Fashion and Sustainability: Consumption and Shared Responsibility

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Abstract- Indulgence in fashion has been indispensable in modern societies, as it is a crucial device for self-image and identity construction. With the advanced technology and globalization of production, the fashion industry has skewed towards fast fashion, making the latest trends available to mass consumers at affordable prices. This research aims to examine how Chinese consumers perceive sustainable consumption in the context of fashion. We endeavor to explore the factors that influence the engagement of sustainable consumption. This study aims not to argue whether sustainable fashion should mobilize or replace the current fashion system but to provide evidence on consumers' perception of sustainability and explore potential factors influencing sustainable behavior.

Relevance to Marketing Educators, Researchers and/or Practitioners - This study assesses consumer knowledge and learning towards sustainability and uncovers the factors contributing to the gap between attitudes and behavior. It also reveals how a marketing system as an agency interferes with sustainable consumption. That said, this study provides insights into sustainable consumption in a global context. It offers practical implications for sustainable branding.

Introduction

The first known European use of the word sustainability occurred in *Sylvicultura Oeconomica* in 1713 by a German forester and scientist. Han Crl Vo Carlowitz (Heinberg, 2010). Later, French Forresters adopted planting trees as a path to "sustained-yield forestry" (Heinberg, 2010). The terms gained widespread usage after 1987 when the United Nations claimed sustainable development as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Nevertheless, this definition was criticized for its failure to note the use of nonrenewable resources and for its general disregard for the problem of population growth (Markandya, Taylor, and Pedroso, 2003).

Traditional marketing encourages growth, promoting a quest for satisfying consumers' needs and wants (Swim, Clayton, and Howards, 2011). In contrast, sustainability suggests that utilized resources can be renewed by mimicking the circular flow of natural resources. It respects the capacity of both resources, and the environment is limited (McDonought and Braungart, 2012). Lorek and Fuchs (2013) further propose that sustainability is dependent upon changes in levels of consumption. Ethical consumers may consider the impact of their consumption on other individuals, animals, or the physical environment (e.g., Barnett *et al.*, 2005). However, research shows that consumers struggle to set parameters around their ethical practice, and an anti-consumption stance is not always culturally or politically feasible (Shaw and Riach, 2011).

That being said, consumers have not fully embraced sustainable goods and practices in several categories (e.g., Harrison *et al.*, 2005). This is particularly relevant in fashion (Birtwistle and Moore, 2007). Despite there is research conducted regarding the fast-fashion supply chain and retailing (e.g., Shaw *et al.*, 2006; Ertekin and Atik, 2015, Goworek *et al.*, 2012), the consumption of sustainable fashion consumers has not been well studied (Bly, Gwozdz, and Reisch, 2015, Flectcher, 2013). As Davies, Lee, and Ahonkhai (2012) note, there is minimal research observing actual buying behavior in sustainable consumption.

China has achieved exceptional economic growth and is ranked 133rd among 146 countries assessed for environmental Sustainability (Tambouratzis, 2016). Although the government has begun recognizing the environmental problem (Liu, 2010), consumers have not fully engaged in sustainable consumption. Therefore, this research aims to examine how Chinese consumers perceive sustainable consumption in the context of fashion. We endeavor to explore the factors that influence the engagement of sustainable consumption. Since the study is exploratory in nature, we conducted field interviews to investigate sustainable fashion consumption. This study aims not to argue whether sustainable fashion should mobilize or replace the current fashion system but to provide evidence on consumers' perception of sustainability and explore potential factors that might influence sustainable behavior.

Fast Fashion Critics

Over the years, the fashion industry has evolved into one of the most influential and sought initiatives globally. The fashion industry is valued at $3 trillion and employs millions of people worldwide (Teibel, 2018). Yet, the fashion industry has negatively influenced consumer welfare by creating artificial newness and obsolescence (Ertekin and Atick, 2015). That being said, youth cultures particularly foster a strong desire to pursue up-to-date taste in clothes as it helps intensify pleasure and provides a sense of control (Böhme, 2003; Cline, 2012). Youth culture is typically driven by self-centered or personal motives (Joergens, 2006). As Belk (1988) posits, fashion is an artifact of the extended self. Clothing is used to emanate meaning about the wearer to others and also to reinforce meanings to oneself. Consumers desire to create an individual identity through fashion that fits within the bounds of social norms (Thompson and Haytko, 1997; Murray, 2002).

The fashion industry exploits the young consumer segment and fulfills their desire by consistently providing new offerings through rapid change and enabling immediate gratification (Joy *et al.*, 2012). The fast fashion industry has grown faster than the retail fashion industry as a whole (Cachon and Swinney, 2011). Low cost, fresh design, and quick response times allow for greater efficiency in meeting consumer demand. Additionally, fast-fashion chains earn higher profit margins (16 percent) than their traditional fashion retail counterparts, who average only seven percent (Sull and Turconi, 2008). For instance, Zara, the exemplar of fast fashion, operates 2,700 stores worldwide and is valued at 24 billion U.S..dollars with an annual sale of eight billion. The continuous change and desire for newness emphasize material values and create idealized beauty images, resulting in reduced self-esteem, eating disorders, and body image distortions (Eertekin and Atik, 2015). Producers offering the latest fashion trends at affordable prices also encourage disposability which leads to rapid product turnover (Cline, 2012). Throw-away fashion comes at the expense of quality garments and the accumulation of an

overwhelming amount of textile waste (Flecher, 2008). As for making, buying, wearing, and discarding clothes are resource-intensive, and each stage of a garment's life has a considerable environmental impact (Cline, 2012).

While the fashion industry is profitable, it is ranked the second-largest polluter globally, next to the oil industry (Teibel, 2018). According to Chi and Chen (2019), the fashion industry is responsible for almost 10 million tons of used textile and apparel ending up in landfills or incineration in the U.S. every year. The fast fashion industry has also been criticized for appalling work conditions and exploitation in clothing production, particularly for low wages and child labor (Cline, 2012). Short lead time creates the need for temporary workers or excessive overtime to meet unreasonable deadlines (Fletcher, 2007). Human rights often are violated in the production of garments (McBobbie, 1997).

Recently, scholars have proposed that sustainably produced fashion has the potential to provide means to alleviate the current strain on social and environmental well-being in the fashion industry (McNiell and Moore, 2015). In this way, sustainably produced clothing offers an ethical purchase choice to consumers while meeting fashion trends and satisfying identity construction through consumption. However, little research has been done to examine the actual buying behavior of sustainable consumption patterns.

Rise of Sustainable Fashion

Sustainable fashion has emerged as a solution to environmental issues in recent years (Park and Lin, 2018). Fashion critics highlight animal cruelty, environmental damage, and work exploitation (e.g., Blanchard, 2013). The concept of sustainable fashion encompasses various terms, such as organic, green, fair trade, slow, eco, and so forth (Cervellon and Wernerfelt, 2012). Within marketing literature, these terms often are used interchangeably. For instance, Joergens (2016) defines sustainable/ethical fashion as clothes that incorporate fair trade while using biodegradable and organic cotton, while Cervellon and Wernerfelt (2012) use green fashion to refer to much the same set of issues. Researchers have also highlighted the issue of used clothing waste and emphasized the benefits of reusing or recycling them (Dissanayake and Sinha, 2015). Recycled products, such as second-hand clothes, can be upgraded by redesigning them when the garments are deconstructed and reconstructed into new and unique styles—this process, known as upcycling, provides new opportunities for fashion designers. Ha-Brookshire and Hodges (2009) find that most consumers would pay five dollars more for organic cotton shirts.

Research shows that consumers generally care about sustainable projects and consumption (Park and Lin, 2020). For instance, Dickson (2001) finds that consumers are concerned about the social consequences of their purchases, particularly when human rights are violated. Sweatshop labor was identified as one of the most important ethical concerns in making clothing purchase decisions. However, this attitude does not translate into actual behavior, particularly with regard to fashion items (McNeill and Moore, 2015). The discrepancy between intention and buying behavior remains poorly understood (Gupta and Ogden, 2009). To address such an issue, Joergens (2006) notes that consumers have limited choices in sustainable clothing. She also finds that consumers consider the appearance and style of sustainable fashion

unattractive and do not suit their wardrobe needs. That said, consumers perceive that price, quality, and appearance of clothing are primary factors to make a purchase decision. Nevertheless, other scholars (e.g., Markkula and Moisander, 2012) view sustainability as driving well-being rather than being a competing attribute.

Scholars have proposed solutions to achieve sustainable fashion consumption. For instance, Gupta, *et al.* (2019) suggest that one possible way to encourage slow fashion is to shift consumers' focus from buying fashion to buying styles. Although style and fashion are often used exchangeably, they carry different meanings (Bly, Gwozdz, and Reisch, 2015). Style is any distinguished mode of tailoring, while fashion is the style prevailing at any given time (Gupta *et al.*, 2019). A style reflects one's long-term identity and resonates with personal meanings.

However, the fashion industry falls into the realm of wicked problems for society (Kennedy, 2016). Drivers to be "fashionable" often outweigh drivers to be ethical or sustainable. This paradox highlights the clash of the desire to consume with efforts to limit consumption (McNeill and Moore, 2015). The long-term behavioral change needs active involvement from the consumers, government, and trade organizations (Ctaldi, Dickson, and Grover, 2010).

Sustainable Consumption in China

Approximately 26 million tons of textile waste are generated in China each year from production, and another 10 tons of waste is due to consumption (Ütebay, Çelik and Çay, 2020). Along with growing sustainability concerns worldwide, marketing research has concerned about the environmental impact of textile production and consumption in China. In a collective culture like China, social norms can determine factors regarding buying sustainable goods. One recent research that primarily examines "face" in relation to sustainable consumption indicates that face-saving is the primary determinant in purchasing sustainable goods. Here, "face" is defined as an individual's public image. It reflects the individual's place in the social network and is considered an essential value in Confucian culture (Wei and Jung, 2017). Additional research also uncovers that U.S consumers believe the brand is the primary criterion to evaluate sustainable goods, while Chinese consumers emphasize functional value (Jung, Oh, and Kim, 2021).

Yet, research on sustainability among Chinese consumers is not well understood (Lee, Ha-Brookshire, and Chow, 2018). It remains unclear what primary factors influence Chinese consumers to engage in sustainable behavior. To this end, this study aims to examine the primary determinants that impact sustainable consumption in the context of fashion. To do so, we take a grounded theory approach. Qualitative interviews are conducted and analyzed. We then discuss the challenges and opportunities that marketing researchers and practitioners may encounter.

The "SHIFT" Framework on Sustainable Consumption

The SHIFT framework provides a framework of sustainable consumer behavior literature and outlines a comprehensive psychological framework to guide researchers and practitioners in fostering sustainable behavior (White, Habib, and Hardisty, 2019). The theory proposes that

consumers are more inclined to engage in pro-environmental behaviors when the message or content leverages the following psychological factors: social influence, habit formation, individual self, feelings and cognition, and tangibility.

Specifically, social factors such as social norms, social identities, and social desirability can shift consumers to be more sustainable. Habit and self-concept can also facilitate sustainable actions. In addition, feelings such as guilt, fear, and sadness can drive sustainable attitudes and behaviors (e.g., Sevillano, ArAgones, and Schultz, 2007). Furthermore, information, knowledge, and learning can impact sustainable behavior. Both information overload and lack of exposure to information lead to low uptake of sustainable behaviors (e.g., Gifford; Chen and Chang, 2013). Finally, one unique fact is that sustainable consumption is that actions and outcomes seem abstract and vague (Reczek, Trudel, and White, 2018). Most sustainable consumer behaviors involve setting aside more immediate and proximal individual interests to prioritize behaviors with consequences that may be realized in the future. That said, sustainability is future-focused, and consumers are often present-focused (White, Habib, and Hardisty, 2019). The intangibility nature of sustainability may also hinder sustainable actions.

Sustainability, which is focused on pro-environmental behaviors, is part of the larger concept of responsibilization, in which consumers address social issues, including the environment, based upon their purchase decisions (Eckhardt and Dobscha, 2019). The responsibilization model assumes that consumers want to be responsible in order to support a firm's efforts. The conscious capitalism movement is one application of companies adopting the rationale of responsibilization.

Conscious capitalism proposes that the purpose of any organization is to make the world a better place (Eckhardt and Dobscha, 2019). A firm will place its consumers ahead of shareholders as the primary stakeholder group. Responsibilization, specifically conscious capitalism, is implemented via a pricing strategy called conscious pricing. Conscious pricing incorporates elements of Pay What You Want (PWYW), Pay It Forward (PIF), and traditional charitable donation behavior based upon what consumers feel is appropriate to pay for a meal based on their support of the social issues of food insecurity. Food insecurity is described as a fear that consumers possess that their food supply will run out (United States Department of Agriculture, 2015). More concisely stated, consumers are asked to put a price on morality (Eckhardt and Dobscha, 2019).

Methods

Our primary goal is to explore the determinants of sustainable consumption in fashion. Given the exploratory nature of the research, we adopt grounded theory as an inquiry. Grounded theory has its origins in symbolic interactionism, which holds that individuals engage the world that requires reflective interaction with the social context (Strauss and Corbin, 1997). Accordingly, behavior is goal-driven, evolving from social interaction that is highly symbolic of self. Given the emphasis on collectivism and "face" value in Chinese culture, this approach allows us to examine possible symbolic and practical values of sustainable behavior. It may uncover the ideological structure and cultural frames that influence sustainable consumption.

Grounded theory is an inductive method that uncovers patterns and relationships in marketing and consumption. It provides insights into how people understand the world and how these are related to their social context. For instance, the "Odyssey" term (Belk, Wallendorf, and Sherry, 1989) uses grounded theory in their analysis of the sacred and profane in consumer behavior. Hirschman and Thompson (1997) use the same approach to examine advertising and mass media.

A total of 25 individuals between the ages of 24 and 35 participated in the study in 2020 in Shanghai, China. All are Chinese nationals. We used our professional network to identify individuals who reside in Shanghai and who have interests in fashion. We did not adopt the snowballing methods to find our informants due to the fear of reaching similar participants. As a result, our informants have diverse backgrounds regarding their place of origin, occupations, and gender.

Extended depth interviews (McCracken 1988) were conducted in the informant's homes, workplaces, and other "hangout" locations. Each of these interviews lasted between one to two hours. The conversation was video recorded and later transcribed in Mandarin or Putonghua. The interviews started with general questions regarding demographics such as age and marital status and were then followed by questions on consumption habits and fashion. Questions on identity formation emerged from the conversation and were further probed for elaboration.

MSC consultancy conducted the interviews in the field. Each interview generated between 15 to 40 pages of transcripts in Mandarin Chinese. Since not all authors are Chinese nationals, the original texts were read by the Chinese authors in the research team and then translated into English. The English transcripts were independently analyzed by the researchers. Then, the researchers discussed their data analysis process/findings, and the consensus was reached within the research team. The transcripts were scrutinized for common themes and categories and compared for consistency across the entire data set (Arnould and Wallendorf, 1994; Belk, Fischer, and Kozinets, 2015; Spiggle, 1994).

Much analysis co-occurred with data collection and helped to determine the direction of the study. As new data were collected, they were analyzed for points of similarity and contrast. Analysis was an iterative process of coding, categorizing, and abstracting the data (McCracken 1988). Data of thematic similarity were identified throughout based on keywords or phrases. Coded data were compared and contrasted yielding a few broad categories, which, through sorting and clustering, were reduced to the more fundamental patterns that constitute the emergent themes. The final analysis integrated the themes into a unified discussion of sustainable fashion consumption (Schouten 1991). This iterative approach requires continually collecting data, comparing categories, and revising interpretation until the process is understood (Sayre 2001).

Findings

The primary goal of this study is to investigate how consumers perceive sustainable consumption in fashion. We endeavor to reveal the factors that influence consumers to engage in sustainable consumption. Our finding indicates that consumers lack specific knowledge of sustainability. We

also uncover that fashion consumption is habitual, and promoting frugality is the key to facilitating sustainable behavior in such a cultural context. The findings indicate that multiple stakeholders shall share responsibilities to promote sustainable ideology in the marketplace.

The Tension of Knowledge and Consumer Learning

One basic means of persuading consumers to engage in eco-friendly action is to present information that conveys desire and undesired behavior and consequences (McKenzie-Mohr, 2000). Scholars argue people's dearth of understanding and knowledge is due to a lack of exposure to information (Gifford, 2011), information overload (Horne, 2009), and confusion (Chen and Chang, 2013). Based on our interview, most participants have concerns about the environment but lack specific knowledge of sustainability and how to engage in sustainable consumption. For instance, Liu stated,

> I feel most Chinese consumers, like me, lack knowledge about sustainability. For example, I heard that Nylon is not sustainable. But. I do not know what to do with them. I do not know the entire manufacturing process either. Is it from petroleum or oil?

> I really cannot tell how sustainable this handbag is (pointing out her Brother brand handbag.) I am not sure how this bag can be environmentally friendly. I cannot be sure just because the label tells me that they used recyclable material.

> Xiao also expressed,

> I wish we have more information from the brand. If you say the cashmere scarf is sustainable, I would like to know how the farm treats the sheep and any violence towards animals. I heard some horror stories about how some farms treat animals. It is heartbreaking. It would also be nice to know how to recycle the product. Where the product ends up and what you do with it after that.

As White *et al.* (2019) posit, the challenge to encouraging sustainable consumer behavior is that actions are often characterized as abstract, uncertain, and complex for consumers to grasp. Yet, in order to cope with uncertainty and inadequate information, our participants are willing to obtain information from various sources. As Zhang expressed, "I just Baidu it and get the information. The Internet tells you everything." Others also acknowledge that they learn about sustainable fashion from reality shows, family, and friends. Li, the 30-year-old blogger, noted, "a while ago, I bought a jacket. When I looked at the package, something was written like, "being naked is the most sustainable option." I think it is interesting. Because of my curiosity, I began to research how this brand chooses materials and manufactures them. Then, I learned that it is about the whole process of material selection, production, logistics." Chang also added.

In the context of fashion consumption, informal organizations such as families and peers have a profound impact on sustainable behavior. Nevertheless, consumer socialization is not new to marketers. Socialization is often viewed as a social process by which norms, attitudes, motivation, and behavior are transmitted from specific courses, commonly known as

socialization agents, to the learners. (Churchill and Moschis, 1979). Socialization takes place through the interaction of the person and various agencies in specific settings. An agent must be a person or an organization that can influence the development of the learner's character. The result of the interaction is the development of the "self-other" system in which the individual is oriented towards evaluating others and the role of prescription.

> I watched d&dearpartment recently. I remembered something called "long-life design. It is quite educational.

> I sometimes post some product in our friend group online. Some friends of mine gradually become concerns about sustainable goods. It is all about mutual influence.

> One of my friends taught me how to categorize waste to recycle. Not just that, I was told not to ask the restaurant to deliver plastic silverware when I ordered food delivery. It is true that when you have the plate and chopsticks at home, why do you waste plastic?

> In theory, the agent and learner relationship can be divided into four categories: organization (e.g., school), mass media, family, and peers. As seen above, the internet, T.V., social networks provide means for consumer learning, as White *et al.* (2019) state that sustainable behaviors often require collective action. It can only be achieved if a large group of people undertakes ethical behavior. Observing others engage in action may increase perceptions of collective efficacy or a group's shared belief in its conjoint capabilities to organize and execute the action.

The Adjudication of Resistance and Frugality

Although the participants showed a strong desire to engage in sustainable consumption, most consider that sustainability is not the first criterion for buying fashion. This phenomenon may be referred to as the "attitude and behavior" gap. For instance, Zhao expressed that "it is all about the style. If it is stylish, I would consider if it is environmentally friendly next." Liu added, "I would consider the design first." In addition, Xin stated,

> Honestly, it is fashion. We buy fashion because of the look. If the product does not look good or appealing, I will not buy it regardless of its sustainability. Also, I have to consider the price. If it is too expensive, I am not going to buy it either. I am not going to buy a product because it is reusable or recycled. I first evaluate if I indeed need it and if the design is appealing.

> We also uncover the other factors that determine the fashion purchase. For instance, some participants informed us that comfort and function are also primary reasons for choosing fashion items. Besides designing "stylish" clothing, the producers may consider the functioning values.

> When I buy a product, I first look at the function. If it comes down to buying shoes and clothes, I will focus on the look and comfort level. If I purchase a facial

mask, I first will look at the ingredients and functions. I do not think biodegradable is something that comes up to mind. (Xu)

We are talking about clothing; comfort is an essential criterion in selecting the products. (Zhang)

I am not going to buy a product because it is reusable or recycled. I first evaluate if I indeed it and if the design is appealing. (Qi)

The findings reveal that sustainability-related attributes are not the top priority compared to price, comfort, and quality. Research has explored the intention and purchase gap (Park and Lin, 2020). Product characteristics such as utilitarianism and self-expressiveness can interface with green consumption (Kim and Rha, 2014). As Park and Lin (2020) posit, products provide basic and additional benefits. The primary benefits are related to functional and utilitarian benefits, whereas other benefits are associated with social and psychological needs.

With the new development of sustainable fashion, consumers may resist buying sustainable fashion. As Gonzalez-Arcros *et al.* (2021) state, responsibilization assumes that consumers want to act responsibly and make moral choices. However, consumers often resist such behavior, particularly when they experience physical and psychological discomfort (Bardhi and Eckhardt, 2017). Therefore, sustainable intervention may require a shift away from responsibilizing consumers and shaping daily life's social elements and systems (Spurling *et al.*, 2013). However, the findings suggest that consumers find an alternative way to engage in sustainable consumption. For instance,

Honestly, I am not good at doing this, although I care and am concerned about it. For instance, when I go shopping, I do not have a good feeling toward the brand if they overemphasize the package. It is unnecessary. (Xia)

The other day, I went shopping. They let me choose two different packages. They both are free. One is a modern and simple design that can be recyclable and reusable. The other looks more luxurious. I was told that I could reuse that one multiple times. I was excited to know they actually care. (Lu)

I shop on Taobao, and it is an online shopping site. When I shop online, I do concern how about the package. It is such a waste. Every time I order something from them, they ship it to me with layers of paper and plastic bags. It looks very sophisticated, but I do not think it is necessary. (Zhang)

Extending the active life of garments has been crucial in reducing the environmental impact of apparel (McLaren and MacLauchlan, 2015). Besides reducing unnecessary packing, many consider buying durable fashion items and reducing waste as alternatives to being sustainable consumers.

> I often consider if the product is durable. I like Tommy Hilfiger because it lasts a long time. Some brands like H&M just wear it and then throw it away. This is one of the criteria that I choose fashion brands.

> The best way to help the environment is to reduce usage, reuse the products, and eventually recycle. Relying on recycling alone cannot save the earth.

> Reducing waste is the key. If these clothes can be worn for an extended period, I would consider them environmentally friendly. It does not matter what kind of material they use.

The finding reflects not only the awareness of sustainable fashion but also the cultural ideology. Lastovicha (2006) defines frugality as a unidimensional consumer lifestyle characterized by the degree to which consumers are restrained in acquiring and resourcefully using goods and services to achieve. Influenced by Confucius and Taoist throughs, and frugality is ingrained in, Chinese consumers are likely to be more concerned about "waste" due to the cultural emphasis on frugality.

The Interface between Tangibility and Credibility

The growing importance of relationship marketing has heightened the role of trust in business relationships. For instance, Urban, Sultan, and Qualls (2000) propose that customer trust builds sustainable market share. In essence, trust is crucial for customer relationship management (Morgan and Hunt, 1994). According to many participants, many fashion brands have produced sustainable products; however, sustainability is seen as a marketing technique. For instance, Lin expressed,

> I know some fashion brands try to emphasize sustainable materials. Tommy and Reformation both create a product line with upcycling Nylon. However, it is just one product line. How about other products they make? If a brand only makes a few sustainable lines, then I consider they are superficial. A while ago, Prada created a sustainable product line. I feel like it is just a marketing technique. If they genuinely care about being sustainable, they should have the entire brand made with sustainable materials.

The credibility concern may be associated with "tangibility" proposed by White *et al.* (2019). Eco-friendly actions and outcomes seem abstract, vague, and distant from the self (Reczek, Trudel, and White, 2018). According to Carrete *et al.* (2012), sustainable outcomes are challenging to measure. For instance, Zhou stated that most of the labels like "100 percent reusable" are a lie. It makes you feel not guilty. However, most of the products are not possible "100 percent recycled." Others share similar feelings.

> Some brands only use 20 percent of recyclable material. I would ask what you do with the rest of 80 percent. (Nan)

Brands like H&M, Zara, and Adidas all try to promote their sustainable product line. Nevertheless, it can be confusing. For instance, the materials they use can be natural and biodegradable, but logistics are not environmental-friendly. The transportation and shipping process still emits Co2. (Fang).

Well, it needs a measurement matrix. I meant we need to know the "authenticity" and "impact." We need to know about the process's low carbon, nature, organic, recycling, and upcycle. Those terms sound very complicated. How would you measure the impact after all? (Gao)

Although global fashion brands have addressed their parts of producing sustainable products, the credibility of "being sustainable" is minimum, according to our participants. Our findings reveal that consumers demand transparency.

We focus on the material generally, but we need to consider shipping, supply chain, and logistics. I would appreciate more transparency. I like Everlane. They provide information such as where the factories are, including pictures of their factories. I feel like I understand something. (Zhou)

I feel we do not have regulations on sustainable fashion. The fashion industry has not been regulated. We do not know how they select materials and make the products. We do not know how they recycle it either. It is unlike buying health care products. The active ingredients are all listed on the package. If it is FDA-approved, it says so on the bottle. If not, it says so as well. However, fashion is not the same. It is not transparent.

Sometimes, products labeled as sustainable tried to charge more. I do not understand that. Raising the price would lower the likelihood of buying sustainable products if you want to promote sustainability. This is like a paradox. I have difficulty trusting them. (Xu)

The findings reveal that sustainable fashion involves designers, producers, media, logistic parties, retailers, consumers, and regulative entities in the marketing system. In other words, sustainable behavior can be driven by consumers, producers, and regulators. The view is similar to marketing system dynamics which address how markets emerge and emerge over time and what actors, actions, and processes bring such change (Ertekin and Atik, 2020). Consistent with Ertekin and Atik (2020), we uncover that consumers, regulators, media, retailers, and producers can be changing agents, and the progress of promoting sustainable behavior is a shared responsibility.

Similarly, the broader concept of responsibilization is a shared responsibility and is accomplished through multiple agents: NGOs, companies, government, consumption communities, and families (Eckhardt and Dobscha, 2019). Consumers are the central problem-solving agent, with that power emanating from their purchasing power.

Discussion

Indulgence in fashion has been indispensable in modern societies as it is a crucial device for self-image and identity construction (Ertekin and Atik, 2020). With the advanced technology and globalization of production, the fashion industry has skewed towards fast fashion, making the latest trends available to mass consumers at affordable prices. Scholars have raised concerns pointing to the challenges associated with climate change, diminishing natural resources, over usage of chemicals, increasing textile waste and pollution, water shortage, and the work conditions in factories and sweatshops (e.g., Beard, 2008; Flectcher, 2008; Morgan and Birtwistle, 2009). Gupta *et al.* (2019) propose that style may be an alternative to promoting sustainable fashion. Style and fashion orientation are expected to lead to different buying behavior. A strong fashion orientation encourages consumers to look for new experiences (Fletcher, 2009).

In contrast, style-oriented consumers are less likely to shop often as they look for clothes that reflect their styles (Cho-Che and Kang, 1996). Yet, most studies addressing sustainability concerns in fashion are either conceptual or deductive. Therefore, this study contributes to the literature by providing a rich analysis of consumers' views of sustainable fashion consumption. We uncover the factors (e.g., materials, labor, logistic, packaging, recycling) that may impact fashion consumption.

Knowledge is an essential construct in understanding consumers (Brucks, 1985). It is considered a driver for consumers to engage in domain-specific behavior. We found that consumers lack specific knowledge of sustainability. Like "functional food" (e.g., diet supplements) research, a low degree of familiarity poses a distinct market challenge. (e.g., Sääksjärvi, Holmlund, and Tanskanen, 2009). Lack of exposure to information can contribute to low uptake of sustainable behavior (e.g., Gifford, 2011). Consumers must know the norm, be aware of and understand the prompt or feedback, and comprehend self-values and self-benefit information to engage in sustainable behavior.

Our study reveals a gap in attitude and behavior. Style and function are two primary reasons for engaging the fashion purchase. To this end, our study contributes to sustainable fashion literature by resonating the focus on the style orientation of clothing (Gupta *et al.*, 2019). We also identify consumers, designers, factories, retailers, logistic parties, recycling organizations, media, and regulators in the sustainable system. This finding enriches the sustainable fashion system that Ertekin and Atik (2020) proposed. According to our data, consumers' role is to reduce usage, and designers may focus on durability. Producers are responsible for selecting recyclable material and engage ethical production. Third-party logistic companies and retailers shall use less packaging material and provide more fuel-efficient shipping methods. Recycling/Sustainable organizations need to promote awareness and educate consumers. That said, mass media can be a conduit to promote awareness and consumer learning.

Managerial implications

If sustainability attempts to balance social, economic, and environmental concerns without compromising the health of ecosystems (Morelli, 2011), then it follows that sustainable innovations are "inventions providing an essential progress concerning social, economic and ecological concerns" (Rosca, Arnold, and Bendul, 2017, p. 1). Business models for sustainable innovations include frugal innovations and reverse innovations.

Frugal innovations (F.I.s) maximize value for customers, shareholders, and society in developing countries, such as China and India, while reducing the need for financial and natural resources. F.I.s are emerging in populations with significant resource scarcity in which mainstream product solutions are too expensive or unavailable (Sun, Cao, Tan, and Shang, 2016). These innovations successfully service low-income consumers in developing countries.

In developing economies, F.I.s tend to achieve sustainability better than mainstream. Innovations (Hossain, 2018). The desired objective is an "as-good, cost-effective" product (Sun, Cao, Tan, and Shang, 2016, p. 1260) with "good enough" functionalities and minimum frills (Agarwal and Brem, 2012). Examples of F.I.s include vehicles, medical devices, health services, solar energy, refrigerators, and water purifiers. Furthermore, reverse innovations are frugal innovations that are adopted first in developing markets and later in developed markets. So, although the innovation is initially aimed at low-income consumers in developing countries, it can trickle up to developed countries (Hossain, 2018).

Examples of F.I.s include vehicles, medical devices, health services, solar energy, refrigerators, and water purifiers (Hossain, 2018). Based on the results of this study, the development of F.I.s in the fashion industry would be an opportunity with significant potential in China. Chinese consumers' cultural orientation toward frugality and an aversion toward wastefulness are viable reasons to leverage frugality in order to attain sustainability.

It shall also be noted that consumers perceive the regulative system as lacking. Therefore, it may be necessary for policymakers to design and reinforce regulations such as transparent eco-labeling. As research indicated in the past, the cooperation of governments, public policymakers, and trade organizations is also critical for the fashion system to be sustainable (Boström and Micheletti, 2016; Gupta *et al.*, 2019).

Conclusion

To conclude, the current study provides a comprehensive view of how consumers perceive sustainable consumption in the context of fashion. It assesses consumer knowledge and learning towards sustainability. It uncovers the factors that contribute to the gap between attitudes and behavior. It reveals how a marketing system as an agency interferes with sustainable consumption. Yet, there are several limitations to this study. For instance, we only use qualitative interviews to conduct the research, and the sample size is small. Future studies may need to confirm the results with other methods. Second, it may be interesting to compare Asian consumers with Western counterparts, given the differences in multiple cultural dimensions. Finally, studies may examine sustainable consumption across different product categories.

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