# Developing a typology of sustainable apparel consumer: An application of grounded theory

By: Elena A. Karpova, Kelly L. Reddy-Best, Farimah Bayat

Elena E. Karpova, Kelly L. Reddy-Best & Farimah Bayat (2023) Developing a typology of sustainable apparel consumer: An application of grounded theory, Journal of Global Fashion Marketing, DOI: 10.1080/20932685.2023.2201251

This is an Accepted Manuscript of an article published by Taylor & Francis in the Journal of Global Fashion Marketing on 05/12/2023, available at: https://doi.org/10.1080/20932685.2023.2201251.

**EXAMPLE 1** This work is licensed under <u>a Creative Commons Attribution</u> NonCommercial-NoDerivatives 4.0 International License.

# \*\*\*Note: Table 1 and Table 2 can be found at the end of the document.

# **Abstract:**

The purpose of the study was to develop a data-driven typology to explain sustainable apparel consumers' orientations towards clothing acquisition and use. Using grounded theory, we analyzed comments of New York Times readers to a sustainability-focused article and identified the two core constructs that allowed for a systematic and effective classification of sustainable apparel consumers: (1) importance of personal appearance and (2) willingness and/or ability to pay for clothing. The typology was developed based on the discourses of several hundred people's comments to share and encourage sustainable practices for acquiring and using clothes. As a result of applying the two constructs to the data, four groups of sustainable apparel consumers were established: classy affluents, chic thrifters, functional minimalists, and austeritics. The paper outlines each group's unique apparel needs and priorities that manifest in everyday practices.

**Keywords:** sustainable apparel consumer | affluent | thrifter | fashion sustainability | sustainable consumption typology

# Article:

## 1. Introduction

When studying sustainable apparel consumption, scholars tend to focus on determining how sustainable apparel consumers (SAC) are different from the rest of the market (e.g. Kim & Jin, Citation2019; Lundblad & Davies, Citation2016; Rahman & Koszewska, Citation2020). In some studies, consumers were divided into two groups: those who favored or practiced sustainable apparel/fashion consumption and those who did not (e.g. Chang & Watchravesringkan, Citation2018; Paetz, Citation2021). In other studies, participants were clustered into four to six groups, each with varying degrees in sustainability-related attitudes and behaviors (e.g. Balderjahn et al., Citation2018; Haines & Lee, Citation2021).

"Green" consumers have different needs and wants when acquiring and using clothes (Dabas & Whang, Citation2021), yet no typology focused specifically on sustainable apparel consumers to understand these differences and similarities. The purpose of this research was to develop a data-driven typology to explain sustainable apparel consumers' priorities and practices when acquiring and using clothing. Scholars tend to view SAC as a homogeneous group (Chang & Watchravesringkan, Citation2018; Paetz, Citation2021), which implies that these consumers have uniformed attitudes and practice similar behaviors when purchase, wear, care and dispose of clothes. A typology that can be used to classify SAC into meaningful groups is the first important step toward developing a theory of sustainable apparel consumption (Hunt, Citation2010). Such typology has valuable practical implications for fashion companies. Understanding what factors drive apparel-related decisions of sustainable consumers (besides being as green as possible) is necessary to effectively serve this important market.

## 2. Literature review

With an increasing interest in sustainable consumption, researchers seek to understand "green" consumers' needs and wants. Several studies (e.g. Dabas & Whang, Citation2021) provided a comprehensive review and analysis of literature on the topic. For our purpose, we reviewed only studies that classified apparel consumers to create distinct clusters based on sustainability-related attitudes and behaviors. Based on a thorough review of extant research of several major databases (e.g. Google Scholar, ProQuest, EBSCO) and fashion/apparel focused journals, we found only nine such studies. We closely examined these studies with respect to theoretical and methodological approach to segmentation and characteristics of the resulting clusters (Table 1). In all studies (except Haines and Lee (Citation2021) who used general consumer traits), sustainability-related constructs were used to segment consumers. In two studies, researchers relied on sustainability-related attitudes to identify distinct clusters (Balderjahn et al., Citation2018; Jung & Jin, Citation2016). Researchers in three studies used participants' preference for sustainable apparel attributes (Baier et al., Citation2020; Koszewska, Citation2013; Paetz, Citation 2021). Another three studies employed sustainability-related attitudes in combination with other research constructs (Cavender & Lee, Citation2018; Ogle et al., Citation2014; Park et al., Citation2017).

Authors used various research constructs to further profile consumer clusters (Table 1). In most studies where participants were recruited from general population (not student samples), sociodemographic characteristics were used to contrast group composition by gender, education, etc. (Baier et al., Citation2020; Balderjahn et al., Citation2018; Jung & Jin, Citation2016; Koszewska, Citation2013). In more than half studies, scholars used purchase orientation or behavior to describe the clusters: clothing expenditure and number of sustainable items purchased (Balderjahn et al., Citation2018; Koszewska, Citation2013; Park et al., Citation2017); purchase intention of slow fashion (Jung & Jin, Citation2016) and fast fashion products (Park et al., Citation2017); motivation to buy eco apparel (Haines & Lee, Citation2021). In three studies, personal values (Balderjahn et al., Citation2018; Jung & Jin, Citation2016) or personality test (Paetz, Citation2021) were utilized to describe obtained clusters. Other research variables used for profiling consumer segments included: fashion consciousness (Cavender & Lee, Citation2018; Haines & Lee, Citation2021); consciousness for sustainable consumption (Haines & Lee, Citation2018).

While the segmentation studies (Table 1) clearly demonstrated that SAC are not a homogeneous population, the results across these studies are not consistent with respect to the number of identified groups and their characteristics. The discrepancies in the obtained sustainable consumer types may be explained by: (a) different factors used to segment apparel consumers; and (b) the lack of a systematic theoretical approach to obtain the consumer clusters. In addition, all nine studies examined all apparel consumers, instead of specifically focusing on those with sustainable attitudes and behaviors.

In conclusion, no study zoomed in on SAC to understand the "whys" behind their apparel consumption decisions while reducing their environmental impact. Further, researchers, who segmented apparel consumers to explain their sustainability-related motivations and behaviors, utilized statistical clustering of participants based on survey responses. Such approach is not conducive to understanding differences between sustainable consumers because it does not allow to compare and contrast the nuanced whys and hows behind clothing attitudes and practices. To address this gap, we selected a qualitative approach (grounded theory) to examine sustainable consumers' orientations when acquiring and using clothing. The goal was to develop a data-driven typology to explain how sustainable apparel consumers differ in their clothing needs and wants. Disentangling sustainable consumers' attitudes and practices is needed to address their expectations in terms of product attributes, retail channels, etc.—all important aspects of business strategies. Analyzing and classifying the elements of a phenomenon (i.e. sustainable consumer) is the first step in theory building to explaining the phenomenon (Hunt, Citation2010).

### 3. Method

#### 3.1. Data collection

To address the research purpose, it was important to have a wide representation of consumers with respect to their clothing attitudes and practices. With this in mind, we collected secondary data, specifically, New York Times readers' comments posted in response to Elizabeth Cline's (Citation2019) sustainability-focused article, Wear clothes? Then you are part of the problem, published in the newspaper's opinion section on 3 November 2019. The unsolicited nature of the data minimized social desirability bias common in sustainability research (Roxas & Lindsay, Citation2012) and provided consumers' opinions collected in a non-invasive manner.

All NYT readers' comments (N = 1,003) posted to the Cline's (Citation2019) article were collected for the analysis. Readers can comment on an opinion article only during a 24-hour period after its publication, after which no more comments could be posted as the forum is closed by the newspaper. For a comparison, the average number of comments posted to New York Times (NYT) opinion articles published during the week of 3 November 2019, was approximately 450. The high number of comments (N = 1,003) posted by the readers to the Cline's article indicates their significant interest in the topic of sustainable apparel consumption. After initial readings of all collected comments, we excluded those that did not directly discuss apparel but suggested other ways to promote sustainable living, such as population control or vegetarian diet. Given the focus of our study on sustainable apparel consumption, we narrowed the final dataset to 724 comments where readers specifically discussed apparel-related opinions, beliefs, attitudes, and practices.

#### 3.2. Data analysis

Grounded theory was selected to explore similarities and differences in NYT readers' sustainable attitudes and practices in relation to apparel acquisition and use. The goal was to identify classification schemata (Hunt, Citation2002) to develop a typology of SAC that is "grounded in the words and actions of those individuals under study" (Goulding, Citation2005, p. 296). Following the grounded theory development process (Glaser & Strauss, Citation1967), we performed multiple close readings of the data discerning patterns in how sustainability minded consumers go about their apparel consumption practices. Specifically, we explored how and why these consumers do things differently to be as sustainable as possible when purchasing, using, and caring for clothes.

Data analysis started with open coding to capture participant sustainable practices, doing line-by-line analysis and constant comparison across the data points (individual posts). We constantly compared and contrasted readers' comments looking for patterns in attitudes and practices. For example, we coded all posts related to clothing acquisition: sources (new vs. used), preferred retailers or brands, spending per garment, frequency of acquiring new garments, etc. The same was done for clothing use (e.g. creating outfits and their rotation, dressing for the day) as well as care and disposal (e.g. laundry and repair to extend garment longevity). We noted how readers expressed sentiments and feelings when describing their practices and sharing experiences and perspectives. We closely reviewed the initial codes multiple times by organizing and combining them in different ways in search of patterns and relationships across the codes that could explain the obvious differences in the readers' practices.

Based on the initial coding, we worked on developing abstract concepts, or categories, and searched for interrelationships among them for theory construction (Glaser & Strauss, Citation1967; Spiggle, Citation1994). We paid special attention to the concepts across which readers displayed clear continua because these concepts could be used to categorize consumers into distinct groups. For example, the abstract concept of quality, while frequently mentioned by readers, was not viewed as instrumental for typology development because it was perceived as important across the data points. In contrast, there was a clear divide in how much time and effort participants spent on creating outfits and deciding what to wear. As the result of comparison and dimensionalisation of abstract concepts, we discovered two constructs on which NYT readers differed significantly and consistently across the data. First, the readers differed on how much they spent on apparel: there was a wide spectrum from very low spenders per garment to those who were paying several hundred dollars for an item. This construct was labeled willingness and/or ability to pay for clothing. Second, the readers placed very different importance on their overall appearance. Some of them cared a lot about what they buy and wear and how they look, in other words, their appearance. In contrast, other readers valued clothing only as a utilitarian product; they did not put much thought when buying and wearing clothes. This construct was labeled importance of appearance. In line with the final stage of the grounded theory development process (Glaser & Strauss, Citation1967), the two constructs systematically connected all other concepts to explain the hows and whys behind sustainable apparel consumption practices described by the NYT readers.

## 4. Results

The data analyses show that NYT readers who practiced sustainable consumption differed on the two core constructs, willingness/ability to pay for clothes and importance of appearance. Applying the two constructs to the data yielded a two-dimensional grid with four quadrants, which allowed to conceptualize four distinct groups of SAC who are either low or high on (1) willingness and/or ability to pay and (2) importance of appearance. The two constructs combined can effectively explain different orientations of SAC when they acquire and use clothes. The four groups were labeled as follows and described in-depth below (Figure 1):

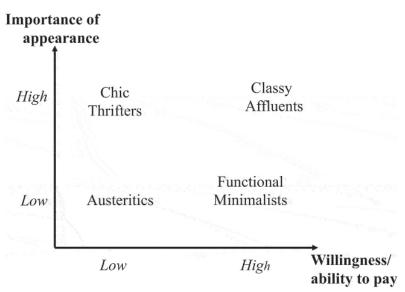


Figure 1. Typology of sustainable apparel consumers (SAC typology).

- Classy Affluents: (1) willing and able to pay a lot for clothes, and (2) place high importance on their appearance;
- Chic Thrifters: (1) either not willing or not able to spend much on clothes, and (2) place high importance on their appearance;
- Functional Minimalists: (1) willing and able to spend more on clothes, and (2) place a relatively low importance on their appearance;
- Austeritics: (1) not willing to spend much on clothes, and (2) place very low importance on their appearance.

Because this is a typology of sustainable apparel consumers (SAC), all four groups share the core value to minimize the impact of their consumption when they acquire and use clothes. Yet, each of the four groups have distinct approaches and strategies to minimize their consumption footprint. The interplay between the two constructs, importance of appearance and willingness and/or ability to pays, explains how and why people in each of the four groups make daily apparel consumption

choices. We illustrate the four groups in Table 2 using NYT readers' quotes to present a rich description of their attitudes and practices.

## 4.1. Classy affluents

These sustainable consumers place a high importance on appearance and spend on clothes more than any other group (Figure 1). Affluents "buy the best quality" Footnote1 in "classic styling" to ensure "well made" clothing will last and "never goes out of style" (Table 2). They value garment craftsmanship and aesthetics and are very selective in clothing choices, resulting in a carefully curated and sophisticated wardrobe. These consumers "dress more like Europeans": fewer highquality expensive timeless pieces that can be mixed and matched. For this group, appearance and the clothes they wear are very important. They invest a lot of time and effort to create and style outfits and appreciate compliments on their smart looks and immaculate taste. Even though affluents purchase fewer items, they spend much more than the average consumer. Affluents pay more to be sustainable, which is not feasible for many people who want to reduce their consumption footprint. Preferred retailer was Eileen Fisher as well as less known designers such as Elizabeth Suzann in Nashville and Hackwith Design, Minneapolis (Table 2). Some affluents frequent consignment boutiques in search of gently used elegant designer garments. Regardless of retail channel, they view fashion as an investment in pieces they love and can use for a long time. These consumers take good care of clothes: gentle washing and drying as well as repairing "as much as possible before replacing".

Affluents' typical practices include: (a) buy high-quality elegant garments in classic styles that do not go out of fashion; (b) pay more for high-end clothes that are made responsibly; (c) favor clothes aesthetics and craftsmanship; (d) view clothes as investment, carefully choosing pieces they love; (e) keep clothes for a long time (10–30 years) and take good care of them because they value their purchases. These strategies allow them to slow down their consumption rates, thus, reducing the footprint. Major clothing sources: new from sustainable and/or high-end brands (e.g. Eileen Fisher) and some secondhand designer goods.

## 4.2. Chic thrifters

These sustainable consumers place high importance on their appearance and "love clothes and fashion"; however, unlike affluents, thrifters are unwilling or unable to spend much on clothes (Figure 1, Table 2). To consume responsibly, they reconcile their passion for style by buying secondhand clothes almost exclusively, with "the exception of socks, tights and underwear". Thrifters enjoy the thrill of the hunt to find the "perfect" unique garments reflective of their sense of self. At the same time, they acknowledge that "the biggest benefit" of thrifting is "the reduced spending". For these consumers, clothing is a "fun, legitimate form of self expression". Thrifters invest time and effort to create chic looks and want to be recognized for their taste and styling skills by receiving compliments on their appearance. Their comments indicate high practicality; indeed, they utilize various outlets to acquire clothing (resale, renting, etc.) and use their creativity (e.g. sewing, upcycling) to satisfy their desire to look chic and to be sustainable. For example, going to a wedding ella biondi created an outfit from a RealReal top, a skirt she made herself, and a blouse received as a gift 25 years ago (Table 2). The resourcefulness and creativity might be a result of the two major constraints thrifters put on their appearel consumption: (a) to be sustainable and (b) limited budget allocated to clothing.

Thrifters' typical practices include: (a) buy stylish used clothes to express their identity and do not chase fashion trends; (b) spend little on clothes; (c) hunt for rare vintage or unique "preloved" treasures; (c) invest time and effort to carefully choose pieces reflective of personal aesthetic; (d) take good care of clothes because they value their finds. Buying mostly secondhand garments and using them for a relatively long time allow thrifters to slow down their consumption rates, thus, reducing their footprint. Major sources of clothing: secondhand stores, such as eBay (mentioned most frequently).

### 4.3. Functional minimalists

These sustainable consumers place a relatively low importance on their appearance yet are willing and able to pay more for clothes than the average consumer (Figure 1). Minimalists are focused on utilitarian aspects of clothing, its performance and durability. They favor well-made clothes that are "more technical than fashionable" and willing to spend more because "it more than pays off to buy known quality" (Table 2). These consumers are getting a lot out of their investment by wearing clothes until they fall apart. This group is not interested in fashion and aesthetic and does not use clothing for self-expression. Minimalistic wardrobe gives them peace of mind – they do little shopping or thinking about what to wear. They appear to have financial resources to purchase highquality garments that are above average market price. However, overall apparel expenditure is relatively low because they rarely need to replace clothes, so they make few purchases over time. To make their apparel consumption as sustainable as possible, minimalists choose performance brands that are known for their concern for their social and environmental concerns, such as Patagonia (most frequently mentioned), Carhartt, and Marmot.

Minimalists' typical practices include: (a) buy few simple high-quality garments that are "outside of fashion"; (b) pay more for quality and functionality; (c) keep garments until they fall apart (20–30 years); (d) maintain a relatively small wardrobe; (e) continuously rotate garments, keeping all in active wardrobe; and (f) meticulously care for clothes – airdrying, repairing. These strategies allow minimalists to slow down their consumption rates, thus, reducing their footprint. Clothing sources: new and used from ethical and functional brands, such as Patagonia.

#### 4.4. Austeritics

These sustainable consumers place the lowest importance on appearance and are not willing to spend much on clothes (Figure 1). They despise fashion and does not follow social dress codes dictating what is appropriate to wear where and how one is supposed to look at different social functions (Table 2). To resist the dress norms and the notion of a continuously rotating wardrobe, they wear simple, uniform-like clothes (e.g. black jeans and sweater/t-shirt). Austeritics spend little on apparel and buy secondhand when possible. Clothing is replaced only when no longer usable. They prefer affordable quality clothing that they can "wear till tear". Out of the four groups, austeritics place the least importance on how they come across to others, "I wear the same thing week after week. I sometimes wonder if people are judging me for it, but I don't care enough to go buy more". (ES, Chicago). Neglect for appearance and concern for the environment may even result in minimal laundry and personal care routine for some austeritics, as the quotes in Table 2 show. Another radical solution is not to wear any clothes when possible.

Austeritics' typical practices are: (a) actively reject fashion and societal norms on "appropriate" looks and dress codes; (b) buy clothing only when necessary to satisfy basic needs

and to function in the society; (c) spend as little as possible; (d) maintain a very small wardrobe that is used continuously; (e) buy clothing that lasts; (f) keep garments for as long as possible (30–50 years). These strategies allow austeritics to slow down consumption rates to reduce their footprint. Major clothing sources: secondhand and new; frequently mentioned retailer, Goodwill.

# 5. Discussion and conclusions

## 5.1. Segmenting sustainable apparel consumers

Using grounded theory to analyze unsolicited comments of NYT readers to Cline's (Citation2019) article, we identified the two key factors that allowed for a systematic and effective classification of SAC: (1) importance of appearance and (2) willingness and/or ability to pay. The typology was developed based on the discourses of several hundred people's comments to share and encourage sustainable practices for acquiring and using clothes. Both factors are well-established as important consumption constructs in extant research; they are contextualized below. This is the first typology that focuses specifically on sustainable apparel consumers. SAC typology categorizes, delineates, and predicts characteristics of the four distinct consumer groups, which is an important initial step in developing a theory (Hunt, Citation2010).

# 5.1.1. Importance of appearance

Throughout history, clothing represented one's status and role in society and many other characteristics about the person – gender, age, religion, sexuality, values, etc. (Kaiser, Citation2012). Therefore, clothing and appearance reflect both how individuals navigate expressing alignment with different communities in addition to their own personal styling, what Tulloch (Citation2010) refers to as style-fashion-dress. Whereas fashion reflects in-flux with the times and the particular communities one may associate with, style refers to an individual's agency in this process.

The more people care about how they look and how they are perceived by others, the more attention they place on personal appearance, including clothes (e.g. Hillhouse et al., Citation2000; Vannatta et al., Citation2009). The importance one places on their personal appearance determines what type of clothes they wear. For instance, someone who prioritizes their image is likely to be very selective when buying clothes and invest time and effort to creating outfits and style their appearance. In contrast, someone who does not care much about how they look (i.e. how they appear to the world) may have little or no interest in clothing and fashion, views clothes as a necessity to function in society and to protect themselves from harsh weather conditions.

# 5.1.2. Apparel spending

Consumer spending is determined primarily by two factors: product price and customer income, or ability to pay. Price is either the major (Jegethesan et al., Citation2012; Rahman et al., Citation2017), or one of the most important product attributes guiding apparel purchases (Hsu & Burns, Citation2002; North et al., Citation2003). In fact, all nine examined studies (Table 1) discussed how much consumers were willing to spend, or importance of product price, when profiling their clusters. In the context of sustainable apparel, price can be a driver or a barrier, depending on the retail channel. When purchasing new products, consumers tend to perceive

sustainable apparel as too expensive and often select lower-priced conventional alternatives (e.g. Harris et al., Citation2016; Moon et al., Citation2015). In contrast, price is a major driver for secondhand shopping, making the resale market an attractive substitute to new products (Bardhi & Arnould, Citation2005).

## 5.1.3. Common traits of sustainable apparel consumers

The research findings indicate that in addition to distinctive characteristics, consumers from all four groups (Figure 1) utilized common strategies, including:

- Being selective when acquiring clothing, whether new or used, to ensure this is what they need/want and will make a good use of it;
- Focusing on quality clothes to ensure garment longevity;
- Not following fashion trends, but instead focusing on satisfying their unique clothing needs (e.g. aesthetics, uniqueness, functionality, durability);
- Following own sense of style/personal aesthetics (instead of copying others);
- Shopping secondhand clothes (to different degrees).

## 5.1.4. Differences among sustainable apparel consumers

The major difference between affluents and thrifters (both place high importance on appearance) is the affluents' high spending on well-made clothing ("buy the best quality you can afford", "expensive dresses") (Table 2). In contrast, thrifters emphasize "reduced spending" as "the biggest benefit" of buying used clothes. Thrifters take pride in not paying full retail prices and being patient when finding gems for "a lot less money". Another difference between the two appearance-conscious groups: affluents favor classic, clean, and sophisticated style, whereas thrifters prefer unique pieces to express their bricolage aesthetic. Affluents are expected to be the smallest sustainable group in the US apparel market, however, they likely make up a larger proportion of the European market, where consumers pay more for quality clothes and are known for classic and sophisticated sense of style (Karpova et al., Citation2021). Most affluents are likely successful professionals as many younger consumers might not be able to afford high-end brands. In contrast, most thrifters are likely to be younger people as the literature indicates young consumers are more open to shopping secondhand and patronizing other alternative consumption modes (Armstrong et al., Citation2016).

The major difference between thrifters and austeritics (both groups spend little on apparel) is that the former "love clothes" and style and admit being "self-confessed clothes horse" (Table 2). Thrifters "take pride" in their appearance and use clothing as a "legitimate form of self expression". In contrast, austeritics view clothing as a necessity to function in society and meet basic safety needs. The major difference between affluents and minimalists (both groups pay more for clothes) is the former's focus on aesthetic, elegance, and style (i.e. garment appearance and design), whereas the latter favor garment functionality and performance.

While all four groups focus on slowing down consumption rates to be sustainable, they achieve it in different ways. Austeritics have the smallest wardrobes, followed by minimalists.

Thrifters are likely to buy more than other groups and to own the largest quantity of clothes, most of which are rare or unique items they purchased used. In their quest for an impeccable and responsible wardrobe, affluents purchase fewer clothes than thrifters but more than minimalists. Minimalists purchase the least amount of clothing, but they buy more expensive and higher quality items and take meticulous care of their clothes to make it last. Austeritics also do not buy much, but do not pay a premium for quality and are somewhat less careful with garment upkeep, therefore, they must replace clothes more frequently than minimalists.

## 5.1.5. Evolution of sustainable apparel consumers

While the proposed SAC typology effectively distinguishes between different types of consumers who are concerned about their environmental footprint, the four groups are fluid. In time, consumers may "graduate" from one and transition to another group due to changing viewpoints, financial situation, life stage, etc. For instance, the importance of appearance might decline with age, or higher income might increase the ability and willingness to pay more for clothing. In this example, the person "moved" from the thrifter to the affluent category: buying fewer high-quality garments at higher prices instead of secondhand clothes, "I have been buying second hand for years, but am now moving up to buying more organic, more sustainable fashions. However, as they are much more expensive, I have to accessorize more as I wear the same clothes more often" (Little black dress, America). For some consumers, a change in apparel consumption might happen gradually over time (e.g. steady wardrobe downsizing), whereas others might experience sudden and radical shifts in acquisition habits and clothing routines. Because of ever-changing needs, preferences, identities, etc., some sustainable consumers might not be readily identifiable as one of the four types, especially, in the period of transition from one typology category to another (e.g. from affluents to austeritics). During such periods, consumers are likely to do cross-shopping to adopt and get used to new acquisition channels as well as new wardrobe rotation patterns and daily dressing routines. Consumers may move between SAC typology categories as they engage in ongoing processes of being as sustainable as possible while fashioning their identities through dress.

## **5.2.** Typology of sustainable apparel consumer (SAC)

In this study, we proposed a comprehensive and systematic consumer typology that clarifies, logically organizes, and explains a complex phenomenon of sustainable apparel consumption, which is the first step in theory building (Hunt, Citation2002, Citation2010). SAC typology is enabled by the interaction of the two key apparel consumption factors: willingness/ability to pay and importance of appearance. The four conceptualized groups of SAC were carefully defined, delineated, and labeled to ensure they are: (a) adequately specify the phenomenon, (b) exhaustive, (c) mutually exclusive, and (d) useful for scholars and industry professionals (Hunt, Citation2010). Next, we outline three theoretical propositions, or law-like generalizations (Hunt, Citation2002), which were formulated based on the research results to guide future theory development and to facilitate practical applications of the SAC typology:

**Proposition 1.** The application of the two key apparel consumption factors - (a) importance of appearance and (b) willingness/ability to pay for clothing - allows to systematically classify SAC into the four groups (Figure 1, Table 2).

**Proposition 2.** The four groups of sustainable apparel consumers utilize some common apparel consumption strategies to minimize environmental footprint: reduced acquisition rates; focus on product quality; indifference to fashion trends; extended useful life of garments; and reduced disposal rates.

**Proposition 3.** To meet their unique clothing needs, the four groups of sustainable apparel consumers differ significantly on the following apparel consumption strategies: patronizing different retail channels; apparel expenditure; wardrobe size; frequency of clothing rotation; and time and effort devoted to daily dressing routine.

**Proposition 4.** The four groups of sustainable apparel consumers differ significantly on the intangible benefits of clothing consumption: expressing identity through clothing symbolic features; using clothing as creativity outlet (self-actualization); using clothing to communicate their aesthetic and sense of style to others.

SAC typology and theoretical propositions are likely to apply to markets beyond the US because: (1) a few posts to the Cline's (Citation2019) article were from people around the world (Europe, Australia, China, etc.), and (2) the two factors – willingness/ability to pay and importance of appearance – are applicable across different economic, social, and cultural contexts as universal apparel consumption determinants relevant to all people.

## **5.3.** Applications of the SAC typology

The research findings offer key insights for apparel companies to determine who their sustainable consumers are and understand their clothing priorities. Recognizing commonalities and differences among the four groups of sustainable apparel consumers will help companies develop and market products for specific target markets. For example, garment aesthetic is critical for affluents and thrifters, but functionality and utilitarian characteristics are the priority for minimalists. In addition to product design, companies should use different communication strategies to promote sustainable apparel by highlighting different garment features targeted for different groups. The message that will resonate with minimalists or antifashion consumers, might turn off affluents or thrifters. In addition to developing new products, there are opportunities to offer various services to SAC such as repair shops, educational workshops, and clothing libraries (Armstrong et al., Citation2016). Scholars might examine which services can be most attractive for each of the four groups and ways to deliver them effectively.

SAC typology is important for encouraging sustainable apparel consumption and educating the public. The differences between the four groups demonstrate that the same message promoting sustainable apparel consumption will not resonate with all consumers considering to "green" their clothing consumption practices. It is important to emphasize the different ways to be a sustainable apparel consumer, which does not necessarily mean sacrificing style and aesthetics, or desire for new outfits. Sustainable marketing communication can provide strategies and examples of how to be sustainable and look stylish, or to be sustainable and be able to create new outfits frequently, or to be sustainable and have a highly functional wardrobe. SAC typology is the first step in acknowledging the diversity of sustainable consumers. As the global apparel market transitions to sustainable production and consumption, the typology will play a greater role in addressing the diverse consumers' needs and desires. The results offer a fruitful direction for future studies. Scholars may further examine the four types of SAC (Figure 1) utilizing different research methods. Using qualitative methodology with purposive sampling will allow to focus on each of the four groups to further explores their differences and similarities and the meanings these consumers attach to their daily clothing consumption rituals. A qualitative approach will allow for nuanced delineation and detailed descriptions of the four consumer types to refine or revise them as needed. A large-scale survey to measure consumers' willingness/ability to pay and importance of appearance will allow to use clustering analysis to corroborate the four types of SAC. Such study can be used to understand the distribution of the four group in a market and explore variations within each group in clothing preferences, retail channel selection, etc. Results from these studies will allow to refine and extend the proposed typology and develop a theory of sustainable apparel consumption.

A radical transformation of the entire apparel market – the way clothing is designed, produced, distributed, used, and discarded – is inevitable. It may happen as a gradual evolution due to shifts in societal and cultural values to support sustainable lifestyles, or as an abrupt change driven by a global crisis in the form of a natural or technological disaster. Scholars have an opportunity and responsibility for leading this transition by discovering, advocating for, and inspiring new values, lifestyles, and business models while ensuring equity and justice for everyone involved in the extremely complex, globalized, and diverse apparel supply chain. We must rethink and transform our views on what is beautiful, what is green, and what is just.

#### References

- Armstrong, C. M., Niinimäki, K., Lang, C., & Kujala, S. (2016). A use-oriented clothing economy? Preliminary affirmation for sustainable clothing consumption alternatives. Sustainable Development, 24(1), 18–31. https://doi.org/10.1002/sd.1602
- Baier, D., Rausch, T. M., & Wagner, T. F. (2020). The drivers of sustainable apparel and sportswear consumption: A segmented Kano perspective. Sustainability, 12(7), 1–21. https://doi.org/10.3390/su12072788
- Balderjahn, I., Peyer, M., Seegebarth, B., Wiedmann, K.-P., & Weber, A. (2018). The many faces of sustainability-conscious consumers: A category-independent typology. Journal of Business Research, 91, 83–93. https://doi.org/10.1016/j.jbusres.2018.05.022
- Bardhi, F., & Arnould, E. J. (2005). Thrift shopping: Combining utilitarian thrift and hedonic treat benefits. Journal of Consumer Behaviour: An International Research Review, 4(4), 223– 233. https://doi.org/10.1002/cb.12
- Cavender, R., & Lee, M. (2018). Identifying apparel consumer typologies with the potential for slow fashion. International Journal of Business Management and Commerce, 3(6), 1–16.
- Chang, H. J., & Watchravesringkan, K. T. (2018). Who are sustainably minded apparel shoppers? An investigation to the influencing factors of sustainable apparel consumption. International Journal of Retail & Distribution Management, 46(2), 148–162. https://doi.org/10.1108/IJRDM-10-2016-0176
- Cline, E. (2019, November 3). Wear clothes? Then you're part of the problem. New York Times. https://www.nytimes.com/2019/11/03/opinion/climate-change-clothing-policy.html

- Dabas, C. S., & Whang, C. (2021). A systematic review of drivers of sustainable fashion consumption: 25 years of research evolution. Journal of Global Fashion Marketing, 13(2), 151–167. https://doi.org/10.1080/20932685.2021.2016063
- Glaser, B., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Aldine.
- Goulding, C. (2005). Grounded theory, ethnography and phenomenology: A comparative analysis of three qualitative strategies for marketing research. European Journal of Marketing, 39(3), 294–308. https://doi.org/10.1108/03090560510581782
- Haines, S., & Lee, S. H. (2021). One size fits all? Segmenting consumers to predict sustainable fashion behavior. Journal of Fashion Marketing and Management, 26(2), 383–398. https://doi.org/10.1108/JFMM-08-2020-0161
- Harris, F., Roby, H., & Dibb, S. (2016). Sustainable clothing: Challenges, barriers and interventions for encouraging more sustainable consumer behaviour. International Journal of Consumer Studies, 40(3), 309–318. https://doi.org/10.1111/ijcs.12257
- Hillhouse, J. J., Turrisi, R., & Kastner, M. (2000). Modeling tanning salon behavioral tendencies using appearance motivation, self-monitoring and the theory of planned behavior. Health Education Research, 15(4), 405–414. https://doi.org/10.1093/her/15.4.405
- Hsu, H. J., & Burns, L. D. (2002). Clothing evaluative criteria: A cross-national comparison of Taiwanese and United States consumers. Clothing and Textiles Research Journal, 20(4), 246– 252. https://doi.org/10.1177/0887302X0202000408
- Hunt, S. D. (2002). Foundations of marketing theory: Toward a general theory of marketing. M.E. Sharpe.
- Hunt, S. D. (2010). Marketing theory: Foundations, controversy, strategy, and resourceadvantage theory. https://ntserver1.wsulibs.wsu.edu:2171
- Jegethesan, K., Sneddon, J. N., & Soutar, G. N. (2012). Young Australian consumers' preferences for fashion apparel attributes. Journal of Fashion Marketing and Management, 16(3), 275– 289. https://doi.org/10.1108/13612021211246044
- Jung, S., & Jin, B. (2016). From quantity to quality: Understanding slow fashion consumers for sustainability and consumer education. International Journal of Consumer Studies, 40(4), 410–421. https://doi.org/10.1111/ijcs.12276
- Kaiser, S. B. (2012). Fashion and cultural studies. Bloomsbury.
- Karpova, E., Kunz, G. I., & Garner, M. B. (2021). Going global: The textile and apparel Industry (4th ed.). Fairchild Books.
- Kim, G., & Jin, B. E. (2019). Older female consumers' environmentally sustainable apparel consumption. Journal of Fashion Marketing and Management, 23(4), 487–503. https://doi.org/10.1108/JFMM-04-2019-0068
- Koszewska, M. (2013). A typology of Polish consumers and their behaviours in the market for sustainable textiles and clothing. International Journal of Consumer Studies, 37(5), 507–521. https://doi.org/10.1111/ijcs.12031

- Lundblad, L., & Davies, I. (2016). The values and motivations behind sustainable fashion consumption. Journal of Consumer Behaviour, 15(2), 149–162. https://doi.org/10.1002/cb.1559
- Moon, K. K.-L., Lai, C. S.-Y., Lam, E. Y.-N., & Chang, J. M. T. (2015). Popularization of sustainable fashion: Barriers and solutions. The Journal of the Textile Institute, 106(9), 939– 952. https://doi.org/10.1080/00405000.2014.955293
- North, E. J., De Vos, R. B., & Kotze, T. (2003). The importance of apparel product attributes for female buyers. Journal of Consumer Sciences, 31(1), 41–51. https://doi.org/10.4314/jfecs.v31i1.52834
- Ogle, J., Hyllegard, K. H., Yan, R. N., & Littrell, M. A. (2014). Segmenting the teen girl apparel market: Differences in fashion involvement, materialism and social responsibility. Young Consumers, 5(2), 153–166. https://doi.org/10.1108/YC-08-2013-00388
- Paetz, F. (2021). Recommendations for sustainable brand personalities: An empirical study. Sustainability, 13(9), 1–18. https://doi.org/10.3390/su13094747
- Park, H., Lee, M. Y., & Koo, W. (2017). The four faces of apparel consumers: Identifying sustainable consumers for apparel. Journal of Global Fashion Marketing, 8(4), 298–312. https://doi.org/10.1080/20932685.2017.1362988
- Rahman, O., Fung, B. C., Chen, Z., & Gao, X. (2017). A cross-national study of apparel consumer preferences and the role of product-evaluative cues. Asia Pacific Journal of Marketing and Logistics, 29(4), 796–812. https://doi.org/10.1108/APJML-09-2016-0175
- Rahman, O., & Koszewska, M. (2020). A study of consumer choice between sustainable and non-sustainable apparel cues in Poland. Journal of Fashion Marketing and Management, 24(2), 213–234. https://doi.org/10.1108/JFMM-11-2019-0258
- Roxas, B., & Lindsay, V. (2012). Social desirability bias in survey research on sustainable development in small firms: An exploratory analysis of survey mode effect. Business Strategy and the Environment, 21(4), 223–235. https://doi.org/10.1002/bse.730
- Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. The Journal of Consumer Research, 21(3), 491–503. https://doi.org/10.1086/209413
- Tulloch, C. (2010). Style–fashion–dress: From black to post black. Fashion Theory, 14(3), 270–303. https://doi.org/10.2752/175174110X12712411520179
- Vannatta, K., Gartstein, M. A., Zeller, M., & Noll, R. B. (2009). Peer acceptance and social behavior during childhood and adolescence: How important are appearance, athleticism, and academic competence? International Journal of Behavioral Development, 33(4), 303–311. <u>https://doi.org/10.1177/0165025408101275</u>

Study & research participants	Research constructs used for clustering	Research constructs to profile clusters	Consumer clusters*
Baier et al. ( <u>Citation2020</u> ). German students, N = 490	<ul> <li>Product range</li> <li>Labeling</li> <li>Processes</li> <li>(Re)Utilized materials</li> </ul>	<ul><li>Gender</li><li>Attitude towards sustainability</li></ul>	<ol> <li>6. Segment 1</li> <li>7. Segment 2</li> <li>8. Segment 3</li> </ol>
Balderjahn et al. ( <u>Citation2018</u> ). German consumers, N = 1,883	Consciousness for sustainable consumption	<ul><li>Schwartz values</li><li>Buying behavior</li><li>Sociodemographic</li></ul>	<ul> <li>9. Financially careless</li> <li>10. Non-simplifiers</li> <li>11. Financially careful simplifiers</li> <li>12. Socially conscious simplifiers</li> <li>13. Sustainable, non-collaborative</li> <li>14. Sustainable</li> </ul>
Cavender and Lee ( <u>Citation2018</u> ). US students, $N = 405$	<ul> <li>Drivers of apparel consumption</li> <li>Orientation to slow fashion</li> <li>Consumption &amp; disposal</li> <li>Sustainable knowledge</li> </ul>	<ul> <li>Shopping store preferences</li> <li>Trend orientation</li> <li>Price/time/effort consciousness</li> <li>Sustainability orientation</li> </ul>	<ul><li>15. Mindful shoppers</li><li>16. Apparel hoarders</li><li>17. Style consumers</li><li>18. Swappers</li></ul>
Haines and Lee ( <u>Citation2021</u> ). US consumers, N = 168	<ul> <li>Emotional factors (perspective taking, empathic concern, distress)</li> <li>Shopping factors (hedonism, frugality)</li> </ul>	<ul> <li>Motivation to buy</li> <li>Consciousness for sustainable consumption</li> <li>Buying impulsiveness</li> <li>Fashion oriented</li> <li>Disposal &amp; repair</li> </ul>	<ul><li>19. Distressed and self-oriented,</li><li>20. Warm and thrifty</li><li>21. Cold and frivolous</li></ul>
Jung and Jin ( <u>Citation2016</u> ). US consumers, $N = 221$	Orientation to slow fashion	<ul><li>Schwartz values</li><li>Apparel consumption behaviors</li><li>Demographics</li></ul>	<ul><li>22. Highly involved in slow fashion</li><li>23. Conventional</li><li>24. Exclusivity oriented</li><li>25. Not involved in slow fashion</li></ul>
Koszewska ( <u>Citation2013</u> ). Polish consumers, N = 981	Reasons to choose and buy clothes	<ul> <li>Socio-demographic characteristics</li> <li>Communication</li> <li>Product differentiation</li> <li>Actual purchases</li> </ul>	<ul><li>26. Fashionistas</li><li>27. Slow fashionistas</li><li>28. Neutral minimalists</li><li>29. Eco conservatives</li><li>30. Eco and socially sensitive</li><li>31. Thrifty</li></ul>

## Table 1. Summary of studies that segmented consumers into sustainable and unsustainable clusters.

## Table 1. (continued)

Study & research participants	Research constructs used for clustering	Research constructs to profile clusters	Consumer clusters*	
Ogle et al. ( <u>Citation2014</u> ). US teenagers, N = 157	<ul> <li>Social responsibility</li> <li>Personal aesthetics</li> <li>Social acceptance</li> <li>Utilitarian characteristics</li> </ul>	<ul><li>Age</li><li>Geographic region</li><li>Income</li></ul>	<ul><li>32. Conventionalists</li><li>33. Self-satisfiers</li><li>34. Embracers</li></ul>	
Paetz ( <u>Citation2021</u> ). German consumers, N = $353$	Preference for a fair-trade label	Personality traits (the five-factor model)	<ul><li>35. Sustainable</li><li>36. Less sustainable</li></ul>	
Park et al. ( <u>Citation2017</u> ) US consumers, N = 754	<ul> <li>Sustainability knowledge</li> <li>Sustainability concern</li> <li>Fashion consciousness</li> <li>Price sensitivity</li> <li>Product quality</li> </ul>	<ul><li>Consumer traits</li><li>Demographic characteristics</li></ul>	<ul><li>37. Concerned shopper</li><li>38. Holistic shopper</li><li>39. Traditional shopper</li><li>40. Apathetic shopper</li></ul>	

\*Consumer clusters that displayed sustainable attitudes and/or behaviors are italicized.

Table 2. NYT readers' comments on sustainable apparel consumption practices, by sustainable apparel consumers typology categories.
--

		/or ability to pay
importance of Hig appearance	LOW	<ul> <li>HIGH</li> <li>Classy Affluents</li> <li> dress more like Europeans buy the best quality you can afford classic styling. Some of my clothes are over 30yrs. old, yet I am frequently complimented by strangers on my style. (Kate Woods, Colorado Springs)</li> <li>I confess I have a problem! I enjoy shopping for clothes and have a keen (perhaps unhealthy) interest in certain brands but it wears on my conscience, as I'm well aware of the environmental impact of the clothes I wear. I have a wardrobe just for my jackets! I have managed to be more selective in what I buy, and pick quality items that will last. (Mark Crozier Free world)</li> <li>Fewer but well made, classically styled garments are our future. Just buy what you will wear till it wears out. And wash and dry it gently. (Linda Johnson, SLC)</li> <li>Thanks for the Shout Out to Eileen Fisher. That's my very favorite brand, for decades. I have pieces that I bought 20 to 25 years ago, still great. Buy classic, buy quality, buy LESS. (Phyliss Dalmatian, Wichita, Kansas)</li> <li>Buying less is the obvious answer to this problem. I tell myself I don't nee a thing when exposed to any retail. If you need to buy, Elizabeth Suzann in Nashville and Hackwith Design in Minneapolis are responsible options in women's fashion, I'm sure there are others. (Laura, Ohio)</li> <li>I cycle through my closet every workweek and fear the day others catch or that I am wearing the same 7 (expensive) dresses and some slacks, skirts and top combinations. (Little black dress, America)</li> </ul>

		Willingness and/or ability to pay	
		LOW	HIGH
Importance of appearance	Low	<ul> <li>Antifashion Environmentalists</li> <li>I attended Catholic schools for 1st – 12th grades so am very used to wearing a uniform. Usually, my uniform these days is a pair of jeans and a simple shirt After I can't wear clothes at work or even running errands, I wear them as I garden. Same goes for my beat-up sneakers. And then I turn the t-shirts into rags for housework. (Pseudonum, US)</li> </ul>	<ul> <li>Functional Minimalists</li> <li>Everything I ever bought from Patagonia has lasted, except one pair of Capilene (synthetic) long underwear that had to be recycled after more that a decade. I still wear Patagonia items from more than a quarter of a centur ago that were Made in the U.S.Aam wearing one now. They look almost new. The cost is higher, but it more than pays off to buy known quality Their clothes are more technical than fashionable, but nice to look at. (CB)</li> </ul>
		<ul> <li>I had to wear a uniform in high school. Best thing ever. That was over 50 years ago and I still have my uniform - instead of a gray skirt, white blouse and blue blazer, I wear black leggings and an oversized black shirt or sweater tunic. Can't miss in black. To spice things up I have jewelry and scarves. A personal uniform makes life so much easier. (mina grace, nj)</li> </ul>	<ul> <li>California)</li> <li>I buy two new pairs of Carhart double front jeans a year, wear them about week between cold water, line dry laundry. When the knees wear out, I cut the back out of the oldest pair and sew a patch an wear them another 6 months. (Tony Ickes, Bellingham)</li> </ul>
		<ul> <li>Well, my lifelong answer to this problem is to become a nudist. No one can see into my house or yard so am naked as much as possible, weather permitting. When I was a teenager I gave up wearing underwear for good. In the last few years I have stopped wearing socks most of the time except when it is really cold outside. I still have some clothes that I wore in High School which I still wear at times. (I am 76 years old now.) (KT, Tehachapi, Ca)</li> <li>I've found that Goodwill is an excellent source of slightly used, good quality clothing. It may not be the latest style, but I haven't cared about</li> </ul>	<ul> <li>Completely agree on the quality of Patagonia. We have clothes that are 25-years old still going strong. (Hope Springs, Michigan)</li> <li>I continue to use a Marmot Gore-tex parka that I bought in 1984. It has survived a ship wreck on Cape Ann, MA as well as 30 years of organic farming. The dog took a destructive interest in one of the pockets about 10 years ago but it still does the essential part of its job. Do I care what I look like? Not in the least, just so long as my customers aren't repulsed. (Sherry Chesterfield)</li> </ul>
		<ul> <li>I've been wearing my sturdy lederhosen and leather jerkin every day for most my adult life I always get a seat on the subway. (Ted, NYC)</li> <li>I used to wash my clothes on a weekly basis. I now do it once a month. People say I stink, but I respond by saying that what stinks a whole lot more is killing the planet. (Josh, Utah)</li> </ul>	<ul> <li>I buy when I have to, when I can no longer go out without being slightly embarrassed. I can't believe that this is an issue with most people. I send my Patagonia stuff back to Patagonia for repair (Yay, Patagonia.) There, again, however, we have to factor in the carbon cost of doing this, though I'm guessing that's better than buying new. (Matt, NH)</li> </ul>