CONSUMER SHIFT: EXAMINING FEMALE GENERATION Y CONSUMERS’ ACTIVWEAR CONSUMPTION

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CONSUMER SHIFT: EXAMINING FEMALE GENERATION Y CONSUMERS’ ACTIVEWEAR CONSUMPTION

A Thesis

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Science

in

The Department of Textiles, Apparel Design, and Merchandising

by

Lauren M. LaPorte
B.S., Southeastern Louisiana University, 2016
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ABSTRACT

The onset of the Covid-19 pandemic resulted in a change to standard consumption patterns as consumers began prioritizing health and wellness, working remotely, and made a switch from material-based consumption practices to an experiential-value-based consumption mindset. Additionally, Covid-19 brought economic downturns, loss of jobs, and supply chain issues. Consequently, the activewear market demonstrated unclear results making it necessary to understand trends within the activewear market while also understanding consumer motivations to wear or not to wear activewear during these societal shifts. This research paper aims it’s focus on female members of Generation Y, a popular and growing market for activewear. In understanding these societal shifts within Generation Y females, the research paper used the Means End Chain (MEC) model, which uses a qualitative soft-laddering interview approach. It was found the top two concrete attributes were stretchability and shaping/supportive properties. The top two abstract attributes were quality fabric and style. Four top functional consequences were identified: task facilitation, ease of use/transitional, physical comfort and physical appearance. The top two psycho-social consequences were feeling motivated and social relationship. And the top value was empowerment. These findings were then applied to Maslow’s Hierarchy of Needs. It was found identified attributes, consequences, and values are directly applicable to every hierarchical level (physiological, safety, love and belonging, esteem and self-actualization) demonstrated within Maslow’s Hierarchy of Needs. We can conclude the consumption and wearing of activewear will continue to be a constant trend within our society as consumers are able to meet every hierarchical level through the consumption of activewear.

Keywords: activewear, athleisure, means-end chain, value-based consumption, COVID-19, Generation Y, consumer shifts
CHAPTER 1. INTRODUCTION

Activewear has been a consistent and increasing trend in recent years and, according to some sources, such as AmeriTrade (n.d) and BusinessWire (2020), there has been considerable market growth in response to the Covid-19 pandemic. For instance, AmeriTrade (n.d.) lists a growth of 300% in the spring of 2020 for popular activewear brand Lululemon with BusinessWire (2020) projecting an uptick of as much as $157.1 billion from 2020-2024. Additionally, taking from a report published by the McKinsey Group, Becker et al. (2021) states that although the sportswear industry saw a dip in sales in the beginning months of the pandemic, the market quickly recovered and outperformed other retail markets. However, in stark contrast, other sources note a slump during the Covid-19 pandemic and project a steady decline. For instance, Best et al. (2020) references the activewear market was expected to reach $371.7 billion from 2019-2020. However, due to Covid-19, the activewear market only reached a value of $314.3 billion (Best et al., 2020). Additionally, popular activewear brand Gildan reported a 71.3% decrease in sales in 2020 (Gildan Activewear second-quarter sales slump 71%, 2020). On a global level, Pang et al.’s (2021) research analyzes Covid-19’s impact on fashion consumer behavior. Their research discusses the pandemic’s negative effects on the economy as well as issues within the global supply chain, however, they make the point that the pandemic also presents a unique opportunity for e-commerce retailing (Pang et al., 2021). Interestingly, according to their results, activewear saw a sharp decline in online interest from April 2020 – May 2020 (Pang et al., 2021). These conflicting sources present the opportunity to understand the reasons associated with the noted growth and slump of the activewear market.

Reasons for the noted growth in the activewear market during this time are thought to be due to a combination of consumers now prioritizing a healthier lifestyle (Gautom, 2020), a more
resent push to consumers now working from home (Wong, 2020), and a switch from material-based consumption practices to a value-based consumption mindset, or spiritual consumption (Mehta et al., 2020). Interest in a healthy lifestyle is not a new trend, however, it can be argued Covid-19 accelerated the interest in consumers to prioritize their health (Gautom, 2020). This increased interest would also result in an increased need for activewear apparel (BusinessWire, 2020). Separately, many consumers in the workforce are opting to work from home in an effort to slow the spread of the virus (Wong, 2020). In response to this shift, there has been an increased need for more comfort-orientated clothing and less interest in occasion dressing (FTI Consulting, 2020). Lastly, it has been stated in times of crisis consumers tend to alter their consumption patterns and shift from “consumer materialism” to “consumer spiritualism” (Mehta et al., 2020). This concept involves consumers buying products they believe to be more aligned with their intrinsic needs instead of buying items simply for their materialistic value (Mehta et al., 2020). Therefore, with consumers placing more value on their health and more value on comfortable clothing, it is possible consumers are also now purchasing from a spiritual consumption mindset, all of which can be attributed to the growth of the activewear market.

Explanations for the slump include the nation experiencing an economic downturn (Amadeo, 2021) and disruptions within the retail supply chain (Sharma et al., 2021). The Covid-19 pandemic forced the nation to close 43% of non-essential businesses to control the spread of the virus (Amadeo, 2021). In response to this, 22 million jobs were lost, and the country began to struggle economically (Ettlinger & Hensley, 2021). Additionally, Covid-19 exposed major gaps within the retail supply chain, such as confusion surrounding which products to stock, where they were wanted, and how much the retail stores were needing (Butt, 2021; Supply chain security, 2022). Therefore, these two events cast uncertainties in the nation and would help
explain the decline in sales previously mentioned. These identified market inconsistencies are important to understand in predicting future market trends. It is thought understanding these market trends will help prepare industry professionals to meet their target audiences’ wants and needs.

This research paper focused on Generation Y females as the identified target audience as members of Generation Y are currently considered the largest generation (Fry, 2021), make up a significant amount of the United States’ working economy (Dimock, 2019; Millennials in the Workplace, 2022), and are increasingly more interested in health and wellness when compared to previous generations (Palmieri, 2013; Smith, 2014 as cited in Patrick & Xu, 2018). Generation Y females are specifically of interest as the women’s United States’ activewear market has seen considerable growth over the last decade (Brice & Thorpe, 2021). Also, as mentioned by Smith (2022b) the women’s wear market has out-paced men’s wear and is now considered the fastest growing segment. By understanding this segment’s consumption patterns, motivations, and perceptions regarding product attributes, it is thought this research also has added to the understanding of the activewear market’s fluctuating state during this time, as demonstrated by AmeriTrad (n.d) and BusinessWire (2020).

Gutman’s (1982) MEC model was used as a framework for the following research study as this theory is based on consumer behavior and is helpful in identifying and linking valued product attributes, consequences, and values. This model was used in related and recent research when discussing activewear consumption. For instance, Zhou et al. (2021) conducted their research using the MEC model, to “investigate the activewear consumption experience of female consumers” (Zhou et al., 2021, p. 81). Patrick & Xu (2018) also used the model when conducting their research, which focused on understanding activewear consumption in consumers aged 21-
Maslow’s (1943) Hierarchy of Needs theory was also used to further understand consumer motivation.

Maslow’s (1943) Hierarchy of Needs theory was used as a framework for the following research study as this theory is considered a landmark study in understanding human motivation and is commonly applied to consumption patterns. For instance, Afify 2022 uses Maslow’s (1943) Hierarchy of Needs to understand consumer patterns during Covid-19 in Egyptian consumers. Cui et al. (2021) applies the model to consumption motivations associated with purchasing electric vehicles. The theory states individuals must first fulfil their most basic needs before fulfilling a higher, more abstract need (Maslow, 1943). Maslow’s Hierarchy of Needs will be used in tandem with the MEC model. It is thought using both frameworks in tandem with one another will provide a better understanding of activewear consumption practices of Generation Y females during the Covid-19 pandemic.

Considering this generational shift, coupled with an unprecedented global pandemic, and an activewear market demonstrating unclear results, an opportunity is presented to better understand future trends of the activewear market. Additionally, it is also important to understand the wants and needs associated with the purchasing behavior of Generation Y females within the activewear market. The following Review of Literature will further explore these inconsistencies as well as the shifting consumer nature in response to the Covid-19 pandemic.
1.1. Research purpose and research questions

The purpose of this research paper is to better understand how female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic. With this purpose in mind, Maslow’s (1943) Hierarchy of Needs will be implemented to better understand consumer motivations for wearing activewear during this time. Therefore, the paper will first discuss background information associated with activewear and common characteristics/behaviors of Generation Y females residing in the United States. Background information surrounding the slump of the activewear market will also be discussed, which includes the economic downturn/loss of jobs and supply chain issues. From here, consumer shifts will be analyzed as these shifts are thought to contribute to the rise of the activewear market. These shifts include increased interest in health and wellness, working from home and spiritual consumption opposed to material-based consumption. A discussion surrounding this information is necessary to better understand consumer motivations to purchase during this time.

Second, the activewear market in the United States during Covid-19 will be further reviewed. It is perceived that female Generation Y consumers are the main consumers of activewear as this generation are known to wear activewear both for physical activity and for the routines of daily life as activewear provides added comfort to its wearers (Female for Life, n.d.; Liu, 2020). Additionally, this research has the potential to be both timely and beneficial to industry professionals as knowing and understanding future implications of the activewear market, while also understanding the intrinsic motivations for activewear consumption, can help marketers target their consumers more effectively and help designers in understanding which product attributes are most valued. Through discussing this point through a marketing lens, while also incorporating key shifts in consumption during the Covid-19 pandemic, and applying
Maslow’s (1943) theory of consumer motivation, it is perceived a more comprehensive understanding of the market and its consumer’s wants and needs will be better understood. Considering this information, the following research questions were developed:

RQ1: Have female members of Generation Y experienced shifts in activewear consumption in response to the Covid-19 pandemic? If so, how have these shifts impacted Generation Y female’s motivation to consume activewear products?

RQ2: What attributes of activewear products are preferred and valued most by female Generation Y consumers during Covid-19, and how have their consumption shifts, positive or negative, impacted their perceptions of activewear product attributes?

RQ3: What are the motivations underlining the shifts in activewear consumption among Generation Y female consumers?

1.2. Definitions

As the following research paper is largely focused on the activewear market, it is important to ensure a comprehensive definition of the term is made.

- Activewear: “clothes that are worn for sports or other physical activities” (Cambridge Dictionary, n.d.)

Additionally, the MEC model is a tool used to understand which product attributes are most valued by consumers. With the model, consumer values are better understood when connecting preferred attributes to consequences and consequences to end-state values (Gutman, 1982; Zhou et al., 2021). To better understand this model, the following definitions are provided:
• Consumer values: “a customer’s perceived preference for and evaluation of product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations” (Woodruff, 1997, p. 142).

• Attributes: refer to the physical components of a product; they can be concrete, such as fabric and color, or more abstract, such as quality (Patrick & Xu, 2018; Zhou et al., 2021).

• Consequences: refers to results happening to consumers due to their consumption behavior, for example task facilitation or physical comfort. Consequences are considered more abstract than attributes (Zhou et al., 2021).

• End-state values: considered the most abstract. They “represent consumers’ beliefs and concepts pertaining to the desirable end states of being” (Zhou et al., 2021, p. 83). Examples are self-respect and sense of accomplishment (Zhou et al., 2021).

Lastly, and as previously discussed, the following research study is interested in understanding consumption shifts of Generation Y females. Therefore, this segment and their shifting motivations to purchase are defined below:

• Generation Y: A generation of people born roughly between 1980-1990 (25-40 years of age). They are also commonly referred to as “millennials” (Merriam-Webster, n.d.)

• Consumption shifts: Sharma & Mehta (2020) state the Covid-19 pandemic altered consumer buying behavior due to many factors including change in income, national and global lockdowns, supply chain disruptions, unavailability/inaccessibility of product, etc. These factors, and more, are what this paper will refer to as “consumption/consumer shifts”.
CHAPTER 2. LITERATURE REVIEW

Within this chapter, an overview of the activewear industry and market pre Covid-19 was first provided. After, the women’s activewear market was discussed with special attention to Generation Y consumers as well as certain generational characteristics unique to this segment. Next, previous research pertaining to Generation Y activewear consumption and female Generation Y activewear consumption is reviewed, which leads to a gap in research as current research has not included Covid-19 as a factor when discussing activewear consumption. Covid-19’s influence on the activewear market was then reviewed, which resulted in economic hardship, supply chain issues, and numerous shifts in everyday consumption. Moving to the theoretical framework, this information was then applied to Maslow’s (1943) Hierarchy of Needs as it is thought activewear consumption satisfies every need, from basic to abstract. The MEC model was also discussed, which targets which product attributes are valued by consumers during the decision-making process (Gutman, 1982).

2.1. General activewear market review pre-Covid-19

Activewear was once worn with the intent of performing physically demanding activities. However, over time, consumers began placing more value on comfort orientated clothing as well as clothing that could easily transition from the gym to daily errands. This concept made activewear clothing more ingrained in our everyday lives (Watts & Chi, 2018). Many brands including Nike, Under Armour, and Lululemon capitalized on the growing interest of activewear and successfully began to blur the lines of fitness and fashion (Fromm, 2016). In 2015, the United States activewear market was valued at $44 billion, a 16% increase from the year prior. Interestingly, the sales of other retail markets experienced a 2% decrease in sales during the same time-period (Banjo, 2016). Further, in 2019 the activewear market is reported to be steadily
growing with six to seven percent growth year after year; activewear brand leaders Nike and Lululemon are mentioned as being top contributors (Zaczkiewicz, 2019). For context, Nike’s total revenue grew $6.7 million from 2016-2019; Lululemon’s total revenue saw a growth of $1.2 million (Nike Revenue, n.d.; Lululemon Revenue, n.d.). Moreover, past analysis of the global activewear market stated the market was expected to see a growth of 5.7% from 2015-2020 with women’s wear outpacing men’s wear (Allied Market Research, 2017). Considering this information, it is important to further analyze the women’s activewear market.

2.2. Women’s activewear market review pre Covid-19

On a global level, the women’s activewear market pre-pandemic was valued at a total of $124.65 billion in 2017 and, at the time, expected to grow by 8.2% from 2018-2026 (Global Women’s Activewear Market, 2019). Regarding the U.S. market, as the United States is the world’s top market for activewear (Zhou et al., 2018), womenswear accounted for 42.4% of the total revenue of the North American activewear market in 2017 (Correa, 2022). Reasons associated with the growth are thought to surround more media coverage on women’s sports, equal pay for female sports professionals, and an overall interest in an active lifestyle (Global Women’s Activewear Market, 2019). The growth can also be attributed to the activewear industry’s marketing strategy, which typically pushes messages of empowerment, independence, self-care, discipline, and bodywork to women (Horton et al., 2016; Lavrence & Lozanski, 2014; Nash, 2016 as cited by Brice & Thorpe, 2021). A more recent push to fashion trends surrounding activewear has also been mentioned (Correa, 2022). Considering this information, consumer popularity for the search term “women’s activewear” was completed using Google Trends to better understand consumer interest for women’s activewear pre-pandemic. Google Trends is a website powered by Google that analyzes the popularity of top searches by users within a given
period. When a term is searched, the webpage provides a graph of interest between a designated timeline. The graph also provides a rating of the term 0-100 with 0 being of little interest, 50 medium interest and 100 of peak interest, as well as the correlating date. The term “women’s activewear” was searched with a custom time range set from January 2012 – January 2019. The following graph, Graph 2.1 Level of interest for the term “women’s activewear” from January 2012- 2019 was generated:

Graph 2.1. Level of interest for the term “women’s activewear” from January 2012 – January 2019

Source: (Google, n.d.).

When looking at the graph, the search term “women’s activewear” had an average interest of 22 (little interest) in January 2012. In February 2016, the term “women’s activewear” had an average interest of 68 (medium-high interest) with peak interest (100) in February 2017. Finally, in January 2019 the term “women’s activewear” had a final average interest of 82 (high interest). Considering this information, we can gather the consumer interest for women’s activewear was demonstrating consistent growth in the years leading up to the Covid-19 pandemic.
Taking from previous research, Patrick & Xu (2018) focus their research on Generation Y consumers and their top-valued attributes, consequences, and values when shopping for activewear products. It is stated their reasoning for focusing on this demographic is due to this segment being more likely to purchase fitness clothing as they tend to exercise more frequently and play an important role in the rise of activewear apparel purchasing (Patrick & Xu, 2018). Additionally, according to a survey conducted in September of 2021, the Millennial generation is currently consuming the most activewear (59%) (Activewear Market in the U.S., 2022). With this information in mind, this research paper was largely focused on understanding this segment.

2.3. Understanding Generation Y consumers

To begin, and to speak generally of Generation Y, this segment is currently considered the largest generation, as this segment recently outnumbered the Baby Boomers (Fry, 2021). Additionally, members of Generation Y were born from 1981-1996 (aged 25-40) and make up much of the United States workforce (35%) (Dimock, 2019; Millennials in the Workplace, 2022). Moreover, this segment has an incredibly influential and increasing purchasing power, as a result, this segment has a large impact on the global economy (Bucuta, 2015; Giovannini et al., 2015; Millennials in the Workplace, 2022; Noble et al., 2009). Next, common characteristics associated with Generation Y were reviewed.

Generations have been considered to have generation specific characteristics, also called “heterogeneity” which is the idea members of the same generation have similar values, lifestyles, and characteristics (Bucuta, 2015). Mannheim’s (1923) landmark study coined the term “sociology of generations” to express the idea behind a generation’s common set of beliefs. In Mannheim’s (1923) terms, “the socially attached individual allies himself with the current, which
happens to prevail in his particular social circle” (Mannheim, 1923, p. 22). Considering this, it can be gathered members of the same generation experience common characteristics.

To begin, members of Generation Y are technologically savvy, making them a powerful consumer group as they are typically more educated regarding product knowledge (Bucuta, 2015). This group also expects constant and consistent connectivity within social groups and are considered social both online and in person, making them more likely to shop and travel within groups as well as more inclined to solicit opinions from others (5 Characteristics of Millennials, n.d; Bucuta, 2015). Because this segment is more likely to follow the opinions of their peers, it can be argued this generation is also more likely to follow trends of their peers. Next, this group is known to be highly driven by their values and place a high value on social causes (5 Characteristics of Millennials, n.d; Bucuta, 2015). As a result, they are generally more interested in consuming from brands they deem as genuine and authentic (5 Characteristics of Millennials, n.d). In the same vein, Millennials are purchasing products they perceive to be of higher value from brands thought to be of higher quality, or products thought to portray a higher social status (Bucuta, 2015). Millennials are also considered confident/achieving; this characteristic embodies a person who is also motivated and goal-orientated (5 Characteristics of Millennials, n.d; Nielsen, 2021). Lastly, members of Generation Y are considerably more interested in health and wellness than past generations (Palmieri, 2013; Smith, 2014 as cited in Patrick & Xu, 2018).

2.4. Previous research surrounding Generation Y activewear consumption

With Generation Y being an important demographic of interest within consumer behavior, multiple studies have focused on this segment’s behavior as it applies to activewear consumption. Rahulan et al. (2013) focus their research on the generational differences between Generation Y and Baby Boomers when consuming sports compression garments. Rahulan et al.
form their study around the generational cohort theory, which states individuals born within a similar time range possesses a similar set of beliefs. After implementing eye-tracking technology, it was found members of the Baby Boomer generation are more interested in the tangible qualities of activewear, such as quality and comfort (Rahulan et al., 2013). Separately, members of Generation Y were found to be more interested in the aesthetics and marketing aspects of their activewear choices and spent 40% longer than those belonging to the Baby Boomer generation inspecting packaging and product details (Rahulan et al., 2013). Lastly, 78.3% of participants belonging to Generation Y stated price influenced their decision making when purchasing activewear apparel (Rahulan et al., 2013).

A separate study researched by Watts & Chi (2018) note a shift in behavior towards wearing activewear for a casual purpose as opposed to strictly for exercise purposes. Their research implements the theory of planned behavior (TPB) to analyze factors influencing purchase intention of activewear for casual use (Watts & Chi, 2018). TPB is the idea that people act according to their attitudes, subjective norms, or perceived behavioral ideas during decision-making (Ajzen, 1985, 1991 as cited by Watts & Chi, 2018). Using the TPB model, it was found those who have purchased activewear in the past and have an interest in health and wellness are associated with a positive attitude towards purchasing activewear for a casual purpose (Watts & Chi, 2018). Interestingly, it was also found age did have an effect as older participants had a more positive attitude toward using activewear for a more casual purpose (Watts & Chi, 2018).

More recent research conducted by Patrick & Xu (2018), found 97.1% of their Generation Y participants stated they are buying activewear for activities not pertaining to exercise. Researchers Patrick and Xu (2018) implemented Gutman’s (1982) MEC model within their research interested in Generation Y consumption of fitness apparel. The model uses a
hierarchical order beginning with uncovering participants’ most valued product attributes (A; least abstract), to their most valued consequences (C; more abstract) and finally to understanding their values associated with purchasing a particular product (V; most abstract). This A-C-V sequence creates a laddering format or means-end chain (Gutman, 1982). As stated by Gutman (1982),

“The means-end chain is focused on the linkages between where a person wants to be, and the means chosen to get there. A product is indeed a bundle of attributes, and people do consume products for the desirable consequences they get. It is the implicative relations between product attributes and consequences and between consequences and values that are the objects of study” (Gutman, 1982, p. 9).

Additionally, when applying activewear to the MEC model, recent research suggests a soft laddering approach, as activewear research is not yet well defined (Patrick & Xu, 2018; Zhou et al., 2021). The soft laddering approach includes asking participants a series of “why” questions, building on one another, until saturation is reached. When using this method, Patrick & Xu (2018) found their Generation Y participants were most concerned with the attributes of aesthetics and price when purchasing activewear apparel. The most important values to be found according to this generation were self-esteem and social recognition, which were found through the top consequences of economic value and image (Patrick and Xu, 2018). Patrick & Xu (2018) conclude by stating members of Generation Y were found to be image driven consumers and care a great deal about the price and quality of the product. This demographic was then further segmented to focus on previous research pertaining specifically to activewear consumption of female members of Generation Y.
2.5. Previous research surrounding Generation Y female activewear consumption

O’Sullivan et al. (2015) state the activewear industry has failed to take gender into consideration, which can potentially place marketers at a disadvantage as this demographic is a significant segment within the activewear market. For example, women are seen bringing activewear to other faucets of their wardrobe and tend to place a higher value on fashion (O’Sullivan et al., 2015). O’Sullivan et al. (2015) conducted a systemic review comprised of industry and academic research papers to better understand female consumer patterns and potential gaps not being considered by the activewear industry. Their review first identified a growth in activewear sales as activewear is becoming more ingrained in the daily wardrobes of consumers, women’s wear in particular (O’Sullivan et al., 2015). Moreover, O’Sullivan et al. (2015) state a women’s age can greatly influence consumer behavior surrounding activewear and those members belonging to Generation Y tend to place a higher value on comfort, style, performance, and price while also being more interested in the surrounding product knowledge of the garment than older generations. Lastly, O’Sullivan et al. (2015) states marketers are still using old stereotypes to target female consumers and must shift their mindset to better understand the modern women, who has an increasingly important decision-making power.

In the same vein, Zhou et al. (2018) noted the same gap in research as O’Sullivan (2015) and state although the women’s activewear market is consistently growing, research dedicated to female consumer behavior and activewear consumption is lagging. Therefore, Zhou et al. (2018) focus their research on understanding what product attributes are most valued by female consumers when purchasing activewear. Zhou et al. (2018) implement brand association theory, which theorizes consumers make mental associations about the brand to assign meaning to the brand (Aaker, 1989 as cited by Zhou et al., 2018). When using the functional, expressive, and
aesthetic model, findings show three product-related attributes (functional design, color, and size/fit), two non-product-related attributes (price and model imagery), and four benefits (mood enhancement, exercise facilitation, healthy/active lifestyle, and physical body image) are of importance to females aged 18-34 when shopping for activewear apparel (Zhou et al., 2018).

Lastly, Zhou et al. (2021) continue the discussion in stating previous research focused on female activewear consumption is lacking and focus their research on analyzing attributes of sport products in connection with values of sport consumers. When using the MEC theory and model, it was found five product attributes (stylish design, color/pattern, fit, functional design, and fabric) are connected to three end-state values (fun/enjoyment, self-respect, and sense of accomplishment) through four consequences (social relationship, physical appearance, task facilitation, and physical comfort) (Zhou et al., 2021). With these findings in mind, Zhou et al. (2021) further state it is important for activewear brands to ensure their female consumers feel connected to the product and should focus more heavily on fashion and stylish products.

This past research leads us to a clear gap as no current research considers Covid-19 as a factor when discussing activewear consumption. It is important to apply activewear consumption to the Covid-19 pandemic as the global health crises changed the way we consume (The evolving consumer, n.d.). The following section discusses this point further.

2.6. Pandemic disruption

The onset of the global Covid-19 pandemic created one of the most challenging years for the fashion industry as sales declined (some retailers are reporting as much as a 90% decrease in profit), consumer demand diminished, and supply chains were disrupted (The State of Fashion, 2021). Consequently, the activewear market demonstrated uncertainty with clear slumps and noticeable rises. The activewear market slump during Covid-19 is discussed by Best et al. (2020)
scheduled a global level with references to a projected growth rate of 6.9% ($11 billion) set to reach $371.7 billion from 2019-2020. However, the actual growth rate fell short of this number totaling only $314.3 billion. Taking this slump into account, the 2020 activewear market projections were set to a 15.9% decrease of what was originally forecasted pre-Covid-19 (Best et.al, 2020). Moreover, major activewear market leader, Gildan, saw a decrease of 71.3% in sales during the second quarter of the Covid-19 pandemic (Gildan Activewear second-quarter sales slump 71%, 2020). It is further stated this downturn is thought to be contributed to inventory destocking, an unfavorable product-mix, and higher discounts (Gildan Activewear second-quarter sales slump 71%, 2020). However, the activewear market has also seen a growth by some sources. For instance, AmeriTrade (n.d.) lists a growth of 300% in the spring of 2020 for popular activewear brand Lululemon. This graph, Graph 2.2 Lululemon growth rate, is listed below.

Graph 2.2. Lululemon growth rate 2018-2021

As seen by the graph, Lululemon experienced a short, yet significant dip in growth at the start of 2020, the onset of the Covid-19 pandemic. However, it is important to look past this dip as the graph begins to trend upward starting from May 2020 through 2021 with an impressive
final increase of 300%. In addition, it has been reported Lululemon’s market share saw a jump to a total of 40% during the Covid-19 pandemic (Salfino, 2020). Though this graph only displays the market from 2020-2021, additional sources have reported the activewear market has the expectancy to grow as much as $157.1 billion from 2020-2024 (BusinessWire, 2020; Bloomberg, 2020). Additionally, as mentioned by Salfino (2020) the U.S. activewear market is projected to increase to a total of $257.1 billion by 2026. Considering these conflicting sources, it is necessary to discuss possible reasons associated with the rise and fall of the activewear market. Two major reasons contributing to the noted slump seen are thought to be due to economic uncertainty/job loss and issues within the retail supply chain.

2.6.1. Economic downturn/loss of jobs

The Covid-19 pandemic sent national, economic shockwaves across the U.S. as millions of Americans lost their jobs as the nation ordered 43% of non-essential businesses to temporarily close to try and control the spread of the virus (Amadeo, 2021). In response to this, the unemployment rate neared levels not seen since the Great Depression with 3.3 million Americans filing for unemployment in late March of 2020 and 6.1 million more filing for employment just the next week leaving the unemployment rate to peak at 25% (Amadeo, 2021). It has been stated by Ettlinger and Hensley (2021) that during this time 22 million jobs were lost between February and April of 2020, a total greater than was seen a decade prior during the Great Recession.

Moreover, due to business closures and the loss of jobs, many consumers were struggling with daily payments. For instance, it was reported one in five households was behind on paying rent in July 2020 (Bauer et al., 2020). In the same vein, retail sales were down 8.7% from February to March 2020 as many consumers did not have the disposable income available
to support their shopping needs (Bauer et al., 2020). The early months of the pandemic saw the most struggle; however, since this time there has been recovery measures implemented and the economy has seen improvement. For instance, the nation was able to recover 80% of the jobs lost by September 2021 (Ettlinger & Hensley, 2021) and retail sales increased 17.7% from April to May 2020 (Bauer et al., 2020). In addition to an economic downturn, the Covid-19 pandemic disrupted numerous supply chains, making it difficult to deliver goods to consumers.

2.6.2. Supply chain issues

The Covid-19 pandemic disrupted the global economy and numerous markets within it. Some supply chains (healthcare, technology) were able to successfully navigate their way around the disruption; however, other industries suffered a major decline (Supply chain security, 2022). For instance, major gaps were exposed within retail supply chains across the globe, especially those with a high level of intermediaries and a lack of information management (Sharma et al., 2021). Many different factors contributed to the crumbling retail supply chain during this time. For instance, retailers were unsure of which products to stock, where they were wanted, and how much was needed by consumers (Butt, 2021; Supply chain security, 2022).

Moreover, when consumers did find products they needed, it often resulted in panic buying and hoarding behaviors as they perceived the products to be in short supply (Supply chain security, 2022). Additionally, and as forementioned, consumers were no longer buying products deemed unnecessary during this time due to the economic downturn and an inflation of job loss. Therefore, while some products experienced a shortage, others experienced a surplus (Supply chain security, 2022). Additionally, quarantine measures were put into place during this time to try and control the spread of the virus. This meant national boarders became tighter and more regulated as workers responsible for the transportation of goods were often forced to self-
isolate when coming and going (Supply chain security, 2022). Going forward, retailers are now building resistance into their supply chains to better tackle expected and worst-case scenarios.

Improving retail supply chains has quickly become a priority as 80% of retailers have stated they are redirecting their attention to focus on supply chain strategies in the wake of Covid-19 (Supply chain security, 2022). Additionally, it has been stated by Butt (2021) that companies that do not instill resistance policies into their supply chain could risk losing up to $5 trillion in the event of another global, catastrophic event. Resistance policies include building up inventory for those products considered to be of high demand, preserving cash flow, allowing a wider array of delivery options for suppliers, adding more capacity to distribution centers, and becoming more flexible when considering logistics (Supply chain security, 2022; Butt, 2021). Therefore, issues within the supply chain during the Covid-19 pandemic are yet another reason for the activewear market to face uncertainty.

Moving from the noticeable slumps, and as previously stated, some sources have reported a rise in the activewear market (AmeriTrade, n.d.; BusinessWire, 2020). These rises are thought to be linked to consumer shifts amid the pandemic. These shifts include health and wellness being prioritized (Gautom, 2020), more people working remotely (Wong, 2020), and a shift from material-based consumption to a spiritual consumption mindset (Mehta et al., 2020).

2.6.3. Shifts in consumption: health and wellness being prioritized

As forementioned, activewear apparel is not a new trend and continues to grow at a consistent rate, especially recently. In fact, the activewear market’s consistency can be seen from 2015 onward as the market has grown by about 3.3% every year (Midena, 2020). A reason for this can be attributed to consumers becoming increasingly more interested in health and wellness. As this happens, the need for functional, yet fashionable clothing is a must-have,
leading the activewear market to be the center of the casualization shift (Liu, 2020). However, it can be argued the Covid-19 pandemic not only enforced this trend, but also accelerated it tremendously as consumers are putting an added importance on their health and wellness. For instance, it has been mentioned the Covid-19 pandemic has re-trained a vast amount of consumers’ motivation and instilled in them a true appreciation to prioritize fitness, which in turn, builds immunity against the illness (Gautom, 2020). As stated by BusinessWire (2020), increased awareness in a healthy lifestyle increases consumer activity levels and therefore increases the need for activewear apparel.

In the same vein, the increased demand for activewear apparel can also be linked to consumers taking part in at-home workouts as gym closures swept the globe; this societal change has led consumers to turn to retailers to stimulate their activewear wants and needs (Campuzano et al., 2020). It has also been mentioned consumers are buying new activewear apparel even when they are exercising alone in their own homes as it helps them feel and look good, leading to a more productive workout (Zhou et al., 2021). Just as consumers are exercising from home, a vast number of consumers are now working remotely and therefore, buying more comfortable clothing.

2.6.4. Shifts in consumption: working remotely

According to a recent survey, 42% of the United States workforce has indicated they have traded their cubicles for at-home-workspaces and are now normalizing working remotely (Wong, 2020). Due to this societal shift, as more people begin to work from home, we are seeing a decrease in work appropriate attire (around 17%) and an increase in more comfort orientated clothing (around 11%) (FTI Consulting, 2020). It should also be mentioned, this 11% can increase to as much as 25% the younger the target consumer (FTI Consulting, 2020).
al. (2020) mentions the pandemic has resulted in a stronger push towards casualization as consumers are increasingly putting added value on comfort, an already popular trend pre-pandemic. Additionally, just as there has been a shift in casualization, consumers are also starting to practice value-based consumption or spiritual consumption.

2.6.5. Shifts in consumption: spiritual consumption

It has been stated that in times of crisis, consumers often shift from “consumer materialism” to “consumer spiritualism” (Mehta et al., 2020). This often includes simplifying the buying process and buying products that are more aligned with consumers’ intrinsic needs. (Mehta et al., 2020). As the U.S. economy took a significant hit due to the Covid-19 pandemic, consumers’ attitudes towards consumption have changed to reflect a more value-based motive, also called spiritual consumption (Mehta et al., 2020). As consumers are programed to do exactly that, consume, and with activewear market’s impressive increase, it is perceived that consumers are putting activewear at the top of their lists as activewear satisfies basic to abstract needs.

As noted by Bohn et al. (2021), the Covid-19 pandemic has brought about a lot of changes and shifting motivations in normal consumption patterns, these changes can be directly linked to the U.S. economy’s floundering state and, as a result consumers’ newfound behavior of valued-based purchasing, or spiritual consumption. For instance, it has been stated, at the height of the Covid-19 pandemic, 75% of the general consumption market had reported their personal consumption patterns had changed due to Covid-19 (Pastore, 2020 June 8). More specifically, 27% of consumers stated they were struggling when making payments and 43% decided to purchase big ticket items at a later date (Pastore, 2020 June 8). These changes could very likely be attributed to the downturn of the U.S. economy as it was also stated 37% of consumers are worried about being laid off from work (Pastore, 2020 June 8). Additionally, Generation Y were
the most worried segment of all the generations and showed drastic changes in their consumption patterns (Pastore, 2020, July 20).

Also stated by Pastore (2020, July 20), 36% of Generation Y reported being more mindful of the products they were consuming during the Covid-19 pandemic. This makes an interesting point, even in the face of a global pandemic, people are conditioned to consume, “trained to always believe that [they] lack something” (Thich, 2019, p. 427). To this end, it can be argued that activewear provides the ever-consuming consumer with simple consumption, as the product in and of itself is so widely versatile. This shift from material-based consumption to consuming with more intention has been referred to as spiritual consumption (Sheth et al., 2021).

Spiritual consumption, coined by Sheth et al. (2011), is not necessarily a new term, but has since had more focus with the onset of the Covid-19 pandemic. Consumer spirituality is defined as “…the intrinsic motivation to seek and express autonomy, inner satisfaction, and self-actualization, maintain harmonious and sacred relationships with others, and desired sacredness in products, services and experiences” (Mehta et al., 2020, p. 298). Spiritual consumption can be directly related to the changing consumption patterns due to Covid-19 as it is thought consumers are now purchasing with more intention and are therefore limiting their searching, purchasing, using, evaluating, and disposing (Mehta et al., 2020). It has also been stated consumers are now interested in simplifying the buying process by purchasing uncomplicated, value-filled products that in turn, simplify their day-to-day lives (Mehta et al., 2020). In fact, in a survey done by FTI Consulting (2020), most participants stated they are consuming with purpose; this means, consuming less and focusing more on concrete needs, like price and value rather than abstract self-esteem needs such as style, color, brand name, etc. Now, with people consuming value-
oriented goods and purchasing with more intention, it can be argued that consumers are beginning to revert to the basics due to Covid-19 and are therefore consuming large quantities of activewear as activewear embodies all human needs, from basic to abstract, in relation to a person’s self-concept.

Spiritual consumption can also be linked to research discussing products and our extended selves, as spiritual consumption is said to be based on valued based purchasing (Mehta et al., 2020). To elaborate, previous research makes the statement that our possessions can be viewed as a “reflection of our identities” and are directly tied to how we view our extended sense of self (Belk, 1988, p. 139). Therefore, it can be argued what we consider our possessions are also those we deem as valuable, or things we place value in. Similarly, as consumers are now putting added value on health and wellness to build a stronger, healthier body, which is better prepared for combating Covid-19, it is possible consumers are also changing their core values; this could impact their purchasing decisions. For example, as stated by Mittal (2006) values and character are a large component of the self, which in turn, influences what and how we consume. Moreover, values are stated to be the desirable goals of life and we purchase items that are perceived to be in line with our values (Mittal, 2006). For instance, if a consumer values saving money, they will most likely shop for lower priced items and feel a sense of accomplishment when finding a product on sale. The same can be said for consumers now valuing their health and therefore, purchasing clothing that makes them feel as though they are living a healthier lifestyle.
2.7. Generation Y female consumers during the Covid-19 pandemic

Pre-pandemic, female Millennials were known to prioritize price, brand loyalty, and interestingly, tended to buy clothing beyond reasons associated with necessity (Costin, 2019). Additionally, according to Sharkey (2019), there were four purchasing values associated with millennial women, pre-pandemic, these were: convenience, customer service, brand engagement, and online reviews. Put simply, Generation Y women tended to shop online pre-Covid-19 and used the internet to better understand competing brands and for the purpose of user-to-user communication (Sharkey, 2019).

However, consumption habits have been re-evaluated in response to the Covid-19 pandemic. In discussing Generation Y as a whole, Mamula et al. (2022) states this generation, though already digitally savvy, is shopping online in higher numbers than before Covid-19. Moreover, this generation has an increased appreciation for health, well-being, and sustainability, and, according to a recent survey, 63% of Generation Y consumers are willing to pay for a product deemed environmentally friendly (Deloitte, 2020). The last noted major change in consumption with Generation Y consumers is a switch to more mindful purchasing, limiting costs and delaying the purchase of large ticket items (Mamula et al., 2022).

When segmenting the entire generation to focus on Generation Y females, Ding (2021) writes priorities of Millennial females have shifted and now have a “conscious aligning of spending and savings with values during the pandemic” (Ding, 2021, p. 2). Reasons associated with Millennial females becoming more financially aware are said to be due to their socioeconomic status as working females generally earn less than their male counterparts and are expected to take more time away from their careers to care for children/parents (Ding, 2020).
It should be noted information pertaining to Generation Y female consumption post-pandemic is scarce, and therefore, there are still unanswered questions pertaining to shifts this segment may have experienced, what products they are purchasing, and what are their motivations for consumption in response to the Covid-19 pandemic? The following research paper will further analyze these questions with specific attention to how these questions relate to the rise and fall of the activewear market. To better answer these questions, two models will be implemented, both of which are focused on understanding consumer motivation. These two models are Maslow’s (1943) Hierarchy of Needs and Gutman’s (1982) Means End Chain (MEC) model.

2.8. Theoretical framework

2.8.1. Maslow’s hierarchy of needs

In Abraham Maslow’s (1943) landmark study titled “A Theory of Human Motivation” it is thought humans require five levels of needs structured in a hierarchy from basic needs to abstract needs. More specifically, individuals must fulfill their most basic needs first, before another, more abstract need. The hierarchy of needs is as follows, beginning with the most basic level: (1) physiological needs, (2) safety needs, (3) love and belonging needs, (4) esteem needs and (5) self-actualization needs (Maslow, 1943).

At our most basic physiological needs, we require clothing to protect us from the elements: wind, rain, snow, etc. This includes warm clothing when the weather is cold and cool clothing when the weather is hot. In simple terms, we must be content and comfortable (Fox, 2016). Next is safety needs, the second tier of Maslow’s (1943) Hierarchy of Needs. This includes having available resources, health, family, employment, and security of body (Komninos, n.d.). The third level is love and belonging. Humans have the intrinsic need to be
loved and accepted within their surrounding society. The next level is esteem needs. Humans enjoy respect and want to be recognized for their social status. Lastly is self-actualization, the most abstract need, and is described by Maslow (1943) as the need to accomplish everything a person feels they must accomplish; “what a man can be, he must be” (Maslow, 1943, p. 382).

Maslow’s (1943) Hierarchy of needs has been applied to consumer sciences in previous research. For instance, Cui et al. (2021) used the theory to predict consumer purchasing patterns of electric vehicles. As stated by Cui et al. (2021) differing human needs shape purchasing behaviors and buying decisions during the decision-making process according to how the consumer perceives the product or service will satisfy these needs. According to their results, environmental concern was the most important factor when their participants purchased an electric vehicle followed by price, openness to experience, social influence, and self-esteem (Cui, 2021). Additionally, the theory has also been applied to fashion clothing as Jackson and Shaw (2009) state consuming a fashionable product mostly applies to the top three levels (social needs, esteem needs, and self-actualization needs) as a fashionable product satisfies the consumers need to belong, feel respected, and attempts to “appeal to a consumer’s perceived spiritual well-being” (Jackson & Shaw, 2009, p. 5). While this may be true, the following research makes the argument consumption practices apply to every level as a more abstract level cannot be achieved without satisfying more basic, lower-level needs. It is though each of these levels can be applied to activewear consumption.
2.8.2. Maslow’s hierarchy of needs in connection with activewear consumption needs

Starting with the most basic tier, physiological needs, activewear provides consumers with the basic need to be clothed in society. In addition, activewear has the bonus of providing the wearer with unmatched comfort, an example of a key attribute related to physiological needs. This point can be directly attributed to one of the reasons for such a heavy appreciation for activewear in recent research. In fact, a recent survey completed by activewear brand Female for Life found people tend to purchase and exercise in activewear apparel they deem to be both comfortable and flattering (Female for Life, n.d.; Liu, 2020). Once the most basic physiological need has been met, the wearer must feel safe and secure.

As aforementioned, safety, relates to having available resources, health, family, employment, and security of body. Here, we will focus in on safety needs when discussing the security of body. Activewear not only clothes us, a basic need, but secures our body into well-supported fitness apparel. Interestingly, there have been reports of consumers finding their activewear to be see-through, creating a market for retailers to supply consumers with leggings promised to conceal embarrassment as well as how to guides instructing consumers on how to avoid this notorious issue (Leaman, 2012). The point being, activewear must be continuously adapted and reconstructed by market professionals and designers to secure our safety needs. Once the second tier is met, a person needs to feel loved and belonged in their social groups.

People must feel accepted within their surrounding society. For instance, it has been stated people adopt and adapt to the clothing trends around them to conform and therefore, be accepted by the larger population (Fox, 2016). We mimic our dress and sense of style from each other, whether this is from people we see out in the world or those we follow on social media. In doing so, the term “social proof” has been coined, which is the “validation or
justification of the power of social influence” (Hallen, 2014 as cited in Bendoni, 2017, p. 69). The social need to conform can be directly applied to the ever-growing activewear market as consumers continue to purchase and wear activewear, fitting in to the surrounding society and their desired social circles. Once a person feels they have successfully been accepted, they must then be respected.

The need to be respected relates to esteem needs. An example of activewear relating to someone’s esteem needs can be demonstrated by brand. Clothing, specifically well-recognized brands, influence individuals to purchase for the symbolic meaning behind the brand image and the message they display to their peers (Fox, 2016). Moreover, as researched by Grathwohl and Grubb (1967), consumers tend to identify with brands as a direct relation of their personality as well as purchase products for the symbols they provide, if in fact, they feel the brand’s symbol displays an image that directly coincides with their believed persona. Brand symbols not only relate to the person consuming the product but also send a message to the surrounding society. A different research study, which focused primarily on luxury brands, found consumers purchase well-known brands to elevate their social status, especially if these consumers are considered to have a low self-esteem (Giovannini et al., 2015). Therefore, this finding can be applied to the activewear market as it can be argued consumers also purchase and wear well-respected activewear brands for the social recognition these brands provide, giving the wearer an elevated sense of esteem. Once esteem is met, a person then must complete the most abstract need, self-actualization.
Self-actualization can be applied to consumerism as past research has found that when people wear certain articles of clothing, they display a heightened sense of self. For instance, as early as the late 1800’s James (1890) stated consumers purchase goods for their fundamental needs, but perhaps even more so purchase these goods as a reflection, or even an extension, of the self. This early finding has held true in recent research by numerous scholars; it has been stated by leading research professionals that consumers have been known to purchase to meet their basic necessities but also for symbolic value, to cope with stress and to boost their mood, esteem, and social status (Aaker, 1996; Belk, 1985; Belk, 1988; Dittmar, 1992; Dittmar, 2011 as cited by, Cisek et al., 2014; Dittmar & Drury, 2000; Kressman et al., 2006; Sedikides et al., 2007, Sirgy, 1980). In a more recent research study done by Adam and Galinsky (2012), it was found that clothes not only display symbolic meaning but also can have psychological and behavioral consequences for the wearer; this phenomenon was coined “enclothed cognition” which is defined as “the systematic influence that clothes have on the wearer’s psychological process” (Adam & Galinsky, 2012, p. 918). In Adam and Galinsky’s (2012) study it was found those who wore a doctor’s coat had heightened attention than when wearing a painter’s coat. Considering this finding, it can be argued consumers may feel a heightened sense of attention when wearing activewear apparel and therefore, promotes wellness and higher levels of productivity in the wearer. More to the point, it can be gathered consumers also have a heightened sense of attention when wearing activewear, and in turn, intrinsically feel more physically healthy/productive when wearing activewear, therefore, reaching a component of self-actualization.
2.8.3. The means end chain model

The Means End Chain (MEC) model targets which product attributes are valued by consumers, even if these needs are unknown to consumers and are valued on a subconscious level (Gutman, 1982; Zhou et al., 2021). For example, in connection with the recently described consumer shifts, it is reasonable to assign a few attributes that consumers may be placing added value on during this time. To name a few, consumers may be placing an added value on the attribute of functionality relating to health and wellness being prioritized, an added value on the attribute of product quality relating to spiritual consumption and supply chain issues, or an added value on the attribute of price relating to economic downturn/job loss. These attributes are then linked to consequences, end-state values, and perceived values, which are organized from basic to abstract needs, much like Maslow’s (1943) Hierarchy of Needs. Consequences are the benefits a consumer receives from a given attribute (Patrick & Xu, 2018). End-state values pertain to a consumer’s beliefs, they are of the individual-centric concept; therefore, they are the highest level of abstract needs the consumer values when shopping for a product (Zhou et al., 2021). In other words, if a consumer states that purchasing a piece of activewear gives them a heightened sense of self-respect, the consumption of the product is applying to their inner self-concept. Perceived values should also be mentioned. Perceived values are the overall impression of the product being consumed; it is a product-centric concept and is therefore consistent with consequences (Gutman, 1982; Sweeney & Soutar, 2001; Zhou et al., 2021). Following the work of past research, the present research will discuss product attributes (least abstract), consequences (more abstract) and end-state values (most abstract) when implementing the MEC model.
2.8.4. Integrated theoretical framework

The following research study will first use the MEC model to identify top valued products attributes (least abstract), consequences (more abstract), and values (most abstract) mentioned by participants. Taking from previous research, these product attributes may include price, fit, or brand, they are concrete qualities of a product (Patrick & Xu, 2018). Next, are consequences, which may include comfort, economic value, and self-expression. Consequences are the benefits a consumer receives from a given attribute (Patrick & Xu, 2018). Lastly, and the most abstract, are values. Values may include self-esteem, happiness, and accomplishment, they are the desired goal the consumer wishes to achieve by consuming a particular product (Patrick & Xu, 2018). Once these product attributes, consequences, and values are identified through the MEC model, they will then be applied to Maslow’s (1943) Hierarchy of Needs as this theory includes a framework of consumer motivation, from basic to abstract. It is thought activewear consumption supplies consumers with every hierarchical need, from basic to abstract as activewear effectively clothes consumers (physiological need-first tier), secures the body (security needs-second tier), is socially acceptable (love and belonging needs-third tier), has been made popular with well-recognized brands (esteem needs- fourth tier) and helps motivate consumers with daily tasks (self-actualization- fifth tier). This theoretical framework is based on consumer motivation, because of this, it is perceived this framework will help to understand the reasonings associated with shifting consumer purchasing patterns within the activewear market. The following research questions are centered on the concept of shifting consumer purchasing patterns.
2.9. Research questions

Considering what has been previously discussed in the recently presented literature review, the following research questions have been formed:

RQ1: Have female members of Generation Y experienced shifts in activewear consumption in response to the Covid-19 pandemic? If so, how have these shifts impacted Generation Y female’s motivation to consume activewear products?

RQ2: What attributes of activewear products are preferred and valued most by female Generation Y consumers during Covid-19, and how have their consumption shifts, positive or negative, have impacted their perceptions product attributes of activewear?

RQ3: What are the motivations underlining the shifts in activewear consumption among Generation Y female consumers?
CHAPTER 3. METHODS AND PROCEDURES

3.1. Research design: Means-end chain approach

The purpose of this research paper is to better understand how female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic. To address this purpose, three research questions were developed:

RQ1: Have female members of Generation Y experienced shifts in activewear consumption in response to the Covid-19 pandemic? If so, how have these shifts impacted Generation Y female’s motivation to consume activewear products?

RQ2: What attributes of activewear products are preferred and valued most by female Generation Y consumers during Covid-19, and how have their consumption shifts, positive or negative, impacted their perceptions of activewear product attributes?

RQ3: What are the motivations underlining the shifts in activewear consumption among Generation Y female consumers?

To answer these questions, a qualitative research method was employed to identify consumers’ preferred product attributes, wearing consequences, and associated consumer value. To better understand consumers’ valued product attributes, wearing consequences, and consumer values, Gutman’s (1982) means-end chain model was specifically applied as this model has been used in recent and related research when understanding activewear consumption (Patrick & Xu’s, 2018; Zhou et al., 2021). The means-end chain model uses a hierarchical order beginning with uncovering participants’ most valued product attributes (A; least abstract), to their most valued consequences (C; more abstract) and finally to understanding their values associated with purchasing a particular product (V; most abstract). This A-C-V sequence creates a laddering format or, a means to an end chain-like format (Gutman, 1982). In applying the means-end chain
model to the current research, twenty participants were interviewed using a soft-laddering approach, which includes asking participants a series of “why” questions, building on one another, until saturation is reached. After data collection, data were analyzed using the LadderUX software, an online tool for research analysis that assists researchers with quantifying qualitative data. The data was then broken into six categories from basic to abstract: 1.) conditions, 2.) concrete attributes, 3.) abstract attributes, 4.) functional consequences, 5.) psychosocial consequences, and 6.) values. From here, the LadderUX software also generated a hierarchical value map, which connects valued attributes, consequences, and values to one another to help researchers visualize top chains. Understanding these chains allows researchers to better understand consumer motivation to purchase. The following chapter describes the data collection process and data analysis in detail.

3.2. Sampling and sample

The participants were gathered by a means of convenience sampling by posting a recruitment form on a popular social networking site (Appendix B). The social media post stated the study was interested in learning how Covid-19 has influenced activewear consumption for Generation Y females. The participants were then invited to participate and told they could discontinue their participation at any time. The post also provided participants with a link to schedule an appointment at a time that worked for them as well as the researcher. The scheduling link was also distributed by a few volunteers who recruited more participants using word of mouth. This allowed for a slightly broader reach in interviewing participants from the southeastern region, northeastern region, and the Midwest. A total of twenty participants were gathered using this sampling method. Participants were not incentivized and were interviewed
strictly on a volunteer basis. Additionally, the participants had to own at least five pieces of activewear clothing; this criterion was used in similar and previous research by Brice and Thorpe (2021). Additionally, before the interview began, the researcher asked the participants criteria information which included age, gender, and if they owned at least five pieces of activewear apparel. This ensured eligibility to continue the interview process. As mentioned by Saaka et al. (2004) the laddering procedure is best completed when using a minimum of twenty participants. Twenty-two participants volunteered. Twenty of those participants were interviewed to completion, the other two participants had scheduling conflicts, which prevented them from participating in the study.

The convenience sample consisted of 95% of the participants identifying as White/Caucasian with 5% identifying as Black/African American. Additionally, 20% of participants made $30,000-$50,000 a year, 75% of participants fell within the $50,000-$100,000 a year bracket, and 5% made over $100,000 a year. Geographically, 15% of participants resided in the northeastern region of the United States, 20% within the midwestern region, and 65% within the southeastern region. Lastly, 10% of participants had a trade school level education, 50% with a bachelor’s degree and the remaining 40% with a master’s degree. The following table, Table 3.1 Demographics, helps identify each participant within the research study:
Table 3.1. Demographics

<table>
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<tr>
<th>Participant</th>
<th>Age</th>
<th>Income</th>
<th>Geographical Location</th>
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<td>Participant B</td>
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<td>Participant C</td>
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<td>Participant P</td>
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<td>Southeast</td>
</tr>
<tr>
<td>Participant Q</td>
<td>29</td>
<td>$50,000-$1000,000</td>
<td>Midwest</td>
</tr>
<tr>
<td>Participant R</td>
<td>29</td>
<td>$50,000-$1000,000</td>
<td>Southeast</td>
</tr>
<tr>
<td>Participant S</td>
<td>36</td>
<td>&gt;$100,000</td>
<td>Southeast</td>
</tr>
<tr>
<td>Participant T</td>
<td>25</td>
<td>$50,000-$100,000</td>
<td>Southeast</td>
</tr>
</tbody>
</table>
Additionally, and in reference to research question one, 55% of participants stated they were purchasing more activewear apparel at the start of the Covid-19 pandemic with 25% stating they were wearing more, even if their consumption remained unchanged. Further, 70% of participants preferred dark/neutral colors to bright colors and 50% stated they preferred to purchase activewear with functional pockets. Lastly, 85% of participants stated they wear activewear over four days a week with 60% stating they wear activewear for most of their day. From here, the interview discussed more in-depth talking points. These points are outlined in the proceeding section, research instrument and data collection.

3.3. Research instrument and data collection

The data collection process followed a soft-laddering approach. As previously mentioned, the soft laddering approach is a process of asking participants a series of “why” questions, which build on one another until saturation is believed to have been reached. The interview process had a foundational structure, which opened with asking participants to describe their activewear wardrobe. From there, the researcher asked participants what their purpose is for wearing activewear. Next, the researcher asked participants to describe their situational context when wearing activewear, this included when and why the participant wears activewear. Most valued attributes of activewear were then discussed, this includes understanding what motivates the participant to purchase. This then led into discussing more abstract associations (consequences) of consuming activewear, such as a comfortable piece of activewear. Finally, values were discussed, the most abstract association of consuming activewear; examples of values may be feeling more motivated to complete daily tasks. Below is a detailed outline of the interview procedure. Important to mention, the interview outline should be considered a template
as the interview was guided and tailored according to each respondent’s answers. The questions mentioned below are merely starting points for the soft-laddering process.

3.3.1. Research instrument and data collection- pilot testing

Two participants were initially tested one month before the formal data collection to ensure the research design was appropriate and to make any necessary adjustments before formal data collection. Both participants reside in the southeast region of the United States, own at least five articles of activewear and are considered to have an average income level. One participant is in her early 30’s while the other is in her late 20’s. The highest education level for one participant is a bachelor’s degree while the other has a post-graduate degree.

Each participant was interviewed over Zoom using a soft-laddering approach, this approach was used in both Patrick and Xu’s (2018) research and Zhou et al.’s (2021) research. Both participants were first asked to describe their activewear consumption practices in relation to the Covid-19 pandemic. From here, and as described previously, the researcher laddered onto what was being described by the participant. Each question was followed by a “why?” question until the researcher felt saturation had been met. The interviews lasted between thirty to forty-five minutes each. Both pilot tests were recorded, and audio transcribed for coding.

The pilot test helped the researcher better understand the laddering structure of the interview process. The two pilot tests served as a space for the researcher to test the method in real time to ensure the process would evoke conversation as well as basic to abstract thinking centered around the consumption of activewear. The interview schedule (Appendix A) used for the pilot testing proved useful during this process and will be used going forward during formal data collection. Additionally, when interviewing participants over Zoom, it was discovered certain settings must be in use to autogenerate the necessary audio transcripts. The researcher made sure
the Zoom account was programmed to auto-record and autogenerate an audio transcript for each interview. Once these adjustments were made, formal data collection followed.

### 3.3.2. Research instrument and data collection: formal interviewing

For formal data collection, IRB approval was first granted from the Human Research Subjects Committee at Louisiana State University to ensure the research being conducted was ethical. Once complete, participants were gathered by posting on a popular social networking platform. The post listed qualifications and criteria needed to participate in the study as well as a link to a scheduling platform. The scheduling platform allowed participants to schedule a time with the researcher that worked with both parties’ schedules. After all interviews were scheduled, the researcher began interviewing each participant privately via Zoom in September of 2022. Each interview followed the same structure as the pilot interviewing and followed the previously shown interview template using the soft-laddering approach. In beginning each interview, the researcher first ensured each participant was eligible by asking the participant of their age, gender, and how many pieces of activewear clothing they owned. Of twenty-two applicants, twenty participants were interviewed to completion. Additionally, the interview process took one month to complete, and each interview averaged between thirty and forty-five minutes each. The online interviews were recorded, and audio transcribed via Zoom for coding purposes. After coding, thirty-six common activewear characteristics mentioned by the participants were identified.

### 3.4. Data analysis procedure

Once the data were gathered, as recommended by Reynolds and Gutman (1988), the means-end chain method was implemented to analyze and quantify the qualitative data using a three-step laddering interview procedure. The three steps are: (1) content analysis, (2)
implication matrix via LadderUX software, and (3) constructing the hierarchical value map via Ladder UX software (HVM) (Reynolds & Gutman, 1988). Content analysis is the process of analyzing all content gathered through the interview process and coding the content into three levels: attributes, consequences, and values (A/C/V). After this step, identified attributes, consequences and values were input via the LadderUX software, an online tool that assists researchers with quantitative analysis of laddering data. Once this information was input into the LadderUX software, chains of the top activewear characteristics mentioned by each participant were then formed per each interview’s coded transcript. The program then generates this information into an implication matrix, a square matrix which displays the number of times each element is connected to a separate element. The program also creates an HVM. The HVM is a tree-like graph which illustrates the relationships between the identified attributes, consequences, and values (Sadeghi, 2006). The data was then applied to Maslow’s Hierarchy of Needs, which was used to better understand participant’s motivation to buy activewear during the Covid-19 pandemic. In analyzing the data, five main chains were identified, which pertains to the second and third research questions, as the first research question was focused on a shift in consumption. This information is discussed further in the following chapter.
CHAPTER 4. FINDINGS

The purpose of this research was to better understand how female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic. With this purpose in mind, and with IRB approval from the Human Research Subjects Committee at Louisiana State University, data were collected from August to September of 2022. The results are as follows.

4.1. Results per the implication matrix

After data were collected, the attributes identified by participants during the interview process were organized into six categories from basic to abstract: 1.) conditions, activities requiring activewear usage such as exercising or working from home; 2.) concrete attributes, tangible qualities, such as price; 3.) abstract attributes, subjective qualities such as style; 4.) functional consequences, wearing outcomes, such as productivity; 5.) psycho-social consequences, symbolic feelings associated with activewear wearing/consuming, such as feeling motivated; and 6.) values, higher associations of activewear, such as empowerment.

The implication matrix shown below demonstrates each identified attribute both vertically and horizontally. The numbers shown when the rows and columns intersect demonstrate the number of times each attribute were either directly or indirectly mentioned during the interview process. For instance, when looking at row 1, exercising, and column 7, fit, the two attributes are shown to have a direct relationship three times and an indirect relationship once. Further, the higher the number of times each attribute is mentioned, the higher that attribute is valued by participants.

As shown below in Table 4.1 Implication Matrix, the top two concrete attributes were stretchability and shaping/supportive properties. Stretchability involves fabric that moves with
the body as needed, giving the wearer freedom of movement throughout their daily routines.

Participant L speaks to this by stating “stretchable clothing makes me feel like I can do anything and not feel interrupted…I feel like I can get more done throughout the day”. Further, Participant N states a stretchable piece of activewear “moves with me, I can trust it”. Similarly, participants also wanted activewear with shaping and supportive properties, meaning clothing that soothes the body and creates a flattering silhouette. Participant I elaborates by stating “I like the activewear that holds you in and makes you feel more put together. You feel more concealed. You don’t have to adjust the waistband”. Following concrete attributes are abstract attributes.

The top two abstract attributes were quality fabric and style. An activewear product was considered of good quality if the product was long-lasting, durable, and came from a well-known brand. For example, Participant O states “I really want material that is long-lasting. I'm not frugal, but if I spend the money, I want it to last. I want timeless pieces with quality material. I really like Athleta for the quality.” Participants also wanted activewear that was considered stylish, or trendy. A few participants mentioned they felt stylish when wearing a matching activewear set, for example, Participant E states “matching sets have no thought, so I like that. It’s also stylish and makes me feel more put together”. Further, Participant P mentioned feeling more stylish socially when wearing activewear and even gets style inspiration from social media platforms. She states, “I’m seeing more available and there are Tiktoks now that will show you how to style a matching set. It's like, there’s more style associated with it…it’s just becoming more acceptable”. Next are functional consequences associated with activewear.

Four top functional consequences were identified: task facilitation, ease of use/transitional, physical comfort and physical appearance. Task facilitation is the idea that wearing activewear allows you to complete daily tasks with ease. Activewear was also discussed
as being transitional, meaning activewear allows the participants to transition seamlessly from one task to the next. Physical comfort and physical appearance were also mentioned, meaning the participants discussed feeling physically comfortable while wearing activewear and gave them an overall positive feeling about their physical appearance. Interestingly, these four consequences were interlinked by multiple participants. For example, Participant N states “I feel like I can concentrate more on the task at hand instead of me constantly thinking about what I’m wearing or wondering if other people are looking at my outfit. I can focus on what I’m doing”. Further, Participant A states “it’s transitional so it does motivate me in the sense that I am getting more done. It’s easier to get things done when you are comfortable”. Proceeding functional consequences of activewear are psycho-social consequences of activewear.

The top two psycho-social consequences were feeling motivated and social relationship. This means participants felt a heightened sense of motivation when wearing activewear and also reported feeling more socially accepted within their respective social circles. For example, Participant I mentions feeling more motivated at work when wearing activewear as opposed to traditional work attire. She states, ”yesterday I wore an athletic pant, and I was more comfortable and even more motivated to get up and go walk around the school to find and connect with my students”. Separately, participants also heavily discussed the acculturation component of wearing activewear socially. Participant N states “if I decide to wear activewear, I don’t feel like I stand out or feel out of place, because there’s other people that are wearing it too”. Following psycho-social consequences are values, the most abstract.

The top value was empowerment. This means wearing activewear was able to give participants an overall feeling of empowerment, as they were motivated and more efficient in
their daily routines. Participant C speaks to this by stating “I am more efficient and more accomplished when wearing activewear, this makes me feel more empowered when the day is done because I know I was productive”. These associations, from basic to abstract, can be found in table, Table 4.1 Implication Matrix, below. After analyzing the implication matrix, the hierarchical value map was analyzed.

Table 4.1. Implication matrix

<table>
<thead>
<tr>
<th>IMPLICATION MATRIX</th>
<th>Wearability</th>
<th>Sharing Support</th>
<th>Quality Fabric</th>
<th>Style</th>
<th>Task facilitation</th>
<th>Ease of use/transition</th>
<th>Physical comfort</th>
<th>Physical appearance</th>
<th>Social relationship</th>
<th>Feeling motivated</th>
<th>Empowerment sum</th>
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<td>1.0</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Feeling motivated</td>
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<td>4.0</td>
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<td>8.0</td>
<td>9.0</td>
<td>1.0</td>
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</table>

4.2. Results per the hierarchical value map (HVM)

The final step of the means-end chain analysis is to analyze the data using a hierarchical value map (HVM), which is a tool that helps visualize the linkage, or chains, between top attributes, consequences, and values mentioned by participants. The LadderUX software generates the collected data into a (HVM). The HVM organizes the six categories from basic to abstract, beginning with conditions at the bottom of the map, concrete attributes above, followed by abstract attributes, then functional consequences, next psycho-social consequences, and ending with values. Within each category, the corresponding attributes are shown. From here, chains are shown between each attribute, consequence, and value. The thicker and more defined the chain is between each attribute, consequence, or value, the more significant their relationship.

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For example, we can see from the previously shown implication matrix that the functional consequences of task facilitation, ease of use/transitional, efficiency/saving time, physical comfort, and physical appearance are valued by participants. However, the HVM allows us to also see these functional consequences are further connected to the more abstract values of feeling good, social relationship, and empowerment. These chains can be seen below in Figure 4.1, Hierarchical value map.

Figure 4.1. Hierarchical value map
4.2.1. Top identified chains per the HVM

When looking at the previously shown HVM, we can see those chains which appear thicker and more defined, have a more significant relationship. In other words, a higher number of participants mentioned these attributes, consequences, and values in connection with other identified attributes, consequences, and values. For example, as the connection between the functional consequence of psychical appearance, the psycho-social consequence of feeling good, the psycho-social consequence of social relationship, and the value of self-esteem have a thicker, more defined line than other chains shown, we know these consequences and values are more closely related than other listed attributes, consequences, and values. When looking at the map, the researcher identified a total of five significant chains. These chains are as follows.

1.) Price → brand → fit → stretchability → breathability → shaping/supportive → quality fabric → social relationship → self-esteem

The above chain establishes a connection between the price of a garment, the brand of the garment, and the properties associated when consuming from a particular brand. When a garment of higher price is consumed, the consumer assigns this factor to a better, more well-known brand. Therefore, the consumer relates this to the garment having a better overall fit, stretchability, breathability, shaping/supportive fabrics, and better quality of fabric. Therefore, when wearing a garment that has all these properties, a consumer is said to feel more included socially, and their self-esteem needs are met. For instance, Participant M mentions she likes a particular brand because she considers the product to be of higher quality. This in turn makes her feel better when socializing with others in the neighborhood. Participant M states:

“I really like Fabletics. They can be a bit pricier, but the quality is there; I like the way they fit. Also, when I am wearing a better brand, I feel I fit in more, which makes me feel better, activewear is like, the uniform of moms”.
The next chain begins with the functional attribute of having pockets and ends with the value of having a sense of accomplishment.

2.) Having pockets → task facilitation → ease of use/transitional → efficiency/saving time → physical comfort → physical appearance → feeling good → empowerment → sense of accomplishment

The functional attribute of a piece of activewear having pockets has a direct correlation to completing tasks while also allowing the wearer to transition more easily in their daily routines as they are not needing to change numerous times throughout the day. This in turn saves the wearer time while also providing them physical comfort and an overall positive feeling about their physical appearance. The consumer is then left feeling good, more empowered, and an overall feeling of accomplishment. To demonstrate this chain, Participant A mentions she specifically looks for pockets when consuming activewear as “most of the leggings that I wear regularly have two pockets, one on each side…pockets are a big thing for me”. When asked to elaborate she further explains pockets make it easier for her facilitate her daily tasks, which in turn makes her look and feel comfortable, making her feel better within society and overall, more empowered and accomplished in her day-to-day. For instance, she further states “…it’s transitional so it does motivate me in the sense that I am getting more done. It’s easier to get things done when you’re comfortable… if it’s comfortable, I’m able to accomplish more.” The next two chains stem from the condition of exercising.

3.) Exercising → efficiency/saving time → physical comfort → physical appearance → feeling good → empowerment → sense of accomplishment

Many participants mentioned wearing activewear for the purpose of exercise in addition to wearing activewear for numerous daily errands. The fact activewear could be worn for both
exercise and errands, left the participants feeling more efficient as they did not feel the pressure to change clothes when transitioning to and from different daily routines. This idea is identified by Participant I, who states whether she is exercising or running errands, it is easier to “transition freely and just complete tasks and not have to think about what you’re wearing. I make so many choices in a day…it’s just one less choice I have to make... ”. Further, the chain discusses being physically comfortable and feeling positive about their physical appearance leaves the participants feeling good, more empowered to exercise or complete the task at hand and therefore, leaves them with an overall sense of accomplishment. Participant K states, “it’s comfort, its safety, it’s empowerment. It makes me feel like I can do everything I need to do. ” Participant D further elaborates and explains if physical comfort is not first met, she is not empowered to complete the task at hand. She states, “when I am actively working out, and if I’m wearing something that doesn’t fit well or I’m constantly having to adjust, I’m not going to be motivated to stay there longer. ” The following chain begins with the condition of exercise and ends with the functional consequence of productivity.

4.) Exercising → efficiency/saving time → physical comfort → productivity

This chain begins with the condition of exercise, which leads to the participant being more efficient as they feel more psychically comfortable. In turn, they are left feeling more productive overall. For instance, Participant C states wearing activewear not only motivates her to exercise, but also makes her feel more efficient as she feels more comfortable. When she is comfortable, she can “complete tasks and feel better with what I’m wearing, it’s more practical. ” Participant L elaborates on this idea by stating “I just know that if I put activewear on for my day, that anything that I have planned will get done, and anything that comes up spontaneously can also get done- that leads me to feeling more productive.”
The last chain begins with the concrete attribute of having shaping and supportive properties and ends with the psycho-social consequence of concealing embarrassment.

5.) Shaping/supportive → quality fabric → concealing embarrassment

This chain begins with participants consuming activewear that they feel shapes and smooths their silhouette. This factor is supplied to them through a piece of activewear made of quality fabric. In turn, if a participant is wearing a garment thought to be of higher quality fabric, they can feel more assured they are concealed when in a public space. For instance, Participant N discusses the shaping properties of activewear by stating this component makes her feel more secure and comfortable to know “nothing is hanging out, activewear tucks everything in.” She elaborates by stating she is “not going to want cotton fabric because I feel like it shows more.” In the same vein, Participant P mentions she feels the quality of activewear has gotten better over the years. She now feels “the quality has changed, if you bend over, you’re not going to see everyone’s undergarments.” Therefore, participants who are consuming a quality piece with shaping/supportive properties are in turn satisfying their overall safety needs. Each of these chains are significant as it shows a basic, fundamental need, satisfied through wearing activewear, is in fact connected to an overall, more abstract state of being.

4.3. Significance of results

4.3.1. Significance of results pertaining to the implication matrix and HVM

The results previously shown via the implication matrix are significant as it was shown there were two top concrete attributes, stretchability, and shaping/supportive properties. The top two abstract attributes were quality fabric and style. Four top functional consequences were identified: task facilitation, ease of use/transitional, physical comfort and physical appearance. The top two psycho-social consequences were feeling motivated and social relationship. And the
top value was empowerment. When looking at each top identified attribute individually, it is clear participants value activewear clothing that moves with them throughout their daily lives, which in turn helps them transition more easily to complete tasks. The ability to do so, leads them to feeling more motivated and empowered. Separately, the participants mentioned activewear helps them feel more comfortable physically when wearing a garment constructed of quality fabric as well as improves their overall physical appearance with stylish activewear made up of shaping/supportive properties. This in turn, makes them feel more acculturated socially. Therefore, the participants are achieving feelings of motivation, empowerment, and social acceptance through the use of their activewear. Further, participants also mentioned a shift to casualization in the workplace as more people opted to dress down after the Covid-19 pandemic. It is thought this can also be attributed to consumers prioritizing comfort as more workers began working remotely. To better understand these main talking points, the participant interviews were further analyzed within the LadderUX program. Two main themes emerged: change in consumption and change in wearing behavior due to Covid-19.

4.3.2. Significance of results in relation to Covid-19- change in consumption

The first research question asks, “have female members of Generation Y experienced shifts in activewear consumption in response to the Covid-19 pandemic? If so, how have these shifts impacted Generation Y female’s motivation to consume activewear products?” To answer this question, each participant was asked to discuss their consumption practices before Covid-19, during lockdown and after lockdown. According to the results, 50% of the participants stated they purchased more activewear during lockdown as opposed to before the Covid-19 pandemic as their lifestyles had changed and they were now working from home. However, after lockdown, their purchasing was slowed. For example, Participant A stated that she “actually
ordered a bunch of leggings because I was working from home, and that was the most comfortable.” Post-lockdown her consumption was changed as she “ordered a bunch of them during lockdown and after, there hasn't been really any changes. I'm still wearing the same leggings that I got during Covid.” Participants also mentioned a slow-down in purchasing after they believed enough had been acquired. This can be partially attributed to economic hardship. For example, Participant L states “I am wearing more activewear after Covid, but I have not spent nearly as much as I used to. Mostly because of money reasons. Yeah, I would boil it down to finances”. This information is in agreeance with Graph 2.1 Level of interest for the term “activewear” from March 2019-present (Google, n.d.) and Graph 2.2 Lululemon Growth Rate 2018-2021 (AmeriTrade, n.d.), presented within the literature review as both graphs show a spike in interest at the beginning of the Covid-19 pandemic. Considering this information, it can be gathered though activewear was not a new trend, the Covid-19 pandemic accelerated the purchasing of activewear due to at-home mandates and a shift in working remotely, which tapered off after enough activewear was believed to have been acquired.

The second research question asks, “what attributes of activewear products are preferred and valued most by female Generation Y consumers during Covid-19, and how have their consumption shifts, positive or negative, impacted their perceptions regarding product attributes of activewear?”. As previously stated within Chapter 4, the top two concrete attributes were stretchability and shaping/supportive properties. The top two abstract attributes were quality fabric and style. The top four functional consequences were identified: task facilitation, ease of use/transitional, physical comfort and physical appearance. The top two psycho-social consequences were feeling motivated and social relationship. And the top value was empowerment. When comparing these research findings to past research completed before the
Covid-19 pandemic, it is shown consumers purchasing activewear before the Covid-19 pandemic are motivated to purchase activewear after the Covid-19 pandemic by similar attributes, consequences, and values. For instance, Patrick and Xu (2018) list aesthetics (i.e.: style) and fabric as two of their top valued attributes. For consequences, Patrick and Xu (2018) list image (i.e.: physical appearance) and comfort. Lastly, Patrick and Xu (2018) list social relationship as one of the top values among participants, which, even though classified as a psycho-social consequence in the current research, was still found as a top component of activewear.

Additionally, Patrick & Xu (2018) list the consequence of efficiency as being important to participants, which is similar to task facilitation, one of the top functional consequences found in the current research. In contrast, Patrick and Xu (2018) do not mention stretchability or shaping/supportive properties as a top attribute nor do they mention empowerment as a top value associated with activewear consumption. Considering this, and regarding an increased shift in activewear consumption, it can be gathered consumers are consuming more activewear during Covid-19 with an added focus on purchasing activewear they feel they can trust to move with them, shape and smooth their silhouette, and overall supply them with an overall feeling of empowerment throughout their daily routines.

This concept also relates to the third and last research question, which asks, “what are the motivations underlining the shifts in activewear consumption among Generation Y female consumers?”, as it is clear consumers are motivated to purchase activewear clothing that moves with them, shapes and smooths their body, is made of quality fabric with a pleasing and trendy style, is comfortable, and easily facilitates tasks. Additionally, this question also relates to a changing purchase motivation seen within a few participants even after the lockdown period was over. This change relates to the concept of spiritual consumption. Spiritual consumption, is
described by Mehta et al. (2020) as the act of shifting to value-based consumption as opposed to material-based consumption. Value-based consumption is defined as mindful consumption based on more abstract values associated with the product, rather than concrete attributes such as convenience, functionality, price, etc. (Burns, 2017). A few participants touched on a shift in the way they consume during the Covid-19 pandemic, which reflects a more value-based consumption mindset. For example, Participant O states she feels that “during Covid people found out what was really important to them. Athleisure just hits every need so it's easy to consume. It allows me to live my life to my fullest.” In addition, Participant H mentions she found herself shopping online more to “shop around rather than buying the first thing I see”. Both quotes reflect a shift in motivation for consumers to a more abstract, value-based way of thinking during the decision-making process. Therefore, it can be gathered, a few consumers were motivated to shop in different ways to meet their needs after the onset of the Covid-19 pandemic. After consumption was discussed, the interviews then focused on activewear wearing behavior.

4.3.3. Significance of results in relation to Covid-19- change in wearing behavior

80% of participants stated they were wearing more activewear due to Covid-19. Interestingly, multiple participants mentioned a notable change in the way themselves and their coworkers were dressing after the lockdown phase was over as more people returned to work. Participant N discusses the wearing behavior of her coworkers and herself by stating “everyone was wearing like; you know nice clothes. Now you'll see people wearing patterned leggings, and like a lot more activewear.” In agreeance, Participant I discussed a similar way of thinking while also mentioning the added importance of being comfortable for work, “when it was time to go
back to go back to work in person, I was like no, these are uncomfortable I want to be more comfortable.” It is made clear the attribute of comfort is a top priority for participants as they return to the workforce to mimic the comfort they found when working from home. Taking from these quotes, it can be gathered the need for comfortable apparel not only improves their workday, but also allows them to work more efficiently when they are dressed in comfortable clothing. This need to be comfortable has even created a new work-related dress code coined “business comfortable”, a dress code one step below business casual that is professional yet has an added layer of comfort consumers had gotten used to during the Covid-19 pandemic (Smith, 2022a). This finding also relates to the second research question as it is clear consumers’ perceptions of wearing activewear have become more lenient in response to the Covid-19 pandemic. For instance, consumers are also becoming more interested in a transitional, casual piece that can double for work and for exercise, Participant I continues: “…I’ve been buying more casual type activewear, like pants specifically to wear to work and for exercise.” Elaborating on this topic, Participant H mentions the added importance of being comfortable and its relation to her productivity, “I definitely work better when I am more comfortable. Even when I went back to the office, I switched to elastic waist bands and slip on/off shoes to makes sure I was able to be comfortable all day.” Lastly, Participant P discusses her shift to comfort-orientated clothing as she describes herself getting,

“a little bit too comfortable in it [activewear], like I’ve taken meetings with my boss, who is the head of the company, and realize I’m in activewear and I think to myself, ‘maybe I should be a little bit more aware of what I’m wearing.”

Interestingly, similar research also mentions a prioritization of comfortable clothing consumption in the wake of the Covid-19 pandemic, which may be due to consumers needing to feel less stressed in the workplace (Liu, Xia, and Lang, 2021). These discussions surrounding activewear
make it clear Generation Y females are consuming more, wearing more, and are placing an added value on being comfortable in the workplace.
CHAPTER 5. DISCUSSION

5.1. Discussion

The purpose of this research paper is to better understand how female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic. To address this purpose, the current research implemented a qualitative research methodology using the means-end chain model, which is a model that addresses what motivates a consumer to purchase during the decision-making process. In implementing the means-end chain model, a total of twenty female members of Generation Y were interviewed using a soft-laddering approach, an interviewing technique centered on asking “why” questions until saturation is believed to have been reached. After data collection and data analysis, the results found consumers are motivated to purchase activewear through two concrete attributes (stretchability and shaping/supportive properties), two abstract attributes (quality fabric and style), four functional consequences (task facilitation, ease of use/transitional, physical comfort, and physical appearance), two psycho-social consequences (feeling motivated and social relationship), and one value (empowerment).

5.1.1. Results in relation to past research

As discussed, this research saw a shift in consumers wearing activewear more casually in daily life. However, it should be mentioned that researchers, Watts and Chi (2018) note the same shift pre-pandemic as activewear was beginning to be worn for a casual purpose and not just strictly for exercise. Therefore, according to what was mentioned by the participants in this research paper, it is possible the Covid-19 pandemic accelerated the shift to wearing activewear for a casual purpose.
This research paper used both Patrick and Xu (2018) and Zhou et al. (2021) as a foundational starting point when constructing this research paper. Patrick and Xu (2018) implemented the use of the MEC model to test a similar sample of Generation Y males and females’ attitudes toward athleisure apparel pre-pandemic. According to their results, Patrick and Xu (2018) found aesthetics, price, durability, performance, fit, breathability, and wick-ability to be the most valued activewear product attributes to their participants. Additionally, it was found economic value, comfort, image, efficiency, and avoiding embarrassment to be the most valued perceived consequences among their participants (Patrick & Xu, 2018). Zhou et al. (2021), also used the MEC model to test a wider age range (21-55) of female consumers’ activewear consumption after the lockdown phase was over. According to Zhou et al. (2021), five attributes: functional design, fabric, color, and pattern; four consequences: physical appearance, physical comfort, task facilitation, and social relationship and three end-state values: sense of accomplishment, self-respect, and fun/enjoyment were found to be significant. Additionally, it should be noted that Patrick and Xu’s (2018) research were completed before the Covid-19 pandemic while Zhou et al.’s (2021) research did not mention Covid-19 as a factor. According to this research, and when using Covid-19 as a determinate for motivation, this research found consumers are now prioritizing simpler consumption and a more comfortable and casual attire in the wake of Covid-19. The consequence of comfort was particularly important to the participants.

The functional consequence of comfort was apparently important to multiple participants as they shared feeling comfortable when wearing activewear clothing helps them facilitate tasks in their daily lives. Participant C mentions a shift from traditional womenswear and its relation to efficiency “I feel more efficient. Women's clothing is just not marketed to be comfortable. Men
have pockets that they can use, and women don't”. Following the same thought process, Participant I also mentioned the need for comfortable, task-orientated clothing:

“We need clothes that move with us…all my friends also wear so much activewear. We just have a lot of stuff to do. We gotta take care of ourselves, we are no longer going to abide by the constraints. Like we are single women, late twenties, and the only ones paying bills…we have stuff to do.”

Lastly, and of the same idea, Participant I expresses relief by saying “finally we have something that allows us to move and breath and just live in. It's empowering and inclusive and transitional. It's just more socially acceptable as well.”

Additionally, while previous research implemented the MEC model, Maslow’s (1943) Hierarchy of Needs was not used as a theoretical framework and did therefore, not attempt to understand consumer motivations on a more abstract level. When doing so, it is believed the results are better understood when viewing the research through a consumer motivation lens. When implementing Maslow’s (1943) Hierarchy of Needs, the research found the participants are meeting every level displayed in the hierarchy through activewear consumption. The needs are met as the participants are buying stretchable and comfortable activewear (physiological needs), activewear with supportive properties (safety needs), stylish pieces that enhance physical appearance (love/belonging needs), the feeling of being respected socially due to stylish pieces (esteem needs) and are given the satisfaction of task completion when wearing activewear pieces (self-actualization). These implications as they apply to Maslow’s (1943) Hierarchy of Needs is further discussed in the following sections: physiological needs, safety needs, love/belonging needs, esteem needs and self-actualization needs.
5.1.2. Physiological needs

When applying Maslow’s (1943) Hierarchy of Needs to the findings demonstrated in this research paper, it can be gathered activewear consumption supplies consumers with every level shown within the hierarchy, from basic to abstract. For instance, consumer’s must first fulfil their physiological needs, which are a person’s most basic needs for survival such as air, water, shelter, clothing warmth, etc. In other words, they must be content and comfortable (Maslow, 1943). This need is satisfied when consuming activewear as a comfortable piece of activewear can be obtained from a product with stretchability and shaping/supportive properties. In relation to past research, Gardner and Hill (1990) researched Maslow’s (1943) Hierarchy of Needs theory while implementing the variable of consumers’ current mood states. According to their results, findings suggest consumers participate in more basic-level consumption when in a negative mood space as the decision-making process requires fewer sensory thoughts and is more of an informational process. With this in mind, and with respect to the current research study, as consumers are innately interested in a stretchable, comfortable, and supportive piece of activewear, it can also be assumed consumers are purchasing activewear that supplies their physiological needs when in a negative, or more utilitarian head space. Once this need is met, a person must feel safe and secure.

5.1.3. Safety needs

The second tier in Maslow’s (1943) Hierarchy of Needs is the need to feel safe and a sense of security. Previous research completed by Karpova (2022) applied Maslow’s (1943) Hierarchy of Needs to collaborative fashion consumption. Regarding safety needs, it is stated participating in collaborative consumption both supports and challenges a person’s need for safety (Karpova, 2022). A sense of safety is supported through collaborative consumption as
consumers are given an abundance of clothing to wear for an affordable price (Karpova, 2022). However, a sense of safety is challenged as the clothing is second-hand and may not be particularly clean, or could have damages (Karpova, 2022). In relation to the current research, findings show activewear consumption provides consumers with safety and security when the piece of clothing is considered to be made of quality fabric. It was stated activewear made of quality fabric provides the wearer with peace of mind and security of body as they can be assured their clothing is supporting them and not see through when completing daily tasks. Therefore, it can be gathered, a consumer who feels their activewear is made of quality fabric is also concealing embarrassment and in turn, feeling safe and secure in what they are wearing when interacting with others.

5.1.4. Love and belonging needs

This brings us to Maslow’s (1943) third tier, love and belonging. The third tier of love and belonging is the need to feel a sense of connection with others and the surrounding society. This tier relates to the identified top psycho-social consequence, social relationship. In reference to Maslow’s (1943) Hierarchy of Needs, Shishani (2020) states other consumers within society often have influence over another person’s purchase decision. Moreover, Shishani (2020) states consumers make buying decisions either directly or indirectly depending on their cultures, subcultures, social class, membership groups, family, cultural trends, and societal environments. Agreeing with this past research, multiple participants within the current research study stated consuming and wearing activewear brings them a sense of belonging, as they are acculturating to a popular trend or identified social “uniform”. As seen in chain one, fulfilling a sense of social relationship is directly connected to a higher self-esteem.
5.1.5. Esteem needs

Maslow’s (1943) fourth tier, esteem needs, is the need to be respected and recognized for one’s status. In connection with motivation to purchase, it is the idea consumers purchase items for the social recognition associated with the given product (Maslow, 1943). Previous research completed by Cui et al. (2021) use Maslow’s Hierarchy of Needs to predict determinants of consumers’ purchase motivation for electric vehicles. The researchers predict consumers who purchase environmentally friendly vehicles are doing so for the social respect and recognition that may be associated with the product (Cui et al., 2021). According to their findings, self-esteem did have a positive impact on purchase motivation for electric vehicles (Cui et al., 2021). Agreeing with this past research, when looking at chain one, the chain begins with a consumer’s interest in name brand activewear. The chain continues to demonstrate when a consumer spends on an established brand, they also perceive the product to be of higher quality. In turn, they feel better about themselves when wearing the product within their respective social circles, fulfilling their esteem needs. Once esteem needs are met, the last tier must be met, self-actualization.

5.1.6. Self-actualization needs

Maslow’s (1943) last tier of needs is the need for self-actualization, which is comprised of person reaching their full potential. This can be a person reaching self-awareness, concern with personal growth, and an interest in fulfilling their full potential. In other words, it is the need to be all that one can be (Maslow, 1943). We can see this need is met when looking at the top identified functional consequence, task facilitation and the top identified value, empowerment. Task facilitation is connected to empowerment in chain two as Participant A explains a piece of activewear with pockets helps complete tasks with ease. Once completing these tasks, she is left feeling empowered, which also gives her a sense of accomplishment.
Therefore, the need to be all that one can be, is met. Applying self-actualization needs to consumption patterns has been applied in previous research, specifically research conducted by Wang et al., 2022 who review pandemic-driven consumer behavior in relation to Maslow’s (1943) Hierarchy of Needs. Wang et al. 2022 state the Covid-19 pandemic saw prosocial buying behavior, which is seen in consumers who made a point to support local brands, support ethical brands, partake in charitable actions, and partake in pro-environmental actions. The researchers note this shift as a “shift in consumer behavior from care for oneself to care for the greater good”. (Wang et. Al, 2020, p. 6). Prosocial buying behavior is described as behavior fulfilling a consumer’s highest tier of self-actualization needs (Wang et al., 2022). Applying this research to Maslow’s (1943) Hierarchy of Needs adds to the body of knowledge as it is shown consuming and wearing activewear does in fact satisfy a person’s basic to abstract needs. Going forward, the following and last chapter concludes the research by relating the gathered findings to the aforementioned research questions, while also making implications, stating limitations, and providing suggestions for future research.
CHAPTER 6. CONCLUSIONS, IMPLICATIONS, SUGGESTIONS AND LIMITATIONS

6.1. Conclusions

The purpose of this research paper is to better understand how female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic, while also implementing Maslow’s (1943) Hierarchy of Needs to better understand consumer motivations for wearing activewear. Data were gathered, while activewear consumption spiked at the beginning of the Covid-19 pandemic following a dip in consumption shortly after, activewear consumption should be considered a consistent pattern rather than a trend, especially with younger generation aged females. More specifically, participants mentioned a noticeable shift in wearing behavior as consumers tend to be dressing down and prioritizing comfort more regularly in their day to day lives.

This behavior can be directly attributed to changing conditions in response to consumer shifts during the Covid-19 pandemic, such as an increase in consumers exercising and working from home. In response to these changing conditions, the implication matrix found consumers were prioritizing two abstract attributes when consuming activewear: quality fabric and style. Four top functional consequences were identified: task facilitation, ease of use/transitional, physical comfort and physical appearance. The top two psycho-social consequences were feeling motivated and social relationship. And the top value was empowerment. The HVM then linked these top valued attributes into chains to better visualize how basic attributes of activewear are connected to more abstract values. To mention a few, exercising made consumers feel physically more comfortable within their appearance which in turn, gave them a sense of empowerment and
an overall sense of accomplishment, relating to Maslow’s (1943) fourth tier, self-actualization. A separate chain demonstrated the price and brand of activewear was found to relate to the participant’s perception of the shaping/supportive properties and quality of fabric when consuming activewear. This in turn made the participants feel more accepted socially which made them have a higher self-esteem, relating to Maslow’s (1943) third tier, esteem. This concept of linking valued attributes, consequences, and values to consumer motivations using Maslow’s (1943) Hierarchy of Needs can be further explained within the following theoretical implication.

6.2. Theoretical implication

As mentioned, previous research implemented the use of the MEC model when researching activewear consumption among Generation Y females ( ). However, the previous research did not take Maslow’s (1943) Hierarchy of Needs into account. When applying Maslow’s (1943) Hierarchy of Needs, it is believed a better understanding of consumer motivation for female members of Generation Y was gathered as Maslow’s (1943) Hierarchy of Needs discusses motivation from basic to abstract, much like the MEC model. When using Maslow’s Hierarchy of Needs as a theoretical framework, the gathered findings show female members of Generation Y have altered their activewear clothing consumption in response to the Covid-19 pandemic by first buying large quantities of activewear apparel and then tapering off their consumption as their needs had been met. Further, and as previously discussed, activewear consumption was found to apply to each level demonstrated by Maslow’s (1943) Hierarchy of Needs from basic to abstract, which provides a better understanding as to why consumers were motivated to purchase during this time.
6.3. Practical implication

The results demonstrated a consumer need for comfortable, quality driven activewear, which in turn makes consumers feel safe, secure, and a sense of belonging within society. When consumers consume and wear a piece of activewear that meets these needs, it is understood they feel empowered and more accomplished in their daily life. Participants also expressed their need for comfortable activewear that moves with them as they go about their daily lives. The activewear not only needs to be comfortable, but functional and flattering. Moreover, it has become apparent workwear is becoming more casual, and consumers, especially Generation Y females, are interested in purchasing pieces they feel can transition easily from work to their daily life.

While these results are in line with previous research, it is believed the results shown within this research study adds to the body of knowledge as previous research did not take Covid-19 into account. Additionally, it is thought Covid-19 is an important factor when discussing activewear as consumption changed so dramatically during this time. It is thought these results are directly applicable to market professionals and brand designers within the activewear segment as it is a necessity for those working in the industry to continuously adapt and supply consumers with products that fit their needs, from concrete to abstract.

6.4. Limitations and future research

This research study is not free of limitations. It is clear the convivence sample had a biased sampling and heavily favored White/Caucasian women within the southeastern region of the United States. It is suggested for future research to gather a larger sample more closely representative of the entire country. Additionally, as the MEC model requires one-on-one laddering interviews, it was required for the interviewer to discuss each interview with only one
participant at a time. However, after sampling, it was thought a focus group may better motivate conversation and encourage participants to think more abstractly about their wants and needs when consuming activewear. Hearing other respondents may influence others to think about their consumption in a different way, creating a helpful hive mind. Therefore, it is suggested for future research to use a slightly different methodological approach. Additionally, this research found activewear consumption to be a continuing and popular trend, even after large amounts had been acquired at the start of the Covid-19 pandemic. With no indication of the activewear consumption movement slowing down, activewear should be considered an important segment of research in consumer behavior, especially as the Covid-19 pandemic has pushed consumers into a casualization shift. Moreover, findings suggest activewear consumption satisfies every hierarchal need demonstrated in Maslow’s (1943) hierarchy of needs, from basic to abstract. Now that society has returned to a state of normalcy amid the Covid-19 pandemic, future research may be interested in future consumer behavior surrounding activewear consumption, and how this relates to Maslow’s (1943) hierarchy of needs. For instance, will the casualization trend continue? Will consumers begin to shift to occasion dressing over time? Is motivation still consistent with Maslow’s (1943) hierarchy of needs?
# APPENDIX A. INTERVIEW SCHEDULE

<table>
<thead>
<tr>
<th>Interview segment</th>
<th>Talking point examples</th>
</tr>
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| **Opener:** Asking the participant to describe consumption practices and to describe their activewear wardrobe. | • Have there been any changes in your consumption before Covid-19, during lockdown and after lockdown?  
  • Can you describe your current activewear wardrobe?  
  • What attributes do you typically gravitate toward?  
  • Have there been any changes in your consumption before Covid-19, during lockdown and after lockdown?  
  • Can you describe your current activewear wardrobe?  
  • What attributes do you typically gravitate toward? |
| **Purpose:** Uncovering the participant’s purpose for wearing activewear.            | • How often do you wear activewear?  
  • How long do you wear activewear?  
  • What is your purpose for wearing activewear?                                                                                                               |
| **Situational context:** Creating a situation for the respondent to consider when and why they wear activewear. | • When do you wear activewear? (exercising, running errands, etc.)  
  • Why do you wear activewear?                                                                                                                                      |
| **Attributes:** Mentioning main product attributes                                  | • In your opinion, what is the most important attribute when wearing activewear?  
  • From here, the interviewer will ask “why is comfort important to you?” or “why is style important to you?” depending on which attribute is mentioned.  
  • What is the meaning of the product having (or not having) this attribute?                                                                                     |
| **Consequences:** Linking the valued attribute to what the consumer feels after consuming the product | • Depending on what is stated by the respondent, the interviewer will link appropriate consequences and proceed with another series of “why?” questions. Such as:  
  • Why is fitting in important to you?  
  • What does this (consequence) mean to you?                                                                                                                        |
| **Personal values:** Linking how the consumer feels after consuming the product to their beliefs and emotions | • How do you feel when you find your (consequence) has been reached?                                                                                           |
| **Spiritual consumption:** Linking activewear to spiritual consumption              | • How do you feel when shopping/buying activewear?  
  • Why do you feel this way?                                                                                                                                           |
APPENDIX B. RECRUITMENT POST

Hi everyone, I am doing a research study in the Department of Textiles, Apparel Design, and Merchandising at Louisiana State University (LSU). The study is interested in learning how Covid-19 has influenced activewear consumption for Generation Y females. You are invited to participate in the research, you can discontinue your participation at any time. Please complete each question fully to the best of your ability. For more information, you can contact me at llapor4@lsu.edu. Thank you for your time.
APPENDIX C. CONSENT FORM

Consent Form for a Non-Clinical Study

1. Study Title:
   CONSUMER SHIFT DURING THE COVID-19 PANDEMIC: EXAMINING FEMALE
   GENERATION Y CONSUMERS’ ACTIVWEAR CONSUMPTION

2. The purpose of this research paper is to better understand how female members of Generation
   Y have altered their activewear clothing consumption in response to the Covid-19 pandemic.
   With this purpose in mind, Maslow’s Hierarchy of Needs will be implemented to better
   understand consumer motivations for wearing activewear during this time. Therefore, the paper
   will first discuss background information within the activewear market and societal shifts
   surrounding Covid-19’s impact (increased interest in health and wellness, working from home
   and spiritual consumption opposed to material-based consumption). Second, the activewear
   market in the United States during Covid-19 will be further analyzed.

3. Risks: There are no assumed risks associated with the research study. Online interviews will
   be recorded and audio transcribed for data collection. This information will be kept within
   OneDrive and Zoom for 6 months and then deleted. Every effort will be made to maintain the
   confidentiality of your study records.

4. Benefits: No incentives. Your participation is completely voluntary and can be withdrawn at
   any time.

5. Investigators: The following investigators are available for questions about this study, M-F,
   8:00 a.m. - 4:30 p.m., Lauren LaPorte: llapor4@lsu.edu and Dr. Chuanlan Liu: elliu@lsu.edu

7. Performance Site: Online via personal Zoom room.

8. Number of subjects: 20

9. Inclusion Criteria: Female member of Generation Y (aged 25-40) who own at least 5 articles
   of activewear clothing.

10. Exclusion Criteria: Males. Females under age 25 or over age 40. If you do not own more than
    5 articles of activewear clothing.

11. Right to Refuse: Subjects may choose not to participate or to withdraw from the study at any
    time without penalty or loss of any benefit to which they might otherwise be entitled.

12. Privacy: Results of the study may be published, but no names or identifying information will
    be included in the publication. Subject identity will remain confidential unless disclosure is
    required by law.

13. Signatures: The study has been discussed with me and all my questions have been answered.
    I may direct additional questions regarding study specifics to the investigators. For injury or
    illness, call your physician, or the Student Health Center if you are an LSU student. If I have
questions about subjects' rights or other concerns, I can contact Alex Cohen, Institutional Review Board, (225) 578-8692, irb@lsu.edu, or www.lsu.edu/research. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Subject Signature: ________________________ Date: ______________

The study subject has indicated to me that he/she is unable to read. I certify that I have read this consent form to the subject and explained that by completing the signature line above, the subject has agreed to participate.

Signature of Reader: ________________________ Date: ______________

14. For research involving the collection of identifiable private information or identifiable biospecimens one of the following must be listed on the consent form: Identifiers might be removed from the identifiable private information or identifiable biospecimens. After removal, the information or biospecimens may be used for future research studies or distributed to another investigator for future research studies without additional informed consent.

Yes, I give permission________________________ Signature

No, I do not give permission________________________ Signature

OR Your information or biospecimens collected as part of the research, even if identifiers are removed, may be used or distributed for future research.

Yes, I give permission________________________ Signature

No, I do not give permission________________________ Signature
APPENDIX D. IRB APPROVAL

TO:                      Chuanlan Liu  
LSUAM | Col of AGRI | Textiles, Apparel  
Design, and Merchandising | CC00109

FROM:                   Alex Cohen  
Chairman, Institutional Review Board

DATE:                   30-Aug-2022

RE:                     IRBAM-22-0838

TITLE:                  CONSUMER SHIFT DURING THE  
COVID-19 PANDEMIC: EXAMINING  
FEMALE GENERATION Y  
CONSUMERS’ ACTIVEWEAR  
CONSUMPTION

SUBMISSION TYPE:        Initial Application

Review Type:            Exempt

Risk Factor:            Minimal

Review Date:            30-Aug-2022

Status:                 Approved

Approval Date:          30-Aug-2022

Approval Expiration Date: 29-Aug-2025

Exempt Category:        2b

Requesting Waiver of Informed Consent: No

Re-review frequency:    Three Years

Number of subjects approved: 20

LSU Proposal Number:    

By:                     Alex Cohen, Chairman

Continuing approval is CONDITIONAL on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the  
   Belmont Report, and LSU’s Assurance of Compliance with DHHS regulations for the protection of  
   human subjects*

2. Prior approval of a change in protocol, including revision of the consent documents or an increase in  
   the number of subjects over that approved.

3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration  
   date, upon request by the IRB office (irrespective of when the project actually begins); notification  
   of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.

5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.

6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.


8. **SPECIAL NOTE:** When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

*All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at [http://www.lsu.edu/research](http://www.lsu.edu/research)*

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http://www.lsu.edu/research
REFERENCES


Global Women’s Activewear Market, 2017-2018 & 2026: Market was Valued at US$ 124.65 Bn in 2017 and is Expected to Grow at CAGR of 8.2%. (2019).


79


%20of%20Generation%20Y,%2C%20and%20bars%20of%20soap%20%E2%80%A6%E2%80%94


VITA

Lauren Michelle LaPorte has always had a creative personal interest involving sewing, design, and merchandising. She received her Bachelor of Science in Family and Consumer Sciences with a concentration in Fashion Merchandising from Southeastern Louisiana University. Shortly after, Lauren began teaching English in Chonburi, Thailand. This is when she discovered her love for teaching and decided to pursue her master’s in her area of expertise. Lauren anticipates graduating from LSU’s graduate program of Textiles, Apparel Design, and Merchandising in the spring of 2023 with the hope to apply her degree within the merchandising curriculum of higher education.