (beverages, watches, and mobile phones) and

determined their Cronbach'a alphas for the items to be 0.92 (beverage), 0.90 (watch), and 0.95 (mobile phone). These items are: 1) I would purchase casual activewear; 2) The probability that I would consider buying casual activewear is low. 3) I would consider buying casual activewear.

In the extended model of the TPB, the past purchase behavior and consumer lifestyle orientation variables are also represented in the survey. Five statements adapted from Kraft and Goodell's (1993) wellness scale and Sparks and Shepherd's (1992) organic food consumption study will be used to operationalize consumer lifestyle orientation and measured with five-point Likert scales where 1= "strongly disagree" and 5= "strongly agree". Kraft and Goodell's (1993) five-point Likert wellness scale was tested in four separate studies which resulted in Cronbach's alpha scores ranging from 0.78-0.86. This proved the scale's reliability. Sparks and Shepherd's consumer lifestyle orientation scale regarding green consumerism met a Cronbach's alpha of 0.80. From both Kraft and Goodell (1993) and Sparks and Shepherd's (1992) studies, it was recommended that the wellness scale meet a minimum Cronbach's alpha of 0.7. The items for this scale are as follows: 1) I am concerned about my health all the time; 2) I try to exercise at least 30 minutes a day, 3 days each week; 3) I believe that the "wellness" idea is a fad; 4) My daily meals are nutritionally balanced; 5) I think of myself as a health-conscious consumer.

The extent of past casual activewear consumption will be measured and operationalized with regard to the frequency performance. Using scales adapted from Eastlick and Lotz (1999) and Sun (2014), five-point Likert scales ranging from "Never =1", "Once or twice=2", "Several times a year=3", "Several times a month=4", and "Several times a week=5" will address the following items: 1) How often do you purchase activewear apparel products with the intention of wearing them outside of exercise environments (not including footwear)?; 2) How often do you wear activewear outside of exercise environments? Research by Sun (2014) met a Cronbach's

alpha of 0.758 for the author's items measuring Chinese consumers' past shopping experience. The item of U.S. consumer's past shopping experience with a low Cronbach's alpha of 0.51 were considered a poor value and were dropped.

### 3.3 Pilot Test of Survey Instrument

The survey instrument was pretested by 10 U.S. consumers. The pretest respondents were asked to answer the questions and then evaluate the contents individually. The revision after pretest included layout improvements and specific wording refinement.

## 3.4 Statistical Analysis Methods

The statistical assumptions tested include multivariate normality, multicollinearity, and correlation. To meet the assumption of multivariate normality, each variable must have normal sample distribution which is visible in a bell-shape distribution within a graph. In addition to the observation of the index values of univariate distributions, skewness and kurtosis are also calculated for each variable. Results for skewness and kurtosis should fall between -2.0 and +2.0 to verify sufficient normality of the distribution (George & Mallery, 2010). A violation of the normality assumption occurs when the results exists outside of this aforementioned range. Multicollinearity occurs in the presence of high inter-correlations among two or more predictor variables in the multiple regression model. Linear dependency among the independent variables can occur when these variables measure the same phenomena and subsequently, one variable can be predicted from the other with little inaccuracy. To test for multicollinearity among the predictor variables, variance-inflation factor ( $VIF_j$ ) and tolerance were applied. In order to indicate that no multicollinearity problem occurs, the multicollinearity statistics should

demonstrate that the dependent variables' tolerance indicators should all be greater than 0.1, and their  $VIF_j$  values should be less than 5.0 (Marquardt, 1970; Neter, Wasserman, & Kutner, 1989; O'Brien, 2007).

To examine the relationship between the variables, Pearson correlation analysis was conducted. To avoid multicollinearity, the correlation coefficient value (r) should not exceed 0.8 (Katz, 2006). The between-variables correlation strength of relationship can be categorized as low (r = 0.10 to 0.29), moderate r = (0.30 to 0.49), or high (r = 0.50 to 1.0) (Cohen, 1988). The constructs of the proposed model will be tested in terms of unidimensionality, reliability, and construct validity (both convergent and discriminate).

Extraction criterion for factor analysis was set at an eigenvalue greater than 1.0. Items with factor loading values lower than 0.50 were dropped (Hair, Tatham, Anderson, & Black, 1998). Factor loadings, coefficient alpha, item-to-total correlations, and factor structure were reviewed again upon the removal of selected measurement variables (Chi, Kilduff, & Gargeya, 2009). The aforementioned frequentative procedure is repeated until all necessary requirements are met.

Model adequacy was proven through the testing of unidimensionality, reliability, convergent validity, and discriminant validity. First, unidimensionality is defined by the presence of one underlying measurement construct which accounts for variation in participants' responses (Chong, Osborn Popp, DiGangi, & Jannasch-Pennell, 2007). Next, Cronbach's alpha, a coefficient of internal consistency, was used to estimate the reliability of the psychometric instrument for a sample of participants (Tavakol & Dennick, 2011). Third, the parameter of convergent validity identifies the degree to which the indicators of a construct share a high proportion of variance (Guo, Aveyard, Fielding, & Sutton, 2008). To ensure convergent validity

is valid, the Average Variance Extracted (AVE) scores for all latent constructs should exceed the threshold of 0.50 (Hair, Black, Babin, Anderson, & Tatham, 2005). Indicator variance can be more accurately interpreted by latent variables when a larger AVE is present (Hair et al., 2005). The AVE score will convey the amount of variation that can be accounted for among the items represented by average percent. Lastly, discriminant validity indicates the uniqueness of a construct in comparison to other constructs. Constructs should be distinctly different from each other. The two latent constructs' squared correlation will be compared to the AVEs. Upon doing so, it should be apparent that the squared correlation is less than the AVEs which assures discriminant validity (Alumran, Hou, Sun, Yousef, & Hurst, 2014).

Once the adequacies of all constructs are demonstrated, the average score of the multiitems for each construct were computed and used in multiple regression analysis (Wang &
Barnes, 2007). To minimize the volume of linear constructs and non-linear construct measures in
a model, the use of single indicants for constructs in the model has been recommended by many
scholars (Cadogan, Cui, Morgan, & Story, 2006; Chi & Sun, 2013; Cohen, Cohen, West, &
Aiken, 2003; Kline, 2011; Wang & Barnes, 2007). Multiple regression analysis was applied to
analyze the relationship (i.e., the proposed hypotheses) between the dependent variable and
investigated independent variables. SPSS software was used for statistical analysis including
assumption tests, model adequacy analysis, and multiple regression analysis.

### **CHAPTER FOUR**

#### **RESULTS AND DISCUSSIONS**

This section provides the data analysis results and discussions, which includes three parts. The first part describes the demographic information of the survey respondents. The second part explains the examination of statistical assumptions and psychometric properties of investigated latent constructs and variables. Finally, the third part presents and discusses the results of hypothesis testing.

## 4.1 Description of Demographic Information

A total of 146 eligible responses were collected by online survey in the U.S. (www.mturk.com). The profile of survey respondents is presented in Table 1. Among 146 respondents, 41.8% were female and 58.2% were male. The ages of the respondents varied from 20 years old to over 60 years old, with 14.4% ranged from 20 years old to 25 years old, 29.5% ranged from 26 years old to 30 years old, 22.6% ranged from 31 years old to 35 years old, 10.3% ranged from 36 years old to 40 years old, 11.0% ranged from 41 years old to 45 years old, 4.1% ranged from 46 years old to 50 years old, 4.8% ranged from 51 years old to 55 years old, 2.6% ranged from 56 to 60 years old, and 0.7% were over 61 years old. Most of the respondents had the education level of some college (42.5%) and bachelor's degree (48.5%), followed by master's degree (6.2%), doctorate degree (1.4%) and others (1.4%). 17.8% of the respondents' personal pre-tax income ranged from \$15,000 to \$24,999, followed by \$35,000 to \$49,999 (17.2%), \$25,000 to \$34,999 (17.1%), \$50,000 to \$74,999 (15.8%), \$75,000 or higher (13.0%), \$10,000 to \$14,999 (6.8%), \$5,000 to \$9,000 (6.8%), and less than \$5,000 (5.5%). Most of the

respondents were Caucasian (72.6%), followed by Asian and Pacific islanders (15.6%), African American (5.5%), Hispanic and Latino (4.8%), and others (1.5%).

Table 1. Demographic information of the survey respondents

	Percentage	e	Percentage	
Gender		Age		
Male	58.2%	20-25	14.4%	
Female	41.8%	26-30	29.5%	
Education Level		31-35	22.6%	
Some college	42.5%	36-40	10.3%	
Bachelor's degree	48.5%	41-45	11.0%	
Master's degree	6.2%	46-50	4.1%	
Doctorate	1.4%	51-55	4.8%	
Others	1.4%	56-60	2.6%	
Personal annual income level		>61	0.7%	
(before taxation)				
<\$5,000	5.5%	Ethnicity		
\$5,000-\$9,999	6.8%	Caucasian	72.6%	
\$10,000-\$14,999	6.8%	African American	5.5%	
\$15,000-\$24,999	17.8%	Asian, Pacific islanders	15.6%	
\$25,000 - \$34,999	17.1%	Hispanic, Latino	4.8%	
\$35,000 - \$49,999	17.2%	Others	1.5%	
\$50,000 - \$74,999	15.8%			
\$75,000 and more	13.0%			

Note: total eligible responses are 146.

## 4.2 Assumption Examinations and Factor Analysis

The normality and multicollinearity of investigated constructs were first examined. First, skewness and kurtosis were used to examine the normality assumption. Skewness is an indicator used in distribution analysis as a sign of asymmetry and deviation from a normal distribution. Kurtosis is an indicator used in distribution analysis as a sign of flattening or peakedness of a distribution (George & Mallery, 2003). With multivariate statistics, the assumption is that the combination of variables follows a multivariate normal distribution. Since there is not a direct test for multivariate normality, we generally test each variable individually and assume that they

are multivariate normal if they are individually normal. A variable is considered as normal distribution if its skewness and kurtosis have values between –2.0 and +2.0 (George & Mallery, 2010). The skewness and kurtosis results met this criterion. Therefore, normality assumption is not violated.

The variance inflation factor  $VIF_j$  was used to examine multicollinearity that occurs when two or more independent variables in a regression model are highly correlated to each other. A commonly used test for multicollinearity is to conduct "artificial" regressions between each independent variable (as the "dependent" variable) and the remaining independent variables. Variance Inflation Factors  $(VIF_i)$  are calculated as:

$$VIF_j = \frac{1}{(1 - R_i^2)}$$

 $VIF_j$  value of 5.0 and above indicates a multicollinearity problem (O'brien, 2007). The  $VIF_j$  of all constructs and variables are below 2.0 in the survey responses collected. Therefore, there is no multicollinearity problem among constructs and variables.

Factor analysis using varimax rotation method was run. All the factor loadings of the measurement variables to their respective latent constructs were high (0.500 and higher) and statistically significant, while their loadings to other constructs were low (0.400 and lower) as seen in Table 2. This also established the evidences of unidimensionality for the investigated latent constructs.

Table 2. Constructs and corresponding measures and scales

Construct	Measure and Scale [Factor Loading]	Source
	Five-point Likert scale (from "Strongly disagree=1" to	
	"Strongly agree=5".)	
Attitude (A)	A1: Purchasing casual activewear for me would be a good	Kim and
	idea. [0.789]	Karpova (2010)

	A2: I like the idea of purchasing casual activewear. [0.787]	& Zheng
	A3: I have a favorable attitude toward the behavior of	(2013)
	purchasing casual activewear. [0.773]	
Subjective	SN1: Most people important to me think that I should	Fitzmaurice
Norm (SN)	purchase casual activewear. [0.652]	(2005)
	SN2: Close friends and family think that it is acceptable for	
	me to purchase casual activewear. [0.719]	
	SN3: People I listen to could influence me to purchase	
	casual activewear. [0.777]	
Perceived	PBC1: In general, shopping for casual activewear is	Kim and
Behavioral	difficult. R [0.844]	Karpova (2010)
Control (PBC)	PBC2: It is hard to find the products I want when shopping	
	for casual activewear. R [0.808]	
	PBC3: I have the resources to purchase casual activewear.	
	[0.676]	
	PBC4: If I want to, I have complete control of purchasing	
	casual activewear. [0.828]	
Consumer	L1: I am concerned about my health all the time. [0.565]	Kraft and
Lifestyle	L2: I try to exercise at least 30 minutes a day, 3 days each	Goodell (1993)
Orientation	week. [0.650]	& Sparks and
(L)	L3: I believe that the "wellness" idea is a fad. R [0.600]	Shepherd
	L4: My daily meals are nutritionally balanced. [0.822]	(1992)
	L5: I think of myself as a health-conscious consumer.	
	[0.861]	
Purchase	PI1: I would purchase casual activewear. [0.739]	Huang, Lee,
Intention (PI)	PI2: The probability that I would consider buying casual	and Ho (2004)
	activewear is low. R [0.671]	
D . D . 1	PI3: I would consider buying casual activewear. [0.744]	
Past Purchase	Five-point Likert scale Never =1, Have once or twice=2,	Chaudary et al.
Behavior (PB)	Several times in the past 6 months=3, Several times a	(2014)
	MONTH=4, Several times a WEEK=5)	
	PB1: Over the past 6 months, how often have you	
N. (D)	purchased casual activewear?	
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Note: (R) - reverse measures. The factor loading of each measure to its latent construct is provided in parenthesis.

## **4.3 Model Adequacy Examinations**

Unidimensionality, reliability, convergent validity, and discriminant validity were tested for proving model adequacy. First, unidimensionality refers to the existence of one underlying measurement construct (dimension) that accounts for variation in examinee responses. Second, Cronbach's alpha is a coefficient of internal consistency. It is commonly used as an estimate of

the reliability of a psychometric test for a sample of examinees. Third, convergent validity refers to the extent to which indicators of a specific construct 'converge' or share a high proportion of variance in common. Convergent validity is valid when Average Variance Extracted (AVE) scores for all latent constructs are above the desired threshold of 0.50. AVE is a summary measure of convergence among a set of items representing a construct. It is the average percent of variation explained among the items. Fourth, discriminant validity refers to the extent to which a construct is truly distinct from other constructs. Comparing the AVEs to the squared correlation between the two latent constructs of interest, the AVEs should be greater than the squared correlation in order to demonstrate satisfactory discriminant validity (Nunnally, 1978). If the AVEs by the correlated latent constructs are greater than the square of the correlation between the latent constructs, discriminant validity is obtained (Fornell & Larcker, 1981). The comparison results established the evidences for discriminant validity. Table 3 presents the correlations and properties of all constructs and demographic variables. Cronbach's coefficient alphas of all latent constructs are greater than 0.70, indicating reliability was rigorously met (Nunnally, 1978). The AVE scores for all latent constructs were above the desired threshold of 0.50, suggesting convergent validity.

The mean score of the intention to purchase casual activewear is 4 (4 out of 5), with a standard deviation (SD) at 0.9. The mean score of respondents' attitude towards casual activewear is 4, with a SD at 0.7. The mean score of the respondents' subjective norm is 3, with a SD at 0.8. The mean score of perceived behavioral control is 4, with a SD at 0.7. The mean score of consumer lifestyle orientation is 4, with a SD at 0.8. The mean score of past casual activewear purchase behavior is 3, with a SD at 0.7.

4

Table 3. Correlations and properties of all constructs and demographic variables

	Attitude	SN	PBC	L	PB	PI	Age	Gender	Ethnicity	Education	Income
Attitude	1	.387**	.407**	.443**	.172*	.644**	.299**	191*	.054	.111	.198*
SN	.150	1	.094	.311**	.108	.267**	044	.040	.023	107	.136
PBC	.166	.012	1	.350**	024	.534**	.141	049	069	.098	.234*
L	.196	.097	.123	1	.119	.454**	.046	099	035	.181	281**
PB	.030	.012	.001	.014	1	045	083	017	.025	.078	.144
PI	.415	.071	.285	.206	.002	1	240**	136	058	.132	.242**
Age	-	-	-	-	-	-	1	231**	170 <sup>*</sup>	.229**	.090
Gender	-	-	-	-	-	-	-	1	.122	.019	.111
Ethnicity	-	-	-	-	-	-	-	-	1	046	.097
Education	-	-	-	-	-	-	-	-	-	1	.274**
Income	-	-	-	-	-	-	-	-	-	-	1
Mean	4	3	4	4	3	4	-	-	-	-	-
S.D.	.7	.8	.7	.8	.7	.9	-	-	-	-	-
Cronbach's alpha	.814	.726	.702	.723	-	.771	-	-	-	-	-
AVE	.613	.520	.630	.504	.531	.517	-	-	-	-	-
Skewness	706	.281	298	163	.522	394	-	-	-	-	-
Kurtosis	.787	.069	.036	.002	.451	509	-	-	-	-	-
VIF	1.810	1.325	1.323	1.469	1.092	-	1.313	1.138	1.003	1.202	1.261

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

PI- Purchase Intention, SN- Subjective Norm, PBC –Perceived Behavioral Control, L –Consumer Lifestyle Orientation.

## 4.4 Hypothesis Testing Results and Discussion

Once the adequacies of all latent constructs were demonstrated, the proposed hypotheses were tested using multiple regression technique. A single score was obtained for each latent construct by averaging across the measurement items. The proposed hypotheses (H1-H5) in the model were tested.

Table 4 presents the results of hypothesis testing. Four out of five proposed hypotheses were proven statically significant at p<0.05 level. The results showed that consumer intention to purchase casual activewear was significantly affected by their attitude ( $\beta$ =0.472, t=6.254), perceived behavioral control (PBC) ( $\beta$ =0.321, t=4.872), but not by subjective norm (SN)  $(\beta=0.052, t=0.779)$ . The effects of demographic variables on consumer intention to purchase casual activewear were all insignificant at p<0.05 level. Thus, H1 and H3 were supported while H2 was rejected. This indicates that US consumers are more likely to purchase activewear for casual purpose when they show positive attitude towards wearing activewear outside of exercise environments. Increasingly perceived control of the resources (e.g., money, time, information) towards casual activewear consumption and the self-confidence to wearing activewear outside of exercise environments lead to US consumers' higher willingness to purchasing casual activewear. In contrast, individual's perceived opinions of other important figures in their lives (e.g., family, friends, and peers) towards casual activewear consumption does not significantly affect their own decision on purchasing casual activewear. The model exhibits a high explanatory power for US consumer purchase intention towards casual activewear, collectively accounting for 52.4% variance in the purchase intention ( $R^2$ =52.4%).

Hypotheses H4 and H5 tested the impacts of consumer past purchase behavior (PB) and lifestyle orientation (L) on their attitude towards purchasing casual activewear. Both past

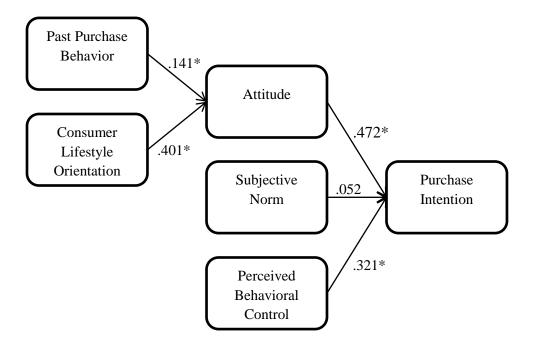
purchase behavior (PB) and lifestyle orientation (L) significantly affect US consumers' attitude towards purchasing casual activewear ( $\beta$ =0.141, t=3.968;  $\beta$ =0.4011, t=5.378 respectively). Thus, H4 and H5 were supported. The previous experience in purchasing casual activewear positively affects US consumer attitude towards wearing activewear for casual purpose. Also, individuals who place a higher level of importance on health value and exercise are more likely to show a positive attitude towards wearing activewear outside of exercise environments. The effects of demographic variables on consumer attitude towards wearing casual activewear were all insignificant at p<0.05 level except age. Age shows a positive effect on consumer attitude towards wearing casual activewear ( $\beta$ =0.296, t=4.911). The model shows a good explanatory power for US consumer attitude towards purchasing casual activewear, collectively accounting for 32.1% variance in US consumer attitude towards purchasing casual activewear (R<sup>2</sup>=32.1%).

Table 4. Results of hypothesis testing

Hypothesis		Dependent variable	Independent Variable	Std. Coef. (β)	t-value	Sig. at <i>p</i> < 0.05	Control Variable	Std. Coef. (β)	t-value	Sig. at <i>p</i> < 0.05	Total R <sup>2</sup>	F-value (df1/df2)	Sig. at <i>p</i> < 0.05
		PI	Constant	-	183	.855	Age	.020	.304	.334	.524	18.825 (8/137)	<.001
H1	Yes		Attitude	.472	6.254	<.001	Gender	023	372	.952			
H2	No		SN	.052	.779	.438	Ethnicity	107	-1.748	.083			
Н3	Yes		PBC	0.321	4.872	<.001	Education	.025	.396	.693			
							Income	.070	1.092	.277			
		Attitude	Constant	-	5.419	<.001	Age	.296	4.911	<.001	.321	9.313 (7/138)	<.001
H4	Yes		PB	.141	3.968	.036	Gender	099	-1.343	.181			
H5	Yes		Lifestyle	.401	5.378	<.001	Ethnicity	.120	1.665	.098			
							Education	047	621	.536			
							Income	.050	.652	.516			

Note: PI- Intent to purchase casual activewear, PBC- Perceived Behavioral Control, SN- Subjective Norm, PB- Past Purchase Behavior and Lifestyle – Lifestyle Orientation. Std. Coef. stands for Standardized Coefficients.

Figure 3. Results of hypothesis testing



#### **CHAPTER FIVE**

## CONCLUSIONS AND IMPLICATIONS

This research empirically determined the key factors influencing American consumers' intentions to purchase casual activewear. This chapter provides the conclusions and implications, which include four parts. The first part compares the finding of this study with previous research results. The second part draws the conclusions based on the results of rigorous statistical analysis. The third part imparts several managerial implications that are of interest to industrial practitioners. Finally, the limitations of this study and possible directions for future research are stated.

### 5.1 Discussion

In this study, attitude positively influenced U.S. consumers' intention to purchase casual activewear. This positive relationship is congruent with previous apparel purchase intention studies (Kim & Karpova, 2010; Wang, 2014; Yan et al., 2010). Prior studies indicate that subjective norm (SN) is an important factor affecting apparel purchase intention (Budiman & Wijaya, 2014; Jabari et al., 2012; Jin & Kang, 2011; Kalafatis et al., 1999; Yan et al., 2012). However, in this study, subjective norm (SN) had no influence on intention to purchase casual activewear for U.S. consumers. The lack of concern over the expectations and opinions of important others suggest that the purchase of casual activewear is tied to self-interest. Vallerand, Deshaies, Cuerrier, Pelletier, and Mongeau (1992) suggest that subjective norm is less significant in the explanation of intention because it is a remote concept. As casual activewear is often worn for solitary leisure activities, remoteness is relevant in that the influence of significant others is

potentially less pervasive. Perceived behavioral control (PBC) positively influenced U.S. consumers' intention to purchase casual activewear. This was consistent with previous empirical studies concerning purchase intention towards apparel (Jin & Kang, 2010; Shim et al., 2001).

U.S. consumers' past purchase behavior (PB) positively influenced attitude towards purchasing casual activewear. This finding was congruent with previous studies (Dean et al., 2012; Kim & Karpova, 2010; Knowles et al., 2012; Lee, 2009). Likewise, lifestyle orientation positively influenced attitude towards purchasing casual activewear. This result was consistent with previous studies (First & Brozina, 2001; Honkanen et al., 2006; Ogle et al., 2004).

#### **5.2 Conclusions**

In recent years, the athletic apparel industry has grown tremendously. As consumers have become increasingly interested in healthy lifestyles, the demand for athletic performance apparel to meet their needs has risen. However, activewear is no longer contained to the gym (Friedman, 2015). It is visible in places such as the grocery store, the boardroom, and the classroom. To better understand this phenomenon of activewear purchased to be worn as casualwear, this study determined the key factors influencing U.S. consumers' intentions to purchase casual activewear.

First, taking a holistic approach, this study integrated the existing social psychology theory for examining factors that govern human intentions (i.e., the Theory of Planned Behavior) and additional important identifiable variables (i.e., past purchase behavior and lifestyle orientation) to propose an enhanced consumer purchase intention model for casual activewear.

Second, the psychometric properties of the developed model were examined using gathered primary consumer survey data from the U.S. Factor analysis and multiple regression

analysis were utilized for data analysis and hypothesis testing. The significant factors influencing the U.S. consumers' intentions to purchase casual activewear were determined. Attitude and perceived behavioral control (PBC) were found to have positive effects on intent to purchase casual activewear. The proposed model shows a high explanatory power for US consumer purchase intention towards casual activewear, accounting for 52.4% variance in the purchase intention ( $R^2=52.4\%$ ).

Third, this study found that the additional variables of past purchase behavior (PB) and consumer lifestyle orientation (L) within the enhanced Theory of Planned Behavior (TPB) significantly influenced attitude towards the purchase of casual activewear. Past casual activewear purchase behavior and lifestyle orientation towards health and wellness help US consumers gain positive attitude towards shopping activewear for casual purpose.

Finally, demographic variables do not significantly affect consumer intention to purchase casual activewear, while age affects consumer attitude towards wearing casual activewear. Older consumers show more positive attitudes toward wearing casual activewear.

## **5.3 Implications**

This study also offers some managerial implications based on the findings. First, attitude influenced intention to purchase casual activewear. Thus, companies should develop ways to enhance consumers' positive attitude towards wearing activewear for casual purpose in promoting their products. Companies should develop marketing strategies and promotional campaigns to promote and cultivate favorable attitudes among target consumers toward casual activewear consumption.

Second, perceived behavioral control (PBC) influenced intent to purchase casual activewear. Therefore, companies should increase the availability of casual activewear products through different sales channels to ensure products are conveniently accessible to target consumers. Information concerning product characteristics and properties should be made readily available to consumers purchasing casual activewear to aid in consumers' informed decision-making. Effort should be made to help consumers perceive affordable prices instead of high prices through the use of marketing strategies such as discounts, advertisements, and new product development. Consumers' lack of self-confidence can also inhibit their ability to purchase casual activewear, so companies should offer products in a variety of styles and fits to provide consumers with the best product to fit their psychological needs.

Third, past casual activewear purchase behavior (PB) positively influenced attitude within the expanded TPB model. To encourage repeat purchase behavior, companies should focus on service quality and consumer satisfaction. That is, if consumers are satisfied with quality of service provided and the purchased product, they will revisit, repurchase, and recommend to others. Managers can identify their competitive strengths and weaknesses from the perspective of the consumer in order to evaluate and improve quality of service and products.

Last, since it has been determined that consumer lifestyle orientation (L) influences attitude, these details should be more focal for future marketers to develop advertising strategies in the future. Aspects concerning health, wellbeing, and fitness should be emphasized in advertising for casual activewear.

### **5.4 Limitations and Future Studies**

First, the conclusions and implications drawn from this study are limited to casual activewear products. The generalization of findings to other apparel products or exercise products needs further validation.

Second, this study is focused on casual activewear and the proposed research model is a casual activewear purchase intention model, the survey instrument is product specific. The application of the survey instrument and research model requires appropriate revisions.

Third, in this study, the intent to purchase is investigated instead of actual purchase of casual activewear. Future studies should pursue the investigation of the measurement of actual purchase of casual activewear since the consumption of activewear in the U.S. is rapidly increasing. Furthermore, the measurement of actual purchase behavior in future studies would increase the research rigor.

Fourth, this study used a quantitative approach. Although the quantitative approach allows the examination of the relationships between each of the factors and intention to purchase casual activewear, it is considered weak when attempting to identify the underlying reasons to explain the phenomenon. Qualitative methods used in future studies might provide a more comprehensive picture on intent to purchase casual activewear.

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# **APPENDIX**

COVER LETTER AND SURVEY QUESTIONNAIRE

## An empirical study of U.S. consumer purchase intention of casual activewear

This study is intended to collect <u>commercially non-sensitive</u> information about the factors influencing activewear purchase intention in the U.S. Understanding the relationships among these factors can help us determine a better path to develop and promote desired activewear to the consumers and make contributions to theoretical advancement and empirical validation in the literature.

This study is being carried out on a **strictly confidential basis**. You do not have to include your name or address details unless you wish to do so. Each interview takes approximately 30 minutes to answer the questions in a provided questionnaire and to comment on the clarify of the questions. If you are not sure of an answer to a question, please provide you best estimate. The interview questions along with this consent form are sent to you for review and decision on your participation. The mode of interview will be discussed and determined with you prior to the interview. We will make notes during the interview for a transcription purpose. All the information collected from the interviews will be only stored on a WSU server for a minimum three years. The risk associated with this study is very minimum. Any risks would be related to data confidentiality, which has been addressed.

By participating in the interview, you agree that you understand the procedures and any risks and benefits involved in this research. You are free to refuse to participate or to withdraw your consent to participate in this research at any time without penalty or prejudice; your participation is entirely voluntary.

If you have questions about this study or the information in this form, please contact the researcher [**Dr. Ting Chi, Associate Professor at the Department of Apparel,**Merchandising, Design & Textiles, Washington State University, tchi@wsu.edu, 509-335-8536]. If you have questions about your rights as a research participant, or would like to report a concern or complaint about this study, please contact the Washington State University

Institutional Review Board at (509) 335-3668, or e-mail irb@wsu.edu, or regular mail at:

Albrook 205, PO Box 643005, Pullman, WA 99164-3005.

Your participation in this important study is greatly appreciated!

THANK YOU!

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Merchandising, Design & Textiles, Washington State University, tchi@wsu.edu, 509-335-

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Your participation in this important study is greatly appreciated!

#### THANK YOU!

If you are not sure of the answer to a question, please provide your best estimate.

## There are NO right or wrong answers.

Activewear: Apparel that is typically worn for fitness activities and worn by people participating in physical activity or sports. These garments are specifically engineered to deliver a pre-defined performance or functionality to the user, over and above its normal functions

*Casual Activewear:* Activewear that is purchased and worn by consumers primarily in casual or leisure settings with no particular intention of use in exercise environment.

1. Please respond to the statements by typing a number corresponding to your best estimate. If you have never made a purchase, please type "0". If your response to the THIRD question is "0", you should not proceed to answer the rest of the questions in the survey.

### Past Activewear Consumption

a.	How many activewear products have you purchased in the past 6 months for either casual
	or leisure purpose or exercise purpose (not including footwear)?
b.	How many activewear products have you purchased in the past 6 months with the
	primary intention of wearing them to exercise in exercise environments (not including
	footwear)?
c.	How many activewear products have you purchased in the past 6 months with the
	primary intention of wearing them outside of exercise environments (not including
	footwear)?

2. Please respond to these statements using the following scale (Circle one number for each statement). Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, and Strongly agree=5

Purchasing casual activewear for me would be a good idea.	1	2	3	4	5
I like the idea of purchasing casual activewear.	1	2	3	4	5
I have a favorable attitude toward the behavior of purchasing					
casual activewear.	1	2	3	4	5
Most people important to me think that I should purchase casual					
activewear.	1	2	3	4	5
Close friends and family think that it is acceptable for me to	1	2	3	4	5

purchase casual activewear.					
People I listen to could influence me to purchase casual					
activewear.	1	2	3	4	5
In general, shopping for casual activewear is difficult.	1	2	3	4	5
It is hard to find the products I want when shopping for casual					
activewear.	1	2	3	4	5
I have the resources to purchase casual activewear.	1	2	3	4	5
If I want to, I have complete control of purchasing casual					
activewear.	1	2	3	4	5
I would purchase casual activewear.	1	2	3	4	5
The probability that I would consider buying casual activewear is					
low.	1	2	3	4	5
I would consider buying casual activewear.	1	2	3	4	5
I am concerned about my health all the time.	1	2	3	4	5
I try to exercise at least 30 minutes a day, 3 days each week.	1	2	3	4	5
I believe that the "wellness" idea is a fad.	1	2	3	4	5
My daily meals are nutritionally balanced.	1	2	3	4	5
I think of myself as a health-conscious consumer.			3	4	5

3. Please circle one number for the following statement. Never =1, Have once or twice=2, Several times in the past 6 months=3, Several times a MONTH=4, Several times a WEEK=5

Over the past 6 months, how often have you purchased apparel?	1	2	3	4	5
Over the past 6 months, how often have you purchased					
activewear?	1	2	3	4	5
Over the past 6 months, how often have you purchased casual					
activewear?	1	2	3	4	5
Over the past 6 months, how often have you worn activewear					
outside of exercise environments?	1	2	3	4	5

4. The following questions designed to collect some basic demographic information about you. There is no personal identification information required. Please answer the following questions with your best estimate if exact data are not available.

a. What is your age? (Please check one of them)							
1) 20-25	2) 26-30	3) 31-35	4) 36-40	5) 41-45			
6) 46-50	7) 51-55	8) 56-60	9) 61 and o	lder			
b. What is your gender? (Please check one of them)  Female Male							
c. What's your ethnicity?							

1) White/Caucasian Islander		2) Black/African American	3) Asian American/Pacific		
		5) Native American	6) Other		
d. What is your eSome colBachelor'Master'sDoctorateOther	lege s degree degree	Please check one of them)			
e. What is your a	nnual income lev	el (before taxation)? (Please	check one of them)		
1) Under \$5, 000		2) \$5,000 to \$9,999	3) \$10,000 to \$14,99		
4) \$15,000 to \$24	1,999	5) \$25,000 to \$34,999	6) \$35,000 to \$49,999		
7) \$50,000 to \$74	1,999	8) \$75,000 and more			
f. Approximately yourself in the pa		y in total have you spent on 3) \$500-\$999	casual activewear for 4) \$1,000 or more		
•		ey in total have you spent or the past 6 months?	n activewear (both casual and		
1) \$1-\$99	2) \$100-\$499	3) \$500-\$999	4) \$1,000-\$1,499		
5) \$1,500-2,999	6) \$3,000-\$4,99	7) \$5,000 or more			
h. Approximately past 6 months?	how much mone	ey in total have you spent or	apparel for yourself in the		
1) \$1-\$99	2) \$100-\$499	3) \$500-\$999	4) \$1,000-\$1,999		
5) \$2,000-4,999	6) \$5,000-\$9,99	9 7) \$10,000 or more			