ABSTRACT

BRYANT, ALARIC. Adolescent Sportswear Consumption: Antecedents and Brand Loyalty. (Under the direction of Dr. Yingjiao Xu).

Following traditional conceptualizations of consumers’ buying behaviors, this study investigated the processes of adolescent sportswear brand consumption, specifically examining the antecedents of brand loyalty. This study proposes a consumer model based upon Keller’s (2001) CBBE model, examining the relationship between adolescent personality and brand perception antecedents, and the resulting consumer behaviors. In particular, brand perception antecedents and the influences of social anxiety and public self-consciousness on consumer behaviors are the focus of this study. To collect data for this study, paper surveys were distributed and collected from 148 adolescents between the ages of 14 and 18 years old. Descriptive analyses, multiple-regression analyses, and ANOVAs were conducted to test the proposed model concerning adolescent consumers’ behaviors towards sportswear brands. The findings suggested that adolescent consumers’ brand loyalty towards sportswear brands was significantly influenced by brand experience and brand image perceptions on the part of the consumer. Secondly, social anxiety and public self-consciousness was found to exert a moderating effect on the relationship between brand perceptions and the resulting brand loyalty of adolescent consumers. Furthermore, public self-consciousness was found to influence adolescents’ perceptions of brand experience and behaviors of brand loyalty toward sportswear brands.
Adolescent Sportswear Consumption: Antecedents and Brand Loyalty

by
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This master’s thesis is dedicated to my loving parents, Alfred and Tabitha Bryant. Thank you both for always supporting me through the best and worst of times. Love you both.
BIOGRAPHY

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Chapter 1: Introduction

1.1. Background of the Study

The sportswear market represents a globally competitive industry with a market size expected to increase from $84.1 billion in 2017 to a forecasted $108.7 billion by 2025 from sportswear apparel sales alone (Costello, 2019). Factoring in sneakers, this global market size is expected to reach 203.84 billion by 2025, headed by innovative market leaders including Nike, Adidas and Under Armour among others (Tamboli, 2019). As a result, competition in the sportswear market is intense, with a sportswear brand occupying the top three spots for most popular apparel brand among young consumers (Hershman, 2018). A major driver for the sportswear industry comes from a growing global teenage youth market, expected to surpass Millennials as the most populous generation in 2019 (Miller and Lu, 2018). Aside from a growing population, the youth market already possesses $600 million in spending power that is expected to boom to $3 trillion over the next couple years (Coulter-Parker, 2018). Projected to account for over 40% of 2020 consumers in the U.S. alone, this market is made up of teenagers with the potential to become lifetime loyal customers as they begin to graduate college, enter the workforce and gain financial power in the coming years (Novak, 2018).

Today’s culture of sports-leisure has fed into a youth-centric market in which adolescent teens are spending an outrageous amount on sneakers and sportswear. Last spring alone, youth males spent 16% and youth females spent 25% of their earnings towards sportswear brands such as Nike and Adidas (McDonald, 2018). Although overall adolescent spending was down 2.4% in 2017, sportswear brands have grown in popularity with 41% of surveyed adolescents naming a sportswear brand as their preferred apparel brand, up by 15% from the year prior (Reagan, 2017). These statistics reflect a unique relationship the sportswear brands have with the adolescent.
market. Brands have pinpointed adolescence as a vital time for both social and self-identity development. Sportswear brands look to play an ever-increasing role in adolescent lives as they mature from an identity standpoint. For these brands, developing relationships with the adolescent market represents a growing financial opportunity both in terms of the present and the future.

For the purpose of this study, the term sportswear refers to clothing or footwear products worn for sports, physical exercise, or casual athleisure wear (Clean Clothes Campaign, 2004). In a marketplace in which brand-consumer relationships have become more complex, the sportswear industry is one of the few that has consistently found ways to cultivate a strong sense of consumer involvement within its target market of adolescents, with the aim of connecting with consumers on a personal level (Gallagher, 2013). Adolescence is a vital developmental time in which large sportswear corporations have keenly recognized an opportunity to take financial advantage. Personal and social identity factors make adolescents vulnerable to the pressures of mass marketing. However, as adolescent consumers’ continue to evolve and change, successful brands must continue to become smarter at making an impression that lasts into the age of a financially independent adult.

1.2. Statement of the Problem

Sportswear has become an increasingly popular fashion choice among young consumers (Hershman, 2018). The influence that sportswear has in everyday life is evident, as magazines, websites, podcasts, YouTube videos and the organization of social events like Sneaker Con all embody the existence of a lifestyle geared towards an affinity for sportswear (Welty, 2014). Furthermore, the popularity of sportswear has emanated through sports, music and fashion, as sportswear brands have formed partnerships with influencers of hip hop and other celebrity
cultures such as Kanye West, in an effort to acknowledge the fashion element of apparel and continue to attract the young lifestyle consumer (Mellery-Pratt, 2015).

A rise in popularity corresponds to an increase in competition among sportswear brands looking to secure a share of the market. Today’s consumers have more options to add to their closet than ever before, and the mass marketing capabilities of social media has allowed the smaller brands to compete with larger corporate giants for the first time. Although bigger brands such as Nike and Adidas are still leading the competition, brands need to rethink the way they reach their young consumers as retail sportswear sales continue to decline due to the rise of online players such as Amazon (Salpini, 2018). As a result of the leveled playing field, it is vital for companies to better understand consumer behaviors, and how brand image can impact consumer habits. Understanding this as a process will provide a basis as to how behavioral factors such as brand loyalty develops in consumers. As this process becomes clearer, businesses will become more competitive and economically stable. Likewise, better insight into the habits of adolescent consumption is necessary as the development of brand loyalty often begins way before consumers mature into adults. As adolescents undergo developmental stages, they become impressionable and their market behaviors are readily moldable. Despite this, the consumer choices of modern adolescents’ in the context of mass marketing and consumerism are understudied (Edgecomb, 2010). The contributions of this study towards the pool of consumerism and youth behavior is relevant as more information on adolescent development and the factors that go into consumption behaviors are uncovered.
1.3. Purpose of the Study

Prior research has been conducted to describe the antecedent factors that impact consumption behaviors towards sportswear purchases and the willingness to purchase from brands (Lim et al., 2016; Rahulan et al., 2015). Previous studies have derived conceptualizations of buyers’ antecedent factors including three dimensions: symbolic, utilitarian and hedonic (Berthon et al., 2009; Hennigs et al. 2013). From these conceptualizations, the symbolic dimension relates to the social-image aspect of a brand, consisting of value signified to others as well as value perceived by the self. The utilitarian dimension is based purely upon the physical attributes of the brand, and whether the quality of product offered has fulfilled a functional need. The hedonic dimension is established upon subjunctive experiences with the brand related to brand-evoked stimuli (Hennigs et al. 2013).

Accordingly, the main purpose of this study was to examine adolescent consumer behavior towards sportswear brands, and to examine the effects of consumer personality and brand perception on consumer behaviors. Specifically, this study examined the conceptualized symbolic, utilitarian and hedonic factors of buyer’s behavior, while including consumer personality in an attempt to better detail adolescent sportswear consumption habits and the relationships they develop with brands. The concept of adolescent consumer behavior was examined from the consumerist perspective, discussed in terms of consumer brand choice, brand loyalty, brand involvement and brand satisfaction. The personality variables of social anxiety and public self-consciousness along with brand perception variables of experience, quality and image were examined as antecedents to the mentioned consumer behavior terms.

For the purpose of this study, adolescence are defined as teens from age 14-18 years old due to the fact that the majority of teens in this age range share similar social educational
environments. The age of 14 usually indicates the first major social transition a child experiences, the transition from junior high school into high school. The age of 18 indicates the tail end of the high school era. The Center for Disease Control and Prevention’s Youth Risk Behavior Surveillance System identifies grade levels 9-12 as significant because of the adolescent high school transition (Kann et al., 2015).

1.4. Research Questions

The following research questions guided the design of the current study to investigate the consumption behaviors of adolescent consumers’ towards sportswear brands:

1. What are adolescent consumers’ sportswear consumption behaviors?
2. How did adolescents’ brand perceptions influence their loyalty toward sportswear brands?
3. How would personality influence adolescents’ consumption behaviors towards sportswear brands?
Chapter 2: Theoretical Background and Literature Review

2.1. Background of Teen Sportswear Market

An increased level of financial resources and decision-making freedom has pushed sportswear brands to commit more resources towards captivating the teen market (Butler-Young, 2017). Competition within the sportswear marketplace has made it important for brands to effectively communicate their product-value to teenage consumers. One way that sportswear brands accomplish this is through fusing innovative products with cultural influencers, ultimately creating brand relevancy to the lifestyles of today’s teen consumers (Danziger, 2017). In a recent survey conducted on adolescent consumers, Nike and Adidas were identified as two of the top nontech brands perceived as innovative (Butler-Young, 2017). Innovative and new sportswear product lines are often introduced utilizing cultural and fashion influencers in an attempt to better connect with teens. In the case of Adidas, music icons Pharrell Williams and Kanye West have signed as collaborators to consistently push the brand’s new product lines, such as the NMD, through social media and commercial outlets (Dunne, 2015). Although strategies somewhat differ, Nike also utilizes fashion influencers to push new innovations in a similar fashion through social media. As a result of combining lifestyle innovations with lifestyle influencers, these sportswear brands represent two of the top overall performing apparel brands among adolescents (Hershman, 2018).

Sportswear brands are not only reaching young consumers through brand products and cultural associations, but also through aligning the brand’s image with social responsibility. A majority of young consumers today believe that companies have moral obligations, and brands have begun to take notice (Davidson, 2019). Sportswear brands have made an effort to invest a great deal of time and finances towards connecting with social causes important to teen
consumers. Whether through charity or active engagement, sportswear companies are creating a socially sensitive image in the minds of young consumers. After Nike created the controversial ad campaign centered on former NFL quarterback Colin Kaepernick and his socially charged dispute with the NFL, quarterly sales thereafter jumped 10 percent (Youn, 2018). With nearly two-thirds of teens admitting that they are more likely to purchase from brands that support social causes, the success of Nike’s ad campaign reflects the importance for sportswear brands to reach young consumers through brand image investment (Sweeney, 2018).

2.2. Adolescent Identity Development

2.2.1. Age of Adolescence

While the age range of adolescence is rather broad, this study focuses upon ages 14-18 years old as it relates to the US age range for high school students. The World Health Organization (WHO) characterizes adolescence as ages 10-19, socially marked by a transition towards independence in a social setting (WHO, 2015). More recently, the scientists at The Lancet suggested that the age of adolescence be expanded to ages 10-24 (Sawyer et al., 2018). A focus on the ages of 14-18 years is an effort to narrow the otherwise broad age range of adolescence. The decision in this study to narrow the age range of adolescence to a 5-year segment is not an attempt to discredit professional definitions of adolescence but rather to emphasize the situational similarity that teens are generally all experiencing during this time. Moving into a larger educational setting at around 14 years old, teens beginning high school are subject to a drastic increase in social interaction compared to past experiences. As a result, age 14 is believed to be a developmentally significant psychosocial benchmark (Curtis, 2015). A substantial amount of evidence backs up the common perception that teens are more responsive to peer influence than adults, as studies suggest that susceptibility to peer influence peaks around
age 14 (Berndt, 1979; Steinberg & Silverberg, 1986; Steinberg & Scott, 2003). The contextual influences of high school throughout the next 4 years compound these responses. Research suggests that the increasing vulnerability to peer influence will impact the individual brand consciousness of adolescents (Nelson and McLeod, 2005). As sportswear continues to be popular among this age group, peer influence is relevant to the consumption behaviors towards brands (Nelson and McLeod, 2005; Halliday, 2018).

2.2.2. Developmental Stage of Adolescents

Russian psychologist Lev Vygotsky (1978) described the adolescent stage as a developmental time in which changes are simultaneously physiological as well as socio-cultural. According to Vygotsky, children become more self-reflective as they begin to perceive their place in public space. Taking this a step further, he argues the principle that full cognitive development is concurrent with social learning experiences. Vygotsky suggests that the social environment in which a youth is surrounded will influence individual thoughts and cognitive processes over time. While social relationships manifest, adolescents begin to search for their self-identity and the answer to the question of “Who am I?” As teens become more socially self-aware, an important concept to consider is that of identity vs. role confusion.

2.2.3. Identity vs. Role Confusion

The fifth stage of ego in Erik Erikson’s theory of psychosocial development, identity vs. role confusion occurs during adolescence and explains a growing independence and desire of the individual to want to become a part of society and fit in (Erikson, 1968). This is done through exploration of possible identities through which an identity is developed as a result. Adolescents, being at an insecure age, often remain unsure of their beliefs, desires, future, and identity. As a result, the individual will incur a sense of role confusion involving uncertainty about an
established place in society. In response, an adolescent may choose to experiment with different lifestyle identities in search of one that feels comfortable and makes them feel happier (McLeod, 2018). The lifestyle exploration that ensues may take a variety of forms, and can often be narrated from a consumerist perspective. As adolescents back up their identity choices with purchase behaviors, their desired identity begins to manifest itself in the clothing brands they choose to identify with and consume (Badaoui et al., 2016).

2.3. Consumerist Narrative

2.3.1. Identity Fulfillment

The influence of marketing and subsequent consumerism on today’s adolescents is overwhelming. The teenage search for self-identity is treated as a major financial opportunity as marketers attempt to connect the self-value of teens to a brand (American Psychological Association, 2004). Consumerist narratives teach adolescents that identity fulfillment comes through consumption and the accumulation of material goods (Loewen, 2008). This narrative tells youth “you are what you consume”, and that material possession is what matters. Research has found that among ages 11 to 19 years, a positive correlation exists between consumerism and age (Flouri, 2004). From childhood to early adolescence, there is an increased level of consumption before a decline in late adolescence (Chaplin and John, 2007). Likewise, it has been found that higher status brands become more desirable as adolescents move into secondary schooling (UNICEF UK/ Ipsos Mori, 2011). This reflects the importance placed upon material accumulation by adolescents in the most developmental years in their lives.

2.3.2. Materialism

Materialism has been defined as the idea that the possession and interaction with goods are a means to happiness (Gil et al., 2016). A strong connection has also been found between
materialism and adolescent self-esteem (Kasser, 2002). The insecurity of early adolescence causes a dramatic drop in self-esteem before it rebounds as late adolescence approaches. This pattern correlates with differences in levels of materialism present during early and late adolescence. Early adolescents accumulate more to compensate for their lack of self-esteem (Kasser, 2002). As the transition to late adolescence creates more self-security, material accumulation will often decrease. Evidence of the rise in materialism among early adolescent age groups support the notion that brand consciousness begins to develop even earlier in childhood.

2.3.3. Brand Consciousness

The rise in technology has exposed children to a plethora of targeted marketing tools from an early age. Between the Internet and television, brands have virtually limitless access to kids’ eyes, making adolescents the most brand-aware generation yet (Lindstrom and Seybold, 2003). According to Lindstrom and Seybold, as brands become familiar, every purchase from the brand includes an added sense of security. Likewise, intensive marketing has morphed brands into symbols of identity. As kids mature into adolescents with more purchasing power, heightened levels of brand awareness makes a purchasing decision much more complicated. The purchase becomes more than just about the product, but about the brand too. Brand identity has become an important part of the way adolescents identify themselves, and through their brand choices they distinguish themselves from one another (Lindstrom and Seybold, 2003). As a result, the brand-consciousness of teens often leads to a pattern of consistently purchasing brands they identify with. Research supports this notion, indicating that young consumers with high brand consciousness are more likely to have a strong motivation to purchase brands they feel strongly connected with, and thereby more likely to be brand loyal (Giovannini, Xu, and Thomas, 2015). Nike’s steady positioning among teenagers as the top overall clothing and
footwear brand is evidence of a strong existing identity connection between sportswear and young consumers (Halliday, 2018).

It is suggested that adolescent brand consciousness is the result of interactions between adolescents’ and the social environment (Lachance, Beaudoin, and Robitaille, 2003). Research has shown that although the level of individual brand consciousness varies from one adolescent to another, the perceived brand consciousness of parents and friends contributes to adolescent assessments of their own brand consciousness (Nelson and McLeod, 2005). As a result, parental influences apparently still play a role in the materialism and consumer-related behaviors present throughout adolescence (Nelson and McLeod, 2005; Meyer and Anderson, 2000). Likewise, the influence of friends’ perceived brand consciousness reinforces the impact that peers have on the consumption behaviors of adolescents’.

2.3.4. Social Anxiety

Social anxiety plays a role in the materialism of adolescents, with research suggesting that adolescents who experience higher levels of anxiety are more likely to be involved in brand communities (Muliz and O’Guinn, 2001). Desire for brand community inclusion among anxious adolescents may be the result of fear associated with group rejection and feeling like an outsider. While adolescents are still in the midst of developing a self-identity, peer relationships formed within the brand communities of anxious teens serve as a basis of identification both with the brand as well as with others who use the brand (Flurry et al., 2014). As a result, anxious teens in search of a self-identity may in fact be more susceptible to interpersonal influences as well as to marketing efforts by brands seeking out anxious teens to offer a community to. This desired for a more defined self-identity reflects the role of social anxiety in the development of consumer-brand relationships amongst adolescents.
2.3.5. Public Self-Consciousness

As adolescents develop and become more neurologically mature, they tend to become more impulsive and self-conscious consumers seeking instant gratification and social status (Pechmann et al., 2005). Due to the increased capacity to reason about other’s thoughts, adolescents begin to perceive social threats to their public image and therefore respond through coping habits such as shopping. Literature suggests that the presence of both social anxiety and self-consciousness work in making teens more receptive to branding and image advertising (Solomon, 1983). Furthermore, the presence of high self-consciousness in teens tends to relate to a desire for branded products, providing evidence to the notion that self-conscious teens consume brands as symbols of social status and self-worth (Bushman, 1993). Due to the uncertainty associated with the developmental period of adolescence, self-consciousness makes teens more vulnerable to the marketing strategies of higher-status brands.

2.4. Research Framework

Brand-consumer relationships and the subsequent true brand loyalty of customers have traditionally been built on the foundational brand-oriented constructs of trust (Morgan and Hunt, 1994), brand credibility (Kim, Morris and Swait, 2008), and perceived value (Sweeney and Soutar, 2001). Discussions involving trust highlight the importance of positive brand experiences (Bloemer and Kasper, 1994). Confidence to such a degree relies upon the culmination of positive past experiences between the consumer and the brand. Similarly, brand credibility is the result of successful purchase decisions over time, referring to both the believability that a brand will deliver what is promised as well as the belief that the brand is capable of crafting quality product due to some expertise. Requiring some evaluation of trust on the part of the consumer, brand credibility has been suggested as an important antecedent to the perception of brand quality.
(Kim, Morris and Swait, 2008). Credibility of a brand is most often attributed to the perception of quality products on the part of the consumers. Therefore, it is suggested that the utilitarian construct of brand quality perception must play a role in the traditional development of brand loyalty. Unlike other brand-evaluators, perceived value occurs throughout the various stages of the purchase process, rather than afterwards (Sweeney and Soutar, 2001). Rather than strictly utilitarian, perceived value consists of a combination of functional, social, and emotional values making it a complex construct for brands to adjust towards.

The relationship factors of trust, brand credibility, and perceived value are often observed from a brand perspective in terms of the impact that brand traits may have on each. However, often ignored are the consumer-oriented personality and social factors integrated within each of these constructs. Consumer personality greatly impacts the degree to which the constructs of trust, brand credibility, and perceived value actually result in a consumer’s loyalty to a specific brand. Social anxiety will be taken into account as a personality trait impacting consumer-brand relationships. Higher levels of social anxiety have been suggested to affect consumer decisions and purchase evaluations (Keng and Liao, 2013). Keng and Liao (2003) indicate that consumer anxiety has a role in purchase situations and post-purchase evaluations, with uncertainty surrounding the decisions of highly anxious consumers often leaving them unsure of whether they made the correct purchase. As a result, the presence of anxiety in a consumer has been linked to their level of sensitivity and attachment towards brands (Swaminathan et al., 2009). Likewise, the ensuing degree of an individual’s public self-consciousness is linked to brand consciousness (Kim and Drolet, 2009). Higher levels of public self-consciousness often relate to a greater preference of brand-name options. Social anxiety and public self-consciousness
represent traits from consumer personality that will be taken into account to gain a clearer, more informed understanding of a consumer’s brand behavioral development.

As mentioned above, consumer brand perceptions have traditionally been based upon the constructs of trust, brand credibility, and perceived value, (Morgan and Hunt, 1994; Kim et al. 2008; Sweeney and Soutar, 2001). Trust has been found through empirical studies to be directly and strongly affected by brand experience (Baser et al. 2016). Similar to brand credibility, the measurement of brand quality perception includes both tangible and intangible brand attributes relating to purchase expectations and results. However, brand quality takes it a step further, driving consumer repurchase intentions by acting as a cumulative evaluation of brand excellence (Forsido and Hohenthal, 2012). Perceived value of a brand or product varies for each consumer based upon consumer values. Likewise, brand image consists of a collection of perceived functional and symbolic associations that vary based upon strength and favorability in accordance with consumer values (Salciuviene et al. 2009). As a result, brand image contains within it the construct of correlated consumer value perception. As construct values vary depending upon the consumer, brand perception and the personality traits of the individual combine to play a role in consumer behaviors towards brands.

2.4.1. Customer-Based Brand Equity (CBBE) Model

This research utilizes Keller’s (2001) Customer-Based Brand Equity Model to test a proposed generalized model in terms of adolescent consumer’s relationships with sportswear brands. This research chose to use Keller’s model based upon its success in previous studies towards helping to explain consumer-brand relationships (Yu et al., 2008; Girard et al., 2017). Keller (2001) suggested a series of steps consumers actively participate in before ultimately forming a relationship with a brand, suggesting consumer-brand relationship as the final step.
Keller indicated the perception of a brand identity as the initial step in the branding ladder towards brand-consumer relationships. This identity involves a brand salience, relating to a broad awareness of the brand and to the customer’s ability to link a brand to associations in memory (Keller, 2001). As the model progresses, the step of brand meaning are comprised of two associations in the mind’s of the consumer: brand performance and brand image. Brand performance involves both the consumer’s experience with the brand itself, as well as the utilitarian aspect of brand quality perceived of the brand’s products by the consumer. Brand imagery refers to more hedonic aspects existing within the mind of the consumer, involving more about how the consumer symbolically thinks about the brand rather than what the brand actually does (Keller, 2001). Continuing with the model, successfully creating a consumer-based brand meaning will elicit a brand response in terms of how the consumer responds to the brand’s products and marketing activities. Brand response consists of a number of post-purchase judgment and feeling-oriented reactions by the consumer with respect to the brand, including the attitude of customer satisfaction post-purchase. Brand resonance represents the final step in Keller’s (2001) model, aiming for a high level of consumer involvement and ultimately consumer brand loyalty. The achievement of brand resonance represents the ultimate relationship and level of identification that consumers have with the brand.
2.4.2. Brand Behaviors

Per Keller’s (2001) Customer-Based Brand Equity model, brand resonance is created through behavioral response toward the brand involving consumer feelings satisfaction, consumer engagement through brand involvement, and finally the development of an active brand loyalty. Past literature utilizing consumer behavior variables justifies the CBBE model (Burgess and Spinks, 2014; Huang et al., 2014).

2.4.2.1. Brand Satisfaction

Brand satisfaction as a construct in marketing practice is important to brands in that it serves as a link between processes culminating in purchases and post-purchase consumer responses such as brand loyalty (Church, Jr. and Surprenant, 1982). Although satisfaction itself isn’t the sole determinant of brand loyalty, empirical studies show that positive satisfaction is increases the likelihood of consumer brand loyalty development (Ha and John, 2010; Haverila, M. and Haverila, K., 2015). Furthermore, it is vital for brands to have an idea of the satisfaction
of its consumers so as to not ignore its’ dissatisfied customers. Brand satisfaction reveals an idea of repurchasing intent; therefore improving the satisfaction of less-satisfied customers should be a priority for brands to retain a solid consumer-base (Forsido and Hohenthal, 2012). Customer satisfaction is defined as a personal feeling of pleasure elicited when the perception of an experience with a product or service meets or exceeds expectations (Kotier, 2002). As discussed by Anderson and Fornell (1994), in research it is important to understand the two different conceptualizations of satisfaction: transaction-specific and brand-specific. Transaction specific satisfaction refers to singular experiences that occur as a post-purchase evaluation of a specific purchase occasion. Brand-specific satisfaction on the other hand refers to an overall evaluation based upon a culmination of experiences with a product or service. For the purpose of this study, satisfaction will be examined from a brand-specific perspective as consumers evaluate a brand’s ability to deliver up to standard.

Perceived Quality, brand experience, and some comparison expectation standard characterize the key antecedent elements for satisfaction (Anderson and Fornell, 1994). If perceived quality and past experience of the brand is positive, post purchase experience will greatly impact consumer satisfaction (Forsido and Hohenthal, 2012). Expectation refers to anticipated performance, and may take the form or utilitarian, hedonic or both depending upon consumer’s interests. Evaluation is based upon benefits they are familiar with, benefits they want from the brand, and how well the brand performs.

A strong link has been suggested to exist between customer satisfaction and consumer retention, thereby proving satisfaction to be vital to development of brand-consumer relationships (Haverila, M. and Haverila, K., 2015). In other words, if a consumer is satisfied after purchasing a product, they are more likely to re-purchase the product or brand. As brands
become increasingly more aggressive and competitive, customers become a scarce resource making satisfaction an increasingly important construct (Anderson and Fornell, 1994).

2.4.2.2. Brand Involvement

The concept of involvement, originating in social psychology, has been heavily applied in the consumer behavior domain of marketing (Shiue and Li, 2013). Shiue and Li (2013) suggest that involvement is important to the retention of consumers through brand-consumer relationships. Their results indicate that a higher level of brand involvement increases the repurchase intentions of consumers’ in spite of dissatisfaction with a brand’s products or services. For a brand, this means that the establishment of solid consumer involvement increases the likelihood of retaining customers. Involvement is defined as the perceived personal relevance of a product or service in the eyes of the consumer in terms of needs, interests, and values (Shiue and Li, 2013; Griffith et al. 2001; Zaichkowsky, 1985). It has also been described as a level of motivation present in one’s mind towards a specific object or activity. Mittal and Lee (1989) suggest that involvement reveals itself in the form of interest in that activity or object.

Involvement can be examined in the context of a number of forms such as product, personal, service, and advertising. As for the purpose of this study however, involvement will be discussed in terms of consumer brand involvement. For consumers with a high level of brand involvement, interest in shopping for and consuming the products of that brand is high relative to that of other brands. Consumption of a brand’s products and brand involvement go hand in hand. Began (1992) suggests that ownership of a brand generates a greater sense of brand involvement in comparison to consumers without possession of the brand. More involvement for owners is likely the result of direct experience and physical possession of the brand, which in turn develops
into a valued association with the self. Possessions have been found to serve as a form of self-expression, compounding the effect of increased brand involvement (Kirmani et al., 1999).

According to Mittal and Lee (1989), causations for brand involvement can be categorized into three value groups: utilitarian, sign-value, and hedonic. Brand-utilitarian value results from a perception of opportunity risks that is associated with choosing one brand’s products over another. Brand-sign value evokes involvement when a particular brand is chosen because it is seen to possess some symbolic value in align with the individual’s self-expression. Brand-hedonic value occurs if the consumer perceives the chosen brand to have a greater capacity to elicit a desired level of pleasure than the alternatives (Mittal and Lee, 1989). Consistency in consumer brand involvement is significant in that it has been found to be vital in developing strong relationships between brands and consumers (Shiue and Li, 2013).

2.4.2.3. Brand Loyalty

Marketing research has placed great emphasis on identifying the psychological processes that lead to the relationship between brands and the loyalty of their consumers (He et al., 2011). The achievement of brand loyalty among consumers has great importance due to the vast number of benefits for the brand itself. Brands with loyal consumers are assured of their customer base, and therefore obtain the privilege of experimenting with price and product changes, while also saving money from their marketing budget without the worry of retaining consumers (Bhasin, 2018). Additionally, loyal consumers can act as ambassadors of the brand, generating publicity by word-of-mouth. However in light of its importance, the definition of brand loyalty has traditionally been debated amongst researchers. Brand loyalty is often broadly defined as the biased purchasing behavior of a specific brand over time with respect to one or more alternative brands (Jacoby and Kyner, 1973; Bozzo et al., 2003). This definition falls short of the mark due
to its failure to distinguish between spurious brand loyalty and true brand loyalty, with the main difference between the two being the degree of consumer commitment to the brand with repeat purchases (Bloemer and Kasper, 1994). According to Bloemer and Kasper, spurious brand loyalty is a function of inertia. This means that a consumer who has spurious loyalty lacks any attachment to the brand, and is open to being immediately attracted to another brand that offers whatever purchasing deal the consumer considers to be better. While repeat purchase of a brand is a form of brand loyalty, it may be spurious as consumers get comfortable with shopping at particular times in places they’re accustomed to (Ju and Wood, 2007). Repetition is evident in the behavior of people throughout daily life, and purchase and consumption behaviors are no different. Consumers tend to purchase the same brands of products, spending a similar amount of money over the course of repeated visits to retail locations (Wood and Neal, 2009; Seetharaman, 2004; Vogel et al., 2008).

Repetitive behavior in consumers can be explained in part by the concept of direct habit cuing. Direct habit cuing suggests that habitual responses are not triggered by the goals of consumers, but rather by the context in the memory of the consumer due to the prior success achieved from repeatedly using a particular behavior to achieve a goal (Wood and Neal, 2009). Habitual responses often dominate the mind of the consumer as alternative responses are often deactivated. According to Wood and Neal (2009), the key to habitual response development is the context-response association resulting from consumer repetition. However, it is important to remember that repetitive consumption behaviors of consumers are not always spurious, but rather may be due to other reasons such as continued preferences or true attitudinal loyalty. Consumers with true brand loyalty have a higher level of commitment to the brand, and thus insist on buying the brand again each time (Bloemer and Kasper, 1994). For this study, brand-
consumer relationships will be studied based on the definition of true brand loyalty, implying an “effective buying behavior of a particular brand, repeated over time and reinforced with a strong commitment to that brand” (Amine, 1998). The conditions by which true brand loyalty develops will be examined through the relationship perspective between the brand and consumer as well as consumer social identification constructs. While adolescents’ brand satisfaction, brand involvement, and brand loyalty behaviors were all measured in this study, only brand loyalty was further investigated in terms of antecedents.

2.4.3. Brand Perceptions

Per Keller’s (2001) Customer-Based Brand Equity model, consumer responses are elicited from consumer perceptions of brand experience, brand quality, and brand imagery. Past literature utilizing brand perception variables justifies the CBBE model (Mishra et al., 2014; Girard et al., 2017).

2.4.3.1. Brand Experience

Described as a subjective perception of a brand in response to brand-related stimuli, brand experience can occur through a brand’s service, a brand’s product interaction, or actual consumption of the brand’s product itself (Brakus et al., 2009). Shopping and service experience occurs when a consumer interacts with a store’s physical space, its personnel, policies, and practices (Brakus et al., 2009). Studies conducted regarding the effects of brand service experience on attitude have found that dimensions of brand services such as interpersonal service with employees, physical facilities, and the image of other brand users all play a role in consumer attitude toward the brand (O’Cass and Grace, 2004). Product experience includes contact with product both directly and indirectly when a product is presented or advertised to the consumer (Brakus et al., 2009). When products don’t provide clear-cut evidence of product
quality, product consumption experiences are open to both direct influences within the decision environment and indirect influences such as advertising (Hoch and Ha, 1986).

Brand experience is an often-ignored perspective, representing a rather subjective state of consciousness with a variety of symbolic meanings, hedonic responses, and esthetic criteria all deriving from consuming a product or service (Holbrook and Hirschman, 1982). While most research has focus on the utilitarian attributes associated with products and services, brand experience derives from brand-related stimuli such as brand colors, slogans, mascots, and brand characters that all help create a brand’s design and identity by appearing in a brand’s packaging, marketing efforts, and retail environments (Brakus et al. 2009). Brand stimuli contributes towards four facets of brand experience; the affective facet captures emotions; the intellectual facet refers to the brand’s ability to catalyze analytical and imaginative thinking; the sensory facet attracts consumers through sensory and aesthetic qualities; and the behavioral facet refers to physical experiences with a brand and its products (Das et al., 2018; Fishbein and Ajzen, 1975). Together, these facets influence a consumer’s overall experience with a brand. Some brand experiences are stronger than others, and thus last longer stored in a consumer’s memory. These longer lasting brand experiences should thereby have an affect on both consumer satisfaction and brand loyalty (Brakus et al. 2009).

2.4.3.2. Brand Quality

Brand quality is determined from the individual consumer’s perspective (Cole and Flynn, 2009; Forsido and Hohenthal, 2012). Although brands are often considered as of generally good or bad quality, a singular measure of quality is not helpful for brands to examine how they stack up in the eyes of consumers. Breaking down the concept of quality into multidimensional, manageable parts allows for better quality assessment in terms of competition comparisons
(Garvin, 1987; Kim et al., 2018). As a result, quality can be assessed through examination of the following parameters; easy to use, durability, serviceability, performance, and prestige (Bruks et al., 2000; Forsido and Hohenthal, 2012). Ease of use is assessed from the physical utilization of the product, alluding to the clarity of product instrumentation and instructions in regards to the consumer’s operational ability of the product. Durability assesses the overall lifespan of the product, including how well the product holds up to normal to weathering, heavy use, and misuse. Serviceability involves the customer service sector of the brand in regards to access to product repair, willingness to assist, and reliability of assistance. Performance is simply how well the product does what it was designed to do. Prestige represents the social symbolic aspect of product ownership, involving how well owning the brand conveys a sense of pride and superiority to the consumer and their social groups (Bruks et al., 2000).

Vera (2015) and Zeithaml (1988) stress that perceived quality is different from actual quality in that the former relies upon subjective abstraction of the consumer rather than verified accomplishments and standards. In this way, brand quality perception depends upon actual experience with the brand, and can be modified as the result of each new encounter (Vera, 2015; Boulding et al., 1999). As a result, each experience a consumer has with a brand’s products affects their beliefs about the brand.

Perceived brand quality has been assessed as an antecedent for perceived brand value, as a consumer’s overall evaluation of a brand is based upon the transaction of a product purchase (Vera, 2015; Zeithaml, 1988). Yang and Peterson’s Equity Theory (2004) suggests that a consumer is likely to feel content and repurchase if they feel their input in a transaction resulted in a fair output. Overall brand quality perception can positively affect perceived value from the consumer’s perspective, impacting attitude and satisfaction with a brand (Vera, 2015).
2.4.3.3. Brand Image

Although scholars have not agreed upon a set definition of brand image, most definitions seem to relate brand image through both functional and symbolic attributes that vary in strength according to consumer preferences (Salciuviene et al., 2009). In accordance with the definition provided by Keller (1993), brand image here is defined as perceptions about a brand’s attributes, benefits, and attitudes as reflected by the brand associations held in the memory of the consumer. Attributes describe the features that characterize a product or service. Symbolic attributes are associated with symbolic and intangible meanings associated with the brand such as status and group membership, while functional attributes entail actual tangible benefits offered such as performance. For consumers, a brand’s attributes have consequences for the individual user so it is important that the brand incorporate its attributes in the specific context for image strength optimization (Salciuviene et al., 2009). Benefits differ from attributes in that they refer to the personal value attached to the brand’s attributes, and relate to what the consumer thinks the brand’s product or services can do for them. These benefits can be utilitarian, experiential, or symbolic (Keller 1993; Park et al. 1986). Utilitarian benefits relate to the physical use of a brand’s product or services, stemming from a functional need or desire. Experiential benefits relate to the sensory and feelings associated with consumption of a brand. Symbolic benefits, like symbolic attributes, are associated with meanings and intangible advantages of consuming a brand such as popularity and group inclusion. Brand attitudes correspond to a positive or negative overall evaluation of a brand. Attitudes are generally long lasting, but possibly influenced by new experiences with the brand (Ghorban, 2012; Solomon, 2009; Perez et al. 2009; Park et al., 2010). Additionally, brand image can also refer to a brand’s uniqueness in comparison to other brands (Lee H. et al., 2011). A favorable brand image in the mind of
consumers allows a brand’s messages to have a stronger influence, and has been found to have a significant effect on customer satisfaction (Hosseini and Behboudi, 1988). Therefore the factor of brand image should be an important determinant of consumer brand buying behavior (Hsieh and Li, 2008; Burmann et al., 2008).

Based on the CBBE model and the above literature review, the following hypotheses were proposed:

**H1.** Brand experience would have a positive influence on adolescent consumers’ brand loyalty towards sportswear brands.

**H2.** Brand quality perception would have a positive influence on adolescent consumers’ brand loyalty towards sportswear brands.

**H3.** Brand image would have a positive influence on adolescent consumers’ brand loyalty towards sportswear brands.

### 2.4.4. Personality Traits

Justified by literature examining the effects of personality on consumers (Keng and Liao, 2013; Swaminathan et al., 2009; Kim and Drolet, 2009) and the unique stage of self-identity development for adolescents, personality variables social anxiety and public self-consciousness were investigated in this study regarding their influence on adolescents’ brand behaviors.

#### 2.4.4.1. Social Anxiety

An investigation of social anxiety is relevant to this study, as brain changes in adolescence are believed to increase teen vulnerability to anxiety (Child Mind Institute, 2017). In literature, the presence of social anxiety is assumed to be due to the interpretation of social
events as potentially harmful, thereby inducing avoidance or safety behaviors in the individual (Giannini and Loscalzo, 2016). As high-socially anxious adolescents are more susceptible to peer influence (Blote, Miers, and Westenberg, 2016), anxiety may influence consumer purchase decisions as a safety behavior against being socially rejected by peers (Huang, Wang and Shi, 2012). While a sense of public awareness itself isn’t enough to create anxiety, it seems to derive to some degree from the focus placed upon the public-self influenced by a high level of self-consciousness (Scheier and Carver, 1985). Schlendker and Leary (1982) define anxiety as a cognitive response of apprehension about an impending potentially negative outcome which one thinks is unavoidable. Social anxiety is thereby the presence of anxiety resulting from personal evaluation in either real or imagined social situations (Schlendker and Leary, 1982).

The presence of anxiety fluctuates over time and situations, but the degree of experience varies from one individual to the next based upon biological, personal, and social factors. Adolescence is associated with an increase in social anxiety due to body changes, new social experiences with peers of the opposite gender, and the transition into a high school setting (Giannini and Loscalzo, 2016). Relationship development and acceptance by peers becomes increasingly important during adolescence, as adolescents seek to individuate from their parents while seeking a social identity and a sense of self-worth (Stapinski et al., 2015). This desire to fit in and be accepted by peers elevates the symptoms of anxiety, as the effects of rejection would be particularly damaging to adolescents.

Attachment theory describes anxiety as the extent that a person’s view of the self is positive or negative (Huang, Wang and Shi 2012). People with a high level of anxiety are characterized by negative self-evaluations and a fear of peer rejection, creating doubts of peer acceptance in their own minds (Brennan et al., 1998). As a result, attachment theory argues that
the shopping behaviors of individuals high in anxiety are more likely to be influenced by the opinions of their peers than are individuals of low anxiety. In fact, adolescents with higher levels of anxiety have been found to spend more money when shopping with friends out of the belief that their friends are more knowledgeable about brands (Huang, Wang and Shi 2012). Social anxiety therefore has the potential to impact adolescent relationships both with the self and with peers and as a result, greatly impact the relationships developed between adolescent shoppers and brands in terms of shopping behaviors.

Hazan and Shaver (1994) suggest that the presence of anxiety in a relationship reflects inconsistencies in responsiveness and may lead to a fear of disappointment. Extending into the domain of consumer-brand relationships, the presence of anxiety has the potential to inhibit a consumers ‘behavioral responsiveness to a brand. According to Shaver and Mikulincer (2005), individuals with a higher level of anxiety become hypersensitive to signs of disappointment and relationship insufficiencies. From the consumerist perspective, this suggests that anxiety has the potential to impact consumer perceptions when considering relationship development with a brand. Research has further suggests that anxiety plays a role in the development of brand loyalty as well, with highly anxious individuals tending to exhibit a lower sense of brand loyalty (Japutra et al., 2018).

*Based upon the above literature review, the following hypotheses are proposed:*

**H4 (a).** There will be significant difference in brand experience between adolescent consumers having low, medium, and high social anxiety.

**H4 (b).** There will be significant difference in brand quality perception between adolescent consumers having low, medium, and high social anxiety.
**H4 (c).** There will be significant difference in brand image perception between adolescent consumers having low, medium, and high social anxiety.

**H5.** There will be significant difference in brand loyalty between adolescent consumers having low, medium, and high social anxiety.

**H6.** Social anxiety will moderate the influence of brand experience, brand quality, and brand image perceptions on adolescent consumers’ brand loyalty towards sportswear brands.

### 2.4.4.2. Public Self-Consciousness

Self-consciousness is a trait that describes the tendency of people to direct personal attention to the inward or outward self, measured as private and public self-consciousness. Mead (1934) suggests that self-consciousness comes about as an individual becomes aware of the perspective of other’s, creating a sense of the self as a social object in the process. Public self-consciousness will be a primary focus of this study. The concept of public self-consciousness refers to self-aspects that are the matters of public display, and the tendencies of the self to think about those aspects in how they form impressions in the minds of other people (Scheier and Carver, 1985). Studies have found the degree of public self-consciousness to be relevant to responses towards peer group behaviors. One study found that women who were measured high in public self-consciousness were more sensitive to peer group rejection, proving to be less willing to affiliate with groups in comparison to women with low public self-consciousness (Fenigstein et al., 1975). Along the same lines, individuals high in public self-consciousness were more likely to accept personal responsibility for peer group rejection than were individuals with lower degrees of public self-consciousness (Fenigstein, 1974). These findings may imply that individuals with a high degree of public self-consciousness are also more likely to behave in manners so as to avoid peer group rejection. Although public self-consciousness has been found to vary effects on
behavioral phenomena, it has been found to affect processing of self-relevant information and resistance to persuasion (Sheier and Carver, 1985). Fenigstein (1975) suggests a probable link between the degree of public self-consciousness and the prevalence of social anxiety. People likely first become aware of themselves as a social object, then evaluating the self and becoming apprehensive of other’s perceptions (Fenigstein, 1975; Scheier and Carver, 1985). As a result it is suggested that individuals high in public self-consciousness prefer branded purchases, especially in the presence of an audience (Bushman, 1993). This suggests that public self-consciousness has the potential to play a role in the behaviors of adolescent consumers due to the uniqueness of their social circumstances. The transition into the greater social arena of high school provides the capacity for adolescents’ of high public-self consciousness to cater their brand purchases to the social image they aspire to be associated with.

Research findings indicate that public-self consciousness drives not only the preference for brand purchases, but that the level of public-self consciousness impacts consumer perceptions of a brand (Bushman, 1993). Bushman (1993) revealed a positive relationship between level of public self-consciousness and ratings toward nationally recognized branded products, and a negative relationship between level of public self-consciousness and ratings of “bargain” branded products. These findings suggest that public self-consciousness affects perceptions of branded products, and that individuals of higher public self-consciousness seem to prefer brands that align with a certain “image”. Consequently, individuals of high public self-consciousness may seek to present a favorable image of the self to the public, therefore impacting relationship development with brands.

*Based on the above literature review, the following hypotheses are proposed:*
**H7 (a).** There will be significant difference in brand experience between adolescent consumers having low, medium, and high public self-consciousness.

**H7 (b).** There will be significant difference in brand quality perception between adolescent consumers having low, medium, and high public self-consciousness.

**H7 (c).** There will be significant difference in brand image perception between adolescent consumers having low, medium, and high public self-consciousness.

**H8.** There will be significant difference in brand loyalty between consumers having low, medium, and high public self-consciousness.

**H9.** Public self-consciousness will moderate the influence of brand experience, brand quality, and brand image perceptions on adolescent consumers’ brand loyalty towards sportswear brands.

Based upon the Customer-Based Brand Equity model and the above literature review, a conceptual framework (Figure 2) was developed with the inclusion of consumer personality. Figure 2 was developed to model the proposed influence of the brand perception variables towards adolescent consumers’ brand loyalty and the proposed influence of social anxiety and public self-consciousness as both a direct influence and a moderating influence. It is proposed that adolescent consumers’ perception of brand experience, brand quality, and brand image will have a direct influence on the brand loyalty variable of consumer behavior. Furthermore, it is proposed that the differing levels of social anxiety and public self-consciousness (low vs. medium vs. high levels) among adolescent consumers will have a direct influence on both brand perception as well as consumer behavior variables, while serving as a moderating factor for the relationship between brand perception and brand loyalty.
Figure 2 Proposed influence of personality on consumer-brand relationship
Chapter 3: Research Methodology

3.1. Data Collection

Data for this study were collected through paper surveys (Appendix A) completed by adolescents’ aged 14-18. The Institutional Review Board approval (Appendix B) was obtained through North Carolina State University prior to the survey distribution. Due to survey respondents being underage minors, a consent form was required to be signed by both the participant and the participant’s parent/legal guardian (Appendix C). Surveys were conducted at two high schools and one church in North Carolina in February 2019. The particular places were chosen due to the regular attendance of adolescents as well as the fact that the necessary consent of parents was most easily obtained at these locations. Each agreed-to-participate subject spent 10-15 minutes to complete the survey and returned it to the interviewer. The goal was to have 200 survey responses, but only 156 surveys were collected due to difficulty of obtaining parental consent. Of the 156 total surveys collected, 148 surveys were valid and thus used in data analysis. Majority of the respondents were high school students (85.1%), with the remaining respondents (14.9%) being in either 8th grade or the freshman year of college. Over half of the total respondents were in the first year of high school (60.1%). Over half of the total respondents were female (56.1%).

3.2. Survey Instruments

3.2.1. Demographics

There are three sections in the questionnaire. The first section of the questionnaire included demographic information such as age, gender, grade, and ethnicity. In addition, participants were asked to list people they felt were most important and most influential to them, which is important considering that adolescent development is directly influenced by family and
peer groups (Rudan, 2000). Furthermore, subjects were asked to describe the role played by
parents in shopping decisions helping identify the extent of family communication on learned
purchase behavior (Niu, 2017).

3.2.2. General Sportswear Consumption Behaviors

The second section of the questionnaire measured general sportswear consumption
behaviors, asking participants to list their favorite sportswear brands, brand closet share,
purchase frequency, spending habits, and preferred method of purchase. In this section, subjects
were asked to identify their most favorite brand (Brand X). For the last section, participants were
asked to refer back to Brand X when responding to the items. Section three included measures of
brand perceptions, brand behaviors, and personality.

3.2.3. Brand Perceptions

Variable measures in section three are adapted from Forsido and Hohenthal (2012) and
pertain to the sportswear brand mentioned in section two, with questions slightly modified to
better fit the sportswear context of this study. The first three variables of the questionnaire
measured brand perceptions. The first variable, perceived brand quality was measured utilizing
five dimensional measurements (Forsido and Hohenthal, 2012) aimed at capturing the subjective
evaluations of the consumer relating to product excellence of the favored brand. A sample of a
survey item measuring perceived brand quality was, “Brand X offers products with very durable
products.” The second variable measure in the section measured brand image, based upon the
perceptions and symbolic attributes (Forsido and Hohenthal, 2012) of wearing the favored
sportswear brand. A sample of a survey item measuring brand image was, “I think Brand X is
fashionable and cool.” The third variable measured in the questionnaire was brand experience,
pertaining to feelings, motivations, and sentiments evoked from using products purchased from
Brand X. A sample of a survey item measuring brand experience was, “When I purchase Brand X, I feel I am part of a community.”

3.2.4. Brand Behaviors

The next three variables in the questionnaire measured brand behaviors. The fourth variable measure was the brand involvement of participants through evaluation of brand choice across five facets of involvement (Pascale and Al Lin Lim, 2003) including interest, hedonic, and sign-value. A sample of a survey item measuring brand involvement was, “Wearing Brand X says a lot about who I am.” The fifth variable measured in the questionnaire was brand satisfaction in terms of the brand’s ability to meet performance and style expectations while providing a satisfactory experience. A sample of a survey item measuring brand satisfaction was, “Overall, Brand X meets my needs and I am satisfied.” The sixth variable measured brand loyalty of the participant in relation to the Brand X mentioned in section two, referring to the attitudinal and future purchasing tendencies (Dick & Bastu, 1994) towards the favored sportswear brand. A sample of a survey item measuring brand loyalty was, “I will buy Brand X in the future even if competitive brands offer cheaper prices.”

3.2.5. Personality Measures

The final two variables of the questionnaire measured personality, and were adapted from the Self-Consciousness Scale revised by Scheier and Carver (1985). The seventh variable of the questionnaire incorporated the measure of social anxiety, deriving in some part from the pre-existing level of public self-consciousness (Scheier and Carver, 1985). A sample of a survey item measuring social anxiety was, “I get embarrassed very easily.” The sixth variable of the questionnaire measured public self-consciousness. A sample of a survey item measuring public self-consciousness was, “I care a lot about how I present myself to others.” The study chose to
omit the private self-consciousness subscale of the Sheier and Carver’s Self-Consciousness Scale due to the irrelevance of the measurement in terms of the research focus of adolescents in a social context. All items in section 3 were measured on a 7-point Likert scale, with 1 being strongly disagree and 7 being strongly agree. Please see Appendix A for the full survey.

3.3. Data Analysis

This research primarily examined the influence of a combination of variables including brand experience, brand quality, and brand image on adolescent consumers’ brand loyalty behavior towards sportswear brands, and how social anxiety levels moderated the influences. The data analysis included three stages: data screening, descriptive analyses, and hypothesis testing. In the data screening stage, 156 total surveys were collected and processed for validity. A total of 8 surveys were removed because respondents either submitted incomplete surveys, or selected the same answer for every question. Then, the data were transferred to JMP (from SAS Institute) for data analyses. Research questions one through three guided the data analyses of this study. Research question one focused upon the consumption behaviors of adolescents towards sportswear. Research question two sought to examine how brand perceptions influence consumer brand behaviors towards sportswear. Research question three asked how personality would influence consumer behaviors towards sportswear brands. Descriptive analyses methods were utilized to investigate research question one. Statistical methods were utilized to investigate research questions one and two.

In the next stage, descriptive analyses were conducted to compile the sample profile and gain an understanding of respondent’s social and parental influences, general shopping behavior, and general brand behaviors. Reliability analysis was conducted to measure the consistency of
the following variables: brand quality, brand image, brand experience, brand involvement, brand satisfaction, brand loyalty, and social anxiety.

In the last stage, to test hypotheses 1-3, regression was utilized to investigate the influence of the antecedent factors of brand experience (H1), brand quality (H2) and brand image (H3) towards sportswear brand loyalty. A p-value of 0.05 was used to determine the significance of influence.

For hypotheses 4, 5 and 6, respondents were divided into three groups based upon their measured level of social anxiety (low anxiety vs. medium anxiety vs. high anxiety). For hypotheses 7, 8 and 9, respondents were divided into three groups based upon their measured level of public self-consciousness (low self-consciousness vs. medium self-consciousness vs. high self-consciousness). To test hypotheses 4-5, ANOVA tests were conducted to determine if there was significant difference of brand perceptions and brand loyalty between young consumers in the low, medium and high social anxiety groups. To test hypotheses 7-8, ANOVA tests were conducted to determine if there was significant difference of brand perceptions and brand loyalty between young consumers in the low, medium and high public self-consciousness groups. To test hypothesis 6 (moderating effect of social anxiety on H1-H3), multiple regression analyses were conducted among three groups of respondents divided upon their measured level of social anxiety (low anxiety vs. medium anxiety vs. high anxiety). To test hypothesis 9 (moderating effect of public self-consciousness on H1-H3), multiple regression analyses were conducted among three groups of respondents divided upon their measured level of public self-consciousness (low self-consciousness vs. medium self-consciousness vs. high self-consciousness).
Chapter 4: Results

4.1. Data Screening

A total of 156 surveys were collected. Out of the 156 surveys collected, 8 questionnaires were removed from the data pool. The following two criteria were used to delete questionnaires: (1) questions for the key constructs were not answered (3 questionnaires were deleted); and (2) selected the same choices for every question (5 questionnaires were deleted). After this data screening process, 94.8% of total collected questionnaires (148) were retained for further data analyses.

4.2. Sample Descriptive Analysis

4.2.1. Reliability Analysis

Reliability analysis was conducted for all multi-item measurements to test consistencies among the items for each variable. Results (Table 1) indicated good internal consistencies for six items. The values of the Cronbach Alpha for the variables were all over .7, with the exception of brand experience, which scored a .698.

Table 1. Multi-item scales reliability statistics

<table>
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<th>Multi-item Scales</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
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<tbody>
<tr>
<td>Brand Quality</td>
<td>0.737</td>
<td>5</td>
</tr>
<tr>
<td>Brand Image</td>
<td>0.729</td>
<td>5</td>
</tr>
<tr>
<td>Brand Experience</td>
<td>0.698</td>
<td>5</td>
</tr>
<tr>
<td>Brand Involvement</td>
<td>0.731</td>
<td>4</td>
</tr>
<tr>
<td>Brand Satisfaction</td>
<td>0.733</td>
<td>5</td>
</tr>
<tr>
<td>Brand Loyalty</td>
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<td>6</td>
</tr>
<tr>
<td>Social Anxiety</td>
<td>0.850</td>
<td>6</td>
</tr>
<tr>
<td>Public Self-Consciousness</td>
<td>0.824</td>
<td>7</td>
</tr>
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</table>
4.2.2. Sample Profile

Frequency analyses were conducted to compile the sample profile. The demographic characteristics of the sample were summarized in table 2. Among the final sample (N=148), majority of the respondents were high school students (85.1%) with over half being in the ninth grade in high school (60.1%). Over half of the respondents were female (56.1%). As required by the study, all of the respondents (100%) were between the ages 14 and 18, with majority of the respondents (67.3%) being between 14 and 15 years old.

Table 2. The demographic characteristics of the sample

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<td>11</td>
<td>7.4</td>
</tr>
<tr>
<td>11</td>
<td>19</td>
<td>12.8</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>14.9</td>
</tr>
</tbody>
</table>

4.2.3. Social Influences and Parental Input

Descriptive and statistical analyses were used to validate the measurements. Descriptive analysis measured the adolescent respondents’ perceived most important and most influential people in life, and revealed a majority (80.3%) of the people listed as most important in the respondents’ lives were family members, with 19.2% of the people listed as friends and less than
1 percent as celebrities. However, only half (50.2%) of the people listed as most influential in the respondents’ lives were family members, with 14.2% listed as friends and 35.6% as celebrities. The difference between those listed as most important and those listed as most influential lies in the nature of relationships (Jesuit Social Services, 2009). Although importance and influential may apply to the same person, importance implies a supportive relationship, while influential implies the provision of some level of intimacy towards individual thought and behaviors (Jesuit Social Services, 2009). Almost half (46.3%) of respondents reported a high level of parental control over shopping decisions. Similarly, 39% of respondents indicated a high level of parental input post-purchases. An overview of the sample influences and parental input is presented in table 3.

**Table 3. Influences and parental input of the sample**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List at most 5 people you view as most important you to:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>505</td>
<td>80.3</td>
</tr>
<tr>
<td>Friends</td>
<td>121</td>
<td>19.2</td>
</tr>
<tr>
<td>Celebrities</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>List at most 5 people who influence you:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>286</td>
<td>50.2</td>
</tr>
<tr>
<td>Friends</td>
<td>81</td>
<td>14.2</td>
</tr>
<tr>
<td>Celebrities</td>
<td>203</td>
<td>35.6</td>
</tr>
<tr>
<td><strong>Which of these best describes the control that your parents/guardians have over your shopping decisions?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No control</td>
<td>23</td>
<td>15.6</td>
</tr>
<tr>
<td>Low control</td>
<td>39</td>
<td>26.5</td>
</tr>
<tr>
<td>Med. control</td>
<td>17</td>
<td>11.6</td>
</tr>
<tr>
<td>High control</td>
<td>68</td>
<td>46.3</td>
</tr>
<tr>
<td><strong>Which of these best describes the attitudes of your parents/guardians regarding your purchase decisions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They don’t comment</td>
<td>44</td>
<td>30.1</td>
</tr>
<tr>
<td>They only complain</td>
<td>25</td>
<td>17.1</td>
</tr>
<tr>
<td>They only support</td>
<td>20</td>
<td>13.7</td>
</tr>
<tr>
<td>Sometimes support, sometimes complain</td>
<td>57</td>
<td>39.0</td>
</tr>
</tbody>
</table>
4.2.4. General Sportwear Consumption Behaviors

The results of the descriptive analysis revealed that out of the 148 respondents, 58% identified Nike as the most favorite sportswear brand. The remaining responses indicated other sportswear brands as the most favored, including Adidas, Champion, Jordan, and a few others. This self-identified favorite brand was referred to throughout the survey as Brand X. Although purchase frequency varied amongst respondents, 43% of respondents reported purchasing sportswear at least every month. Majority of the respondents (66.2%) reported spending over $50 towards the purchase of sportswear on a shopping trip, with just over 30% indicating at least $100 spent towards sportswear on shopping trips. Majority (68.7%) of the respondents indicated either department stores or specialty stores as the preferred shopping outlet for sportswear purchases. A small portion (25.9%) of the respondents reported a high closet share dedicated to Brand X, indicating low brand loyalty in terms of purchase tendency. These findings support the research of Singh and Pattanayak (2014), which found that young consumers tend to be big spenders on sportswear. Additionally, the sample’s general low level of closet share dedicated to a particular brand corresponds with the notions of Singh and Pattanayak (2014) who suggest that due to the phasing out of old wardrobes and the constant information supply from different brands, brand loyalty in young consumers is difficult to accomplish. General shopping behavior of the sample is presented in Table 4.
Table 4. General Shopping Behavior of the sample

<table>
<thead>
<tr>
<th>How often do you purchase sportswear?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost Daily</td>
<td>4</td>
<td>2.7</td>
</tr>
<tr>
<td>Once Per Week</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td>Every Couple of Weeks</td>
<td>33</td>
<td>22.3</td>
</tr>
<tr>
<td>Every Month</td>
<td>20</td>
<td>13.5</td>
</tr>
<tr>
<td>Every Few Months</td>
<td>44</td>
<td>29.7</td>
</tr>
<tr>
<td>1-2 Times Per Year</td>
<td>32</td>
<td>21.6</td>
</tr>
<tr>
<td>Never</td>
<td>8</td>
<td>5.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How much money do you spend on sportswear on a shopping trip?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20</td>
<td>16</td>
<td>10.8</td>
</tr>
<tr>
<td>Between $20 and $50</td>
<td>34</td>
<td>22.9</td>
</tr>
<tr>
<td>Between $50 and $100</td>
<td>53</td>
<td>35.8</td>
</tr>
<tr>
<td>Between $100 and $200</td>
<td>36</td>
<td>24.3</td>
</tr>
<tr>
<td>Greater than $200</td>
<td>9</td>
<td>6.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is your preferred shopping outlet for sportswear purchases?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Stores</td>
<td>78</td>
<td>53.1</td>
</tr>
<tr>
<td>Specialty Stores</td>
<td>23</td>
<td>15.6</td>
</tr>
<tr>
<td>Thrift Stores</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Brand’s Website Online</td>
<td>31</td>
<td>20.9</td>
</tr>
<tr>
<td>Amazon/Other Website Marketplace</td>
<td>9</td>
<td>6.1</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name your favorite sportswear brand:</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nike</td>
<td>86</td>
<td>58.1</td>
</tr>
<tr>
<td>Under Armour</td>
<td>6</td>
<td>4.1</td>
</tr>
<tr>
<td>Adidas</td>
<td>27</td>
<td>18.2</td>
</tr>
<tr>
<td>Jordan</td>
<td>13</td>
<td>8.8</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>10.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What percentage of the sportswear that you own is from Brand X (the favorite brand indicated)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20%</td>
<td>24</td>
<td>16.3</td>
</tr>
<tr>
<td>20% to 40%</td>
<td>42</td>
<td>28.6</td>
</tr>
<tr>
<td>40% to 60%</td>
<td>43</td>
<td>29.3</td>
</tr>
<tr>
<td>60% to 80%</td>
<td>30</td>
<td>20.4</td>
</tr>
<tr>
<td>Greater than 80%</td>
<td>8</td>
<td>5.4</td>
</tr>
</tbody>
</table>

4.2.5. Brand Behaviors

Descriptive analysis results (Table 5) suggested that in general, adolescent consumers had positive brand behaviors towards sportswear brands. Using a 7-point Likert scale, the results included brand involvement (M=4.85, SD=1.59), brand satisfaction (M=6.11, SD=1.27) and brand loyalty (M=5.10, SD=2.00). Interestingly, the mean response of the sample was relatively
lower for brand loyalty and brand involvement than for brand satisfaction. These results indicate low brand loyalty towards sportswear brands for the sample.

Table 5. Descriptive statistic of brand behavior

<table>
<thead>
<tr>
<th>Brand Behavior</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Involvement</td>
<td>4.85</td>
<td>1.59</td>
</tr>
<tr>
<td>Brand Satisfaction</td>
<td>6.11</td>
<td>1.27</td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>5.10</td>
<td>2.00</td>
</tr>
</tbody>
</table>

4.3. Regression Analysis Testing of H1 through H3

Regression was conducted to investigate the influence of the brand perception antecedent factors of brand experience (H1), brand quality (H2) and brand image (H3) towards sportswear brand loyalty. In this study, a p-value of .05 served as the cutoff value for statistical significance. Regression analyses of the combination of factors were suggested to be statistically significant ($R^2 = .44$, $F = 37.2$, $p < .0001$). However, not all factors exerted significant influences. The influences of brand experience (H1) and brand image (H3) towards brand loyalty were statistically significant. The influence of perceived brand quality (H2) upon brand loyalty was not statistically significant. Brand experience (H1) and brand image (H3) both indicated positive influences towards brand loyalty as suggested by the positive coefficient associated with each. Therefore, H1 and H3 were supported. H2 was not supported. Results of H1 through H3 can be found in tables 6 and 7.

Table 6. Analysis of Variance H1-H3

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3</td>
<td>80.438</td>
<td>26.812</td>
<td>37.197</td>
</tr>
<tr>
<td>Error</td>
<td>144</td>
<td>103.800</td>
<td>0.721</td>
<td>Prob &gt; F</td>
</tr>
<tr>
<td>C. Total</td>
<td>147</td>
<td>184.238</td>
<td>&lt;0.0001</td>
<td></td>
</tr>
</tbody>
</table>
Table 7. Parameter Estimates H1-H3

| Parameter          | Regression Coefficient | Std. Error | Prob |t| |
|--------------------|------------------------|------------|------|---|
| Intercept          | 0.827                  | 0.539      | 0.123|   |
| Brand Experience   | 0.452                  | 0.069      | <0.0001| |
| Brand Image        | 0.343                  | 0.091      | 0.0002| |
| Brand Quality      | -0.029                 | 0.106      | 0.778|   |

4.4. Social Anxiety testing of H4 through H6

4.4.1. ANOVA test on Social Anxiety (H4-H5)

ANOVA testing was used to determine whether there were significant differences between the adolescent consumers in the low, medium, and high SA group in terms of brand experience (H4a), perceived brand quality (H4b), brand image (H4c), brand loyalty (H5). The distribution of mean sample scores of social anxiety was used to divide the respondents into three groups (low anxiety vs. medium anxiety vs. high anxiety). Respondents with a social anxiety score lower than 4.33 were placed into the low anxiety group, respondents with a social anxiety score between 4.33 and 5.33 were placed into the medium anxiety group, and respondents with a social anxiety score higher than 5.33 were placed into the high anxiety. 47 respondents scored in the low SA group, 52 respondents scored in the medium SA group, and 49 respondents scored in the high SA group. The test results (tables 8 and 9) indicate that there was no significant difference in SA level and brand experience, perceived brand quality, brand image, or brand loyalty. Therefore, H4a, H4b, H4c, and H5 were not supported.
### Table 8. Analysis of Variance H4-H5

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Experience</td>
<td>2</td>
<td>3.149</td>
<td>1.575</td>
<td>1.14</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>200.164</td>
<td>1.380</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>147</td>
<td>203.313</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Quality</td>
<td>2</td>
<td>0.481</td>
<td>0.240</td>
<td>0.33</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>105.416</td>
<td>0.727</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>147</td>
<td>105.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>2</td>
<td>2.133</td>
<td>1.066</td>
<td>1.073</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>144.127</td>
<td>0.994</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>147</td>
<td>146.260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>2</td>
<td>1.408</td>
<td>0.704</td>
<td>0.56</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>182.829</td>
<td>1.261</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>147</td>
<td>184.238</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 9. ANOVA Mean Results H4-H5

| Social Anxiety | N  | Mean  | Std. Error | Prob > |t| |
|----------------|----|-------|------------|--------|---|
| Brand Experience  |
| low            | 47 | 5.22  | 0.17       | 0.32   |
| medium         | 52 | 5.03  | 0.16       | 0.32   |
| high           | 49 | 5.38  | 0.17       | 0.32   |
| Brand Quality  |
| low            | 47 | 6.14  | 0.12       | 0.72   |
| medium         | 52 | 6.12  | 0.12       | 0.72   |
| high           | 49 | 6.25  | 0.12       | 0.72   |
| Brand Image    |
| low            | 47 | 6.30  | 0.15       | 0.34   |
| medium         | 52 | 6.13  | 0.14       | 0.34   |
| high           | 49 | 6.00  | 0.14       | 0.34   |
| Brand Loyalty  |
| low            | 47 | 4.98  | 0.16       | 0.57   |
| medium         | 52 | 5.10  | 0.15       | 0.57   |
| high           | 49 | 5.22  | 0.16       | 0.57   |
4.4.2. Social Anxiety as a Moderator (H6)

To test the moderating effect of social anxiety (SA) on the relationships proposed in H1-H3, the data was divided into three groups. As described previously, the distribution of mean sample scores of social anxiety was used to divide the respondents into three groups (low anxiety vs. medium anxiety vs. high anxiety). A regression analysis was conducted on each of the three groups. The results are presented in tables 10 and 11. The regression analyses for the low SA group ($R^2 = .66, F = 28.44, p < .0001$), the medium SA group ($R^2 = .39, F = 10.19, p < .0001$) and the high SA group ($R^2 = .43, F = 11.34, p < .0001$) suggests brand experience to be statistically significant factors for adolescent consumers’ brand loyalty towards sportswear brands regardless of anxiety level. For respondents with low anxiety and high anxiety, brand image was also suggested to be a statistically significant factor for adolescent consumers’ brand loyalty towards sportswear brands. For the high SA group, brand experience was more important than brand image in terms of impact on brand loyalty. However, for the low SA group, brand experience and brand image were equally important. Perceived brand quality was not found to be a statistically significant factor for any of the three groups. Due to the differences in significant factors for brand loyalty impact across the three groups, SA was found to have a moderating effect on adolescent consumers’ brand loyalty towards sportswear brands. Therefore, H6 was supported.

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>R Square Adj</th>
<th>Mean</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Anxiety (Low)</td>
<td>0.66</td>
<td>0.64</td>
<td>4.98</td>
<td>28.45</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Social Anxiety (Medium)</td>
<td>0.39</td>
<td>0.35</td>
<td>5.10</td>
<td>10.19</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Social Anxiety (High)</td>
<td>0.43</td>
<td>0.39</td>
<td>5.22</td>
<td>11.34</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>
Table 11. Regression Anxiety Low vs. Medium vs. High

<table>
<thead>
<tr>
<th>Social Anxiety</th>
<th>N</th>
<th>Regression Coefficient</th>
<th>Std. Error</th>
<th>Prob</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Experience</td>
<td>low</td>
<td>47</td>
<td>0.57</td>
<td>0.10</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>medium</td>
<td>52</td>
<td>0.39</td>
<td>0.14</td>
<td>0.0088</td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>49</td>
<td>0.44</td>
<td>0.12</td>
<td>0.0004</td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>low</td>
<td>47</td>
<td>0.90</td>
<td>0.19</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>medium</td>
<td>52</td>
<td>0.08</td>
<td>0.19</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>49</td>
<td>0.33</td>
<td>0.12</td>
<td>0.0091</td>
<td></td>
</tr>
<tr>
<td>Brand Quality</td>
<td>low</td>
<td>47</td>
<td>-0.09</td>
<td>0.21</td>
<td>0.67</td>
</tr>
<tr>
<td>medium</td>
<td>52</td>
<td>0.11</td>
<td>0.17</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>49</td>
<td>-0.25</td>
<td>0.21</td>
<td>0.22</td>
<td></td>
</tr>
</tbody>
</table>

4.5 Public Self-Consciousness testing of H7 through H9

4.5.1. ANOVA test on Public Self-Consciousness (H7-H8)

ANOVA testing was used to determine whether there were significant differences between the adolescent consumers in the low, medium, and high public self-consciousness (PSC) groups in terms of brand experience (H7a), perceived brand quality (H7b), brand image (H7c), brand loyalty (H8). The distribution of mean sample scores of public self-consciousness was used to divide the respondents into three groups (low PSC vs. medium PSC vs. high PSC).

Respondents with a public self-consciousness score lower than 4.71 were placed into the low self-consciousness group, respondents with a public self-consciousness score between 4.71 and 5.86 were placed into the medium self-consciousness group, and respondents with a public self-consciousness score higher than 5.86 were placed into the high self-consciousness group. 48 respondents scored in the low PSC group, 55 respondents scored in the medium SA group, and 45 respondents scored in the high SA group. The test results (tables 12 and 13) indicate that there was a significant difference in brand experience and brand loyalty between the low, medium, and high PSC groups. No significant difference was found between PSC level and perceived brand
quality or brand image. Therefore, H7a and H8 were supported. H7b and H7c were not supported.

Table 12. Analysis of Variance H7-H8

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Experience</td>
<td>2</td>
<td>10.423</td>
<td>5.211</td>
<td>3.92</td>
<td>0.0220</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>192.891</td>
<td>1.330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>147</td>
<td>203.313</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Quality</td>
<td>2</td>
<td>0.872</td>
<td>0.436</td>
<td>0.60</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>105.025</td>
<td>0.724</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>147</td>
<td>105.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>2</td>
<td>0.279</td>
<td>0.139</td>
<td>0.14</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>145.981</td>
<td>1.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>147</td>
<td>146.260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>2</td>
<td>10.878</td>
<td>5.439</td>
<td>4.55</td>
<td>0.0121</td>
</tr>
<tr>
<td></td>
<td>145</td>
<td>173.359</td>
<td>1.196</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>147</td>
<td>184.238</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13. ANOVA Mean Results H7-H8

| PSC        | N  | Mean | Std. Error | Prob > |t| |
|------------|----|------|------------|---------|---|
| Brand Experience low | 48 | 4.90 | 0.17       | 0.0220  |   |
| medium     | 55 | 5.19 | 0.16       | 0.0220  |   |
| high       | 45 | 5.56 | 0.17       | 0.0220  |   |
| Brand Quality low  | 48 | 6.09 | 0.12       | 0.55    |   |
| medium     | 55 | 6.15 | 0.11       | 0.55    |   |
| high       | 45 | 6.28 | 0.13       | 0.55    |   |
| Brand Loyalty low | 48 | 6.08 | 0.14       | 0.87    |   |
| medium     | 55 | 6.17 | 0.14       | 0.87    |   |
| high       | 45 | 6.17 | 0.15       | 0.87    |   |
| Brand Loyalty low | 48 | 4.74 | 0.16       | 0.0121  |   |
| medium     | 55 | 5.17 | 0.15       | 0.0121  |   |
| high       | 45 | 5.41 | 0.16       | 0.0121  |   |
4.5.2. Public Self-Consciousness as a Moderator (H9)

To test the moderating effect of public self-consciousness (PSC) on the relationships proposed in H1-H3, the data was divided into three groups. As described previously, the distribution of mean sample scores of public self-consciousness was used to divide the respondents into three groups (low PSC vs. medium PSC vs. high PSC). A regression analysis was conducted on each of the three groups. The results are presented in tables 14 and 15. The regression analyses for the low PSC group ($R^2 = .47, F = 13.23, p < .0001$), the medium PSC group ($R^2 = .37, F = 9.96, p < .0001$) and the high PSC group ($R^2 = .49, F = 13.15, p < .0001$) suggests brand experience to be statistically significant factors for adolescent consumers’ brand loyalty towards sportswear brands regardless of self-consciousness level. For respondents with low self-consciousness and high self-consciousness, brand image was also suggested to be a statistically significant factor for adolescent consumers’ brand loyalty towards sportswear brands. For the both the low PSC and high PSC group, brand experience was more important than brand image in terms of impact on brand loyalty. Perceived brand quality was not found to be a statistically significant factor for any of the three groups. Due to the differences in significant factors for brand loyalty impact between the low and high PSC groups and the medium PSC group, public self-consciousness was found to have a moderating effect on adolescent consumers’ brand loyalty towards sportswear brands. Therefore, H9 was supported.
Table 14. Regression Model Fit H9

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>R Square Adj</th>
<th>Mean</th>
<th>F</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Self-Conscious (Low)</td>
<td>0.47</td>
<td>0.44</td>
<td>4.74</td>
<td>13.23</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Public Self-Conscious (Medium)</td>
<td>0.37</td>
<td>0.33</td>
<td>5.17</td>
<td>9.96</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Public Self-Conscious (High)</td>
<td>0.49</td>
<td>0.45</td>
<td>5.41</td>
<td>13.15</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

Table 15. Regression Self-Consciousness Low vs. Medium vs. High

| PSC               | N  | Regression Coefficient | Std. Error | Prob |t| |
|-------------------|----|------------------------|------------|------|---|
| Brand low         | 48 | 0.39                   | 0.12       | 0.0022|
| Brand medium      | 55 | 0.53                   | 0.14       | 0.0003|
| Brand high        | 45 | 0.49                   | 0.13       | 0.0004|
| Experience medium | 55 | 0.03                   | 0.22       | 0.90 |
| Experience high   | 45 | 0.57                   | 0.17       | 0.0020|
| Brand low         | 48 | 0.24                   | 0.20       | 0.24 |
| Brand medium      | 55 | 0.06                   | 0.16       | 0.72 |
| Brand high        | 45 | -0.40                  | 0.21       | 0.06 |
Chapter 5: Discussion

The purpose of this study was to examine adolescent consumer behavior towards sportswear brands, and to examine the effects of consumer personality and brand perceptions on consumer behaviors by following the Customer-Based Brand Equity Model proposed by Keller (2001). The following research questions guided the current study: (1) What are the consumption behaviors of adolescent consumers’ towards sportswear brands?; (2) How did adolescents’ brand perception influence their behaviors toward sportswear brands?; (3) How would anxiety influence adolescents’ consumption behaviors towards sportswear brands?

5.1. RQ1: Consumption Behaviors of Adolescents toward Sportswear Brands

According to the results, a majority of adolescent consumers’ have a preference towards Nike, Adidas, and Jordan as a favorite sportswear brand. Yet, the measure of the brand loyalty scale towards a particular sportswear brand was only moderate across the sample. This was also reflected in the low purchase tendencies of the adolescent consumers, with only approximately a quarter of the sample indicating a high closet share dedicated to a brand. Although frequency of sportswear purchases varied amongst consumers, a majority of respondents indicated that they spend at least $50 on sportswear on shopping trips. This indicates that sportswear brands are indeed relevant to adolescents as a commodity. While adolescent consumers’ brand involvement measured only moderately across the sample, brand satisfaction was measured higher than both brand involvement and brand loyalty. This supports the suggestions of Ha and John (2010) that although satisfaction may be a key variable, focusing on satisfaction alone is insufficient for determining the development of brand loyalty. Furthermore, low closet share dedicated to specific brands in combination with the relatively low average of brand loyalty scale indicated
across the sample suggests that adolescents have a low level of brand loyalty towards sportswear brands. Although adolescents appear to be purchasing a relatively large amount of sportswear as indicated by the amount of money reportedly spent towards sportswear on shopping trips, they seem to be consuming a variety of brands rather than developing loyalty to just one.

Interestingly, although Under Armour was mentioned quite often as a brand liked by adolescents, they were rarely listed as the favorite brand. This supports findings of previous youth studies that show despite Under Armour having a top performing sportswear stock, Nike and Adidas are still the more popular brands (Hershman, 2018).

5.2. RQ2: Influence of Consumers’ Brand Perception on Adolescent Sportswear Loyalty

Among the brand perception factors, brand experience (H1) and brand image (H3) had a significant positive influence towards adolescent consumers’ brand loyalty behavior towards sportswear brands. The results of H1 support the empirical findings of Shim (2012) who suggested that the more positive the brand experience, the greater the brand loyalty. However, while the Shim’s research focused primarily upon general online purchases of apparel brands, the findings of the current study suggest that brand experience is generally a key factor no matter the apparel-shopping outlet. The results of H3 support the findings of Lu and Xu (2015) towards the important role brand image plays in young consumers’ brand loyalty behavior towards sportswear brands. However, instead of testing the mediating effect of brand image on young adults in the Chinese market, this research assumed the direct effect of brand image on brand loyalty among the younger adolescent population in the general market. The influence of brand image was expected due to the increased brand consciousness in adolescence, causing an increased desirability for status-brands as suggested by Mori (2011). Results did not find perceived brand quality to be significant in the development of adolescent brand loyalty towards
sportswear. These results are supported by empirical research findings that perceived quality does not have a positive influence on young consumer brand loyalty towards sportswear (Boon et. al, 2016).

5.3. RQ3: Influence of Personality on Adolescent Sportswear Consumption

When social anxiety was considered as a direct influencer of brand perceptions and brand loyalty, no significant differences were found between the low, medium, and high socially anxious groups. However when public self-consciousness was considered as a direct influencer of brand perceptions and brand loyalty, significant differences were found among the low, medium, and high self-conscious groups in terms of brand experience and brand loyalty with high self-conscious teens indicating the highest levels of brand experience perceptions and brand loyalty and low self-conscious teens indicating the lowest levels of brand experience perceptions and brand loyalty. These results support the study of Bushman (1993) who suggests that higher levels of public self-consciousness positively impacts perceptions of branded products, therefore increasing the likelihood of relationship development with a brand.

Both social anxiety and public self-consciousness were found to have nearly identical moderating effects on the relationship between brand perceptions and brand loyalty. Interestingly, brand experience was a significant factor for groups of low, medium, and high social anxiety as well as for groups of low, medium, and high public self-consciousness. Likewise, brand image was a significant factor for only the low and high groups of both social anxiety and public self-consciousness. Brand experience and brand image shared the same level of importance as a significant factor for social anxiety as a moderator among the low and high groups. However, brand experience was the more important factor for public self-consciousness as a moderator among the low and high groups. Neither social anxiety nor public self-
consciousness had any effect on perceived brand quality. This is somewhat surprising given that Mikulincer (2005) suggests individuals of higher anxiety will experience higher levels of sensitivities to potential brand insufficiencies. The lack of findings on anxiety effects on perceived quality may indicate that quality is not a valued perception of adolescent consumers towards sportswear brands.

The similarities of both social anxiety and public self-consciousness as moderators on adolescent sportswear consumption is not that surprising, given that literature suggests a probable link between the coexistence of the two (Fenigstein, 1975). Furthermore, their impact on adolescent consumption behaviors supports the work Solomon (1983) who indicates that both social anxiety and public self-consciousness makes teens more receptive to marketing and branding efforts.
Chapter 6: Conclusions and Implications

Recent popularity growth of the sportswear market among adolescent consumers makes this investigation into the process of teenage sportswear consumption timely and relevant. Traditionally utilized in an effort to explain consumer loyalty, brand-oriented constructs of perception including brand experience (Brakus et al. 2009; Baser et al. 2016), brand quality (Erdem and Swait, 1998; Vera, 2015), and brand image (Hsieh and Li, 2008; Burmann et al., 2008) are proposed in this research to exist alongside the oft-ignored consumer personality constructs of social anxiety to help explain consumer behaviors. This study empirically tested the influence of brand perception antecedents, of which it confirmed the positive influence of brand experience and brand image on adolescents’ brand loyalty towards sportswear brands. This study also tested the influence of personality upon adolescent consumption of sportswear brands, finding most importantly that both social anxiety and public self-consciousness have a moderating effect on the relationship between adolescent perceptions of a sportswear brand and brand loyalty. Based upon the results of this study, the following are implications for sportswear retail brands competing for the loyalty of adolescent consumers:

1. Adolescents are purchasing the experience. Research results revealed brand experience to be the most significant influencer on brand loyalty. Regardless of consumer social anxiety and public self-consciousness level, brand experience is the most important consumer perception towards developing a relationship with a brand. Despite the increasing trends of e-commerce, descriptive analysis of this study revealed that nearly 69 percent of adolescents still prefer to shop for sportswear in physical department or specialty retail stores. These statistics fall right in line with a study released by IBM and National Retail Federation (2017) that found 67 percent of Gen Z-ers generally still
prefer in-store shopping over online shopping. This represents a tremendous opportunity for marketing teams of sportswear brands to create a lasting experience for the consumer. Offering an in-store interactive environment for adolescents would not only catch their attention, but would also allow otherwise socially anxious consumers an opportunity to feel a part of a community. Nike, named as the favorite sportswear brand by most of the respondents, has done an excellent job at creating an inviting in-store shopping experience. The new flagship store that opened in 2018 in NYC offers a digitally innovative experience that allows consumers to not just shop for products, but to actually interact with the product itself (Beltran, 2018). In additional to physical store experiences, offering a digital membership program would also allow an opportunity for brand experience and community involvement.

2. **Evolving the image of the brand.** Alongside brand experience, this study found that brand image had a significant influence on sportswear brand loyalty of adolescent consumers. Examples of items asked to the respondents in the survey included “I think Brand X is well known and popular”, and “I think Brand X is fashionable and cool”. In today’s age of social media and mass marketing, popularity and style are subjective evaluations that rarely stay constant over time. Therefore, the presentation of brand image must evolve as the perceptions of ‘popularity’ and ‘coolness’ changes amongst adolescent consumers. In the descriptive analysis, 36.5 percent of responses indicated celebrities as most influential to adolescents. A large portion of the celebrities mentioned were actually YouTubers, which is definitely a fairly new cultural development within the last 5 to 10 years. This represents tremendous marketing potential for sportswear brands looking to build an image in the minds of adolescent consumers. It is highly suggested for brands to choose
timely and relevant avenues through which to enhance their brand image, and YouTube happens to be a popular and unique one that has yet to be taken full advantage of by any brand. Of course, there are other options out there other than YouTube, but the key is to create and maintain a culturally relevant brand image.

3. Adolescents are not generally brand loyal. Despite the relatively large amounts of money spent towards sportswear purchases, this study revealed both low closet shares towards a specific brand as well as low measures of brand loyalty across the sample. These findings reflect that although adolescent sportswear consumption is high, relationship development between adolescent consumers and sportswear brands do not yet culminate in brand loyalty. Despite the prevalence of social anxiety among teens (Giannini and Loscalzo, 2016), anxiety was not found to directly influence adolescent brand loyalty development. This may be explained due to the ongoing development of a self-identity experienced by the general population of adolescents, resulting in a tendency to attempt to identify with different brands rather than just one (Lindstrom and Seybold, 2003). Therefore, it is important for brands to recognize the adolescent search for identity and provide an outlet through a strong, welcoming brand community.

Limitations

Although the results of this study have provided some important implications, there are a few limitations to be mentioned. First, the convenience sample prevents a generalization for all adolescent consumers. Furthermore, the requirement of a signed parental consent form for the participants of the study not only limited the size of the sample, but possibly created vulnerability to sample bias and influences beyond the control of the researcher. Additionally, the model proposed in the study was based upon the Customer Brand-Based Equity, borrowing
items from other general consumer behavior studies not necessarily geared towards adolescents.

As a result, future research could focus on further developing the proposed model specifically for the pool of adolescent consumer research. Also, the apparent lack of direct influence by social anxiety brand perception and consumer behavior variables may simply be due to a lack of sufficient sample size. As a result, future investigation is suggested regarding the implications of social anxiety influence on the sportswear consumption of adolescent. Lastly, the untested brand involvement and brand satisfaction were not included in the proposed model as this research focuses on brand loyalty. Brand involvement and brand satisfaction should be examined in future studies.
REFERENCES


*Sportswear Industry Data and Company Profiles* Clean Clothes Campaign. 2004 Print.


Appendix A. Research Survey

Survey: Adolescent Consumption Behavior towards Sportswear Brands

As part of my thesis research at North Carolina State University, this survey is about consumption behaviors of adolescents towards sportswear brands. The survey is intended only for students between the ages of 14-18 years old, and will take approximately 10-15 minutes to complete. I greatly appreciate your participation in the survey. Please provide answers to each question in the survey.

For the purpose of this survey, the term sportswear refers to clothing or footwear products worn for sports, physical exercise, or casual athleisure wear.

Part 1

1. How old are you? Choose One
   a. 14   b. 15   c. 16   d. 17   e. 18

2. Which grade are you currently in? Choose One
   a. 9th   b. 10th   c. 11th   d. 12th   e. Other, please specify_________________

3. Please Indicate your gender
   a. Male   b. Female

4. Please indicate your Race-ethnicity
   a. White   b. Black or African-American   c. Asian or Asian American   d. Hispanic or Latino   e. Native American or Alaskan Native   f. Other

5. Please list people you view as important to you below. Include their approximate age, and their relation to you. Limit your list to no more than 5 people.

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________
6. Please give a list of people who influence you below. Include people you know personally as well as celebrities. Limit your list to no more than 5 people.

7. Which of these best describes the control that your parents/guardians have over your shopping decisions?
   a. I discuss product purchases with my parents/guardians, but I can buy whatever I want.
   b. I discuss product purchases with my parents/guardians, and they tell me whether I can purchase the product or not.
   c. I don’t discuss product purchases with my parents/guardians; they let me decide what I should buy for myself.
   d. I don’t discuss product purchases with my parents/guardians, but they prohibit me from buying certain things.

8. Which of these best describes the attitudes of your parents/guardians regarding your shopping decisions?
   a. My parents/guardians complain when I buy things they do not like, but are supportive when I buy things they do like.
   b. My parents/guardians complain when I buy things they do not like, but don’t comment otherwise.
   c. My parents/guardians only comment when I buy things they like.
   d. My parents/guardians do not usually comment on my purchase decisions.
Part 2

   a. Almost Daily
   b. At Least Once Per Week
   c. Every Couple of Weeks
   d. Every Month
   e. Every Few Months
   f. 1-2 Times Per Year
   g. Never

10. Approximately how much money do you spend on sportswear on a shopping trip? Choose One.
    a. Less than $20
    b. Between $20 and $50
    c. Between $50 and $100
    d. Between $100 and $200
    e. Greater than $200

11. What is your preferred shopping outlet for sportswear purchases? Choose One.
    a. Department Stores
    b. Specialty Stores
    c. Thrift Stores
    d. Brand’s Website Online
    e. Amazon/Other Website Marketplace
    f. Other. Please Describe ________________________________

12. Name up to 3 of your favorite sportswear brands:
    __________________, __________________, __________________

13. Please list name of your most favorite brand from the above list________. For questions in the following sections, **Brand X** refers to this brand.

14. Approximately what percentage of the sportswear that you own is from **Brand X**?
    a. Less than 20%
    b. 20% to 40%
    c. 40% to 60%
    d. 60% to 80%
    e. Greater than 80%

Just a reminder, in the following sections, **Brand X** refers to your favorite sportswear brand mentioned in Question 13 in Part 2.
**Part 3.** Please indicate the level to which you agree with each item by placing a check in the appropriate box, ranging from 1 (strongly disagree) to 7 (strongly agree).

<table>
<thead>
<tr>
<th>BQ.</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BQ.1.</strong> Brand X offers products with very good quality.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>BQ.2.</strong> Brand X offers products with consistent quality.</td>
<td></td>
<td></td>
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<tr>
<td><strong>BQ.3.</strong> Brand X offers very durable products.</td>
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<tr>
<td><strong>BQ.4.</strong> Brand X offers very reliable products.</td>
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</tr>
<tr>
<td><strong>BQ.5.</strong> Brand X offers products with excellent performance features.</td>
<td></td>
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</tbody>
</table>

**Part 4.**

<table>
<thead>
<tr>
<th>BI.</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BI.1.</strong> I think Brand X is well known and popular.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>BI.2.</strong> I think Brand X has a reputation for high quality.</td>
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</tr>
<tr>
<td><strong>BI.3.</strong> I think Brand X is fashionable and cool.</td>
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</tr>
<tr>
<td><strong>BI.4.</strong> I think Brand X is number one among sportswear brands.</td>
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</tr>
<tr>
<td><strong>BI.5.</strong> The company manufacturing Brand X is trustworthy.</td>
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</tr>
</tbody>
</table>
**Part 5.** Please indicate the level to which you agree with each item by placing a check in the appropriate box, ranging from 1 (strongly disagree) to 7 (strongly agree).

<table>
<thead>
<tr>
<th>B.E.</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BE.1.</strong> Wearing Brand X creates positive feelings and sentiments.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>BE.2.</strong> I find Brand X interesting beyond the products they offer.</td>
<td></td>
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</tr>
<tr>
<td><strong>BE.3.</strong> Wearing Brand X motivates me to have an active lifestyle.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>BE.4.</strong> I feel that the products of Brand X go with my way of life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>BE.5.</strong> When I purchase Brand X, I feel I am part of a community.</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 6.**

<table>
<thead>
<tr>
<th>Brand Involvement (In)</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In.1.</strong> Brand X is personally very important to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>In.2.</strong> Wearing Brand X says a lot about who I am.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>In.3.</strong> When I buy Brand X, I can never be quite sure if it was the right choice or not.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>In.4.</strong> Whenever I buy Brand X, it is like giving myself a present.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Part 7.

<table>
<thead>
<tr>
<th>B.S.</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
</table>
| BS.1. | My expectation regarding the performance of Brand X is high.
| BS.2. | I am satisfied with the experience that comes with wearing Brand X.
| BS.3. | Overall, Brand X meets my needs and I am satisfied.
| BS.4. | I am satisfied with the stylishness of Brand X.
| BS.5. | I am satisfied with the product comfort of Brand X.

Part 8. Please indicate the level to which you agree with each item by placing a check in the appropriate box, ranging from 1 (strongly disagree) to 7 (strongly agree).

<table>
<thead>
<tr>
<th>Brand Loyalty (BL)</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
</table>
| BL.1. | I will buy Brand X in the future even if competitive brands offer cheaper prices.
| BL.2. | I recommend Brand X to my friends and family.
| BL.3. | I consider myself loyal to Brand X.
| BL.4. | Brand X is my first choice among all sportswear brands.
| BL.5. | I have a favorable attitude towards Brand X.
| BL.6. | If a store does not carry Brand X, I am not interested in shopping there.
### Part 9.

<table>
<thead>
<tr>
<th>Anxiety (Ax)</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ax.1.</em> It takes me time to get over my shyness in new situations</td>
<td></td>
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<tr>
<td><em>Ax.2.</em> It's hard for me to work when someone is watching me.</td>
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<td><em>Ax.3.</em> I get embarrassed very easily.</td>
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<td><em>Ax.4.</em> It's easy for me to talk to strangers</td>
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<td><em>Ax.5.</em> I feel nervous when I speak in front of a large group.</td>
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<td><em>Ax.6.</em> Large groups make me nervous.</td>
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### Part 10.

<table>
<thead>
<tr>
<th>PSC</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Somewhat Disagree (3)</th>
<th>Undecided (4)</th>
<th>Somewhat Agree (5)</th>
<th>Agree (6)</th>
<th>Strongly Agree (7)</th>
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<tbody>
<tr>
<td><em>PSC.1.</em> I’m concerned about my style of doing things.</td>
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<td><em>PSC.2.</em> I care a lot about how I present myself to others.</td>
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<td><em>PSC.3.</em> I’m self-conscious about the way I look.</td>
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<td><em>PSC.4.</em> I usually worry about making a good impression</td>
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<td><em>PSC.5.</em> Before I leave my house, I check how I look.</td>
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<td><em>PSC.6.</em> I’m concerned about what other people think of me.</td>
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<td><em>PSC.7.</em> I’m usually aware of my appearance.</td>
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THANK YOU for completing the survey!
Appendix B. IRB Form for Approval of Surveying

Dear Alaric Bryant:
Date: January 14, 2019

IRB Protocol 15412 has been approved

Title: Adolescent Sportswear Consumption: Antecedents and Brand Loyalty
PI: Xu, Yingjiao

The project listed above has been reviewed by the NC State Institutional Review Board for the Use of Human Subjects in Research, and is approved for one year. This protocol will expire on 01/01/2100 and will need continuing review approval before that date.

1. This board complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU the Assurance Number is: FWA00003429.
2. If your study involves an informed consent form, you must use the approved consent forms (available in the IRB system with the documents for your protocol).
3. Your approval for this study lasts for one year from the review date in this letter and listed on the "Title" page of the eIRB. If your study extends beyond that time, including data analysis, you must obtain continuing review approval from the IRB.
4. Any changes to the protocol and supporting documents must be submitted and approved by the IRB prior to implementation.
5. If any unanticipated problems or adverse events occur, they must be reported to the IRB office within 5 business days by completing and submitting the unanticipated problem form on the IRB website: https://research.ncsu.edu/sparcs/compliance/irb/submission-guidance/.

If you have any questions, please don't hesitate to call us.

********************************************************************

Jennie Ofstein
NC State IRB Office
919.515.8754 (email is best)
Appendix C. Research Participant Consent Form

North Carolina State University
INFORMED CONSENT FORM for RESEARCH

Title of Study: Adolescent Consumption of Sportswear
Principal Investigator: Alaric Bryant
Faculty Sponsor: Dr. Yingjiao Xu

What are some general things you should know about research studies?
You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?
The purpose of this study is to investigate how and why adolescents develop brand loyalty towards sportswear brands.

Am I eligible to be a participant in this study?
In order to be a part of this study you must be a high school student between the ages 14 to 18 years old. You cannot participate in this study if you are younger than 14, or older than 18.

What will happen if you take part in the study?
If you agree to participate in this study, you will be asked to complete a survey on paper containing 54 items, broken up into 3 parts. The first part consists of 2 items, the second part consists of 25 items, and the third part consists of 29 items. Completing the entire survey will take between 10-15 minutes. The research will take place in a provided room at your local Boys and Girls Club.

Risks and Benefits
There are minimal risks associated with participation in this research. There are no direct benefits to your participation in the research. The indirect benefits are that the results achieved from this research will benefit the science community in terms of better understanding the impact that social and personal factors have upon adolescent behavior.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely on an NC State managed computer. No reference will be made in oral or written reports that could link you to the study.

Compensation
For participating in this study you will receive a free slice of pizza. If you withdraw from the study prior to its completion, you will still receive a free slice of pizza.

Emergency Medical Treatment
If you are hurt or injured during the study session(s), the researcher will contact the University’s emergency medical services at 515-3333 for necessary care. There is no provision for free medical care for you if you are injured as a result of this study.

**What if you are a high school student?**
Participation in this study is not a course requirement and your participation or lack thereof, will not affect your class standing or grades at your high school.

**What if you have questions about this study?**

If you have questions at any time about the study or the procedures, you may contact the researcher, Alaric Bryant, at aabryant@ncsu.edu, or [910-827-0204].

**What if you have questions about your rights as a research participant?**
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB Office via email at irb-director@ncsu.edu or via phone at 1.919.515.4514. You can also find out more information about research, why you would or would not want to be in research, questions to ask as a research participant, and more information about your rights by going to this website: http://go.ncsu.edu/research-participant

**Consent To Participate**

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.” By signing this form, the parent is giving permission and the minor is giving their assent to be in the study.

Participant's signature_______________________________________ Date _________________
Parent’s signature___________________________________________ Date _________________
Investigator's signature________________________________________ Date _________________