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Exploring Generation Y Consumers' Fitness Clothing Consumption: A Means-end Chain Approach

Katelyn Patrick
Business Development Specialist, Glen Raven,
MS & BS, College of Textiles,
North Carolina State University

Yingjiao Xu, Ph.D.
Associate Professor,
Textile and Apparel, Technology and Management,
College of Textiles,
North Carolina State University,
Raleigh, NC

ABSTRACT

Thanks to the growing health awareness and the trend of athleisure, the fitness clothing market has been substantially growing. Generation Y consumers are one of the major segments for the sportswear industry in the U.S. The purpose of this study is to identify preferred product attributes, perceived benefits/consequences and driving values related to Generation Y consumers' fitness clothing consumption. The means-end chain (MEC) model was adopted to identify the underlying values related to Generation Y consumers' fitness clothing consumption. Data were collected from 35 subjects via laddering interviews. A hierarchical value matrix (HVM) was structured following the means-end chain analysis. Results highlighted Gen Y consumers' self-esteem, social recognition, and financial needs in their consumption of fitness clothing. Aesthetics and price seemed to be the most salient attributes identified by the subjects for fitness clothing, followed by durability, performance, fit, breathability and wick-ability. Connecting product attributes to consumer values, perceived consequences included economic value, comfort, image, efficiency, and avoiding embarrassment. This study revealed the major values underlying Generation Y consumers' consumption of fitness clothing as well as preferred product attributes and perceived benefits/consequences. These findings could provide great implications to the fitness clothing companies in their product development and marketing communication.

Keywords: Fitness Clothing, Generation Y consumers, sportswear

1. Introduction

As of 2011, the United States has led the world in the largest and most developed market for sportswear (Research & Market, 2013). A growing segment of the sportswear industry is fitness clothing, which refers to apparel products primarily used for activities such as working out, recreational use, sports,

and the growing use of casual wear (Sportswear in the U.S., 2013; Patterson, 2011). Over the course of 2013, the fitness clothing industry's sales rose 7% from the previous year, whereas traditional clothing companies' sales only rose 1% (Pasquarelli, 2014). Obviously, the fitness clothing segment has outpaced the growth of other traditional clothing categories (Sherman, 2014), and is expected to see tremendous growth in the coming year.

Growth in the fitness clothing market is driven by an overarching trend toward casualization as consumers are shifting expenditures from other categories into active wear. Fitness clothing is also becoming more fashionable, and retailers continue to provide consumers with more options across styles, colors, patterns, fabrics, and technology, causing the market boundaries to blur as activewear for exercising blends into daywear for leisure purposes (Smith, 2014). Gen Y consumers play a critical role in the growth of the fitness clothing industry (Smith, 2014; Palmieri, 2013) due to their health and fitness consciousness and their involvement in exercise. It was suggested that the most likely fitness clothing purchasers are young adults aged 18-34 (Smith, 2014). Generation Y consumers are more likely to work out longer and more frequently due to their stamina and drive for physical results (Krol, 2014; Smith, 2014). With this generation being more active and its strong purchasing power accounting for 24.5% of the U.S. population (O'Donnell, 2014), retailers are striving to accommodate their needs for fitness clothing (Smith, 2014; Palmieri, 2013; Park, 2006). The insight of Generation Y consumers' behavior toward fitness clothing will be of strategic importance to the practitioners in the field in their endeavors to serve this growing segment.

While environmental trends are contributing to and pushing the growth of the fitness clothing industry, it is important to uncover what really drives an individual consumer's consumption of fitness clothing. Marketing research has suggested that a consumer's decision to purchase a product is not solely based on its discernible physical characteristics. Rather, it is the functional and psychosocial benefits its use provides, and how these benefits help the consumer attain life goals and values that are the greater motivator (Olson & Walker, 1991). Consumer value is the end goal a consumer desires from a consumption situation and plays a critical role in all marketing activities (Holbrook, 1996).

While there is an immense amount of literature revealing Generation Y consumers' characteristics, prevalent values, and general consumer behaviors (Beatty, Homer, & Kahle, 1986; Gong, Li, Wu, & Zhang, 2002; Ko, Norum, & Hawley, 2009; Hong & Kim, 2011; Olson & Walker, 1991), limited research has been conducted on investigating and understanding Generation Y's behavior toward fitness clothing. Therefore, understanding that consumers strive to find products or services that satisfy their functional and psychosocial needs as well as physical aspects, this study aims to unveil underlying values driving Generation Y consumers' consumption of fitness clothing. Specifically, this study is designed to investigate Generation Y consumers' consumption of fitness clothing in terms of preferred attributes and the underlying driving values. As the goal is to reveal the underlying values related to consumer behavior, this study adopted the means-end chain (MEC) approach (Gutman, 1982) with a laddering interview technique for data collection and analysis.

2. Literature Review

2.1 The fitness clothing industry and the athleisure trend

Sales of fitness clothing have been increasing on an average of 20% since 2000 (Park, 2006). The trend of yoga becoming more popular among Americans contributed greatly to the growth of the fitness clothing industry. Today the fitness clothing industry and the market segment of yoga has significantly evolved making it not only a fashion trend but a lifestyle trend (Sherman, 2014). Other fitness related activities and markets such as outdoor activities,

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swimming, cross-fit training, running, and amateur/collegiate/ professional sports are also growing substantially as well (Smith, 2014; Sportswear in the U.S, 2014; Sherman, 2014).

Originally, fitness clothing was mainly designed to be worn while working out, participating in physical activity, or for outdoor leisure (Patterson, 2011; Salfino, 2013). Recently, consumers overall are beginning to see a need for a healthy lifestyle (Sherman, 2014; Krol, 2013; Let's Move, 2014). The growth of awareness among consumers to improve their well-being has greatly helped sustain the fitness industry altogether (Sportswear in the U.S, 2014; Sherman, 2014). As more individuals understand the importance of making healthier lifestyle changes the fitness clothing industry will be further fueled (Sherman, 2014).

On top of consumers' growing health awareness, the increasing availability of fitness clothing products is another important reason why the market has grown (Research and Market, 2013). The growing sales have attracted a variety of retailers, even traditional and fast fashion clothing companies, to join the industry. Retailers such as J. Crew, Tory Burch, and Nordstrom along with companies like Champion are either increasing or creating fitness clothing lines, or are partnering with designers to expand their fitness clothing offerings to reach a bigger target market (Salfino, 2014). The fitness clothing market and individuals are beginning to see big name fitness clothing companies (i.e. Adidas, Nike, Puma, etc.) team up with fashion designers like Stella McCartney or Pharrell Williams to produce innovative designs and offer stylish options. Not only are product offerings of fitness clothing increasing, but they are becoming more innovative (Research and Market, 2013; Sherman, 2014). Companies like Nike and Under Armour are creating technologically advanced garments and accessories. Additionally, companies are actively advertising and using social media campaigns to drive consumers to purchase fitness clothing and to exercise more (Sherman, 2014)

Another major driving factor for the growing fitness clothing industry is the prevalent athleisure trend, which mainly stems from people who are embracing healthier lifestyles while also demanding more functionality from their wardrobes (Wilson, 2015). The desire for everyday comfort and the great availability of fitness clothing that combines performance with stylish looks, makes more and more people feel confident wearing these garments at work, or for various activities other than just working out in the gym (Cotton Inc., 2012; Pasquarelli, 2014). Fitness clothing also gives non-active consumers the chance to appear as though they are leading a healthier lifestyle, but actually are just capitalizing on the athleisure trend by wearing stylish, comfortable, fashion-forward fitness clothing (Palmieri, 2013; Pasquarelli, 2014). Research shows that 93% of consumers purchase and wear fitness clothing for activities other than exercising, like traveling, working, and running errands, as this type of clothing has increasingly become the "go to" uniform (Salfino, 2012; Sherman, 2014). Therefore, attributable to the athleisure trend, consumers purchasing fitness clothing have diversified greatly (Patterson, 2011; Sportswear in the U.S, 2013; Park, 2006; Sherman, 2014) in the sense that consumers who do exercise regularly and consumers that don't exercise regularly both purchase fitness clothing using it for different purposes (Patterson, 2011). While the majority of the market hinges on active consumers who participate in exercise regularly, there is an opportunity for growth in the fitness clothing industry with respect to non-active consumersose who don't exercise regularly (Cotton Inc., 2012).

2.2 Fitness clothing product attributes

While consumers may have different preferences because of their respective activity level, lifestyle, or demographics, the versatility of fitness clothing affords consumers, both active and non-active, to blur the lines between appropriate attire for

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work and for the gym (Pasquarelli, 2014). Male consumers, in particular, tend to gravitate towards the versatile features of fitness clothing as it is becoming more sophisticated (Pasquarelli, 2014) combining performance features with style. Appealing to both active and non-active consumers, fitness clothing is almost always associated with comfort, fashion, functionality, and versatility (Gong, Li, Wu, & Zhang, 2002; Wilson, 2014; Pasquarelli, 2013; Cotton Inc., 2012). These attributes allow individuals to transition from one activity to the next effortlessly (Sherman, 2014; Pasquarelli, 2014; Salfino, 2014). This smooth transition has earned the fitness clothing an important position in the fashion world as the new daily uniform.

Comfort tops the ranks as the most important attribute in fitness clothing (Smith, 2014). This aligns with the casualization trend and the desire for athletic wear to also become daywear. The pursuit of comfort is reflected in consumers' desire for fit and other special function related features such as moisture-wicking, breathability, reflective, and stretch (Cotton Inc., 2012; Park, 2006; Pasquarelli, 2014; Salfino, 2013). Research has shown that consumers prefer comfort over other features and often make purchase decisions based on both the comfort and performance of a garment (Jegethesan, Sneddon, & Soutar, 2012).

The innovative and ever-changing style of fitness clothing is another attractive feature. Similarly, fit and image are other related attribute desired by fitness clothing consumers (Cotton Inc., 2012). Partnerships between companies such as Nike, Adidas, Puma, and Under Armour and major fashion designers reflect the precedence put on combining expertise in both the performance aspects of a garment and the fashion style of fitness clothing pieces (Salfino, 2012).

The brand has also been described as an "important feature when [an individual] considers making a [fitness clothing purchase]" (Jegethesan, Sneddon, & Soutar, 2012). The top three favorite fitness clothing brands among consumers are Nike, Adidas, and Under Armour (Cotton Inc., 2012). As fitness clothing becomes more stylish, certain brands will appeal to consumers not only on the basis of fulfilling their exercising needs (i.e., yoga wear vs. cycling wear), but also enabling them to project their personal style. Additionally, consumers purchase certain brands because they are popular among their peers or endorsers they admire (Noble, Haytko, & Phillips, 2009). Consumers, specifically Generation Y consumers, seek out brand names they trust and recognize because they know the level of quality they will receive for the price (Noble, Haytko, & Phillips, 2009).

Fitness clothing is available at a wide price range. While some consumers are willing to pay premium prices with the goal of expressing a healthy and fashionable lifestyle, others pay a minimum price on leggings, instead of jeans, for the comfort and versatility. Therefore, while the hefty price tags are encouraging a variety of specialty stores, department stores, and even high-end luxury companies to join the industry and/or expand their businesses, the diversity of consumers also attracted low-end mass merchandisers and discount stores into the industry.

While consumers of all ages are increasingly purchasing fitness clothing, Generation Y consumers, being active as well as fashion conscious, represent an important cohort to capture in order to sustain the growth of the fitness clothing industry (Patterson, 2011; Sportswear in the U.S, 2013). Fitness clothing features are transitioning to be more innovative and meet the value and lifestyle needs of consumers, specifically consumers of particular ages, such as Generation Y consumers (Sherman, 2014; Pasquarelli, 2014).

2.3 Consumer values and the means-end chain model

Consumer value plays an important role in marketing and consumer research (Reynolds & Gutman, 1988). Woodruff (1997) defines consumer value as "a customer's perceived preference for and evaluation of product attributes, attribute performances, and consequences arising

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from use that facilitate (or block) achieving the customer's goals and purposes in use situations." This definition suggests that individuals determine value based on which attributes are present and how important those attributes are to achieve an individual's end goal (Reynolds & Gutman, 1988; Woodruff, 1997). Essentially, consumer value is the end goal a consumer desires from a consumption situation (Holbrook, 1996). Marketing research has suggested that the best performing firms continuously develop new strategies to improve consumer value (Parasuraman, 1997; Woodruff, 1997).

The concept of desired consumer value is well explained by the means-end chain (MEC) model, which argues that a product's relevance to consumers is derived by the personalized perception of the relations between the product's attributes and individually desired goals (Gutman, 1982). According to the MEC model, product attributes are the means whereby consumers obtain their desired end goals, namely values, through the benefits (or consequences) yielded from consumption. Therefore, when choosing to consume a product, a consumer will evaluate the product's attributes cognitively in terms of the consequences resulting from the product's use, and the subsequent instrument in achieving important personal values (Gutman, 1992).

The MEC model suggests a hierarchical ordering of three interconnected concepts: product attributes, consequences or benefits, and values. The model progressively becomes more abstract as it goes, with attributes being responsible for the least abstract level (Ha & Jang, 2012). Attributes refer to the physical properties or characteristics of products. Consequences are the benefits consumers receive from attributes, which can be both tangible and physical experiences, (i.e. hunger or thirst) (Gutman, 1982) or emotional and more symbolic experiences (i.e., rising group status) (Gutman, 1982). The most abstract concept in the model is consumer value, which is a customer's desired goal that determines their consumption decisions (Gutman, 1982; Reynolds & Gutman, 1988). The value level of the hierarchy is not believed to be consciously experienced by the consumer (Claeys, Swinnen, & Vanden Abeele, 1995), and is connected to product evaluation only through the immediate or intermediate consequences of consuming the product (Gutman, 1992).

To elicit means-end chains, laddering method has frequently been used (e.g., Reynolds and Gutman, 1988; Gutman, 1997; Ha & Jang, 2013). Laddering refers to an in-depth, one-on-one interview technique used to understand how consumers evaluate the attributes of products or services, translate them into benefits, and finally, achieve their end goals (Gutman, 1982). The laddering method operates in two steps. The first step is to identify the attributes a consumer prefers (Kirchhoff, Smyth, Sanderson, Sultanbawa, & Gething, 2011). The second step is the actual interview itself (Kirchhoff, Smyth, Sanderson, Sultanbawa, and Gething, 2011). The interview's purpose is to ask questions that uncover the connections between attributes, consequences, and values (Gutman, 1982; Kirchhoff et al., 2011). During the interview, the respondents reply to a series of "why" questions. For instance, "Why is that attribute (or consequence) important to you?" These questions in sequence of each other create a chain that reveals connections between the attributes, consequences, and values referred to as Hierarchical Value Matrix (HVM) (Gutman, 1982; Olson & Walker, 1991).

MEC model has been applied to understand a wide range of consumer behaviors including restaurant patronage (Ha & Jang, 2013), vegetable consumption (Kirchhoff et al., 2011), furniture shopping (Lin & Chang, 2012), and store loyalty (Lee, Chang, & Liu, 2010). Mort and Rose (2004) are one of the first few researchers using the MEC model to investigate consumer motivation for hedonic products, including fashion products. Following that, Ko and her colleagues (2010), using content analysis of advertisements, conducted an investigation of consumers' value structures for clothing products. Based on the consumer value structure for clothing products suggested by

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Sheth et al. (1991), Ko et al. (2010) provided a historical perspective of the general value structure, as well as desired product attributes and consequences, for clothing products. Recently, Amatuli and Guido (2011) applied the MEC model in investigating Italian consumers' fashion luxury consumption. This current study will further the undergoing endeavor in understanding consumer value for clothing products by focusing on a specific product category: fitness clothing. The means-end chain model was adopted in this study to identify Generation Y consumers' preferred product attributes and desired values for fitness clothing.

3. Methodology

3.1 Data Collection

Data were collected through laddering interviews of 35 students enrolled in a large mid-Atlantic university with a diverse representation of educational backgrounds and demographics. The subjects were recruited via a snowballing method. The original plan was to recruit 50 participants. However, after 30 interviews not much new information was generated. Therefore, the interview process stopped after conducting 35 interviews. This sample size (35) was in line with most sample sizes (range from 26-71) used in previous studies using the laddering technique (Gutman, 1982; Ha & Jang, 2013; Kirchhoff et al., 2011). The interviews took place on campus during a two-week time period. The subject was greeted upon arrival, and casual conversation was made to make them feel more comfortable before beginning the interview. Once the subject seemed more at ease, they were given the survey questions to answer before beginning the actual interview process. Each interview lasted between 20 and 45 minutes until no new information was produced. Each subject was interviewed individually while being tape recorded. The tape recordings were then transcribed to ensure accurate collection of answers. A total number of 120 pages of transcripts were generated and used for data analysis.

3.2 Laddering interview

The interviews were split into two phases. The first phase was a direct elicitation of the preferred product attributes in the form of a short paper and pencil survey, which also collected the subjects' demographic information and their general fitness clothing consumption behaviors, such as purchase frequency, favorite brands, and excise level. Direct elicitation is believed to provide a strong focus on intrinsically relevant attributes (Bech-Larsen & Nielsen, 1999) and to be appropriate for low involvement products (Kirchhoff et al., 2011).

The second phase was a soft laddering interview to reveal the perceived consequences/benefits derived from the preferred product attributes and finally their consumer values. Soft laddering was used to allow for freedom of articulation in order to capture more complex cognitive structures (Gruner & Valli, 2001; Russell et al., 2004). Standard laddering questions asked participants to verbalize why attributes and consequences are important to them. This line of questioning was repeated until final values were elicited and no further information was generated from the subject regarding their values related to the attributes. In this study, each subject was asked a series of why questions for each of the attributes identified in the first phase. The interview questions aimed at identifying underlying values consumers hold about the attributes that influence their purchasing decisions. For instance, if the subject indicated durability as important, they were asked: "*Why is durability important to you?*" If the subject replied with "*Because durability most likely means the garment will last longer and therefore save me money.*" Then the interviewer asked, "*Why is saving money important to you?*" This pattern continued until a value is reached and then it was repeated for the next attribute on the list.

3.3 Data Analysis

The analysis and subsequent categorization of the data followed the common method employed in MEC research

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(Gutman, 1982). As typical for qualitative research, a code system was developed to represent the elements of the MEC model, including attributes, consequences, and values each subject identified. When an element was identified (e.g., *price*), a code (e.g., PR) was used to label that element when it was found in each interview transcript. This coding system continued for all the MEC elements identified from the interviews. During the interviews, multiple terms were used by subjects to describe similar attributes. It was determined to group similar features and label them with the same attribute code. For example, the features of support, flexibility, and functionality were grouped as the performance of a garment.

The data were coded by an academic professor and a graduate student. Both were familiar with the MEC model. Each identified element was classified as attribute, consequence, or consumer value. It was relatively straightforward to distinguish consumer value from the other two elements as it was more abstract and not so specifically related to the product. Between the attributes and consequences, the classification was based on the evaluation of the element having a source and an end result at the same time or not. If yes, it was a consequence. Otherwise, it was an attribute. When disagreement occurred between the two researchers, the original transcripts were reviewed again, and further revision was made to reach an agreement on the coding and categorization among the three levels of elements.

After coding and categorization, the identified items (attributes, consequences, and values) were first tallied and then linked to create the Hierarchical Value Matrix (HVM). The HVM was formulated from the identified salient product attributes, resulting consequences, and consumer values. The lowest level of the matrix was the attributes. The middle of the matrix revolved around the slightly more abstract consequences, while the highest level of the matrix was reserved for the values held by the subjects. The connecting lines between each level were drawn to illustrate the means-end chain connections from an attribute all the way to the value. Each line was labeled with a count, illustrating the number of times that a salient attribute resulted in a respective consequence or a particular consequence led to a desired end-state or value. A cutoff value of two counts was established to avoid drawing all lines between the three levels. Therefore, the counts of the attributes, consequences, and values compared to their corresponding lines do not always equal to each other. During the interviews, attributes would not always lead to a consequence, or a consequence would not always continue to meet a desired end.

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4. Results and Discussions

4.1 Profile of participating subjects

A total of 35 student subjects (28 females and 7 males), age from 18-32, participated in this study. They represented a variety of class standings, majors, and colleges across the university. Around half (48.6%) of the subjects purchased general apparel products 1-3 times per month, with the remaining subjects shopping less frequently. All of the subjects had purchased fitness clothing in the past with 97.1% of them wearing fitness clothing for activities other than exercises. The top three fitness clothing brands purchased among the subjects included Nike (29.6%), Adidas (18.3%), and Under Armour (13.0%).

As a result of the data analysis, a total of nine (9) attributes, six (6) consequences, and seven (7) values were obtained for a total of 22 items. Table 1 provides a summary of the elements identified at each level (attributes, consequences, and consumer values).

Table 1. MEC elements obtained for fitness clothing: attributes, consequences, and values

Attributes	Consequences	Values
1. Aesthetics (26) 2. Price (23) 3. Durability (18) 4. Performance (17) 5. Fit (17) 6. Brand (9) 7. Fiber Contents (8) 8. Breathability (6) 9. Wick-ability (4)	1. Economic Value (25) 2. Image (18) 3. Efficiency (14) 4. Comfort (8) 5. Self-Expression (5) 6. Avoiding Embarrassment (3)	1. Self-Esteem (19) 2. Social Recognition (15) 3. Security (14) 4. Freedom (10) 5. Accomplishment (8) 6. Physical Well-being (7) 7. Happiness (1)

4.2 The attributes of fitness clothing

As indicated in Table 1, when asked about the important attributes relative to fitness clothing, the subjects seemed to emphasize the attributes of *aesthetics*, *price*, *performance*, *fit*, and *durability* of the products, followed by other attributes such as *brand name*, *fiber contents*, *wick ability*, and *breathability*. As suggested by the sample profile, the majority (97.1%) of the participants indicated wearing fitness clothing for activities other than exercises. The literature also suggested that fitness clothing is adopted as a symbol for an active lifestyle and as a casual yet fashionable daily wear (Salfino, 2012; Sherman, 2014). The findings of *aesthetics* being the most important attribute well reflected the purposes of wearing fitness clothing as indicated by the results of this study and also in the literature. Color and style were other terms used by the participants to refer to the aesthetics of the garments. While it was revealed in the literature that consumers are paying a premium price for certain fitness clothing products, this study suggested that the subjects were concerned about the price points. This finding could be limited in a sense that it was from a student sample. *Performance*, *fit*, and *durability* all were viewed as important attributes. The results of this study are consistent with the literature which emphasizes the importance of attributes such as comfort, fit, brand, price, style and performance (Cotton Inc., 2012; Park, 2006; Pasquarelli, 2014; Salfino, 2013), but at the same time reflect the unique characteristics of Generation Y consumers.

4.3 The consequences of fitness clothing attributes

Consequences tend to be slightly more abstract and were integral to reaching a consumer's desired end-state or value. As shown in Table 1, a total of six consequences were identified that aided subjects in reaching their desired end-state or value.

Economic value (EV) reflected the financial benefits consumers received and included responses such as "*saving money*," "*a good value*," "*not wasting money*" and "*saving for the future*." *Image* (I) referred to someone's physical and social image, often based on their appearance. For example, subjects stated that "*I wouldn't want people to exclude me based on my* ***appearance***." Whereas, s*elf-expression* (SE) referred to how a subject wanted to express their personality through their fitness clothing or exercise activities. For instance, one subject noted that "*colors allow me to show off my personality*." *Efficiency* (E) signified how an attribute assisted a subject in feeling or being more productive often declaring "*I feel like I am more active*" or "*I can focus better*." The consequence of *comfort* (C) was used to describe how fitness clothing influenced how they felt. Subjects would state that fitness clothing needs to be "*comfortable*" and would avoiding being "*uncomfortable*" whether at the gym or during various other activities. Lastly, a*voiding embarrassment* (AE) was similar to *image*, but was a consequence referring to a subject avoiding embarrassment by wearing fitness clothing that serves its purpose (i.e., performance, wick-ability, and breathability attributes) or

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has a flattering fit (i.e., fit and aesthetic attributes).

4.4 Consumer values of fitness clothing consumption

The seven values revealed in this study (Table 1) included *self-esteem, social recognition, security, freedom, accomplishment, physical well-being,* and *happiness* in the order of importance. The seven values listed can be thought of as elements that steer the behavior of consumers (Rokeach, 1973).

The two most important values were self related. *Self-esteem* referred to one's level of confidence or respect for themselves (Rokeach, 1973), while *social recognition* referred to the individual's needs for belonging and acknowledgement with a goal to establish an ideal social self (Rokeach, 1973). For the value of *self-esteem*, some subjects would state that they "*don't want to look ugly or like a freak as it will make me feel bad about myself."* While another subject said that "*working out allowed them to be more confident*" about themselves. The value of *social recognition* revolved around the admiration or respect given by peers (Kamakura and Novak, 1992; Rokeach, 1973). For example, some subjects stated "*I don't necessarily wear it to be seen, but when I do, and someone knows what I am wearing and appreciates it, it's nice."* or "*If I have a cute exercise outfit on, I want to show it off*." Other subjects described fitness clothing as a way to "*make good impressions"* and "*want to be known by others*."

The values of *security* and *freedom* were similar in that both had an aspect of financial security and the ability to have choices by being financially stable. Security contributes to a subject feeling capable of taking care of themselves or others who are of importance to them (Kamakura & Novak, 1992; Rokeach, 1973). For example, subjects indicated that "*…enough money for other priorities*," "*…not need to worry about …*," or "*being able to provide for family*." *Freedom* can also be related to the ability to freely express a subject's personality or the freedom to choose to purchase any piece of fitness clothing a consumer wishes. For instance, a subject disclosed that by purchasing durable, quality pieces of fitness clothing that lasted they subsequently "*had more money and freedom to spend it on other wants and needs*." Some subjects stated that the wide range of aesthetics "*gave them the freedom to project different personas through their fitness clothing*" and "*…was able to provide for the family when needed…."*

Accomplishment referred to a subject feeling a sense of success or accomplishment (Rokeach, 1973) or the ability to complete planned activities/tasks. It could also facilitate a subject in feeling as though they left a lasting contribution. Interviewed subjects stated that they "*want to be efficient so that I feel good about accomplishing what I planned to do*" and "*workout to my fullest… to be successful*."

The last identified value is *physical well-being*. *Physical well-being* signified a subject's healthy habits or longevity of life that they strive for through sought out attributes and resulting consequences. Subjects stated that they wanted to "*stay in shape*," "*live a long life*," "*have the best life possible*," and "*stay healthy*." *Happiness* was also mentioned as an end goal in the study. However, due to a limited number of mentioning, it was not included in the development of the HVM.

4.5 The hierarchical value matrix (HVM) for fitness clothing

Linking the product attributes all the way to consumer values, the resulted hierarchical value matrix (HVM) revealed the means-end chains for Generation Y consumers' fitness clothing consumption (Figure 1). Each connecting line was labeled with a count, illustrating the number of times that a salient attribute resulted in a respective consequence or a particular consequence led to a desired end-state or value. Due to limited mentioning and links between elements, not all the elements mentioned were included in the value matrix.

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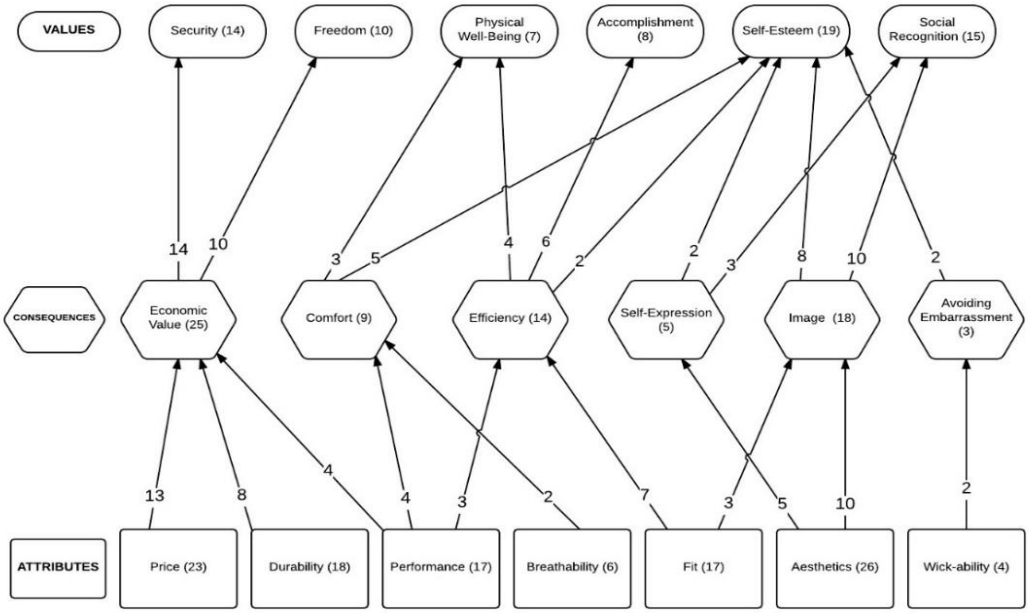

The lowest level in the matrix is product attributes. The major attributes identified in the hierarchical value matrix included *aesthetics, price, durability, performance*, and *fit*. Being one of the most sought-after attributes, *aesthetics* played a critical role in Generation Y consumers' consumption of fitness clothing. The aesthetics of the products provided a great means for *self-expression* and ability to maintain a desirable *image* with a final goal to gain *social recognition* or to enhance *self-esteem*. *Aesthetic*s included color, style, and design in this study.

Price and *durability* were another two major attributes that Generation Y consumers paid much attention to when shopping for fitness clothing. While Generation Y may be the future of consumerism, the majority of them are still in college, just graduated, have settled into their first job, or are starting a family, making them financially conscious. They are more concerned in obtaining an *economic value* of their fitness clothing purchase through either investing in a *durable*, long-lasting piece of apparel or spending less by purchasing something on sale. The end goal of this sought after consequence of *economic value* is to establish a sense of financial s*ecurity* and to have more *freedom* to purchase other products and/or enjoy other activities. This finding is consistent with the literature which suggested that young consumers are price sensitive and have the ability to process information faster and seek comparative prices (Powers and Valentine, 2013). While consumers are willing and prepared to pay a higher price for fitness clothing versus traditional clothing (Cotton Inc., 2012), price plays an influential role in consumers' gathering information about the product and determining the potential longevity of a product. This insight offers fitness clothing companies, high-end fashion designers, and fast fashion retailers the opportunity to strategically price their fitness clothing offerings to reflect the *durability* (and

quality) of the garment and capture this *price*-conscious young market segment.

The next attribute of *performance* referred to the characteristics of support, flexibility/stretch, and functionality of fitness clothing. In addition to the perceived consequence of *economic value*, *performance* also led to the consequences of *comfort* and *efficiency*. *Comfort* referred to the feeling of the body not being restricted by the clothing worn, which eventually led to the value of *physical wellbeing* as "*when I feel comfortable, I am more likely to continue doing exercise to enhance my physical and health condition*." *Efficiency* referred to the consequence of being effective and productive in exercising, which could lead to the goal of maintaining *physical wellbeing* and also enhancing *self-esteem*. Another end goal for the subjects to value the consequence of *efficiency* is to feel *accomplished* in a sense that "*I am **able** to consistently workout to maintain my physical wellbeing and ideal physical image*."

The major values revealed in this study reflected consumers' physical, financial, social, and psychological needs in term of *physical wellbeing*, *security and freedom*, *social recognition*, *accomplishment*, and *self-esteem*. Among these values, the most dominant ones were *self-esteem* and *social recognition*, both linked to the consequence of *image*. *Self-esteem* centered more on ones' self and referred to the confidence or respect an individual has for themselves. Whereas *social recognition* revolved around others and referred to the admiration or respect gained from peers. While *social recognition* was mainly achieved through the consequence of *image*, *self-esteem* was a consequence of several consequences as seen in the hierarchical value matrix including *comfort*, *image*, *self-expression*, *efficiency*, and *avoiding embarrassment*. The next major driving values were from the financial perspective: *freedom* and *security*. While *security* mainly focused on the self being able to get basic needs fulfilled, *freedom* also provided a perspective of helping and providing for others. While *Physical well-being* was originally a major motivation for consumers to purchase fitness clothing, with the athleisure trend, its importance was relatively not that much valued by the young consumers compared to the *self-esteem* and *social recognition* needs.

5. Theoretical and Managerial implications

This study aimed to explore Generation Y consumers' consumption of fitness clothing in terms of preferred product attributes, perceived benefits/consequences, and driving values. The study revealed that the majority of the participants wore fitness clothing for activities other than exercises. This finding is consistent with the finding of aesthetics being the most important attribute, instead of performance. Similarly, the image related values such as self-esteem and social recognition, rather than physical well-being, were highlighted in this study for Generation Y consumers' fitness clothing consumption. Another important attribute revealed in this study was price, which strongly related to consumers' pursuit of economic value and finally their end goal of financial security and freedom. Durability, also referring to the quality of the products, were also desired as a way to achieve economic value and consequently to establish financial security and freedom. These findings were well in line with the literature in terms of preferred products attributes (Cotton Inc. 2012; Palmiereri, 2013; Salfino, 2012; Mintel, 2014), but more importantly, it reflected the unique characteristics of Generation Y consumers, including image conscious (Fernandez, 2009), strong sense of belonging and being well respected (Hong and Kim, 2011; Kim, 2005), pursuit of security (Kim, 2005), and self-esteem (Logan, 2008).

The results of this study can be of great interest to the fitness clothing industry in their efforts of targeting the Generation Y consumers who are representing a large market segment both in size and in purchasing power. It is of great benefit for the companies to recognize that these young consumers were very image driven with a goal either to enhance self-esteem or to gain social recognition and were wearing fitness

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clothing for activities other than exercises. Sportswear companies such as Nike cannot rest on their strong brand appeal, advanced technology, and expertise in producing functional products. They also need to pay close attention to the aesthetics of their products, especially in an environment when more specialty stores, high-end designer companies, and even fast fashion retailers are joining the industry. However, it is also worth noting that while consumers want clothing that is stylish, comfortable, and are buying it for more reasons other than to work out, when it comes to exercise, performance and the technical requirements such as breathability and wicking ability of the clothing do matter. That is why it was suggested that it might be difficult for fashion retailers who are getting in the sports apparel industry to build credibility without this expertise (Smith, 2014).

Another implication is coming from Generation Y consumers' pursuit of economic values for an end goal of financial security and freedom. While paying less was considered as a typical way to save money, companies will benefit to appreciate that investing on high price tag items for lasting quality was another means Generation Y consumers took for the pursuit of economic value. Therefore, it is well justifiable for high-end companies to invest in expensive high quality, long-lasting, and sweat-wicking materials, while low-end retailers are only paying a fraction of the cost to deliver similar looking products. The key point is that companies need to appreciate Generation Y consumers' limited budget situation and their mindset of obtaining financial security and freedom.

The hierarchical value matrix also provides a great insight of Generation Y consumers' layers of thinking in their fitness clothing consumption. The linking from attributes to values can assist companies not only in their product development but also in their marketing by focusing on and communicating consumer values to their target market segment. Successful companies should not only focus on providing the most demanded products, but also advocating for consumers to improve their overall physical, financial, mental, and social psychological lives. Additionally, the appreciation of consumer decision-making process revealed in the hierarchical value matrix can help companies in identifying what consumers' value and also determining what values the company should focus on.

6. Limitations and future studies

As a qualitative research study, this study bears several limitations. First, while the sample size was in line with the average sample size of similar studies and no new information was produced after interviewing 35 subjects, it could be beneficial to examine a different sampling unit, such as non-student Gen Y population. Secondly, the sample consisted predominantly females (28 female and 7 male). This was due to the primarily voluntary nature of subject selection. More females agreed to participate. It would be interesting for future studies to interview more males to see if differences exist between genders in terms of attributes and the resulting consequences and values of those opposing attributes.

While the study examined the uses of fitness clothing and salient product features that Generation Y consumers look for in fitness clothing, it lacks addressing the possible shopping motivations toward fitness clothing. It could be of importance for companies to understand why consumers go to purchase fitness clothing as well as salient product features and driving values. Another direction for future studies is to distinguish between those active and non-active consumers in their fitness clothing consumption behaviors.

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