

Sustainable Consumption Intention and Behavior of Chinese Consumers on Children's Apparel: A Behavioral Reasoning Theory Perspective

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Abstract

The thesis aimed to explore what factors influenced Chinese consumers' sustainable consumption intention and behavior with regard to children's apparel. Regarding sustainable consumption, numerous previous studies found consumers were becoming more environmentally conscious and showing positive attitudes towards sustainable consumption. However, affected by various factors, consumers had failed to transform their sustainable consumption intentions into behaviors, namely an intention-behavior gap existed. In this study, by utilizing Behavioral Reasoning Theory and conducting in-depth semi-structured interviews with eight interviewees living in Beijing to explore consumers' perception regarding sustainability, their reasons for engaging in or not engaging in children's apparel sustainable consumption behaviors, the empirical findings suggested first consumers' limited knowledge of clothing sustainability led to their lower commitment to clothing sustainable consumption and impeded them to perform more clothing sustainable consumption behaviors. Second, consumers' engagement in sustainable consumption behaviors was not all driven by pro-environmental beliefs and values. Consumers recycled clothes for the sake of environmental protection. While they purchasing eco-friendly children's apparel was for health considerations, and they reusing clothes was motivated by saving cost and habitude. Third, consumers' sustainable consumption intention-behavior gap existed due to various external constraints, which was consistent with numerous previous research findings.

Keywords: Sustainable consumption, Children's apparel, Intention-behavior gap, Behavioral reasoning theory, Pro-environmental beliefs and values

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Abbreviations

SCP	Sustainable Consumption and Production
WHO	World Health Organization
UNICEF	The United Nations Children's Fund
BRT	Behavioral Reasoning Theory
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
H	Theoretical hypotheses
COVID-19	Coronavirus disease 2019
App	Application
NGO	Non-Governmental Organization

1. Introduction

Unsustainable consumption and production lead to considerably global environmental problems including global warming, air and water pollution, and reduction of biodiversity (Liu, Oosterveer and Spaargaren, 2016), as well as pose certain threats to people's health. China is the second-largest economy in the world (Xiao, 2015) with one of the world's largest manufacturing capacities and the highest rate of consumption (Jung, Choi and Oh, 2020). Meanwhile, China is the world's largest carbon dioxide emitter (Shao, 2019) and has serious air and water pollution problems (Greenpeace International, 2011). Additionally, according to the estimation of the World Health Organization (WHO), 21 percent of the disease burden of Chinese residents is caused by environmental pollution (Lu et al., 2017). Thus, for the sake of sustainable development, it is especially important to get China involved in the global sustainable consumption and production (SCP) network.

Previously, global efforts have been mainly paid to alleviate pollution through production-side control and cleaner production technologies including in China. However, these achievements tend to be offset by unsustainable consumption patterns from the consumer side (Liu, Oosterveer and Spaargaren, 2016). Hence, in order to foster consumers' sustainable practices, it is essential to understand the consumer perspective, which requires an in-depth exploration and analysis of consumer's decision making process and behavior (Fletcher and Grose, 2012).

This study aims to explore what factors influence Chinese consumers' sustainable consumption intention and behavior with regard to children's apparel. The apparel industry is the world's second largest polluter, which accounts for 10 percent of global carbon emissions (Diddi et al., 2019). It also causes certain health risks for wearers by largely use of chemicals during the manufacturing process (De Angelis, Amatulli and Pinato, 2020). As the chemicals may leave on the final products, which can be

harmful to people's health (Chen, Ding and Yu, 2019). For instance, plenty of chemicals that are widely used in textiles have hormone-disrupting effects, adverse impacts on the reproductive system and the immune system, and potentially carcinogenic risks (Greenpeace International, 2014). Moreover, compared with adults, the size of infant's bodies, their developmental stage of organs and systems, and their characteristic habits make them exceedingly vulnerable to health risks under the same exposure to toxins and pollution (UNICEF, 2020).

When it comes to sustainable consumption, there is no consistent understanding of its concept in academia. Some scholars have paid close attention to the production side focusing on reducing resource depletion and environmental pollution caused by economic activities. While some academics believe sustainable consumption is a broader concept that also needs to take into account consumers' sustainable choices and behaviors. Moreover, two common themes have emerged from numerous previous studies. Specifically, consumers are becoming more environmentally conscious and showing positive attitudes towards sustainable consumption, as well as there is a gap between consumer's sustainable consumption intention and behavior. Namely, many consumers do not translate their environmental concerns into their consumption patterns (Caruana, Carrington and Chatzidakis, 2016). As consumer's decision-making process and behavior are complex and difficult to predict as well as can be influenced by various factors (Niinimäki, 2010). Thus, a large number of theories including economic models, psychological models, social marketing models, and systems- or institution-based models have been developed to study consumer's consumption behavior in light of different perspectives and what factors form the intention-behavior gap (Wang, Liu and Qi, 2014). Among the numerous theories, the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) based on the perspective of psychology have great influence and are widely applied in various domains (Liu, Oosterveer and Spaargaren, 2016).

However, I would argue that this is not the full story. First, previous studies suggest that consumers show a positive attitude towards sustainable consumption. But this is a general trend. Whether people have the same level of favorable attitude in diverse domains needs to be further investigated. Second, most of these results in previous researches have been obtained through employment of the quantitative methods of questionnaires which mainly incorporate researchers' preset questions, rating scale answers and finite rational answers (Auger Pat and Devinney Timothy M., 2007). It may face the risks of not getting what consumers really think. As the questions and answers are predetermined by the researchers, it reflects the researchers' preconceptions. Besides, when it comes to sensitive or values questions, the respondents are more likely to present themselves as "good citizens" and choose the answers that may not reflect what they really think (Auger Pat and Devinney Timothy M., 2007). Third, numerous previous researches have paid great attention to study the factors that form consumer's sustainable consumption intention-behavior gap. While relatively little attention has been paid to explore why consumers decide to engage in sustainable consumer behavior. In other words, it is uncertain whether consumers' engagement in sustainable consumption behavior is all driven by pro-environmental beliefs and values.

Therefore, in order to meet the thesis aim and deal with these uncertainties, this study will apply James D. Westaby's Behavioral Reasoning Theory (BRT) and conduct in-depth semi-structured interviews with eight Chinese consumers living in Beijing to explore consumers' reasons for engaging in or not engaging in sustainable consumption behaviors with regard to children's apparel, and their perceptions regarding sustainability. In so doing, it facilitates a better understanding of consumers' decision-making processes and behaviors. The research questions are designed as follows:

- 1) What are Chinese consumers' perceptions of sustainability in general and clothing

specific?

2) What children's apparel sustainable consumption behaviors do Chinese consumers engage in and why?

3) What children's apparel unsustainable consumption behaviors do Chinese consumers engage in and why?

In order to make the thesis can be conducted in a more feasible and clear manner, the scope of the study needs to be defined. First, the consumers studied in this thesis are age between 30 and 49 years old. In China, the consumers of this age group currently have great purchasing power and influence for sustainable consumption (Li, Zhang and Jin, 2017). Besides, many of them are married and have children (R.I.S.E. Sustainable Fashion Lab, 2020). Namely, they have the consumption need for children's apparel. Second, in this study, children's apparel refers to the clothes for newborn and infant, namely ages range from birth to two years old (World Health Organization, 2007). Because older children already have or are developing their own ideas of choosing clothes, this may affect their parents' purchase decisions. Thus, this scope enables the exploration of consumers own consumption decision-making processes and behaviors of children's apparel. Third, here, sustainable consumption refers to the process of purchasing, using and disposing of products with the participation of consumers. Actually, there are various understandings in sustainable consumption's scope. In this study, the idea of garment life-cycle assessment is referred, namely the apparel life-cycle begins at fiber (cradle), moving through to textile production, garment design process, manufacture, transport, storage and sales, use and reuse by consumers, and eventual disposal (grave) (Payne, 2011). As this study aims to explore the consumers' perspectives, thus, it only focuses on the process which consumers get involved in.

The empirical findings suggest that, first, the majority of interviewees associate

sustainability with reducing adverse environmental impacts caused by the production side. Besides, consumers have certain pro-environmental beliefs and values which drive them to engage in various sustainable behaviors that benefit the common good. When it comes to clothing sustainability, due to a lack of related knowledge and information, consumers' environmental beliefs and values in the clothing domain are relatively weak. It leads to a lower commitment to clothing sustainable consumption and hinders consumers from engaging in more clothing sustainable consumption behaviors. Second, consumers' engagement in the practice of recycling is driven by pro-environmental beliefs and values. While their engagement in purchasing eco-friendly children's apparel is for health considerations and their participation in reuse clothes is motivated by saving cost and following what previous generations and the people around them have done. Third, due to various external constraints, consumers have failed to translate their sustainable consumption intentions into behaviors. Namely, there is a gap between consumer's sustainable consumption intention and behavior, which is consistent with numerous previous research findings. Overall, the empirical findings are capable to answer the research questions. Besides, compared with the traditional behavioral intention model TPB, BRT is more appropriate to understand consumers' decision-making processes and behaviors with regard to children's apparel in this study.

After the introduction section, the remaining sections are organized as follows. Section 2 literature review presents previous studies on sustainable consumption. It falls into three main themes: discussion on what is sustainable consumption and its scope; two recurring themes in previous studies, namely consumers are becoming more environmentally conscious and showing positive attitudes towards sustainable consumption, as well as there is a gap between consumer's sustainable consumption intention and behavior; and significance of this study. Section 3 theoretical framework introduces James D. Westaby's Behavioral Reasoning Theory to guide the thesis. In

this section, the origin of BRT, BRT's logic, BRT's advantages and limitations, and the application of BRT in the thesis are presented respectively. Section 4 methodology explains the data need to be collected, data collection method, interviewee profiles, the study's limitations and challenges, ethical considerations, and my reflexivity. Section 5 findings present consumers' perceptions of sustainability in general and clothing specific, consumers' consumption habits of children's apparel, consumers' behavioral reasons for engaging in children's apparel sustainable consumption behaviors, and their reasons against engaging in children's apparel sustainable consumption behaviors. Section 6 is discussion. The relevance of empirical findings to research questions and BRT is discussed respectively. Lastly, a conclusion is presented in Section 7.

2. Literature review

Since the 1990s, research into sustainable consumption has grown significantly (Caruana, Carrington and Chatzidakis, 2016). Numerous previous studies have provided abundant insights for the understanding of sustainable consumption. In this section, I will first review what sustainable consumption is and its scope. Then, discuss two common themes that have emerged from previous studies on sustainable consumption respectively. Namely, consumers are more concerned about the environment than before and a growing number of people hold a positive attitude towards sustainable consumption, as well as there is a gap between consumer's sustainable consumption intention and behavior, which leads to consumers' failure to translate their environmental concerns into actual behaviors. Lastly, a conclusion and the significance of the study will be presented.

2.1. Discussion on what is sustainable consumption and its scope

When it comes to what is sustainable consumption, there is no consistent understanding of it in previous studies (Heiskanen and Pantzar, 1997). The concept of

sustainable consumption was first espoused at the United Nations Conference on Environment and Development in 1992. There was a broad consensus that in order to address the global environment and development problems, major changes in consumption patterns were necessary (Dolan, 2002). The changes in consumption patterns not only rely on the performance of firms and the design of products but also on the expectations, choices, behaviors, and lifestyles of consumers (Wang, Liu and Qi, 2014).

However, some of the previous studies mainly understand sustainable consumption from the production side. They have paid close attention to designing and producing more eco-friendly goods in order to reduce the adverse environmental impacts caused by economic activities (Liu, Oosterveer and Spaargaren, 2016). For instance, Dolan (2002) states sustainable consumption is a discourse that seeks to present a solution to ecological problems in light of industrial economic production. Ruppert-Stroescu et al. (2015) suggest sustainable consumption focuses on improved behavior that lessens the depletion of Earth's natural resources and decreases the use of toxins that may pose a threat to future generations. White, Habib and Hardisty (2019) define sustainable consumption as actions that lead to reduce adverse environmental impacts and decrease utilization of natural resources throughout the lifecycle of the product, behavior, or service.

Since the achievements of pollution alleviation through production-side control tend to be offset by unsustainable consumption patterns from the consumer side, lots of previous studies deem sustainable consumption as a broader concept that also needs to incorporate the sustainable choices and behaviors of consumers (Liu, Oosterveer and Spaargaren, 2016). Thus, Thøgersen (2005) suggests sustainable consumption can be defined as people's choices and actions towards products and services that reduce environmental impacts, lessen the use of available materials or energy, or alter the

structure of ecosystems. Sesini, Castiglioni, and Lozza (2020) point out two criteria that are closely related to the definition of sustainable consumption. One is meeting human needs. The other one is preserving the capacity of the environment and respecting its constraint. Kilbourne, McDonagh and Prothero (1997) believe sustainable consumption has a close connection with ecological degradation, modern overconsumption, as well as economic and political institutions. De Angelis, Amatulli and Pinato (2020) consider sustainable consumption as the set of activities that can bring environmental and social benefits to the planet. According to the Oslo Symposium on Sustainable Consumption in 1994, which organized by the Norwegian government, sustainable consumption has been defined as “the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations.” (Carvalho de Abreu Lima and Lima, 2020, p.333)

When it comes to the scope of sustainable consumption, there are different understandings of it as well in previous studies. Zhang (2007) suggests sustainable consumption practices are the behaviors of purchasing, using and recycling. According to White, Habib and Hardisty (2019), sustainable consumption is the process including information search, decision making, product or behavior adoption, product usage, and disposal of products that are inclined to sustainable outcomes. Sesini, Castiglioni, and Lozza (2020) state sustainable consumption involves the process of decisions and actions enacted by consumers which include purchase, use and disposal of goods. While Liu, Oosterveer and Spaargaren (2016) argue sustainable consumption does not only refer to the consumption of final products. It involves a variety of activities in different stages ranging from initial production to final consumption of goods. Bergh and Ferrer-i-Carbonell (1999) suggest sustainable consumption includes processes of resource extraction, production, transport, trade, and waste management.

Regarding the clothing domain, Ruppert-Stroescu et al. (2015) state sustainable consumption of apparel involves the behaviors of purchasing eco-friendly products, recycling textiles, and reducing consumption. Hong and Kang (2019) suggest sustainable consumption of clothing incorporates purchasing, storing, using clothes, and caring for the product life cycle as every process from manufacturing the fibers to dispose of the garments. Jung, Choi and Oh (2020) deem sustainable consumption as purchasing eco-friendly clothes and recycling. According to Diddi et al. (2019), sustainable consumption of apparel includes the behaviors of purchasing clothes that are made of eco-friendly materials, buying used clothes, purchasing clothes less often, and repairing clothes to help them last longer.

Overall, there are various understandings of sustainable consumption and its scope in previous studies. However, the inconsistent understandings in academia may lead to confusion and uncertainty in the understanding of sustainability for consumers. Further, it may also pose challenges to promote actual sustainable consumption practices. Because without a consensus of its definition, scope, and corresponding assessment of sustainable consumption among a number of stakeholders including researchers, scientists, policymakers, business, consumers, media, etc. (Diddi et al., 2019), it is difficult to make concerted efforts to achieve sustainable consumption and push significant progress towards sustainable development.

2.2. Previous studies on sustainable consumption

Previous studies on sustainable consumption involve different disciplines, theories, and methods, as well as different domains. Although the empirical findings are varied and contextual, two recurring themes can be identified. One is that consumers are becoming more environmentally conscious and showing positive attitudes towards sustainable consumption. The other one is that there is a gap between consumer's sustainable consumption intention and behavior. Namely, many consumers do not

translate their environmental concerns into their consumption patterns (Caruana, Carrington and Chatzidakis, 2016).

2.2.1. More concern for the environment and a positive attitude towards sustainable consumption

Numerous previous researches suggest consumers are more concerned about the environment than before and a growing number of people hold a positive attitude towards sustainable consumption. Lee and Holden (1999) find consumers show growing concern for environmental issues. According to Balan, Siddiq and Chih (2018), nowadays consumers are better educated on environmental protection. They have become more concerned and more conscious of the adverse effects on the environment. Jung, Choi and Oh (2020) suggest global awareness of environmental problems and consumers' awareness of sustainability have risen. Liu et al. (2012) state more and more people have expressed they would like to avoid purchasing products that might potentially harmful to the environment. Shao (2019) finds people are willing to pay a premium for sustainable products if they can fully access product information. According to a survey conducted by Nielson, 66 percent of consumers worldwide have shown their willingness to pay more for sustainable offerings (White, Habib and Hardisty, 2019). Balan, Siddiq and Chih (2018) note approximately 80 percent of western consumers deem themselves as environmentalists. They acknowledge the need to alter lifestyle choices and are ready to change their purchasing habits.

Similar results have been found in China as well. According to a survey of 204 Chinese respondents, the results show that Chinese consumers are aware of the current growing environmental problems (Balan, Siddiq and Chih, 2018). Based on an investigation conducted by Nielsen (2014), 69 percent of Chinese respondents express their willingness to purchase eco-friendly products from companies that have a good performance on social responsibility. A survey of 2251 Chinese consumers shows 58

percent of respondents express that they would feel anxious about the negative environmental impacts of their consumption. 71 percent of participants respond they would like to offset their negative environmental impacts by purchasing sustainable products (R.I.S.E. Sustainable Fashion Lab, 2020). According to Alibaba's online purchasing data, the number of Chinese sustainable consumption consumers has increased from 4.32 million in 2011 to 65.87 million in 2015 (Alibaba Research Institute, 2016). A survey conducted in ten cities with 9370 Chinese respondents in 2016 finds more than 70 percent of consumers are aware of sustainable consumption and half of the consumers express their willingness to pay extra fees of up to 10 percent for sustainable products (Li, Zhang and Jin, 2017).

I believe that consumers are much more environmentally conscious than they were in the past. However, whether consumers will show the same level of environmental awareness and positive attitude towards sustainable consumption in different domains needs further investigation. Besides, it is hard to measure how much the awareness has increased or how strong the awareness is now. Lots of results of people's environmental awareness and attitude towards sustainable consumption in previous studies have been obtained through quantitative surveys by incorporating rating scale answers, finite rational answers and ethical obligations. However, the use of questionnaire and rating scale answers may face the risk of not obtaining what consumers actually think. For instance, when it comes to sensitive or values questions, the respondents are more likely to self-presentation as "good citizens" and choose the socially desirable answers. Moreover, the description used in rating scales is crucial. Vague wording may lead to erroneous results (Pat and Timothy M., 2007).

2.2.2. Sustainable consumption intention and behavior gap

Another recurring theme in previous researches on sustainable consumption is that there is a gap between what people say and what they actually do, namely the so-called

“intention-behavior” gap (Caruana, Carrington and Chatzidakis, 2016). The decision-making process and behavior of consumers are complex and difficult to predict. It can be influenced by various factors (Niinimäki, 2010). A large number of theories in light of different perspectives including economic models, psychological models, social marketing models, and systems- or institution-based models have been developed to study it (Wang, Liu and Qi, 2014). Among the numerous theories, TRA and TPB based on the perspective of psychology are influential and have been widely applied (Liu, Oosterveer and Spaargaren, 2016).

Although each theory provides a piece of the puzzle, almost all of them have a consistent finding that many consumers fail to translate their sustainable consumption intentions into actual behaviors. For instance, according to Young et al., (2010), 30 percent of British consumers express their concern regarding environmental issues, whereas merely 5 percent of these consumers turn their concern into sustainable products purchase. Magnusson et al. (2001) find more than half of Swedish consumers report that they have positive attitudes toward organic food. Nevertheless, only 4 to 10 percent of the same consumers actually purchase them, depend on specific food products category. In Canada, an online survey finished by 1000 respondents has shown that approximately 40 percent gap exists between people’s sustainable consumption intention and actual purchase (Nguyen, Nguyen and Hoang, 2019). According to a survey of 1093 Egyptian consumers, the results suggest that the correlation between consumer sustainable consumption intention and selecting to purchase sustainable products is negative. Based on an investigation in Indonesia, consumers show positive attitudes towards sustainable goods but this indirectly affect consumers to buy them (Liu et al., 2012). In Vietnam, sustainable consumption intention-behavior gaps are found in 416 samples in Hanoi and Ho Chi Minh City (Nguyen, Nguyen and Hoang, 2019).

In China, the gap between consumers' sustainable consumption intention and behavior is found as well. A survey conducted in Suzhou city shows even though consumers are concerned about environmental issues, approximately half of the respondents among 336 valid samples have seldom purchased sustainable products (Liu et al., 2012). According to an online survey, 240 samples are collected purposely from the urban residents in Shanghai, Beijing and Chengdu cities. The results suggest 203 respondents express their sustainable consumption intentions. However, among them, 196 consumers have actually bought environmental-friendly apparel (Jung, Choi and Oh, 2020). Based on an investigation conducted by R.I.S.E. Sustainable Fashion Lab (2020), 71 percent of 2251 Chinese consumers show their willingness to purchase sustainable products, whereas only 29 percent of them have shopping experiences of sustainable fashionable goods.

Previous studies have found various factors to explain consumers' sustainable consumption intention-behavior gap. Caruana, Carrington and Chatzidakis (2016) suggest everyday consumption practices are still considerably constrained by lack of time and finance, insufficient products' information, reluctance and inconvenience to change shopping habits, etc. According to Liu et al. (2012), sustainable consumption intentions and behaviors are related to people's values and individual beliefs. Different from general purchase-related behaviors, environmentally preferable purchasing is deemed as a future-oriented outcome rather than an instant personal gain. Thus, the perception level of threat or responsibility is an important factor to motivate sustainable consumption. Besides, feeling an individual's ability to make tangible changes is also a factor to affect environmental behaviors. Chan (1998) finds subjective norms and social influences are significant to the actual environmental behavior. While Jung, Choi and Oh (2020) argue social norms do not show any noticeable influences on the relationship between sustainable consumption intention and behavior. Many scholars consider that the availability of sustainable products affect consumers' purchasing decisions (Liu et

al., 2012). Li, Zhang and Jin (2017) find the higher prices, low credibility of producers, uncertain of which products are sustainable products, and suspicion of product quality are the reasons for consumers not choosing sustainable products. According to Thøgersen (2005), external conditions and individual level limitations both play a role in constraint consumers to change their lifestyle towards sustainability. External conditions include cultural meanings, social norms, and available alternatives. Individual-level limitations are limited time and financial resources, limited cognitive capacity, limited self-control, limited knowledge about problems and solutions, and limited skills and task-specific knowledge.

When it comes to the apparel domain, Diddi et al. (2019) find various reasons account for consumers' sustainable consumption intentions and behaviors gap, such as lack of variety of eco-friendly products, lack of knowledge and skills to mend clothes, lack of availability of sustainable products and mending services, financial constraints, skeptical of brand companies' sustainable claims, reluctant to buy second-hand clothes, lack of self-control, and feel happy to buy more clothes than they really need. Jung, Choi and Oh (2020) suggest the apparel design and brand recognition play a significant role to influence consumers' actual purchase decisions. According to Adıgüzel (2020), various reasons result in the discrepancy between consumers' sustainable consumption intentions and behaviors, including relatively higher prices of sustainable products, reluctance in changing habits and routines, suspicious of brand companies' greenwashing, and the low quality, low performance and low durability of sustainable products. Hong and Kang (2019) suggest aesthetic requirements, financial constraints, and the credibility of material are the main reasons to impede consumers to purchase eco-friendly clothes. Cho and Han (2015) state Korean young mothers' reluctance to buy eco-friendly apparel for their kids is caused by dissatisfaction with the product design and doubt of the materials.

2.3. Significance of this study

Previous studies have provided rich insights into sustainable consumption. Some aspects of previous researches can be concluded as follows. In the past few decades, research into sustainable consumption has grown significantly. In academia, there are different understandings of what sustainable consumption is and its scope. Some scholars have paid close attention to the production side with a focus on reducing resource depletion and environmental pollution caused by economic activities. While some academics believe sustainable consumption is a broader concept that also needs to take into account consumers' sustainable choices and behaviors. However, the inconsistent understandings in academia may lead to confusion and uncertainty for ordinary consumers in understanding it. In addition, numerous previous studies suggest that consumers are becoming more environmentally conscious and showing positive attitudes towards sustainable consumption. Lots of these results have been obtained mainly through quantitative surveys by incorporating rating scale answers, finite rational answers and ethical obligations. There is no doubt that the use of quantitative methods is able to find the increasing trend of people's awareness and attitude towards environmental protection (Diddi et al., 2019). However, it is hard to measure how much the awareness has increased or how strong the awareness is now. Since people may conceal what they actually think when it comes to sensitive or values questions. Besides, if vague wording is used to describe rating scales may lead to erroneous results. Furthermore, plenty of previous studies have provided people's general awareness and attitude toward sustainable consumption. Whereas whether people have the same level of pro-environmental awareness and attitude in different domains needs to be further investigated. Another recurring theme in previous researches on sustainable consumption is that there is a gap between consumers' sustainable consumption intention and behavior. In other words, the empirical findings of previous studies suggest many consumers do not translate their environmental concerns into their consumption patterns. Since consumer's

decision-making process and behavior are complicated and difficult to predict. Thus, a large number of theories based on different perspectives have been developed to study it. In previous studies, a variety of external and internal factors have been found to explain the gap between consumers' sustainable consumption intentions and behaviors.

In spite of the fruitful insights in previous researches, this study may have a number of significances. First, the in-depth semi-structured interview based on a qualitative approach will be employed in this study, which may provide different insights to understand consumer's decision-making process and behavior. In order to foster consumers' sustainable practices, it is essential to understand the consumer perspective, which requires an in-depth exploration and analysis of consumer attitudes and behaviors (Fletcher and Grose, 2012). However, as mentioned earlier, the majority of previous studies have conducted quantitative methods to use surveys and incorporate rating scale answers, finite rational answers and ethical obligations in understanding people's awareness, attitude and behavior regarding sustainable consumption. Relatively few previous studies have employed qualitative methods to explore consumers' thoughts that may exceed the researchers' preconceptions.

Second, this study will apply a relatively new theory named Behavioral Reasoning Theory to explore both the reasons for consumers to engage in and not engage in sustainable consumption behaviors. In so doing, it may enable a better understanding of consumer's decision-making process and behavior. Two recurring themes have emerged from previous studies on sustainable consumption. One is that consumers are more concerned about the environment than before and a growing number of people hold a positive attitude towards sustainable consumption. The other one is that the intention-behavior gap leads to consumers' failure to translate their environmental concern into actual behaviors (Nguyen, Nguyen and Hoang, 2019). Thus, for the sake

of promoting consumers' sustainable practices, lots of previous researches have made great efforts to study the factors that form the gap. However, there are relatively few researches on the reasons why consumers engage in sustainable consumption behavior. In other words, whether the driving force for consumers to engage in sustainable consumer behavior is necessarily based on environmental considerations is questionable. Thus, the investigation of the reasons why people actively engage in sustainable practices is also important to understand consumers' thoughts.

Third, this study will explore the consumption decision-making process and behavior of Chinese infant parents, whose ages are between 30 and 49, rather than the younger generations. Previous studies suggest young consumers are particularly relevant to sustainable consumption researches. Thus, they are a key target group by researchers, policy-makers, and educators alike. This is in light of the perception that young consumers are crucial to intervene in the formation and conventionalization of mainstream unsustainable consumption practices and patterns. They are expected to lead actual pro-environmental changes to the planet (Fischer, Böhme and Geiger, 2017). However, confined by income and current purchasing abilities, young consumers may become the main group of sustainable consumers in 5 to 10 years but not right now. Whereas at present 30-49 years old consumers have great purchasing power and influence on sustainable consumption in China (Li, Zhang and Jin, 2017). Thus, it is meaningful to study their consumption decision-making process and behavior.

All in all, this study may enrich the perspectives to understand consumer's decision-making process and behavior with respect to sustainable consumption in terms of research method, theory and research object.

3. Theoretical framework

In this section, James D. Westaby's Behavioral Reasoning Theory (BRT) will be

introduced to guide the thesis and explore Chinese consumers' sustainable consumption intention and behavior with regard to children's apparel. BRT is a relatively new theory that developed in 2005. It emerged from Icek Ajzen's Theory of Planned Behavior (TPB) which is an extension of the Theory of Reasoned Action (TRA). Thus, before the introduction of BRT, it is necessary to get a review of the origin of BRT, namely the theories of TRA and TPB. Then, the advantages and limitations of BRT as well as the application of BRT in this study will be discussed respectively.

3.1. Origin of behavioral reasoning theory

A bunch of theories ranging from economic models, psychological models, social marketing models, etc. have been developed to predict or explain consumers' behaviors. A fundamental assumption for a number of studies is that consumers make rational decisions and maximize their benefits, namely they opt for alternatives with the highest benefits against the lowest costs in light of money, social approval, etc. (Wang, Liu and Qi, 2014). Among a large number of theories, Westaby (2005) argues that most of the recent behavioral intention theories including BRT have derived from two foundational psychological theories: the Theory of Reasoned Action, and the Theory of Planned Behavior which is an extension of TRA. TRA and TPB are widely applied in environment, health, marketing, and many other domains to explain and predict individual behavior (Ajzen, 2020).

TRA was proposed by Martin Fishbein and Icek Ajzen in 1975. It is derived from previous research in social psychology, persuasion models, and attitude theories (Fishbein and Ajzen, 1975). TRA suggests that there is a strong correlation of the attitude towards behavior and subjective norms to behavioral intention. The attitude towards behavior refers to the degree of an individual to have a favorable or unfavorable evaluation of the behavior. Subjective norms mean a person perform or not perform a behavior in terms of the social pressure he or she received (Ajzen, 1991).

Intention is defined as “a person’s location on a subjective probability dimension involving a relation between himself and some action.” (Fishbein and Ajzen, 1975, p.288) Moreover, TRA considers behavioral intention as the best predictor to determine people whether or not actually perform the behavior (Montaño and Kasprzyk, 2008). Thus, according to TRA, people would have a higher intention and are more likely to perform the behavior when they have a positive attitude, perceive significant others want them to perform the behavior, and the suggested behavior is positive (Sheppard, Hartwick and Warshaw, 1988). Since the theory has not addressed habits, cognitive considerations, emotional factors, or factors that lie outside individuals’ will (Brohmann et al., 2013), such as the barriers of lack of money, time, or other resources (Ajzen, 2020). Hence, in some circumstances, studies have found that behavioral intention does not always result in actual behavior (Norberg, Horne and Horne, 2007).

In response, Ajzen developed TPB in 1985 by adding a new component of “perceived behavioral control”. The perceived behavioral control is defined as people’s perceptions of their ability to perform a given behavior, namely whether it is easy or difficult to perform the behavior based on previous experience and the anticipated obstacles (Ajzen, 1985). As an extension of TRA, TPB aims to deal with TRA’s limitations of individuals having incomplete volitional control. TPB regards behavior as the pursuit of a goal whose achievement is uncertain. The perceived behavioral control is used to account for the uncertainty. Thus, the TPB model suggests an individual’s intention is guided by the attitude towards behavior, the subjective norms and perceived behavioral control. The more favorable attitude and subjective norms, and perceived easier to conduct a behavior, the stronger the individual’s intention to perform the behavior. Moreover, the importance of attitude, subjective norms and perceived behavioral control may vary in light of different behaviors and situations (Ajzen, 1991).

In addition, TPB also hypothesizes that behavioral beliefs, normative beliefs, and control beliefs predict attitudes, subjective norms, and perceived control (Westaby, 2005). Behavioral beliefs refer to considerations of the likely outcomes of a behavior. Normative beliefs are considerations that deal with the likely approval or disapproval of a behavior by significant others, such as family members, friends, colleagues and so on. Control beliefs concern the presence or absence of factors that performing a behavior easier or more difficult. Besides, Ajzen suggests that behavioral, normative, and control beliefs people hold to perform a given behavior can be affected by a wide range of background factors, such as cultural, personal, social and situational factors. Nevertheless, for the sake of simplicity and generalization, TPB does not incorporate these background factors into its theoretical framework (Ajzen and Fishbein, 2005). A visual overview of TRA and TPB can be seen in Figure 1.

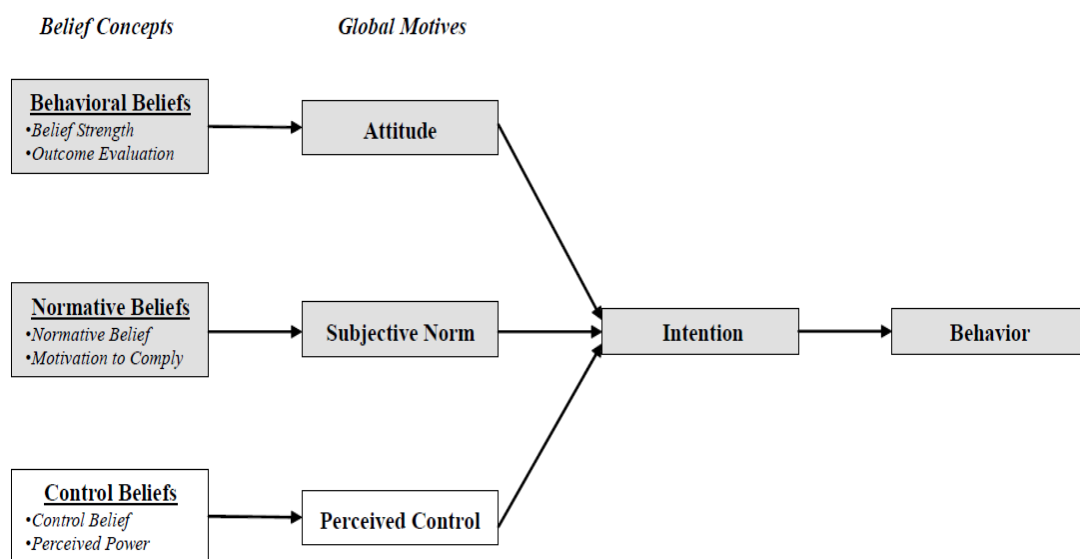


Figure 1 Traditional behavioral intention models. The theory of planned behavior is represented by all boxes and arrows. The theory of reasoned action is represented by the nested constructs with shading. Source: Westaby (2005), p.98

3.2. Behavioral reasoning theory

Behavioral reasoning theory (BRT), an extension of TPB, was proposed by Westaby in 2005. According to Westaby (2005), although belief concepts give an understanding of

context-specific factors impacting behavior, TPB has not theoretically addressed an important question about how “reason” concepts affect motivational mechanisms. Because reason concepts play a significant role in influencing a number of judgment and decision-making contexts. Thus, in 2005, Westaby proposed BRT. Consistent with Ajzen’s TPB, BRT endorses attitudes, subjective norms and perceived behavioral control as global motives which broadly construct and affect intentions in a variety of behavioral domains. Besides, “context-specific beliefs and reasons are contextualized to the specific behavior under investigation and are presumed to serve as the fundamental antecedents of global motives and intentions.” (Westaby, 2005, p.98)

Westaby (2005) has visualized the propositions in BRT to briefly introduce its logics (see Figure 2). In line with TRA and TPB, BRT hypothesizes that intentions are the best predictors of behavior (H1). Global motives including attitudes, subjective norms and perceived behavioral control are expected to predict intentions (H2). As a unique prediction, reasons are expected to predict global motives, hypothetically through “reasons for” and “reasons against” mechanisms (H3). Moreover, these justification and defense mechanisms are expected to allow reasons to directly predict intentions without explained by global motives (H4). Besides, reasons are not expected to be isolate existence from people’s beliefs and values. In other words, the reasons people use to affect their behaviors are assumed to be consequent upon the processing of their beliefs and values (H5). Beliefs and values are expected to directly play a role in affecting global motives. Because automated processes have the possibility to circumvent deeper reason activation (H6). Lastly, BRT theorizes that reasons would be enhanced after behaviors are performed in light of dissonance theory and may be used to support, distort, or rationalize behavior. In other words, it hypothesizes that when new information is presented that causes people to doubt their reasons, they may interrupt their ongoing behavioral pursuits. Furthermore, in the model, beginning with the prediction of behavior, each linkage is considered in turn. The significance of each

component may vary in different specific behaviors.

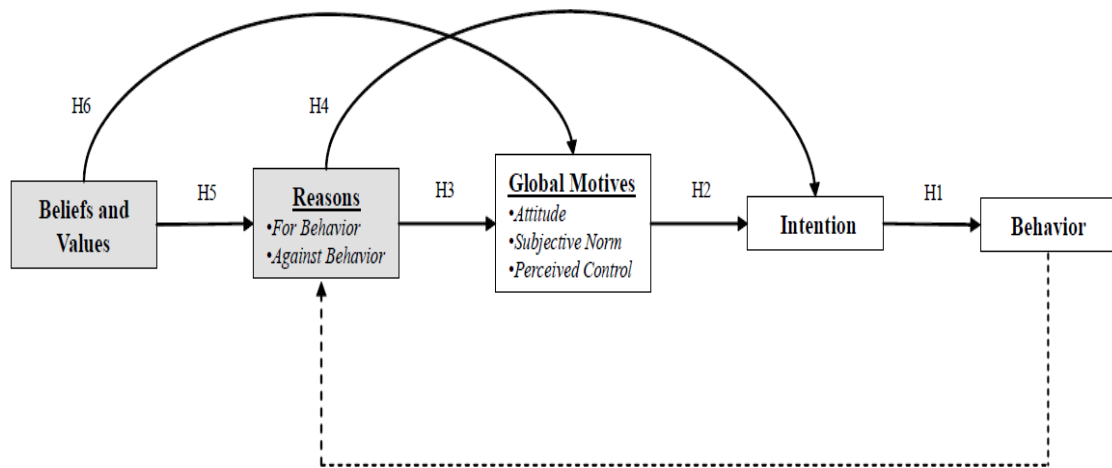


Figure 2 Behavioral reasoning theory. Shaded boxes denote context-specific cognitions used to form and sustain global motives, intentions, and behavior. H=theoretical hypotheses.

Source: Westaby (2005), p.99

3.3. Advantages and limitations of behavioral reasoning theory

Compared with other alternative behavioral intention theories, BRT has a number of advantages in understanding the factors that affect consumer intention and behavior. First, the justification and defense mechanisms provide a better explanation of consumer decision-making phenomenon. The “reasons for” and “reasons against” are not just opposites of each other. They are two critical different perspectives and qualitatively distinct constructs that influence consumer intention and actual behavior. Second, the measures of “reasons for” and “reasons against” are context-specific. Other theoretical frameworks including TRA and TPB mainly evaluate consumers’ general beliefs with regard to a given behavior. BRT is able to provide rich contextual information to understand consumer decision-making process and behavior (Ryan and Casidy, 2018). Third, BRT has not ignored the important role of values and beliefs in predicting reasons, intentions, and consumer behaviors (Kumar Sahu, Padhy and Dhir, 2020). Hence, in light of these advantages, a number of recent studies have utilized the BRT framework to explain consumer behavior in a variety of contexts. Besides, these

prior BRT studies have suggested that the BRT model serves as a coherent framework for predicting consumer attitude, intention, and behavior (Ryan and Casidy, 2018).

Although BRT provides several advantages over other alternative theoretical frameworks, its limitations should not be ignored. First, BRT is a relatively new theory, which needs to be applied in various domains and diverse geographical, cultural, and demographic contexts to test the theory's effectiveness. BRT was proposed in 2005. Even though its popularity has soared in the recent past to predict consumer behavior, BRT-related research is still at the early phases of development. Until now, BRT has not been applied and tested largely. Previous application of BRT is mainly in the domains of consumer behavior and marketing. Moreover, BRT-related researches have involved respondents from European, Asian, and North American regions. Second, early applications of BRT have found that, in some cases, in order to have a holistic understanding of consumers' decision-making process, it is necessary to add variables apart from the original components of BRT (Kumar Sahu, Padhy and Dhir, 2020). Third, the findings of BRT studies are contextualized. It is confined by generalization.

Overall, although BRT is a relatively new theory, its effectiveness still needs to be tested in diverse contexts and environments. A number of previous studies suggest that BRT model has its explanatory power in predicting or explaining consumer attitude, intention, and behavior. In addition, the nature of BRT allows for a rich discussion of the reasons for consumers to engage in or not engage in a specific behavior. It may provide a better understanding of consumer decision-making process and behavior.

3.4. The application of behavioral reasoning theory in this study

According to BRT, reasons serve as important linkages between people's beliefs, global motives, and intentions to engage in a specific behavior. Besides, reasons are presumed not to exist in isolation from people's beliefs and values (Westaby, 2005). Thus, in accordance with BRT, I will first explore consumers' beliefs and values

regarding sustainability in general and clothing specific, as well as their reasons for engaging in or not engaging in sustainable consumption behaviors with regard to children's apparel. The empirical findings will be presented in Section 5. Then, the impact of consumers' context-specific beliefs and reasons on their global motives, intentions and behaviors will be considered in turn for the sake of better understanding consumers' decision-making processes and behaviors. This will be discussed in Section 6.

4. Methodology

An appropriate method offers an important tool to discover and interpret the facts in a certain reality (Almeida, Faria and Queirós, 2017). In this section, in order to explore Chinese consumers' sustainable consumption intention and behavior with regard to children's apparel as well as meet the thesis aim and deal with the research questions, I will first analyze what data need to be collected. Then, I will discuss the employment of in-depth semi-structured interviews based on the qualitative approach to collect the data. Following that, interviewee profiles will be introduced. Further, the limitations and challenges of the data collection method, ethical considerations, and reflexivity will be discussed respectively.

4.1. Data need to be collected

In order to meet the thesis aim and answer the research questions, first, the data of Chinese consumers' perceptions of sustainability in general and clothing specific need to be collected. For the sake of breaking down this question and make the data can be collected in a feasible way, the data will be collected into four themes: consumers' general understandings of sustainability, the perceived sustainable behaviors they actively engaged in their daily life, the domains that they paid close attention to when it comes to sustainability, and their attitudes towards eco-friendly clothes. Second, it is necessary to collect the data of consumers' consumption habits including purchase,

use and disposal of children's wear in their daily life. In so doing, it helps identify their engagement of sustainable and unsustainable consumption behaviors of children's apparel. Data collection will be divided into six themes: buyer of children's apparel in household, purchase channel of children's wear, purchase frequency, brand preference, considerations for purchase children's clothes, and use and dispose of clothes. Third and fourth, the data of the underlying reasons for consumers' engagement in and not engagement in sustainable consumption behaviors including purchase, use and disposal of children's apparel will be collected respectively.

4.2. Data collection method

In this study, in order to better understanding consumer's decision-making process and behavior, the in-depth semi-structured interview based on the qualitative approach is employed to collect the data. As mentioned in the literature review section, plenty of previous studies have employed surveys in light of the quantitative approach to explore consumers' sustainable consumption awareness, attitudes and behaviors. In quantitative research, the data can be quantified. The results can be taken if the samples are large enough and constitute a general and comprehensive view (Almeida, Faria and Queirós, 2017). Nevertheless, in the questionnaire, all the questions are predetermined and the answers are closed, which may have certain limitations for probing consumers' thoughts and a better understanding of consumers' perspectives. While in qualitative research, it concerns aspects of reality that cannot be quantified and focuses on producing in-depth understanding and explanation of the problem under analysis in diverse dimensions (ibid). Thus, the qualitative approach is considered more suitable for this study.

In addition, semi-structured interview, just as its name implies, contains the characteristics of structured interview and unstructured interview. On the one hand, a semi-structured interview has an interview guide and a number of preset questions.

Thus, unlike the unstructured interview whose process is too open-ended and hard to control, the semi-structured interviewer is able to guide and administrate the process by following a framework. On the other hand, different from the structured interview which mainly contains closed questions and answers, a semi-structured interview is designed with key questions and open-ended answers (Bryman, 2012). It encourages a conversational manner with fewer participants and enables a deep probe and understanding of the interviewees' thoughts, their experiences, and their reasons for engaging in or not engaging in behavior with an open mind. In the meantime, new perspectives are allowed to add to the interviews in the form of follow-up questions (Brinkmann and Kvale, 2015). Hence, the semi-structured interview process is easy to control, flexible, and has the opportunity to follow new and diverse paths of inquiry. To some extent, it offsets the limitations of both structured and unstructured interviews.

Nevertheless, some cautions need to be exercised when designing the interview guide. First, in order to obtain the real thoughts of consumers and their daily consumption behaviors, how to describe the questions in neutral language and how to prioritize the questions need to be carefully considered. The descriptions relate to people's values and expectations for sustainable consumption should be avoided as much as possible for the consideration that interviewees may intend to meet "good" expectations and give unreal answers. Besides, questions regarding interviewee's consumption habits would be better to come first, followed by questions about their perceptions with respect to sustainability. In so doing, it helps to create a good atmosphere for conversation and may help to get interviewees to talk more about what they really think and really do. Second, a small pilot test has been conducted before the formal interview to help revise the interview questions.

The interviews have been conducted via WeChat video call or voice call due to the ongoing COVID-19 pandemic. Although interviewing in qualitative research prefers

the face-to-face kind, it is difficult to travel for data collection now. In the Digital Age, Web-based data collection has become a common practice for researchers for the advantages of time and cost-saving (Shapka et al., 2016). The online interview provides another possibility to implement the research (Bryman, 2012). Moreover, video call or voice call has advantages other than text-based interviews, such as email or instant message. On the one hand, it is similar to the in-person conversation, which can facilitate the interaction between interviewer and interviewees. On the other hand, it helps to eliminate misunderstanding and clarify instruction or questions immediately that make the interviews be conducted in an effective way. Furthermore, using WeChat as a communication tool is convenient for both researcher and interviewees. WeChat is developed by Tencent with more than 500 million monthly active users. It is the most popular and widely used instant messaging tool in China (Stockmann and Luo, 2017).

Additionally, the collected interview data are coded via the qualitative data analysis software NVivo after transcription. In qualitative research, coding is the process of fragment a large amount of collected data into different themes and labeling them as various codes. In so doing, it helps to identify common and different themes in the bulk of collected qualitative data, which would facilitate further data analysis (Bryman, 2012). Inspired by the components of BRT and the data need to be collected, the interview data are coded into four main themes including perceptions of sustainability, consumption habits, reasons for and reasons against. Then, the theme of perceptions of sustainability is divided into four sub-themes that consist of understandings of sustainability, pro-environmental behaviors, focus domains and attitude towards eco-friendly clothes. The theme of consumption habits is fragmented into six sub-themes including buyer, purchase channel, frequency of purchase, brand preference, considerations for purchase, and use and disposal. The theme of reasons for and reasons against are divided into three sub-themes, namely purchase, use and disposal.

4.3. Interviewee profiles

In this study, the semi-structured interviews are conducted with eight residents living in Beijing. Previous studies suggest various demographic variables are significant to influence people's sustainable behaviors, such as age, gender, education level, income and place of residence. In other words, young, female, well-educated, wealthy, and urban dwellers are found to have relatively higher levels of sustainable behaviors (Liu et al., 2012). With these aspects in mind, the interviewees are selected as follows. First, their ages range from 31 to 45. According to Li, Zhang and Jin (2017), at present 30 to 49 years old consumers have great purchasing power and influence for sustainable consumption in China. In this age group, lots of people have got married and have children. Namely, they have the consumption need for children's garments. Moreover, in order to differentiate their ages, three of them are between the ages of 31 and 35. Another three belong to the age group of 36 to 40. The rest two are ages ranging from 41 to 45. Second, the interviewees consist of six mothers and two fathers. In China, mothers are expected to be closely involved in the upbringing of the children (Santos, 2017). In most families, females are the actual buyers for a variety of daily supplies (Li, Zhang and Jin, 2017). Thus, the majority of interviewees are female. Third, the interviewees include three bachelors and five masters. Fourth, because some mothers have quit their jobs to become stay-at-home moms, the interviewees' incomes have not been listed. What is clear is that all the interviewees' households belong to the middle class¹. Fifth, the interviewees are residents living in Beijing for the sake of practical consideration. During the ongoing COVID-19 pandemic, it is feasible to contact potential interviewees by making use of the researcher's own social network. In spite of this, four of the masters have used to study abroad in Europe. It may help to examine the impacts of different resident places and different contexts on their sustainable consumption behaviors. Sixth, four of the interviewees have one child and

¹ According to the National Bureau of Statistics of China, a middle-class household in China earns between RMB 100,000 (US\$ 15,447) and RMB 500,000 (US\$ 77,234) in a year (Li and Yang, 2021).

the other four have two children in light of the Chinese context. According to China's population policy, previously residents in Beijing only could have one child in each family. In 2016, this policy has relaxed that all couples are allowed to have two children (Zhang, Guo and Zhai, 2019). Thus, this circumstance is taken into account as well. The interviewee profiles and interview records can be seen in Table 1.

Table 1 Interviewee profiles and interview records

Name (Pseudonym)	Interview date	Gender	Age group	Education background	How many children	Length of interview
A	2021-2-8	Female	31-35	Bachelor	One	00:43:11
B	2021-2-9	Female	36-40	Master	One	01:01:28
C	2021-2-9	Female	31-35	Bachelor	Two	00:59:43
D	2021-2-10	Female	31-35	Bachelor	Two	00:46:30
E	2021-2-11	Female	41-45	Master	One	00:27:00
F	2021-2-11	Male	41-45	Master	One	00:31:54
G	2021-2-12	Female	36-40	Master	Two	00:36:35
H	2021-2-12	Male	36-40	Master	Two	00:33:01

4.4. Limitations and challenges

Although qualitative research has some advantages to better understand people's decision-making process and behavior, its limitations and challenges should not be ignored. First, the nature of qualitative research is to deep understanding a problem rather than numerical representativeness (Almeida, Faria and Queirós, 2017). Thus, it is often criticized as being too subjective, difficult to replicate, hard to generalization and lack of transparency (Bryman, 2012). Second, as for the semi-structured interview, the usage of the language in describing the questions and the manner of the interviewer asking questions need to be cautious. It poses certain challenges to obtain interviewees' real thoughts, especially the questions related to the participants' values

and beliefs. Third, it is time-consuming work to prepare the interview and transcribe the collected data (Adams, 2015). Fourth, all the interviews are conducted in Chinese rather than English. During transcription of the collected data, there is a risk that the translation may not be accurate enough to fully express the interviewee's original meaning.

4.5. Ethical considerations

The Swedish Research Council (2017) provides important rules and guidelines on ethical considerations, which helps to make sure the quality and implementation of the research. A number of principles closely related to this study are taken into account. First, the interviewees need to be fully aware of the purpose of the interview, the interviewer's background and the interview questions. Thus, before conducting the interviews, the interviewees are informed of the researcher's background as a master's student of Lund University to conduct the master's thesis. Their answers would be only used for the analysis of the thesis. The thesis will be published on Lund University's public website. Besides, the interview questions are provided beforehand. Second, the interviewees' participation is voluntary. They can quit the interviews at any time if they feel uncomfortable or insecure. Moreover, they can skip any questions which they do not want to answer. Third, their participation is anonymous. Their real names are not released and are replaced by pseudonyms. In addition, most of the interviewees are the researcher's friends. In order to protect their identities from being recognized by acquaintances, when presenting the data, some personal information are not mentioned, such as their occupation and specific age, their children's gender and age, etc. Fourth, the interviews are recorded and approved by the interviewees. The recording will not be released as well.

4.6. Reflexivity

Reflexivity concerns the examination of the implications of methods, the influence of

the researcher's own values, bias and decisions on knowledge generation during the research process and then how the knowledge is transmitted to the audience in the form of text. In terms of methods, this study is constructionism in ontology and interpretivism in epistemology. Ontology concerns the nature of social entities. Different from objectivism which asserts social phenomena and their meanings exist independently of social actors, constructionism suggests social actors are continually influencing social phenomena and their meanings (Bryman, 2012). From the standpoint of constructionism, the researcher's understanding is co-constructed with participants through mutual interaction within the research setting and dialogic interaction through interviews. In other words, the researcher's values and dispositions play a considerable role in affecting the knowledge construction through interaction with the respondents in the inquiry. Epistemology concerns the sources and limits, rationality and justification of knowledge (Given, 2008). At the level of epistemology, qualitative research is largely influenced by interpretivism (Bryman, 2012). How the collected data to be interpreted by using the language tool may be affected by various factors, for instance, the researcher's cultural, political, and social context, values, life experiences, educational background, self-interest, bias, and gender roles (Brinkmann and Kvale, 2015). Thus, it is necessary to reflect and aware of my own position on how to interpret the collected data as an international student who is affected by both Chinese and western narratives and a mother who has two children. Overall, when employing qualitative methods, the researcher is part of the research. Either from the ontological or epistemological standpoint, it should accept that this study is essentially subjective rather than objective.

5. Findings

In this section, the data collected from eight in-depth semi-structured interviews are presented as follows: first, explore Chinese infant parents' perceptions with respect to sustainability in general and clothing specific. Second, outline the interviewees'

consumption habits regarding children's apparel so that the sustainable and unsustainable consumption behaviors the infant parents have engaged in their daily life can be identified. Third and fourth, probe the underlying reasons for interviewees engaging in and not engaging in sustainable consumption behaviors respectively.

5.1. Perceptions of sustainability in general and clothing specific

To address the first research question, the interviewees are asked to talk about their general understandings of the concepts, the perceived sustainable behaviors they actively engaged in their daily life, the domains that they paid close attention to, and their attitudes towards eco-friendly clothes.

5.1.1. Understandings of the concepts of sustainability

The interviewees have shown different understandings of sustainability. They described the concept respectively as “use materials that can be degraded by nature”, “reduce the use of limited natural resources in production process”, “decrease the use of pesticides and chemicals during the manufacturing process”, “avoid air pollution and water pollution caused by economic activities”, “reduce carbon emissions”, “sort garbage properly”, “reuse, reduce and recycle” and “purchase eco-friendly products”. Besides, most of the interviewees have expressed that although they could identify some features of sustainability, they did not fully know the exact meaning of it.

Regarding the understandings of clothing sustainability, even though the interviewees could list some of the behaviors associated with it, such as reducing purchase, buying eco-friendly clothes, recycling, and reducing pollution during the production process, most of them have mentioned that they did not have a clear idea of its concept and its specific impacts on the environment.

5.1.2. Engagement in pro-environmental behaviors

The interviewees have actively engaged in various sustainable behaviors in their daily

life. For instance, take public transportation such as subway and bus, or use shared bikes instead of driving the car, classify garbage carefully, reuse plastic bags, take reusable shopping bags when shopping, purchase organic food or eco-friendly products, double-sided use of paper, read e-books rather than paper books, turn off lights when not use, water conservation, climb stairs instead of taking the elevator, and reduce using disposable cutlery.

5.1.3. Domains they pay close attention to

All of the interviewees have expressed that they paid close attention to the domains which have a direct impact on their health and safety. For instance, air pollution caused by automobile exhaust emissions, food safety caused by the abuse of pesticides, the chemical safety of the products which can put directly into mouth, such as cutlery, toys, feeding bottle and pacifier. Besides, the interviewees also noted that compared with air pollution and food safety, they normally paid little attention to clothing sustainability due to a lower level of threat to themselves or not familiar with the adverse impacts on the environment. As two interviewees illustrated:

I am more concerned about air pollution and food safety due to the direct impact on our health. As for the apparel domain, I know that making jeans need to use a lot of water and chemicals. Its production process also results in water and air pollutions. It definitely does not good for the environment. But compared to the former, because it does not have a direct influence on me, I think it is a bit far away from my daily life (E, female, one child).

I do not fully know what clothing sustainability refers to and its specific impact on the environment. So I prefer to pay attention to the domains which I have a direct sense in my daily life, such as air pollution caused by car emission (H, male, two children).

5.1.4. Attitude towards eco-friendly clothes

The interviewees' attitudes towards eco-friendly clothes are varied. All the interviewees have mentioned they did not have a clear idea about the production process of environment-friendly clothing, the characteristics of various eco-friendly

materials, and these clothes' specific positive impacts on the environment. However, some of them have expressed if they could fully access the environment-friendly products' information, even though most of these clothes' prices were relatively higher than the normal ones, they were willing to pay more to purchase them. While among them, one interviewee has mentioned it still depended on how much higher the price of it. Another participant has expressed that one more premise of paying more was that the quality of eco-friendly clothes needed to be superior to that of normal products. In addition, two of the interviewees have responded they would not pay a premium for pro-environmental clothes. Because it was the firm's responsibility to produce sustainable products, excessive costs should not be imposed on consumers.

5.2. Consumption habits of children's apparel

A brief review of infant parents' consumption habits with regard to children's apparel in their daily life is needed. In so doing, their engagement of sustainable and unsustainable consumption behaviors can be identified, which will further facilitate the "reasons for" and "reasons against" analysis.

5.2.1. Buyers of children's apparel in household

When it comes to who takes charge to purchase infant clothes in the household, all interviewees responded mothers were the main buyers. Fathers have bought children's clothes only a limited number of times. Moreover, child care by grandparents is considerably common in both urban and rural areas in China (Santos, 2017). For the families in which grandparents play an important role in helping the parents to take care of children, grandmothers have bought clothes for their grandchildren sometimes.

5.2.2. Children's apparel purchase channels

The shopping mall is consumers' main purchasing channel of children's wear. The interviewees have mentioned shopping in physical stores enabled a direct feeling about the clothes' quality, especially when they were new parents and had no shopping

experience for children's clothes. Moreover, they believed the products sold in malls have been tested and qualified. Thus, the clothes would have higher quality and would be much safer for the kids. However, in the situation that they did not have time to go to shopping mall, or based on health considerations during the Covid-19 pandemic, they would purchase children's clothes mainly at Tmall stores, which is an Alibaba online platform for businesses to sell brand name goods to consumers.

5.2.3. Frequency of purchase

Different from buying clothes for adults, the physical growth characteristics of children lead to the need to replace clothes for them with new sizes every two or three months. However, for the mothers who just have the first child, they purchased children's apparel very often, for instance, every two or three days a time. While for the mothers who already have two children, they purchased less often compared with the former, for instance, once every two or three months.

5.2.4. Brand preference

Regarding brand preference, the answers mainly divide into two groups. In one group, the fathers and one mother were more likely to buy children's wear in fast-fashion brands, such as H&M, ZARA and Uniqlo. For the fathers, due to not familiar with children's wear brands, they preferred to consume in these integrated brands. Thus, they could purchase clothes for the kids and themselves together. The mother mentioned the prices of fast fashion brands were relatively cheaper compared with the brands that specialize in children's wear. As the kids grew quickly and needed to replace the size frequently, it was not necessary to buy expensive clothes. In another group, other mothers were inclined to consume in children's wear brands, such as Mothercare and Balabala for the perceptions that these brands were specialized in children's products. Thus, their quality, comfort level and safety should be higher than the fast-fashion brands.

5.2.5. Considerations for purchase children's clothing

Comfort, safety and price are the main considerations when purchasing children's apparel. All interviewees have expressed when it comes to purchasing children's apparel, the criteria of safety and comfort must be met, especially when the children were under one year old. As for children's apparel safety, according to Chen, Ding and Yu (2019), the categories are classified as mechanical safety, flammable safety, chemical safety, and external safety from technical perspective. In the interviews, all participants were more concerned about mechanical safety and chemical safety. Namely, whether the clothes had small parts from design and production, and whether there were residual poisonous and harmful substances on the clothes which might cause health risk to wearers. As for comfort, as the infants spent most of their time at home, they wore home clothes more often compared with outerwear. Thus, comfort must be placed into the top two considerations. Moreover, to check whether the clothes have met the criteria, the interviewees would prefer to purchase children's wear in shopping malls to check the quality of the products directly, smell whether the clothes have a pungent scent, check whether the products have the label of GB 18401-2010 A², buy naturally colored cotton, organic cotton or light color clothes which fewer chemicals were used during the manufacturing process, or read the labels to check the percentage content of cotton. As for the prices, they mainly referred to purchasing children's apparel from mainstream brands rather than luxury brands. Additionally, the interviewees have mentioned different from buying children's apparel, when purchasing adult clothes for themselves, they more concerned about the clothes design rather than comfort, safety and prices.

5.2.6. Use and disposal of clothes

For the unwanted children's apparel with good condition, all interviewees have

² "GB 18401-2010 A" is the national general safety technical code for textile products. "A" refers to baby and infant products. It tests the clothing's formaldehyde content, pH value, color fastness, odor, and decompose carcinogenic aromatic amine dyes.

expressed they normally first gave to their relatives, friends or colleagues, whose kids are younger than theirs. Meanwhile, they were also willing to get worn children's wear with good condition from the people who they know. As for the unwanted clothes with bad conditions, they would cut some cotton ones and use them as cleaning cloth. With regard to the broken ones and not suitable for cleaning cloth, some interviewees dropped them to recycling bins and others threw them directly into the trash bins.

5.3. Behavioral “reasons for” engaging in children’s apparel sustainable consumption behaviors

To address the second research question, through the review of interviewees' consumption habits regarding children's wear, some sustainable consumption behaviors can be identified, such as purchasing naturally colored cotton or light color children's wear, reuse worn clothes as cleaning cloth, giving to or getting from worn clothes with relatives, friends or colleagues, and recycle worn clothes. The reasons for engaging in these sustainable consumption behaviors are discussed below.

5.3.1. Health considerations

In order to minimize health risks rather than pro-environmental consideration, some consumers have used to purchase naturally colored cotton or organic cotton clothes for their children, especially during their newborn phase. As mentioned earlier, chemical safety is one of the top considerations for respondents when buying children's clothing. The naturally colored cotton material has the characteristic of inherent color. It skips the most polluting activity of dyeing during its production process (Karakan Günaydin et al., 2019). The organic cotton clothes are deemed to add fewer chemicals during their manufacturing phase. Thus, respondents thought these clothes used fewer chemicals and were safer for children.

5.3.2. Saving cost and habitude

Saving cost and habitude rather than pro-environmental concerns are the reasons for all interviewed parents' engagement in reuse the unwanted children's clothes. A quote of G (female, two children) has explained the reasons below:

I gave unwanted children's clothes in good condition to my friend. Her child is one year younger than mine. I also got some worn clothes from my sister whose child is three years older than my child. As for the bad condition cotton clothes, I just cut them as cleaning cloth. In doing so, I do not need to buy children's clothes very often and save money. Besides, I think I just do what my mother used to do. When I was little, I got the worn clothes from my old sister and gave my clothes that were too small to wear to my younger sister. As the saying goes, wearing a hundred families' clothes, the children will grow healthily. Almost every generation has done it this way.

5.3.3. Environmental protection

Environmental concern is the main reason for consumers' engagement in recycling unwanted children's clothes that cannot be reused. Generally, they would drop the unwanted clothes into recycling bins in their community or working company, or H&M recycling boxes. As A (female, one child) mentioned:

There is a recycling bin for clothes in our company. It is very convenient to drop the unwanted clothes there. I think it is very important to recycle garbage properly. Recently, the government began to strongly promoted garbage sorting. Meanwhile, I have watched some television news and popular reality television shows that introduced the impacts of improperly sorting garbage on the environment. So I think it is very crucial to start actions by individuals.

5.4. Behavioral "reasons against" engaging in children's apparel sustainable consumption behaviors

To address the third research question, through the review of interviewees' consumption habits with regard to children's wear, it can be identified several unsustainable consumption behaviors the interviewees engaged in their daily life, such as purchasing children's clothes very often, not actively purchasing eco-friendly children's apparel, and not disposal of unwanted clothes properly. The "reasons

against” are presented below.

5.4.1. Lack of experience

The lack of children’s apparel purchase and use experience leads to overbuy of clothes. When the mothers were pregnant, they have already begun to prepare a variety of children’s stuff for the baby on the way. For the mothers who were pregnant with their first child, due to a lack of experience in purchasing and using children’s clothing, most of them actually purchased more than needed or purchased unsuitable products. It would result in a certain number of children’s clothes were still new but too small to wear, or some clothes did not match with the season. However, when they have accumulated experience, they would buy children’s clothes less frequently. As C (female, two children) explained:

I purchased lots of children’s clothes when I had my first child. For instance, every two or three days, I would buy children’s wear in stores or online. However, I often encountered the problem that many new clothes were too small or out of season to wear, especially the outerwear. I felt it was too wasteful to buy lots of clothes than needed. Thus, after my second child was born, based on my previous experiences, I only bought some house wear for the baby when needed. As for the outerwear, the baby just wore the clothes getting from my first child or my friends’ children.

5.4.2. Chemical safety requirements can be met

The perception of purchasing in shopping malls could meet the need for chemical safety has confined consumers to actively buying eco-friendly children’s apparel. As F (male, one child) responded:

The children’s clothes which can be sold in shopping malls should be safe enough. First, the brands in shopping malls are normally famous. Second, their products should have been tested and qualified. Third, in order to maintain their reputation, the shopping malls will not allow unsafe and low-quality brands to open stores there. Thus, I think purchasing in shopping malls is enough to meet my need for safety. Eco-friendly clothes are just an additional condition to further minimize health risks. It is not necessary to purchase them purposely if the basic safety need can be met

5.4.3. Dissatisfaction with the design of eco-friendly product

Dissatisfaction with the design of eco-friendly children's clothes has impeded consumers to purchase them. Some mothers used to purchase naturally colored cotton clothes for their newborn babies. Although this material is deemed safe to the wearers, its inherent characters have restricted its design and variety. According to Karakan Günaydin et al., (2019), the naturally pigmented fibers are confined for limited color shades, such as green, brown, mocha and red and their relevant shades depend on the gene of the fiber as well as the seasons and geographical locations. The mothers have expressed it was too boring to always purchase the almost same color and look. Additionally, naturally colored cotton clothes also have the advantage of comfort. However, the mothers mentioned when the children have grown up to one and a half or two years old, except for safety, they would gradually take aesthetic needs into consideration rather than comfort. Thus, even though some interviewees used to purchase naturally colored cotton clothes, confined by its design and limited selections, they did not continue to purchase these clothes.

5.4.4. Dissatisfaction with the quality of eco-friendly product

Except for the design, dissatisfaction with the quality is another reason for not continue to buy eco-friendly children's clothes. As G (female, two children) described her experience:

I used to purchase once a blue color children's cloth made of organic cotton at H&M. I thought the clothes made of eco-friendly material should have good quality and safe for the kids. However, after the cloth was washed and worn, I found it had obvious fading color and fur shedding quality issues. The product quality was even worse than the normal clothes. Thus, I do not consider purchasing the so-called eco-friendly clothes purposely.

5.4.5. Inconvenience to find eco-friendly products

Perceived difficulty to find eco-friendly children's apparel has confined consumers to purchase them. In recent years, many mainstream brands in the clothing industry have

tried to incorporate environmental awareness into their DNA and increasingly produced and promoted sustainable products. For instance, H&M has launched a conscious Exclusive Collection line, in which the products are made of 100 percent regenerated nylon fiber and recycled silver. Zara has a sustainable collection labeled as “Join Life” that the products are made with eco-friendly materials including organic cotton, recycled wool, and forest-friendly wood fiber (Adıgüzel, 2020). However, some interviewees have expressed they did not have any impression of eco-friendly children’s wear and did not know where could purchase them. On the one hand, they did not see any brands actively promote eco-friendly clothes as main products and set them in an obvious or separate area in physical stores. On the other hand, many brands did not have a separate section for sustainable products on their online stores. Thus, for the consumers who intended to buy eco-friendly clothes, it was difficult to quickly and effectively access sustainable products in a vast amount of clothes.

5.4.6. Skepticism

Skepticism has hindered consumers from engaging in a number of sustainable consumption practices. The skepticism mainly reflected in brands’ sustainability claims, the safety of clothes made of recycled materials, and the subsequent management of recycled clothes. Even though many mainstream brands have actively produced lots of sustainable products and showed their commitment to sustainable production and consumption, all interviewees have expressed in their views, it was largely a selling point. Moreover, some of them did not buy the idea and did not consider purchasing the so-called eco-friendly clothes merely in light of the brands’ sustainability claims. A quote from C (female, two children) has detailed this idea:

As for the brands’ sustainability claims, I think the selling point accounts for 70 percent and the positive impact on the environment accounts for 30 percent. The ultimate goal for the brand companies is to gain profits. Nowadays, the term sustainability has become a hot topic and a fashion

trend. More and more people have paid attention to sustainable products. Thus, the brands have to promote these eco-friendly products in order to meet consumers' demands. In addition, fast-fashion brands, such as H&M and Zara, produce massive cheap clothes every year. It needs to consume a vast amount of resources. The behavior per se is not eco-friendly and contradicts with the so-called sustainability. Therefore, for me, when I buy children's clothing, I mainly make sure it can meet my needs of safety and comfort, and whether it is environmentally friendly is not important.

In addition, a few interviewees mentioned their skepticism regarding the safety of clothes made of recycled materials. As D (female, two children) explained:

As far as I know, there are some adult clothes made of recycled materials. I do not know how these recycled materials have been processed. After all, these materials have been worn by others who I do not know. So I was not sure whether it would cause some health risks to my kids, such as skin allergies. Hence, in order to avoid unnecessary health risks, I do not consider buying these clothes.

Furthermore, A (female, one child) has expressed her concerns with respect to how the recycled clothes have been managed:

There is a recycling bin for old clothes in our community. However, I have not tried to drop used clothes in it. The recycling bin is provided by a private company other than the government. So I do not fully believe it and do not know how these recycled clothes have been disposed of later. For instance, whether the clothes will flow into the market and sell for their own purpose?

5.4.7. Lack of facility and service

Lack of facility and corresponding services have hindered interviewees from recycling practice. As two participants detailed their experiences:

There is no recycling bin for used clothes in our community. So I do not know how to dispose of unwanted bad condition clothes either for children's wear or adult clothes. After all, not all of them are suitable for use as cleaning cloth. Hence, I have to keep them at home and the clothes occupy a certain amount of the space. Or sometimes we just threw these clothes directly into the trash bins (B, female, one child).

There is a clothes recycling bin in our community. But it is always full. I have noticed that for quite a long time, no staff came to collect the clothes and emptied it. So I cannot dispose of our unwanted clothes now (C, female, two children).

Moreover, it should be mentioned that lack of service has limited consumers' options for reuse. Except for giving used good condition clothes or new clothes to the people who the interviewees knew, the donation is an alternative way to reuse the unwanted clothes. However, some interviewees shared it was difficult to find donation services with regard to infant wear. As D (female, two children) explained:

For the used clothes in good conditions which nobody needs, I used to donate adult clothes to an organization that can help you to send the clothes to mountain areas. I think the idea is good that the clothes can be reused and it also can help people in need. But the donation's conditions are very strict. Generally, they need relatively new and winter clothes. Besides, they do not accept infant apparel. Thus, I have to keep the unwanted clothes at home to see whether someday someone may need them.

5.4.8. Time constraints

Time constraints have resulted in stay-at-home moms not always recycling clothes properly. Some mothers have quit the jobs and take care of the children full time at home. Their majority of time has been occupied by the babies and housework. Thus, for some of them whose community does not provide clothes recycling bins, it is hard to manage time to go to shopping malls and drop old clothes at stores, such as H&M. A quote from E (female, one child) explained:

There is no recycling bin for used clothes in our community. The only channel to deal with these unwanted clothes as far as I know is that H&M provides recycling services. You can drop the old clothes with any brand and any conditions to them. In so doing, you can get a discount coupon from H&M which can be used for later shopping. I think it is a very good idea and can be accepted by lots of consumers. Thus, I used to drop some old clothes there before. However, since I need to take care of the baby and also need to manage the housework at home, it means I do not always have free time to drop clothes at stores.

5.4.9. Improper disposal of recycled garbage by cleaning personnel

One interviewee is unwilling to actively participate in clothing recycling and garbage sorting because cleaning personnel does not properly deal with recycled garbage. As F (male, one child) detailed his experience:

I used to actively sort garbage and throw them into the classified trash bins before. However, one day, I saw a garbage collector mixing all different kinds of garbage together. When I saw this, I just felt my previous work was useless. So from that day, I do not sort garbage carefully and just throw unwanted clothes in any of the trash bins.

Moreover, it is worth mentioning that when he was studying in Europe, he began to actively engaged in garbage sorting and clothing recycling. Because it was very convenient to access recycling facilities and almost all his neighbors and friends participated in recycling as well. After he finished the studies and returned to China, he continued this habit until he had the experience described above.

Overall, these empirical findings are helpful to understand consumers' perceptions of sustainability, their consumption habits of children's apparel, and their reasons for engaging in and not engaging in sustainable consumption behaviors with regard to children's apparel. Moreover, it should be mentioned except that the interviewees with two children are more likely to reduce purchasing new clothes for the kids and the recycling behavior may vary affected by the different context in different residence places, other demographic variables were not found to have significant effects on consumers' understanding of sustainability and their sustainable consumption behaviors.

6. Discussion

The exploration of consumer's perceptions regarding sustainability and their reasons for engaging in or not engaging in children's apparel sustainable consumption behaviors including purchase, use and disposal provides an important basis for

answering research questions and deeper engagement with James D. Westaby's Behavioral Reasoning Theory. Further, it enables a better understanding of consumers' decision-making processes and behaviors. Thus, in this section, the relevance of empirical findings to research questions and theory will be discussed respectively.

There are three research questions that need to be answered. The first question is regarding consumers' perceptions of sustainability in general and clothing specific. When it comes to the concept of sustainability in general, the interviewees have shown different understanding of it. Most of them have associated sustainability with reducing natural resource depletion and avoiding environmental pollution during the manufacturing process. While a few interviewees have connected sustainability with consumer behavior patterns, such as purchasing eco-friendly products and sorting waste. In other words, at the knowledge level, most of interviewees tend to link sustainability to reduce adverse environmental impacts caused by the production side, which may lead to the perception that sustainability is distant to individuals' life. With regard to the pro-environmental behaviors they have actively engaged in their daily life, the examples they have listed indicate they are more likely to participate in sustainable behaviors which help reduce environmental pollution and decrease natural resource and energy consumption. It indicates consumers have certain pro-environmental beliefs and values, which drive them to engage in a number of sustainable behaviors that benefit the common good.

When it comes to their perceptions of clothing sustainability, even though the interviewees can list some behaviors related to it, most of them have expressed they have a limited understanding of its concept and do not have a clear idea of what specific impacts it would have on the environment. In addition, compared with transport and food domains, consumers have paid less attention to clothing sustainability. Because they are more aware of the direct impacts of air pollution and

food safety on health rather than clothes. It indicates consumers have insufficient knowledge regarding the sustainability of clothing. Nonetheless, the majority of consumers have shown favorable attitudes towards the purchase of eco-friendly clothes. But the positive attitude is based on a number of additional conditions, such as full access to product information, not too higher prices, and good quality. It indicates that to some extent consumers know insufficient information regarding eco-friendly clothes.

In short, the empirical findings suggest consumers' understanding of sustainability in general is different and most of them are prone to associate sustainability with reducing adverse environmental impacts caused by the production side including natural resource depletion and environmental pollution. A number of sustainable behaviors they engage in daily life are mainly related to reducing natural resource and energy consumption and decreasing the environmental pollution. It shows consumers have certain pro-environmental beliefs and values that drive them to behave sustainably for the common good. As for the perceptions with respect to clothing sustainability, the empirical findings suggest consumers have limited knowledge or information of it, which leads to consumers' lower attention to sustainable consumption of clothing. Actually, lack of sufficient knowledge and information on clothing sustainability may also result in consumers' lower commitment to it and hinder them from engaging in more clothing sustainable consumption behaviors. Appropriate knowledge is an important precondition for environmentally conscious action. Even though consumers are aware of environmental problems, due to limited knowledge about the problems and solutions, they may feel uncertain about what the problem exactly is, how it relates to their own behavior, what effort can be done about it, and who should or will do it. Thus, affected by the uncertainty, the likelihood people actually do something about the problem and make an effort to common good will reduce (Thøgersen, 2005). In other words, due to a lack of knowledge of apparel

sustainability, consumers may show relatively weak environmental beliefs and values in the clothing domain. When it comes to clothing consumption behavior, consumers are more likely to put self-interest ahead of common interest.

The second research question is about what sustainable consumption behaviors regarding children's apparel the consumers have actively engaged in and the reasons. The empirical findings suggest all consumers actively reuse the unwanted clothes in the form of giving to or getting from good condition old clothes with their relatives, friends, or colleagues as well as reuse some bad condition apparel as cleaning cloth. Because reuse clothes can help save money, and they simply follow what previous generations and the people around them have done. Moreover, some consumers engage in buying eco-friendly children's wear. The reason is that children's clothing made of eco-friendly materials uses relatively few chemicals during its manufacturing process and may therefore be safer for children's health. In addition, some consumers actively participate in the practice of recycling clothes. This is because they are becoming more aware of the negative impact of not sorting garbage on the environment through the implementation of a new garbage sorting policy and more media information exposure. Thus, they are willing to help protect the environment through individuals' efforts. These reasons suggest consumers' participation in some sustainable consumption behaviors is not entirely driven by environmental concerns.

The third research question concerns the behaviors of consumers not engagement in sustainable consumption of children's clothing and the reasons. According to the empirical findings, consumers are prone to overbuy children's wear when they have the first child due to lack of shopping and using experiences in children's apparel. Moreover, some consumers do not actively purchase eco-friendly children's clothes. There are a variety of reasons. For instance, there is no need to buy environmentally friendly children's apparel, as shopping in the mall can meet their requirements for

chemical safety. Even if some consumers used to purchase children's wear made of eco-friendly materials, dissatisfaction with the product design and quality makes them reluctant to buy it anymore. The difficulty of finding sustainable products in physical and online stores reduces the likelihood that consumers purchase them. The suspicions that brands promote sustainability primarily for making profits, and clothes made of recycled materials may have potential health risk for children lead to consumers' reluctance to buy them. Furthermore, some consumers throw unwanted children's clothes into trash bins without sorting and recycling. A number of reasons have been found, such as skepticism that recycled clothes will be resold by private organizations for their own purpose, lack of recycling facilities and service, lack of recycling facility in the community and lack of time to drop unwanted clothes in stores, and the improper disposal of recycling waste by cleaners has led consumers to believe that it is useless to rely solely on individual efforts to make tangible changes.

By linking the empirical findings to BRT, consider the relationship of the reasons to global motives, intention to engage in a specific behavior, and beliefs and values, first, it can be found there are several reasons that bypass global motives and directly affect consumers' engaging in or not engaging in sustainable consumption practices with children's apparel (H4, H1). For instance, purchase eco-friendly children's clothes for health consideration. Reuse children's wear for the sake of saving money. Overbuy children's apparel due to lack of experience. There is no need to buy environmentally friendly children's clothes because the chemical safety of the products can be guaranteed by purchasing them in shopping malls. In this case, the traditional behavioral intention model TPB, which relies on global motives including attitude, subjective norms and the perceived behavioral control to predict consumer's intention to enact the behavior, has lost its explanatory powers. Thus, the application of BRT is more appropriate to understand consumers' decision-making processes and behaviors in this context. Moreover, these reasons exist inseparably from consumers' beliefs and

values (H5). In other words, consumers have limited knowledge of the sustainability of clothing, and they show lower commitment to the sustainable consumption of apparel. When it comes to children's wear consumption, they are more likely to put self-interest ahead of common interest. Even if they behave sustainably, the motivations are self-interest oriented.

Second, some reasons are found that serve as important antecedents of global motives, which in turn influence consumers' intentions and behaviors (H3, H2, H1). For instance, reuse children's wear under the influence of previous generations and people around. The reason is closely related to subjective norms, which impact consumers' intentions to engage in the practice of reuse. Moreover, inconvenience to find eco-friendly children's apparel in stores impedes consumers to purchase sustainable products. Do not recycle clothes and sort garbage properly due to a lack of recycling facilities and services. Do not have time to recycle children's clothes in the shopping mall. These reasons are associated with the perceived behavior control. Namely, when consumers intend to engage in the sustainable practices of purchase environmentally friendly products and recycle children's wear, affected by several constraints consumers have failed to transform the intentions into behaviors. Thus, the empirical findings show that there is a gap between consumer's sustainable consumption intention and behavior, which is consistent with a large number of previous research findings. Furthermore, consumers are reluctant to purchase eco-friendly children's apparel due to suspicious brand companies promote sustainability mainly to make a profit and suspicious clothes made of recycled materials may pose a health threat to children. Skepticism of recycled clothes will be resold by private organizations for their own purpose leads to consumers not recycling clothes. These reasons result in consumers' unfavorable attitudes towards buying environmentally friendly products and recycling, which further impede them to perform related behaviors. Actually, consumers' skepticism is mainly caused by consumers' insufficient information or

knowledge regarding these aspects. As mentioned earlier, appropriate knowledge is an important precondition for environmentally conscious action. While limited knowledge would make people more likely to put self-interest first and reduce the likelihood to make an effort for the common good.

Third, consumers participate in recycling children's apparel for the sake of environmental protection. It indicates that consumers' pro-environmental beliefs and values have a direct impact on their positive attitude towards recycling, namely global motives, which in turn promotes their actual recycling behaviors (H6, H2, H1).

Fourth, in line with BRT, in some circumstances, reasons can be used to rationalize behavior after behaviors are enacted. In other words, when a new situation arises, consumers are found that discontinue their ongoing behavioral pursuits. The reasons can be used to rationalize their current behaviors. For instance, consumers used to purchase eco-friendly children's apparel. However, unsatisfied with the existing design of children's clothes made of environmentally friendly materials due to the consideration that product design becomes more important after the child reaches one and a half years old, as well as unsatisfied with product quality lead to their reluctance to continue buying sustainable clothes. In addition, a consumer used to actively recycle clothes and sort garbage. Nevertheless, when he found that cleaning personnel mixed all different kinds of sorted garbage together, he felt it was useless to rely solely on individual efforts to make tangible changes and broke the habit of recycling and garbage sorting. Thus, it can be found that these reasons emerged after new situations arise, which can be used to rationalize consumers' behaviors of not purchasing eco-friendly children's wear and not recycling clothes.

Overall, in line with BRT, the empirical findings suggest the reasons serve as important linkages between people's beliefs, global motives, and intentions. Beliefs and values play a certain role in affecting the reasons and global motives. Besides,

compared with the traditional behavioral intention model TPB, BRT is more appropriate to understand consumers' decision-making processes and behaviors with regard to children's apparel in this study.

7. Conclusion

This study aims to explore what factors influence Chinese consumers' sustainable consumption intention and behavior with regard to children's apparel. Through application of James D. Westaby's Behavioral Reasoning Theory and conducting in-depth semi-structured interviews with eight Chinese consumers living in Beijing to explore consumers' reasons for engaging in or not engaging in sustainable consumption behaviors with regard to children's apparel, and their perceptions regarding sustainability, the empirical findings are capable to answer the three research questions. First, the majority of interviewees associate sustainability with reducing adverse environmental impacts caused by the production side. Besides, consumers have certain pro-environmental beliefs and values which drive them to engage in a number of sustainable behaviors that benefit the common good. When it comes to clothing sustainability, due to a lack of related knowledge and information, consumers' environmental beliefs and values in the clothing domain are relatively weak. It leads to a lower commitment to clothing sustainable consumption and hinders them from engaging in more clothing sustainable consumption behaviors.

Second, the empirical findings suggest that consumers' participation in sustainable consumption behaviors of children's apparel is not entirely driven by environmental concerns. For instance, consumers' engagement in purchasing eco-friendly children's wear is based on health considerations. Their engagement in reuse unwanted clothes is in light of saving cost and habitude considerations. Only the practice of recycling is motivated by pro-environmental beliefs and values. This is because they are becoming more aware of the negative impact of not sorting garbage on the environment through

the implementation of a new garbage sorting policy and more media information exposure. Thus, they are willing to help protect the environment through individuals' efforts.

Third, a number of reasons for consumers not engaging in sustainable consumption behaviors of children's clothes have been found. Specifically, consumers are prone to overbuy children's wear when they have the first child due to lack of shopping and using experiences in children's apparel. Some consumers do not actively purchase eco-friendly children's clothes due to a variety of reasons. For instance, there is no need to buy environmentally friendly children's apparel, as shopping in the mall can meet their requirements for chemical safety. Even if some consumers used to purchase children's wear made of eco-friendly materials, dissatisfaction with the product design and quality makes them reluctant to buy it anymore. The difficulty of finding sustainable products in physical and online stores reduces the likelihood that consumers purchase them. The suspicions that brands promote sustainability primarily for making profits, and clothes made of recycled materials may have potential health risk for children lead to consumers' reluctance to buy them. Some consumers throw unwanted children's clothes into trash bins without sorting and recycling. A number of reasons have been found, such as skepticism that recycled clothes will be resold by private organizations for their own purpose, lack of recycling facilities and service, lack of recycling facility in the community and lack of time to drop unwanted clothes in stores, and the improper disposal of recycling waste by cleaners has led consumers to believe that it is useless to rely solely on individual efforts to make tangible changes. Therefore, due to various external constraints, consumers have failed to translate their sustainable consumption intentions into behaviors. Namely, there is a gap between consumer's sustainable consumption intention and behavior, which is consistent with numerous previous research findings. Besides, consumers' insufficient knowledge and information of related aspects have impeded them to purchase eco-friendly children's

apparel and recycle clothes.

By linking the empirical findings to BRT, consider the relationship of the reasons to global motives, intention to engage in a specific behavior, and beliefs and values, it can be found that each hypothesis is valid. The reasons serve as important linkages between people's beliefs, global motives, and intentions. Beliefs and values play a certain role in affecting the reasons and global motives. Moreover, compared with the traditional behavioral intention model TPB, BRT is more appropriate to understand consumers' decision-making processes and behaviors with regard to children's apparel in this study.

Lastly, although the empirical findings are helpful to understand the decision-making processes and behaviors of consumers on children's clothing consumption, since this study employs the qualitative method of in-depth semi-structured interviews, the findings cannot be generalized. In addition, the empirical findings suggest that females are the actual buyers for a variety of daily supplies in households. In order to study how to narrow consumer's sustainable consumption intention-behavior gap, further research could consider exploring more about the decision-making process and behavior of female consumers.

8. Appendix

Interview guide:

The information you need to know before we conducting the interview:

- My name is Yuan Gao. I am a master's student in Asian Studies at Lund University in Sweden.
- This interview is related to your previous shopping habits and experiences regarding children's apparel. Here the children's apparel refers to the clothes for age from birth to two years old.
- The questions' answers will be only used in my master's thesis and published on

Lund University's public website. In spite of this, your real name and very specific personal information will not be released and the name will be replaced by pseudonyms.

- This participation is voluntary. You can quit the interview at any time when you feel uncomfortable or insecure. Or you can skip any questions which you do not want to answer.
- If I can get approval from you, this interview will be recorded for the convenience of my analysis and the recording will be not released as well.
- The interview will take approximately half an hour to one hour.
- Last but not least, I am really appreciated your support and your precious time!

Basic information for interviewee:

Interview Date:

Time:

Gender:

Age:

Education background:

How many children do you have:

Key Questions:

- In your household, who mainly takes charge to buy children's apparel for the kids?
- Where do you purchase children's apparel? In-store or online? Why?
- How often do you buy children's apparel? Why?
- Which brands do you usually buy for children's wear? Why?
- What are the most three factors do you consider when you purchase children's clothes? What criteria do you use to evaluate them?
- In the case that you have two children, are there any differences in the considerations that you purchase clothes for the first kid and second kid?
- What are the most three factors do you consider when you purchase clothes for yourself?
- Have you ever bought children's clothes made of eco-friendly materials? Why?

- How do you dispose of old or unwanted children's wear? Why?
- Which behaviors do you engage in your daily life that you perceive as sustainable?
- Which domains do you mainly focus on with regard to sustainability? Why?
- Which behaviors do you perceive relate to clothing sustainable consumption?
- Would you like to pay more for eco-friendly children's apparel? Why?
- Do you think eco-friendly children's apparel is easy to find? Why?
- What do you think of the sustainability claims made by brands?
- How do you understand sustainability?
- Where do you obtain knowledge and information with regard to sustainability?

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