



LUND UNIVERSITY  
School of Economics and Management

# Stop consuming clothes, start using them!

How can product-service systems be designed to be accepted as the norm?

by

Emmi Kaarna and Jessica Könnecke

May 2017

Master's Programme in International Marketing and Brand Management

Supervisor: Johan Jansson  
Examiner: Burak Tunca

# Abstract

**Title:** Stop consuming clothes, start using them! How can product-service systems be designed to be accepted as the norm?

**Keywords:** Product-service systems, circular economy, green family consumption, norms, normalization process

**Purpose:** The purpose of this research was to find the influencing factors, which might hinder or facilitate the normalization process of product-service systems in the clothing industry. Hereby, the researchers tried to understand the influence of established norms and their affect on the normalization process.

**Methodology:** The researchers took a position as social constructionists by following nominalistic viewpoints. They consequently tried to understand the interviewee's norms and perceptions affecting the openness towards product-service systems. The qualitative research approach incorporated the concept of grounded theory, which lead towards the generation of new theoretical concepts in terms of combining product-service systems and normative theory.

**Theoretical Perspective:** The researchers combined the research fields of product-service systems and the normalization process. Areas of circular economy concepts and normative theory were scrutinized, which were then applied to green family consumption.

**Empirical Data:** The study was carried out by conducting nine semi-structured interviews. The chosen sample contained environmentally conscious parents that were interested in a sustainable lifestyle. All interviews were either executed as face-to-face or remote interviews.

**Conclusion:** The researchers created contributions on two levels. First, they could contribute theoretically to the research field of product-service systems and normative theory by conceptualizing influencing factors for the normalization process of product-service systems in the clothing industry. The thesis thus highlights the influence of complexity, flexibility, practicability, quality, potential risks, people's aspirations, communities and added value. Second, they developed practical recommendations that are based on these theoretical influencing factors and are then applied to the cyclical model of normalization. Companies can use these insights and design their product-service systems accordingly. As a result, all four stages, communication, implementation, public engagement and deliberation are optimized to facilitate the acceptance of PSSs in the clothing industry.

# Acknowledgements

During the research process, we have been through various phases, which guided us towards the final purpose and form of our thesis. This process was accompanied by discussions, reflections and constant evaluations. Therefore, we would like to express our gratitude to the people, who supported us throughout the writing process.

Firstly, we thank our supervisor Dr. Johan Jansson for his engaged support and expertise in our research field.

Second, we would like to thank the fair fashion startup Pitupi for providing us with the opportunity to interview some of their customers and get insights into the fair fashion children's industry.

In addition, we would like to give our thanks to the interviewees who provided us with useful and interesting insights for our study.

Last, we want to thank our families and friends, who supported us throughout the whole master programme and especially during the thesis writing process.

Lund, Sweden, May 24th, 2017

Emmi Kaarna

Jessica Könnecke

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Background .....	1
1.2	Problem Definition .....	2
1.3	Aim and Research Question .....	4
<b>2</b>	<b>Theoretical Framework .....</b>	<b>5</b>
2.1	The Concept of a Circular Economy .....	6
2.1.1	Principles of a Circular Economy .....	6
2.1.2	Circular Economy Business Models .....	8
2.2	Normative Theory .....	11
2.2.1	Green Family Consumption and Norms .....	13
2.2.2	Consumption of Children’s Clothing .....	15
<b>3</b>	<b>Methodology .....</b>	<b>17</b>
3.1	Research Approach and Design .....	17
3.2	Data Collection .....	19
3.2.1	Interviews .....	19
3.2.2	Qualitative Sampling Strategies .....	22
3.3	Data Analysis .....	24
3.3.1	Sorting .....	25
3.3.2	Reducing .....	27
3.3.3	Arguing .....	28
<b>4</b>	<b>Analysis .....</b>	<b>29</b>
4.1	Purchase Phase .....	30
4.2	Usage Phase .....	35
4.3	Disposal Phase .....	40
<b>5</b>	<b>Discussion and Conclusions .....</b>	<b>43</b>
5.1	Research Aims .....	43
5.2	Theoretical Contributions .....	44
5.3	Practical Implications .....	50
5.4	Limitations and Further Research .....	56
	<b>References .....</b>	<b>vi</b>
	<b>Appendix A .....</b>	<b>xi</b>

# List of Tables

Table 1: Attributes of nominalism and constructionism .....	17
Table 2: Interviewees' demographics .....	23
Table 3: Example of line-by-line-coding .....	26
Table 4: Example of focused coding .....	27
Table 5: Example of themes .....	27

# List of Figures

Figure 1: Theoretical framework.....	5
Figure 2: Linear life-cycle model of a product .....	6
Figure 3: Circular economy system diagram .....	7
Figure 4: Main and subcategories of PSS .....	10
Figure 5: Cyclical model of social change .....	11
Figure 6: Norm taxonomy .....	12
Figure 7: Interview structure .....	21
Figure 8: Grounded analysis as a three-step approach.....	24
Figure 9: Concepts divided into the useful life of a garment .....	29
Figure 10: Knowledge generation from detailed towards general implications .....	44
Figure 11: Norms affecting the normalization process of PSSs in the children’s clothing industry.....	45
Figure 12: Influencing factors during the normalization process of PSSs in the clothing industry.....	46
Figure 13: Cyclical model of normalization containing practical recommendations for Pitupi .....	53

# 1 Introduction

The first section of the thesis highlights the background, which covers essential aspects that display the problematic situation of the fast fashion industry and its implications on society and the environment. Additionally, the purpose and research question are illustrated.

## 1.1 Background

Cheaper and faster - The fast fashion industry has enabled consumers to continually change their clothing assortments by dismissing the traditional six-month cycles of collections (Barnes, Gabrielli, Baghi & Codeluppi, 2013). This change fueled a loop of continuous consumption and has enabled consumers to acquire more clothes for the same price than what they were able to buy several years ago. Fast fashion retailers stir up consumers' desires for time-limited and trendy clothes for cheap prices (Chatvijit Cook & Yurchisin, 2017). Hereby, one can speak of "value-free fashion" (Fletcher, 2009, p.118), as people are constantly acquiring new clothing items without paying attention to where and under which conditions their garments have been produced. However, the fast fashion garments are not faster to produce or consume. It is the economic speed that characterizes the fast fashion industry (Fletcher, 2009). Additionally, different aspects of production, such as time, capital, work and natural resources are rearranged, which enable the cheap price of clothing (Fletcher, 2009). The garments usually are of poor quality as they are manufactured of cheap materials, which can result in garments breaking or consumers discarding them after few wears as it is inexpensive to purchase a replacement (Joung, 2014).

This state of a throw-away culture has led to an extremely harmful handling of our resources putting pressure on the environment. The production of only one t-shirt requires 2700 liters of water. Next to the excessive use of water, the application of chemicals especially in the dying process of the clothing impacts the environment negatively (Greenpeace, 2016). According to the Swedish Chemicals Agency (2014) the production of one kilogram of cotton t-shirts takes up to three kilograms of chemical substances.

Despite these negative consequences, there are consumers that might consider the concept of fast fashion beneficial for their current living conditions. Especially parents face a difficult task when choosing clothing for their children. Children grow so fast that parents must constantly look for garments that fit the growing toddler. As a result, parents often opt for fast fashion clothing for their children due to price constraints and the availability on the high street (Ritch & Brownlie, 2016).

## 1.2 Problem Definition

However, within the last years, the so-called ‘slow-fashion’ movement has developed (Pookulangara & Shephard, 2014). This movement aims at shifting the focus back to the production of the clothes and to the actual value each garment carries. Non-governmental organizations such as *Fashion Revolution* try to raise attention for the working conditions in the garment factories in third world countries and urge corporations such as H&M, Zara and Adidas to make their value chain more transparent (Fashion Revolution, 2017).

Parents have also started to be more concerned about the clothing their children are wearing and want to make more and more sustainable choices and pursue an environmental conscious lifestyle for themselves and their children. So-called *green parents* are interested in a sustainable lifestyle in areas such as food, clothing, and transportation, and are ready to rethink fast consumption patterns and find new ways of consuming, as the traditional way of buying constantly new clothes and discarding the old ones cannot be considered a sustainable behavior. Their way of living “encompasses a lifestyle of making healthy choices that are often organic, natural, and low in environmental toxins” (Meredith, 2017, n.p.). According to a study carried out by Unilever in 2013, nine out of ten parents consider the birth of their child as the moment when they decided to live a more sustainable life and change their lifestyle for a better.

### *Organic Cotton Clothing*

Nevertheless, making sustainable consumption choices for children can be quite a challenge. Parents interested in a sustainable lifestyle have to make a lot of complex decisions concerning the well-being of their child and the products they buy for them, which may result in trade-offs of values or other attributes (Ritch & Brownlie, 2016). This may lead to challenges on an intellectual, moral and practical level (Moisander, 2007). In 2010, Gam, Cao, Farr and Kang conducted a buying scenario experiment on the influence of price and other variables of the buying behavior of organic cotton clothing for children. This study confirmed the research carried out by Wang (2007) that the probability to purchase organic cotton clothing increases if the parents are interested in a sustainable lifestyle. However, the research also showed that most of the parents were not willing to pay a price premium as they did not see a direct benefit of organic cotton for themselves and their children (Gam et al. 2010). The parents selected for the study considered *fabric softness* to be the decisive factor when they purchase children’s clothing and not the fact that the garment was made from organic cotton or not. Therefore, Gam, Cao, Farr and Kang (2010) argue that for an environmentally friendly product to be successful, it should be superior to the competitor’s product, but in first place it should have a substantial benefit for the customer himself.

### *Renting Service, Advice Service and Take-Back Models*

Not only are parents confronted with the decision whether to buy organic or conventional cotton clothing, they are nowadays also offered the possibility to rent clothing, receive advice services and give back worn clothing. These circular services are called ‘*product-service systems*’ (PSS). PSSs “are systems that try to complete or substitute traditional business models with a service offer that ideally leads to a reduction in environmental impacts” (Besch, 2005, p.1084).

If a company chooses to offer the consumers the possibility to rent clothing, this is usually based on a renting period of a few days or for a longer period. Clothes rented just for a few days are usually special garments, such as dresses or other formal attires (Lacy & Rutqvist, 2015). A company can also offer a monthly subscription, where the customers pay a monthly fee and



receive a parcel of products every month. An example in the field of children's clothing is the Danish start-up 'Vigga', which uses a PSS model that enables parents to lease ecological clothing for a monthly fee (Vigga, 2017). Third, companies can also provide repair services or maintenance guidance such as advices on how to care for and wash the product correctly to make it last longer. Lastly, take-back services offer the customer the possibility to turn in old products. The company can then resell the products or upcycle them. An example here is a Finnish clothing company Arela that has adapted many different forms of PSSs. They offer advices on how to care for the product to make it last longer. Additionally, they offer a repair service and a take-back service, where old clothes in a good condition are sold as second-hand and old clothes in a poor condition are upcycled (Arela, 2017). However, as these concepts are rather new, we claim that the acceptance and awareness of these models amongst consumers and even among green parents is still low.

The global consulting firm Accenture ascribes our current linear economy four different types of waste: Wastes resources, wasted capacity, wasted life cycles and wasted embedded values (Lacy & Rutqvist, 2015). Summing up the economic value of these four areas, circular economy business principles, such as the renting service, advice service and take-back models yield a value opportunity of 4.5 trillion USD (Lacy & Rutqvist, 2015).

According to various studies, it has been ascertained that the production and usage stage of the life cycle of garments have the biggest impact on our environment (Chapman, 2010). Nevertheless, also the disposal and end-of-life stages can produce damage (Chapman, 2010). However, the latter described phases are often not as deeply researched as the production and usage stage (Stål & Jansson, 2017). With regards to PSS there is hence a vast research potential as these business models do not only impact the production and usage stage, but are also directed towards the disposal and end-of life phases of a product.

We consider PSSs to have a huge economic value on the one hand, but also environmental benefits such as a more responsible handling of our resources on the other hand. Consequently, we believe that when PSSs become the norm, they can help people and especially green parents in their decision-making process to opt for sustainable clothing. As mentioned earlier, decision-making can be difficult for green consumers, as people are influenced by prevailing norms and opinions of others. Especially purchasing children's clothing can cause stress to green parents, as children outgrow their clothes quickly and thus the need for new garments is constant. Parents must decide whether to buy new or used clothes and from which sustainable producer, and how to deal with the clothes that are useless for the growing child. PSSs can help green parents in multiple ways and change the way of handling children's clothing.

In summary, most people and especially parents still do not perceive ecological alternatives the same way they see average products that they use in their everyday life. For most people, living an environmentally friendly lifestyle relates to more effort and a higher price (Ritch & Brownlie, 2016). Rettie, Burchall and Barnham (2014) argue that as long as environmentally friendly products are only an alternative to normal, non-ecological products, they will not be viewed as normal and therefore not be integrated into one's daily life. Thus, we argue that a long-term sustainable solution has to be discovered that has the potential to ultimately become an accepted norm.

## 1.3 Aim and Research Question

As the two sections have illustrated, pursuing a sustainable lifestyle and opting for sustainable clothing solutions can be complex and demanding. Additionally, the prevailing linear ‘take-make-dispose’ consumption model that starts with the extraction of raw materials and ends up with the product being discarded in landfill, has guided towards a situation that requires a rethinking (McDonough & Braungart, 2009). On this account, we propose a circular approach, which moves away from linear business principles and leads towards a sustainable and holistic path in the textiles industry. One possible way to reach this aim is the integration of product-service systems. PSSs will then create a continuous loop of reusing and recycling of the products. More precisely, we will analyze how product-service systems can be applied in children's clothing industry so that a circular business approach can be guaranteed. This means that instead of disposing the garment at the end of its useful life, it will be brought back into the usage loop. In return, it is then of interest to discover how these PSSs should be designed to become the norm.

Hence, the aim of the thesis is two-fold. First, connecting the concept of PSSs with children's clothing industry can help to establish circular economy principles in the industry, which is particularly affected by short consumption cycles. To do so, we will demonstrate the general principles and possible business models within the circular economy. Subsequently, the potential of PSSs and the different forms and categories of PSSs will be identified.

Second, to provide a better understanding of normative theory and the factors behind norms, we will illustrate different types of norms alongside with the peculiarities of a green consumption lifestyle.

Relating both ideas, we will ultimately analyze how PSSs can be designed in a way that they are perceived as normal. Hence, we will discuss how PSSs can be usefully applied in the textiles industry for children's clothing and make a theoretical contribution by depicting the influencing factors, which can hinder or facilitate the normalization process of PSSs in the clothing industry in general to answer our research question:

- *How can product-service systems be designed to become accepted as the norm?*

As the potential of PSSs within children's clothing industry has hardly been researched, it is of general interest to investigate how sustainable clothing can be perceived as normality. We will study how to overcome the barriers that hinder green parents from the usage of PSSs and detect green parents' norms, which can have an influence on a successful implementation of PSSs in the children's clothing industry.

# 2 Theoretical Framework

In the following, we will scrutinize the existing literature stemming from two different literature streams. First, the circular economy and its business models will be illustrated. Second, we will examine the concepts of norms with regards to green consumers and parents. Finally, we will combine both research streams to provide a profound theoretical background, which will be used in the subsequent analysis.

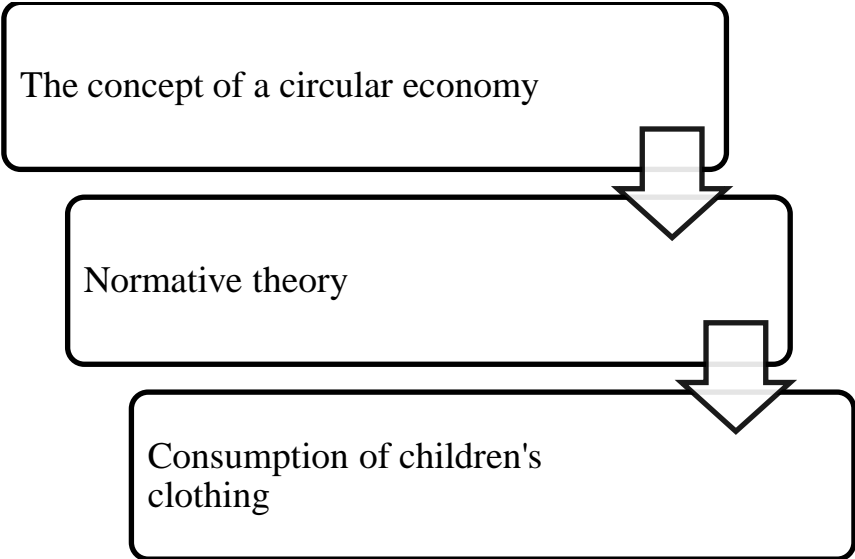


Figure 1: Theoretical framework

## 2.1 The Concept of a Circular Economy

As illustrated earlier, the current 'take, make, dispose'-model does not allow for a sustainable handling of our resources. More concretely, this linear model creates imbalances, which impact the economic growth and the environment (Ellen MacArthur Foundation, 2012). Therefore, a more holistic approach, which captures all aspects that can guarantee a responsible resource handling, is needed.

### 2.1.1 Principles of a Circular Economy

Literature within the field of circular economies can be traced back to the 1970's. Walter Stahel's idea of a performance economy was one of the first contributions towards the research field of circular economy concepts (Stahel, 2010). In the 1990's, the idea of a circular economy continued to gain momentum and reached a peak with McDonough's and Braungart's (2009) cradle-to-cradle concept. They emphasize the idea of moving away from a *linear model* through which a conventional product goes from sourcing of materials, over the processing and manufacturing to the usage and its end-of-life, towards a circular, cradle-to-cradle model (McDonough & Braungart, 2009). For the consumer, this linear model involves the purchase of a product, the subsequent use and the final disposal.



*Figure 2: Linear life-cycle model of a product  
(Authors' illustration based on Chapman, 2010)*

Other conceptualizations such as Benyus' (2002) bio-inspired Biomimicry approach, which is centered around the idea to emulate strategies directly stemming from nature, or the vision of Natural Capitalism coined by Hawken, Lovins and Hunter Lovins (2002), which criticizes the industrial capitalism and calls for an alternative form of capitalism, underline the vast potential that the idea of circular concepts implicates.

Considering the different characteristics of a circular economy, the European Environment Agency (EEA) has developed five characteristics, which epitomize the idea of the two material flows (European Environment Agency, 2016). Firstly, the rise of renewable and recyclable resources and energy leads to a closure of material cycles (European Environment Agency, 2016). Secondly, a circular economy stands out through less input and use of natural resources. Raw materials are used in a sustainable way and facilitate an efficient use of natural resources (European Environment Agency, 2016). Third, the emissions are reduced. With lower emission rates, the pollution generated of the process is decreased. (European Environment Agency,

2016). As a fourth characteristic, a circular economy reduces material losses and thus minimizes the waste (European Environment Agency, 2016). Fifth, the value of the products, components and materials is kept in the economy. This enables a reuse and the product lifetime is protracted (European Environment Agency, 2016).

One of the most recent views on the circular economy originates from the Ellen McArthur Foundation. Their definition of a circular economy describes the concept as one that is “restorative and regenerative by design, and aims to keep products, components, and materials at their highest utility and value at all times.” (Ellen McArthur Foundation, 2015, n.p.). Their interpretation of a circular economy highlights the interaction of material flows (see Figure 3).

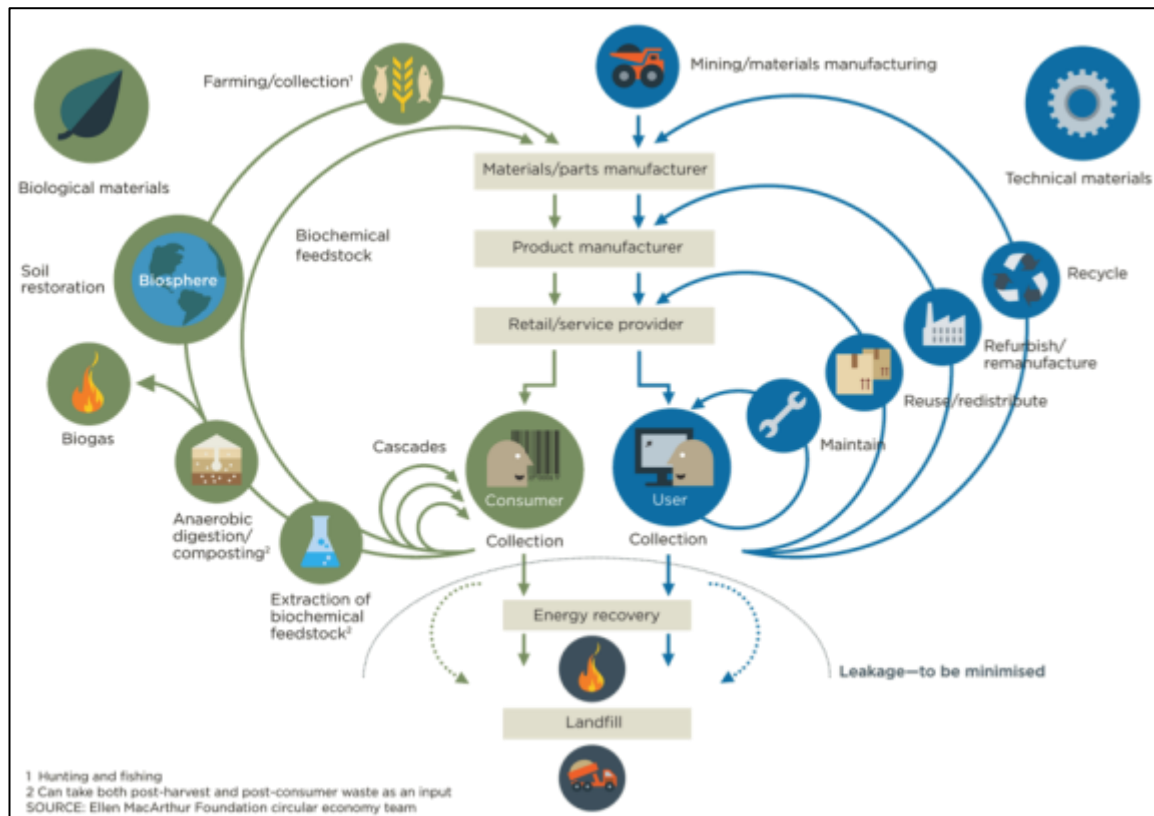


Figure 3: Circular economy system diagram (Ellen McArthur Foundation, 2015)

According to William McDonough and Michael Braungart (2009), the circular economy combines two types of material flows: biological and technical nutrients.

The two cycles have different characteristics and are distinctive from each other. **Biological nutrients** can be composed and are thus useful to the environment (Ellen MacArthur Foundation, 2012). In contrast, **technical nutrients** are man-made materials and are re-used by applying energy (Ellen MacArthur Foundation, 2012). Figure 3 highlights the interaction between the two nutrient cycles scrutinizing the movement of the products and materials. The circular economy consequently unifies the two cycles and enables a constant exchange of materials (Ellen MacArthur Foundation, 2012).

These cradle-to-cradle flows can be reached by capitalizing on three different strategies of cycling (Bocken, Pauw, Bakker, & Van der Griten, 2015). First, there is the possibility to slow

the resource loops through product-life extension and the design of long lasting products. Second, one can close the resource loops by recycling goods and materials (Bocken et al. 2015). The authors also introduce a third resource loop, which encompasses the idea of resource efficiency by narrowing down the resource flows. As a result, fewer resources are needed during the production process.

Consequently, circular material flows can lessen the material circulation on the one hand, and still increase the received and perceived output on the other hand (Tukker, 2015). There are several circular economy business models capturing the illustrated advantages and potential benefits. Even though research has emphasized the importance of these circular concepts, they are still lacking a structured and comprehensive implementation among businesses.

## 2.1.2 Circular Economy Business Models

Considering the peculiar capability of circular systems to move away from the prevailing state of linear economic systems, numerous business models exist, which encapsulate circular concepts. As companies still face the challenge of incorporating circular business principles, the business models provide a first support to move towards a more sustainable way of operating.

According to Osterwalder, Pigneur & Tucci (2005, p.3), a business model “is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm [...]”. Integrating circular ideas into a firm’s business model requires therefore a careful analysis of the wanted business logic. Following the idea of Linder and Willander (2017, p. 183), who define circular business models (CBM) as “a business model in which the conceptual logic for value creation is based on utilizing economic value retained in products after use in the production of new offerings”, they make clear that they emphasize the aspect of keeping the product’s value high after usage.

Moreover, the authors identified multiple strengths of CMBs. These business models do not only reduce the cost during the manufacturing process and improve a firm’s margins, they ultimately can result in a better customer retention (Linder & Willander, 2017). Thus, it becomes apparent that if firms use CMS in a profound way it can be beneficial for their business performance.

Against this background, five different circular business models illustrate how a firm can prolong the pre- and usage phase while slowing down the post-usage phase as stated by Lacy and Rutqvist (2015). Using a *circular supply chain business model*, the whole supply chain works as a closed circle. To implement this CBM successfully, it is crucial to “do it right from the start” (McDonough & Braungart, 2009, p.76) meaning that the input is decisive. Next, *the recovery and recycling approach* can help firms to optimize by-products and manage waste streams in an effective way. This then yields a potential to grow in return (Lacy & Rutqvist, 2015). Third, the idea of *maximizing the useful life of a product* is incorporated in the product life-extension approach. Instead of creating revenue through volume, a firm can manage to create revenue through longevity (Lacy & Rutqvist, 2015). *The sharing platform* is the fourth CBM. This approach implies the connection of product owners with other individuals via a platform that offers the use of a product or service (Lacy & Rutqvist, 2015). Last, *product as a service business model or product-service systems* offer the customer the possibility to buy a function instead of a product. It is crucial to bear in mind that the firm can still offer a physical

product, but the ownership remains with the company and does not go over to the consumer (Lacy & Rutqvist, 2015).

We consider this last circular business model to be the most appropriate approach in terms of being accepted as the norm by consumers. We believe that the practicality of product-service systems allows companies and consumers to move towards a more sustainable behavior in both, the business and personal environment. In the following section, the product-service business model will be scrutinized more in depth. Its economic potential for consumer markets will be illustrated together with the characteristics and integration into different PSS categories.

### *Product-Service Systems*

As explained earlier, Stahel was one of the first advocates of circular business principles and product-service systems. He phrased his idea of selling performance instead of goods within the concept of a Functional Service Economy (Stahel, 2010). For him, this shift in thinking provides an extensive possibility for firms to attract more customers and offer more diverse solutions (Stahel, 2010). In addition, Tukker and Tischler (2006) ascribe the PSS great future potential thanks to importance of services, which make up 70% of the GDP in the Western world. In this regard, the authors mention “societal megatrends, such as specialization, internationalization, smaller and double-income families” (p.1553), which according to them can advantage PSS.

Looking closer at the exact definition of a PSS, Tukker & Tischner (2006, p.1552) describe it as a business model, which “consists of a mix of tangible products and intangible services designed and combined so that they jointly are capable of fulfilling final customer needs”. Thus, it becomes apparent that PSS can be executed successfully if the combination of offering a physical product and the offered service is balanced so that the consumer receives a benefit. However, this does not count for all types of products and customers. SusProNet, which is the first European Network on Sustainable Product-Service Development, developed several characteristics, which can help firms to back up their development process of PSS (Tischner, Verkuijl & Tukker, 2002). The network firstly recommends offering PSS for expensive products which are technically advanced. These types of products usually require maintenance and repair, which could result customers being more willing to purchase a service instead of opting only for the physical product. Next, the authors suggest selecting easily transportable products with an infrequent usage. Also, they point out that the logistics system is a central part of the PSS business model and therefore the need of extensive transportation can complicate and hinder an effective implementation of a PSS. An infrequent product usage can prolong the usage phase of the product in a sense that its appearance and physical condition is improved. Last, they suggest PSS are more easily applied to products, which are not strongly influenced by trends or fashion.

In addition to the definition of PSS characteristics, it can be beneficial for organizations to acknowledge different PSS categories. Tukker (2004) determines three PSS categories with eight PSS models (see Figure 4).

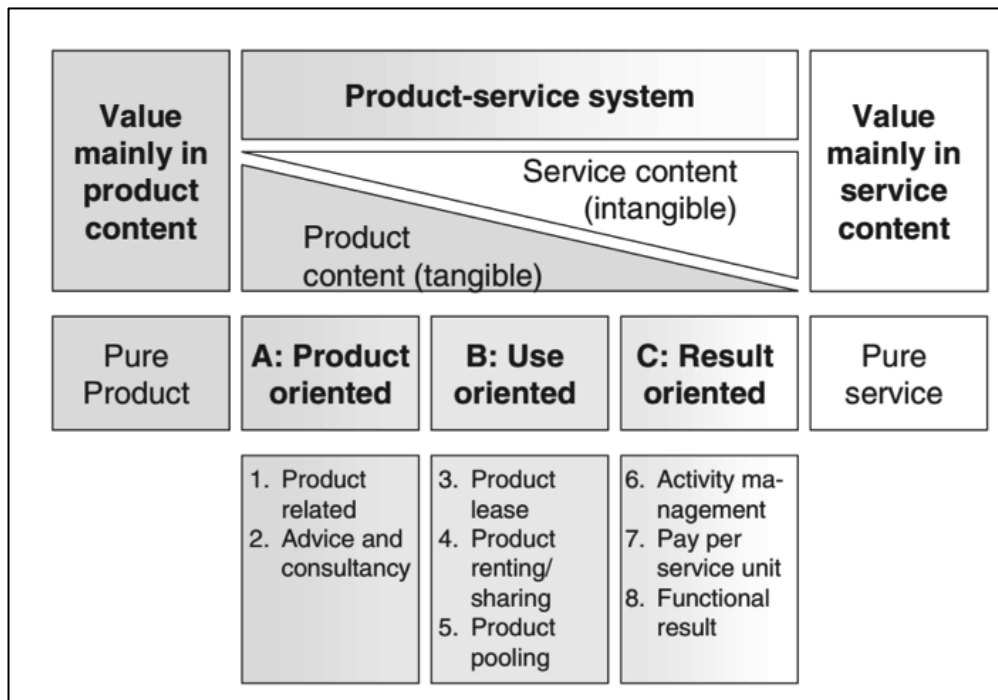


Figure 4: Main and subcategories of PSS (Tukker, 2004)

First, **product-oriented services** put an emphasis on the sales of products in combination with services offered (Tukker, 2004). However, the selling of the physical product is still central. Hence, product-related service and advice or consultancy are two different models.

Second, **use-oriented services** focus, as the product-oriented services, on the product. Nevertheless, the ultimate business strategy is not directed towards the products sales as the ownership is kept within the company and does not go over to the customer. Examples for this PSS category are product lease, product renting and sharing and product pooling (Tukker, 2004).

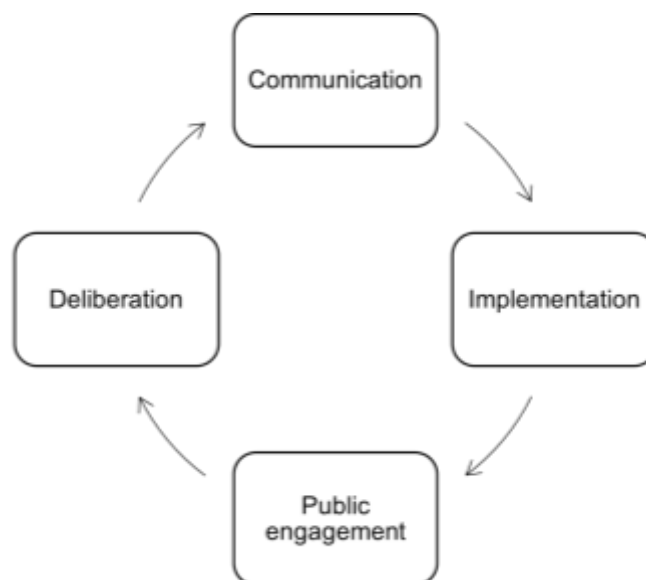
Third, **result-oriented services** such as activity management or outsourcing and pay per service unit purely centralize the service idea without incorporating the physical product itself (Tukker, 2004).

Capitulatory, all three categories of product-service systems can provide substantial benefits to companies as well as to consumers. When it comes to implementing product-service systems, people might consider these new services unconventional and peculiar. However, we argue that product-service systems can become the norm if companies scrutinize the consumer's wants and design the product-service systems accordingly. To do so, they should be aware of the existing norms in society and what influences and changes theses.



## 2.2 Normative Theory

Today's society is characterized by a variety of norms, which subconsciously influence the way people make decisions and form their opinions (Rettie, Burchell & Barnham, 2014). Instead of making pure rational decisions, people base their actions on what they think that others want them to perform (Ajzen & Fishbein, 1970). Thøgersen (2006, p. 248) defines norms as “shared beliefs about how we ought to act which are enforced by the threat of sanctions or the promise of rewards”. Hence, people tend to act according to prevailing perceptions, which they consider to be normal in society (Rettie, Burchell & Barnham, 2014). In this context, Ajzen and Fishbein formed the idea of normative beliefs. According to them, “a normative belief deals with the influence of the social environment on behavior” (Ajzen and Fishbein, 1973, p.43). Therefore, ideas that are perceived as different or atypical do not fit into the category of normality. However, it is possible to convert an activity that has been initially perceived as different into one, that is accepted as normal (Rettie, Burchell & Barnham, 2014). This process is called normalization (Rettie, Burchell & Barnham, 2014). This social normalization is also central for our research. Jensen and Wagoner (2009) created a framework, which describes the process of social change normalization. Their *cyclical model of social change* is divided into four phases: communication, implementation, public engagement and deliberation (Rettie, Burchell & Barnham, 2014). As norms are usually not accepted immediately, they may be modified and reformulated, so that the whole process becomes circular. During the communication phase, the new norm or new ideal is expressed and communicated to the public. It then reaches the phase in which it is implemented through various ways, so that the public becomes engaged and receives the message in the third phase. Last, during the deliberation phase, the norm can either be claimed to be successfully implemented or it has been rejected resulting in modification processes.



*Figure 5: Cyclical model of social change  
(Authors' illustration based on Rettie, Burchell & Barnham, 2014)*

A central component of the concept of norms is the degree to which they are internalized (Derlega & Grzelak, 1982). It is important to make a distinction between descriptive and injunctive norms as Figure 6 shows (Thøgersen, 2007). Descriptive norms refer to the majority of people's actions (Rettie, Burchell & Barnham, 2014). In contrast, injunctive norms describe what people ought to do (Cialdino, Reno & Kallgreen, 1990). Bertoldo and Castro (2016) argue that actions which are motivated externally can be classified as social norms, whereas practices, which are related to someone internally, can be named as personal norms. Berkowitz (ed. 1977) describes personal norms as self-expectation of certain actions in a certain situation, experienced as a moral obligation. There are several examples for positive interrelationships between personal norms and environmentally conscious behaviors such as recycling, conscious forms of travelling and buying organic and environmentally food and products (Thøgersen, 2003; Bamberg, Hunecke & Böbaum, 2007; Thøgersen, 1999; Thøgersen, 2002). Bicchieri (2006) explains that social norms are behavioral rules for situations that meet two criteria: (1) a large part of the population knows the rule and that it is used in a certain type of situations (2) one conditionally chooses to comply to the rule in this certain situation.

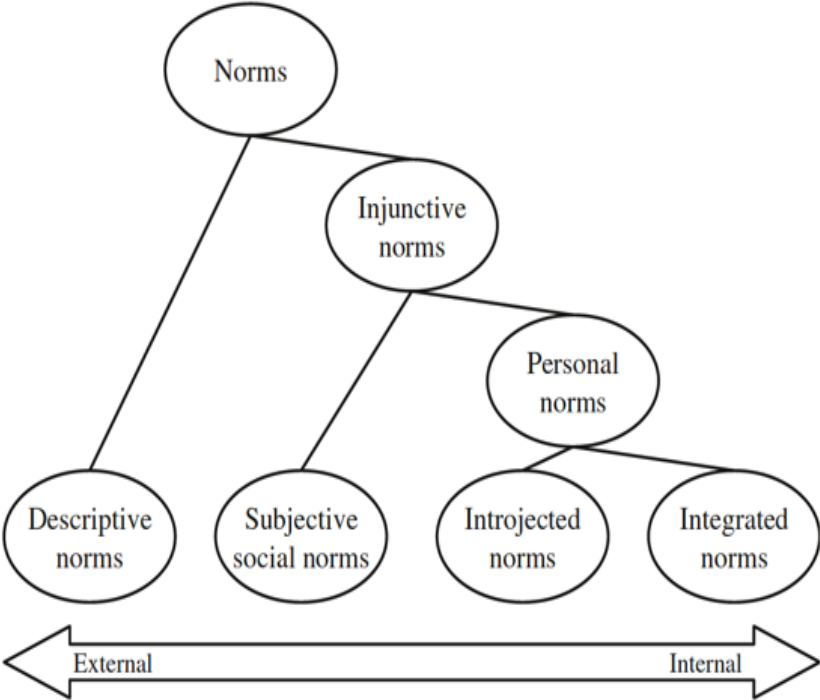


Figure 6: Norm taxonomy (Thøgersen, 2006)

In our research, we wanted to emphasize social norms as they affect society as a whole, so that the development of our framework illustrating the design of a PSS that is accepted as the norm, is facilitated. Also, research has shown that there is a close interdependence of personal and social norms (Jansson & Dorrepaal, 2015). Social norms are always formed prior to personal norms (Jansson & Dorrepaal, 2015). According to Thøgersen (2009), personal norms have stronger and more trustworthy implications on behavior than social norms. Thøgersen (2009) argues that existing literature is unclear about personal norms and if they are just accepted social norms. Personal norms are strongly rooted in the consumer's cognitive structures and mediate

the influence of social norms, and all behavioral effects of reasons and motives (Thøgersen, 2009).

In order for the PSSs to become accepted, one has to understand how consumers develop and hence integrate norms into their daily lives. Therefore, the following two sections demonstrate how environmentally conscious families form their consumption lifestyle and how the formation of norms can consequently be influenced. Finally, we will illustrate how this can impact the consumption of children's clothing.

### 2.2.1 Green Family Consumption and Norms

Green consumers are generally defined as people who embrace an environmentally friendly behavior and choose to buy green products instead of standard alternatives (Boztepe, 2012). The concept of green products is broad. Green products are goods that are produced in a manner that is less harmful for the environment, as well for the workers who made the product (Peattie, 2010). With every purchase decision, consumers can impact ethical, resource, waste and community factors, which can lead them towards an increasingly complex decision-making process (Young, Hwang, McDonald & Oates, 2010). In the end, consumers evaluate a product based on their past experiences, current concerns, information, and pressure from social circles resulting out of norms stemming from the society (Gam et al. 2010).

As environmental awareness and sustainability are becoming more important for people, businesses have started to change their production of goods and services, and therefore marketing strategies accordingly (Boztepe, 2012). Growing environmental awareness has resulted in more consumers choosing environmentally friendly products containing only materials which are less harmful to the environment or human health (Boztepe, 2012).

#### *Complexity of Green Consumption*

According to Moisander (2007), environmentally friendly consumption or green consumption is an extremely complex form of consumer behavior that challenges the consumer intellectually, morally and practically. Green consumption is motivated by a variety of different environmental concerns, which has led to a situation, where green consumers need to make difficult judgements on value, making trade-offs and prioritizing their environmental concerns (Moisander, 2007). The individual objectives of the consumer and the collective long-term environmental protection objectives of society are the two principle motivations of green consumption (Moisander, 2007).

Despite the prevalent assumption that green consumers are rational consumers, the complexity of information and the general perception of environmental products and unreliable green marketing techniques make it difficult for green consumers to act accordingly to their beliefs (Moisander, 2007). Even a green consumer will sometimes choose a standard product instead of a green product as these usually are more expensive and require more time to find (Moisander, 2007). Young et al. (2010) found in their study of green consumer behavior that the lack of time for research, the decision-making and the purchase itself were the main obstacles when purchasing green goods. They also discovered that the cognitive effort in researching, decision-making and searching for the products was extensive (Young et al. 2010).

### *Image, Symbolic Consumption and Community*

Another complex aspect of consumption are the meanings that goods obtain and the messages consumers want to communicate through them. Consumers can portray a certain picture of themselves with different products that they buy. Through symbolic consumption the consumers voluntarily build an ideal image of themselves, even though their behavior is guided by socially produced values and norms (Elliott & Wattanasuwan, 1998). Consumer goods such as clothing, carry cultural meanings, which consumers can try to appropriate in different ways through possession rituals (McCracken, 1986). McCracken (1986) has identified four different rituals: exchange, possession, grooming and divestment. Consumers use these to transfer cultural meanings from goods to themselves.

Through the possession ritual, consumers claim an object as their own, while also trying to draw from its qualities given to it by marketers (McCracken, 1986). If a consumer has not successfully claimed the symbolic properties of a certain product, the consumer can feel that they do not really possess the good even though they own it (McCracken, 1986).

McNeill and Graham (2014) argue that in addition to purchasing symbolic goods for themselves, mothers use their children and the clothes and other goods of the infants in their own identity construction process. The authors continue that this is possible as the young children cannot verbally engage in the consumption process. Parents can also use McCracken's (1986) exchange ritual and try to pose certain qualities to their children. The gifts or clothing that parents give to their children can hold symbolic properties that the parent wishes the children to embrace (Baltes, 1978).

Consumers can try to present a certain type of expertise and status through consumption practices. Different communities around consumption and brands offer a place where to share knowledge and discuss with other like-minded consumers (Muniz & O'Guinn, 2001). Muniz and O'Guinn (2001) describe brand communities as specialized and non-geographic groups that are based on set of social relations among fans of a certain brand, therefore the community can act as an important source for information. McNeill and Graham (2014) discovered in their study that mothers are largely influenced by their reference group and that mothers create and maintain an identity that holds shared meanings around the role of a mother. Women are socialized to accept common conceptions and norms of motherhood, which are filled with different cultural meaning (Thompson, 1996). Behavioral expectations and social context of the role of a mother and the identity construction related to it creates pressure for women (McNeill & Graham, 2014).

### *Social Dilemma*

According to Gam et al. (2010), having children can motivate parents to behave in an environmentally friendly and sustainably way. Following a sustainable lifestyle involves concerns about the effects of the production of goods on the environment and the workers, the waste reduction through consumption, as well as reusing and recycling of goods, which can be difficult in the family setting and add further complexity to the family decision-making (Ritch & Brownlie, 2016).

Additionally, Ritch and Brownlie (2016) explain that, despite the knowledge families have about the benefits of sustainable food in a broader context, it is not transferred to other consumption practices, for example when buying clothes. The reason for this is the complexity of the issues, and the fact that fashion retailers keep quiet about worker and environmental exploitation, focusing on other marketing criteria and in affordable price (Ritch & Brownlie, 2016). Relating to that, even though people prefer a clean environment and appreciate pro-

environmental and ethical standards, there can still be a temptation not to act accordingly and ignore environmental and ethical problems (Thøgersen, 2008). This can be due to a social dilemma. According to Dawes and Messick (2000, p.111) “social dilemmas are situations in which each member of a group has a clear and unambiguous incentive to make a choice that when made by all members provides poorer outcomes for all than they would have received if none had made the choice”. This may lead towards a situation, in which people who are pro-environmental will act against their beliefs due to a momentary personal benefit or peer pressure.

### *Greenophobia*

As all these examples have illustrated, people are strongly influenced by the degree to which sustainable alternatives are available and perceived as normal in society. Therefore, it becomes evident that when marketing environmentally friendly products, marketers must take into consideration how norms are formed and how they affect the consumer’s behavior (Thøgersen, 2009).

According to Diekmann and Preisendörfer (2003), environmental concerns influence the behavior of green consumers in situations that relate to low costs and imply little inconvenience for the individuals. Many pro-environmental consumers also prefer to show their stance in areas that are low-cost and do not require effort (Diekmann & Preisendörfer, 2003).

Summing up the complexity of normative theory within the field of green consumption, Rettie, Burchell and Barnham introduced the term ‘greenophobia’. The authors argue that “consumers see green products as more expensive, less effective and for ‘weird’ people” (Rettie, Burchell & Barnham, 2014, p.10). According to the authors, sustainable products are still only an alternative to conventional products, which makes the products be perceived as abnormal.

## 2.2.2 Consumption of Children’s Clothing

As illustrated before, circular business principles and in particular PSSs can influence and change the current linear consumption model in a positive way. The next step is then to transfer the concept of a circular economy to the textiles industry of children’s clothing. By using design strategies and services that prolong the life of a garment such as the product-service system, it can be possible to fight the problems of the short life span of textiles (Niinimäki & Hassi, 2011).

With regards to current sustainable consumption practices of clothing, Joung and Park-Poaps (2013) argue that reference groups such as family and friends affect the consumer’s disposal behavior in the same way as they affect the consumer’s purchasing behavior. As demonstrated before, especially the disposal of clothing has an enormous impact on the environment. Different incentives, especially those of monetary nature, can also increase the recycling behavior of the consumer (Jacobs & Bailey, 1982).

Joung and Park-Poaps (2013) further found that economic concerns can guide the resale and reuse behaviors, implying that the consumer’s main motivation is to save money. Consumers who discard textiles are motivated by convenience and those who donate used clothing are motivated by environmental and charity concerns (Joung & Park-Poaps, 2013).

Gam, Cao, Farr and Kang (2010) state that parents generally prefer to buy organic cotton clothing as the material of the fabric is softer, which is especially important for toddlers and

young children. Next to material texture, “size, price, quality, ease of shopping and payment options are the main factors that influence parents’ purchasing decisions” (Köksal, 2007, p.79) for children’s clothing. Originally stemming from the consumption of organic food products, the term ‘*organic child*’ is gaining more popularity among parents (Cairns, Johnston & MacKendrick, 2013). The salient idea is to keep the child away from harmful contaminants (Cairns, Johnston & MacKendrick, 2013). This incorporates the trend that more parents also start not only to look for ecological food for their children, but also to purchase sustainable clothing (Gam et al. 2010).

Considering the general interest and potential of sustainable children’s clothing, it is now of interest how PSSs fit into the idea of a circular children’s clothing industry. In general, companies can implement PSSs in multiple ways. First, it is important to find the most suitable way for one’s business and the aspired target market. PSS models can vary from renting and leasing services to subscribing for a monthly order and offering repair and maintenance service or a take-back service (Stål & Jansson, 2017). As already described, our aim is to find ways that facilitate the acceptance of product-service systems within the society and hence be more widely perceived as normality. Therefore, it is crucial to be aware of barriers and prejudices that exist in people’s minds. Against this background, the method section will build a foundation on which we can then draw our conclusions gathered from the empirical material.

# 3 Methodology

Our aim is to generate new insights and theory from our empirical material. We applied grounded theory to analyze the collected material and to achieve a deeper understanding of the factors affecting the green parents' norms. With the aid of these insights, we were ultimately able to obtain concrete notions how to design a PSS to become accepted as the norm.

## 3.1 Research Approach and Design

To gain an understanding what environmentally conscious parents perceive as normal and which factors affects these norms, we chose to conduct qualitative interviews. We used semi-structured, intensive interviews to understand the underlying norms and values, which influence the shopping behavior of the modern green parent.

In this research, we chose *nominalism* as our ontological stance, since we believe that there is no single truth and that different viewpoints can be derived from the interviews (Easterby-Smith, Thorpe & Jackson, 2015). We thus aimed at revealing how our interviewees interpret their environment by acknowledging different truths.

Since we wanted to understand the green parents' thoughts and capture their perception of normality, we followed the assumptions of *social constructionism*. We tried to gather rich data from our small, but specific sample and to find new insights concerning the norms and values of the green parents and their perception about PSS (Easterby-Smith, Thorpe & Jackson, 2015). Consequently, we collected thick descriptions, which allowed us to analyze and reflect upon the people's answers profoundly (Geertz, 1977).

All green parents provided us with different insights and interpreted the world in diverse ways. It was therefore crucial to cover various views on the topic of PSSs and norms to develop an in-depth understanding of the different factors affecting these viewpoints. Table 1 demonstrates the different implications of nominalism and social constructionism, which we have pursued in our research.

Table 1: Attributes of nominalism and constructionism  
(Authors' illustration based on Easterby-Smith, Thorpe and Jackson, 2015)

Nominalism Constructionism	Aims	Starting Point	Designs	Data Types	Analysis	Outcomes
	Invention	Critiques	Engagement and Reflexivity	Discourses and Experiences	Understanding	New Insights

Moreover, we applied an *inductive approach* during our research, as we aimed to develop new theory from the findings of the research instead of testing existing theory (Bryman & Bell, 2015). Our interviews were structured in a way, which facilitated new insights on one hand and the generation of new theory about how PSS should be designed to become the norm on the other hand.

In the following chapters, we will scrutinize the techniques chosen to conduct the study. We will reflect upon the chosen method and its validity and quality. Later, we will explain the data collection method in detail.

### *Validity*

The three terms, authenticity, plausibility and criticality, can be used to describe validity and quality in a qualitative research (Easterby-Smith, Thorpe & Jackson, 2015). Golden-Biddle and Locke (1993) explain the three concepts. According to the authors, authenticity means that the researcher has a deep understanding of what is happening. Particularizing everyday life, outlining the relationship between the researcher and the interviewee, portraying the analysis of data, and understanding personal biases, can help to achieve authenticity (Golden-Biddle & Locke, 1993). We reached *authenticity* by carefully examining the existing literature, so that we gained a deep understanding of the topic. We also acknowledged our own biases and took these into consideration when analyzing the empirical material.

*Plausibility* represents the credibility of the study, meaning that the findings of the study make a valid contribution to a common concern, while linking to other researchers and their studies (Golden-Biddle & Locke, 1993). This can be achieved by normalizing unconventional methods, involving the readers by building dramatic anticipation and differentiating the findings of the study (Golden-Biddle & Locke, 1993). We believe we reached plausibility as our research contributes to existing theory by linking norms and PSSs in children's clothing industry, which offers a new viewpoint.

The third term, *criticality* invites the readers to evaluate and re-examine the forgone assumptions of the research (Golden-Biddle & Locke, 1993). According to Golden-Biddle and Locke (1993), this can be reached by using reflections, the recognition of differences and the imagination of new, novel results and possibilities. Easterby-Smith, Thorpe, and Jackson (2015) summarize that qualitative research should be believable, transparent, reflexive and thoroughly descriptive throughout the process of the data collection. As a result, we interpreted the empirical material critically to develop both, theoretical and practical implications concerning the norms of green parents and their effect on the normalization process of PSSs in the clothing industry.

### *Research Quality*

Easterby-Smith, Thorpe, and Jackson (2015) argue that the quality of a research project depends on how the researchers approach the study from the beginning of the process. The authors continue that examining the quality of the collected data is of high importance and one should reflect upon the collected data as well as the data that was intentionally left out. Additionally, the researchers should examine the sampling strategy and its possible biases as well as reflect upon their own role and its effect on the interviewees and the interview situation (Easterby-Smith, Thorpe & Jackson, 2015).

Hence, the researchers should engage in constant comparisons and critical reflections when analyzing their findings, as this can lead to alternative interpretations which will result in good theory-building (Easterby-Smith, Thorpe & Jackson, 2015). The aim of qualitative research is thus the internal generalizability, which describes the capability to explain what has been



researched in the given context (Easterby-Smith, Thorpe & Jackson, 2015). During our research process, we constantly reflected upon each chapter and we compared our findings with existing literature and theory. It was important to guarantee a consistent research approach and integrate the empirical material in a coherent and reasonable way.

## 3.2 Data Collection

In the following chapters, we will depict the data collection process and exemplify the interview and sampling strategies used in the research. To receive in-depth insights about the green parents' norms and values, we decided to gather data with a qualitative method. As illustrated before, qualitative data is information collected in a non-numeric form and normally accounts for what the objects of study have said or done (Easterby-Smith, Thorpe & Jackson, 2015).

### 3.2.1 Interviews

We chose to conduct *in-depth semi-structured interviews*. This method enabled us to open up the complexity of norms and values. We believe that intensive interviews with open questions could solve this complexity more thoroughly than strict questions that do not leave space for an open discussion. Our intensive interviews enabled us to collect in-depth views of a certain subject and could be used for an interpretative research (Charmaz, 2006). During an intensive interview, the interviewer asks the interviewee to portray and reflect upon his life. Thus, it is the interviewer's responsibility to encourage the participant to open up the answers and ask for more details and concrete examples (Charmaz, 2006).

In general, semi-structured interviews are more flexible compared to fully structured interviews, as they are conducted with the aid of a topic guide resulting in a more open ended interview structure (Easterby-Smith, Thorpe & Jackson, 2015). Our topic guide involved questions about the current situation of the green parents and the purchase, usage and disposal of children's clothing. Once we discussed the current behavior, we then explained three different scenarios of PSSs, which should project a future situation. By asking the parents about their opinion and thoughts, we tried to reveal the participant's motivations to opt for PSSs and how their norms regarding the handling of their children's clothing affect their perception.

Our topic guide was designed to first scan the current behavior in terms of their life as environmentally conscious parent and then projecting possible future situations with the integration of PSSs (see Figure 7). We asked the parents to describe their current lifestyle and the way sustainability is present in their everyday life. These questions were designed to reveal how environmentally conscious the parents are, and if they have strong green values and in what way these values affect their decision-making.

After scanning the current situation, we then proceeded with three different scenarios with different examples of PSSs. With the scenarios, we wanted to gain information on how the parents perceive the PSSs and what kind of norms and values they connect with them. We provided them with one example from each of the three categories of PSSs: product oriented services, use oriented services and result oriented services.

## *Scenarios*

### *Renting and Leasing*

The first scenario was a renting and leasing scenario, which belongs to use oriented services. We portrayed a picture of a renting service, which would offer the parents the possibility to rent organic children's clothing. They could choose to either rent one piece at a time or sign up for a monthly subscription. Once the child has outgrown the clothes, the parents would send the old clothes back to the company and receive a new parcel.

### *Advice Service*

The advice service belongs to the category of product oriented services. We created a scenario, where an organic children's clothing store would offer advices on how to take care of the clothing and wash the product correctly. Additionally, the store would offer a repair service, where parents could send their damaged garments to be mended. All this would be free of charge.

### *Take-Back Service*

The third scenario was a take-back service, which is a result oriented service. This business model suggests taking back old clothes bought at the same store. The parents would receive a discount voucher, which they could use for their next purchase. The store would then either sell the used clothes as second-hand or upcycle them.

We chose to include examples of each category to get different opinions on these services, so that we could then make suggestions for companies when choosing the most suitable PSS option. Additionally, we wanted to reveal the different norms, which are associated with these different services.

Finally, we asked questions about the parents' willingness to use the PSSs and which service model they would prefer.

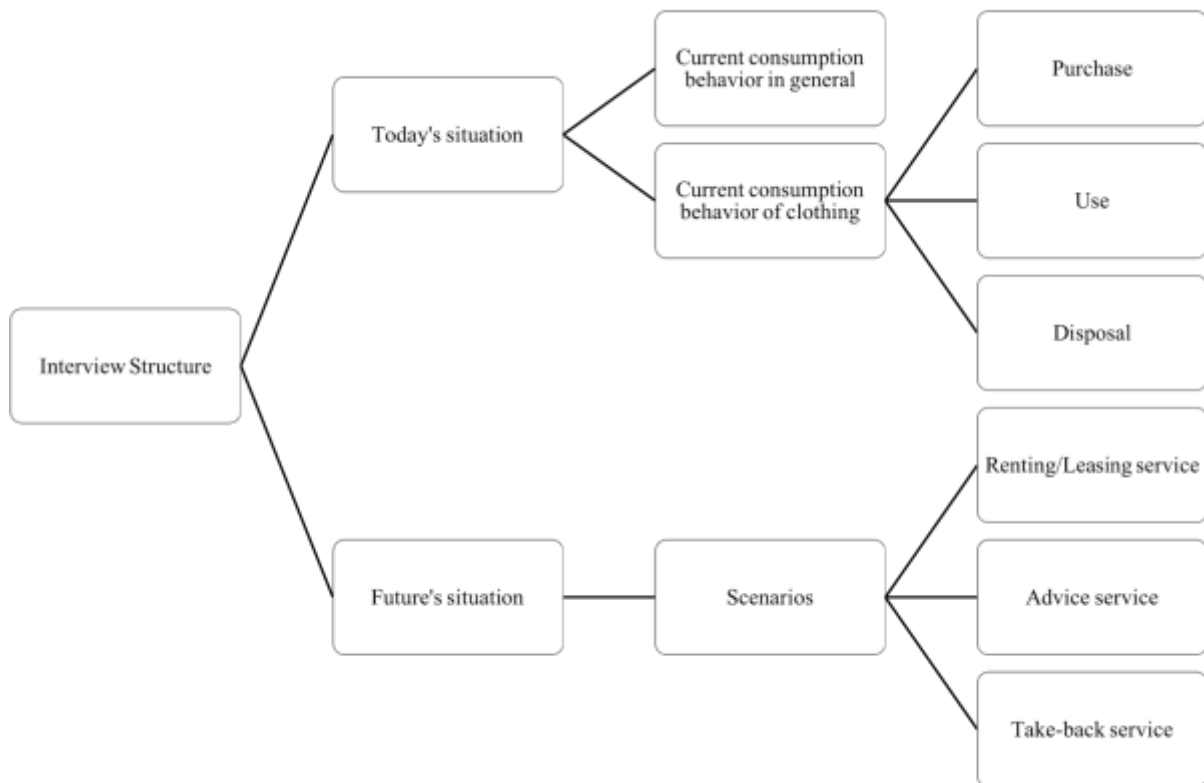


Figure 7: Interview structure

As mentioned earlier, we interviewed parents who are environmentally conscious and have bought or are interested in buying sustainable clothing for their children. We chose to interview only parents interested in a sustainable lifestyle. If the interviewed parents were ‘regular’ consumers, they would not necessary have any prior opinion or knowledge about the subject of sustainability or PPSs, which could have resulted in very narrow results. If the timeframe for this study was longer, we could have interviewed both, regular consumers and environmentally conscious consumers, to find differences in the norms and beliefs.

During qualitative interviews, the interviewer should be sensitive and understand the interviewee’s viewpoint, but also assist them to expand participants’ own views and beliefs (Easterby-Smith, Thorpe & Jackson, 2015). We tried to achieve this with an open discussion method, leaving space for the discussion to flow and asking for examples and more details.

We conducted the interviews both, face to face and remotely via Skype. We chose these options, as some of the parents were extremely busy with their children and the remote interviews suited them better. Remote interviews can cause limitations as nonverbal cues are not as easily interpreted than in a face to face interview (Easterby-Smith, Thorpe & Jackson, 2015). Nevertheless, we used mainly video calls to be able to see our interviewees and notice their gestures and facial expressions.

Additionally, we applied a ***laddering technique*** to ensure that the participants could open up their answers and provide us with examples about their behavior and views. Applying the laddering up technique, we could receive more detailed information. Hereby, the researcher asks ‘why’ questions to receive more in-depth examples (Easterby-Smith, Thorpe & Jackson,

2015). Laddering is as well a main characteristic of intensive interviews, where instead of just nodding, the interviewer asks the participants to give examples and provide more detailed information (Charmaz, 2006).

When conducting an intense, in-depth interview, there is always a concern that the interviewer can be biased. The interviewer can pose his own opinions and references to the participants by both asking certain types of questions or when interpreting the answers (Easterby-Smith, Thorpe & Jackson, 2015). We tried to avoid this by asking open questions and not guiding the participants too much into a certain direction.

### 3.2.2 Qualitative Sampling Strategies

We used two different sampling strategies to collect suitable participants for the interview.

First, we chose the *snowball sampling* strategy. Snowball sampling involves the idea of participants recommending and recruiting other participants among their acquaintance circles (Easterby-Smith, Thorpe & Jackson, 2015). In our case, this was necessary as we looked for environmentally conscious parents. As a next step, already recruited participants provided us with contact details of their friends, who were interested in sustainable children's clothing and a sustainable lifestyle. In addition, the sustainable children's clothing start-up Pitupi, who we will later give recommendations for a suitable PSS, gave us contact details of their customers. The customers were in general interested in sustainability topics and had already bought organic clothing from Pitupi.

The second sampling strategy that we used was *theory-guided sampling*, which incorporates the idea that the participants should meet certain theoretical characteristics (Easterby-Smith, Thorpe & Jackson, 2015). In our research, we were looking for parents that could be classified as green parents. Green parents are environmentally conscious and are interested in a sustainable lifestyle and hence also show an interest for sustainable children's clothing.

We trusted our participants, when they presented themselves as environmentally oriented and interested in sustainability in general as well in children's clothing. However, we designed our topic guide in a way, which allowed us to ask control questions. At the beginning of the interviews, we asked the participants to describe their sustainable lifestyle and it became apparent that all participants had at least some level of pro-environmental attitude and experience regarding sustainable children's clothing.

We conducted a *multicultural research* as our participants represented a variety of different nationalities. We had participants with Indian, Albanian, Danish, German, Canadian, Icelandic and Swedish backgrounds. The fact that the participants had different cultural backgrounds enabled us to gain very different culturally related insights that would not have been possible if the participants all had the same nationality.

Table 2: Interviewees' demographics

Name	Age	Nationality	Gender	Profession	Number of children and age
Anna	27	Icelandic	Female	Student	one; 18 months
Denise	32	Polish	Female	Architect	one; six months
Sofia	35	Indian	Female	HR	one; two years
Lara	35	Swedish	Female	Teacher	one; eight years
Christina	32	Danish	Female	Housewife	two; three year and one year
Melanie	35	German	Female	Entrepreneur	three; five years, three years and six months
Pia	36	Swedish	Female	Journalist	one; one year
Patrice	29	Canadian	Female	Project Manager	one; one year
Viola	32	Albanian/ Swedish	Female	Housewife	one; five years and two years

### 3.3 Data Analysis

To be able to extract valuable information out of the gathered data, it should be prepared and organized (Easterby-Smith, Thorpe & Jackson, 2015). After that, the data is framed and interpreted with the aid of grounded theory. Both steps are part of the so-called data analysis and will be presented subsequently.

For the data analysis, we applied a three-step approach as worked out by Rennstam and Wästerfors (2015), serving as a framework for our grounded analysis. The authors describe three steps during the data analysis that encompasses the *sorting, reducing and arguing*. By splitting the data analysis into these three parts, one can frame the grounded analysis in a comprehensive and structured way (see Figure 8).

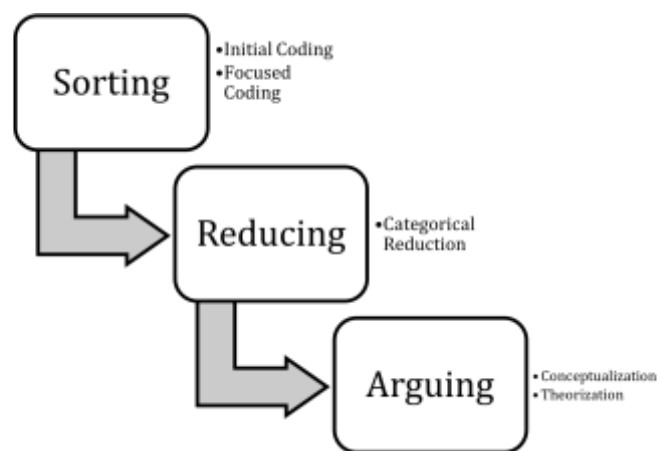


Figure 8: Grounded analysis as a three-step approach

In general, grounded analysis can be described as an open approach that incorporates a constant reshape of the collected data (Easterby-Smith, Thorpe & Jackson, 2015; Charmaz, 2006). Also, it does not center the idea of testing established theories, but rather tries to build theory from formed categories (Easterby-Smith, Thorpe & Jackson, 2015). Glaser and Strauss (1967) defined several components, which are part of the grounded theory practice. First, they put an emphasis on the idea that codes and the resulting categories are not derived from preformed hypotheses, but from the gathered data. Second, it is crucial to constantly compare the derived data. Third, they recommend developing memos throughout the analyzing process to discover relationships between different categories. Last, the authors consider the building of grounded theory as ultimate step in the grounded theory practice.

Subsequently, our three-step approach will be explained more in-depth with the aid of concrete examples. These examples serve as means to visualize the data analysis process incorporating only an excerpt of the empirical material.

### 3.3.1 Sorting

The process of sorting starts with the familiarization of the gathered empirical material (Easterby-Smith, Thorpe & Jackson, 2015). Here, it is important to have the focus of the research project in mind to be able to scan the material efficiently (Glaser, 1978). We started the sorting process by transcribing the interviews by implementing the same structure we also used to conduct the interviews. Hence, all interviews were divided into two parts: the situation as it is today applying the idea of the product life cycle with its three phases of purchase, usage and disposal of clothing and the situation simulated in the future with the application of PSSs.

As soon as we familiarized ourselves with the gathered empirical material and the participants' answers we could code it. Charmaz (2006, p.43) defines coding as the process of "naming analytic segments of data with a label that simultaneously categorizes, summarizes, and accounts for each piece of data". Her definition of coding does center the idea of creating pieces containing the essence of the data. According to Saldana (2009), codes can be manifested in forms such as sentences, statements or components of pictures.

Alongside with the process of coding, comes the distinction between *initial line-by-line coding* and *focused coding* (Charmaz, 2006). As the expression already predicates line-by-line coding entails the process of assigning names to each line of the transcribed interview (Glaser, 1978). Glaser (1978) suggests using gerunds, which should serve as support to follow your data. Therefore, the idea of detecting actions instead of implementing categories that had been developed beforehand is crucial (Charmaz, 2006). During the line-by-line coding process we paid special attention to the participants' real intentions behind their answers to be able to derive meaningful and rich inferences from them.

Additionally, Charmaz (2006) considers initial line-by-line coding as means to reach two criteria within the grounded theory analysis. According to her, fit and relevance can be accomplished by developing codes that fit into the empirical work on the one hand and clarifying relationships between processes on the other hand (Charmaz, 2006). This was extremely important during our first cycle sorting process. Table 3 provides examples for the line-by-line coding process. The left column contains the product life cycle phase and hence the interview structure, whereas the right column illustrates the codes, which we could derive from the gathered data.

Table 3: Example of line-by-line-coding

Product Life Cycle	Line-by-line codes
Purchase of children's clothing	Chooses second-hand for financial reasons, fast usage and health for the child
	Receives it from families and friends
	Only buys what they need
	Avoids fast fashion
Usage of children's clothing	Repairs clothing
	Ecological washing powder
Disposal of children's clothing	Hands it over to family and friends
	Donates clothing
	If good quality, sells it

Second, focused coding allows “to separate, sort, and synthesize large amounts of data” (Charmaz, 2006, p.11). This second cycle of coding provides the researcher with the chance to analyze the data more thoroughly and decide which information is of relevance and which not (Easterby-Smith, Thorpe & Jackson, 2015). Additionally, focused coding facilitates the process of making comparisons between the different interviews and considers “people’s experiences, actions, and interpretations” (Charmaz, 2006, p.59). By working out codes, which are suitable for our research we always tried to be able to formulate them in a way that allows us to make comparisons with the codes from other interviews as Table 4 illustrates. Hereby, similarities between the interviewee’s’ answers were taken as orientation to formulate broad and similar codes for all interviews.

This second cycle of coding also laid the foundation for the formation of categories, which will be discussed in the following section.



Table 4: Example of focused coding

Line-by-line coding	Focused coding
Family, friends	Community
Repair, mindful washing, line drying	Extensive Usage
Donation, easy selling, recycling, storing, handing it over to friends	Disposal Practices

### 3.3.2 Reducing

After sorting the empirical material, it is crucial to reduce it in a systematic and thorough way. One possibility to reach this aim is the division of the established codes into *categories or themes*. Rennstam and Wästerfors (2015) describe this process as categorical reduction. Hereby, they recommend organizing the data according to themes, insights, possible answers to a research question” (Rennstam & Wästerfors, 2015).

According to Charmaz (2006) categories can be built up with the aid of two different strategies. First, one can take so-called in vivo codes, which are codes that are directly extracted from the interviewee’s response. Second, one uses the rather theoretical data, which is based upon actions as described in the section before. Both strategies provide the possibility to make use of the codes that have been developed beforehand and bundle them accordingly. As Table 5 below demonstrates, we used themes, which capture several codes containing data from different interviews.

Table 5: Example of themes

Focused coding	Themes
Community	Own Circular Networks & Convenience
Extensive Usage	
Disposal Practices	

As Glaser and Strauss (1967, p.37) defined it, a category is a “conceptual element in a theory”. Beyond that, Charmaz (2006) advises to use the defined categories or themes as heading of the sections, which will be established for the analysis and discussion. The author highlights the great potential of categories to guide the reader throughout the thesis and manifest them in the topic (Charmaz, 2006).

As a final step, it is of central importance for the researcher to know the point of saturation of the chosen categories (Charmaz, 2006). As long as the categories provide new insights and findings, there has to be added new information. We reached our point of saturation when we realized that all established categories were at least repeated once by another interviewee.

### 3.3.3 Arguing

The third and last step within the data analysis is the arguing. Rennstam and Wäterfors (2015) mention that arguing is a process, which makes an independent position possible. Hence, analyzing data does not only mean to present it, but to argue for it. To do so, the researcher can follow two steps. First, he conceptualizes. This process captures the idea of linking the former defined categories and see how they are related to each other (Easterby-Smith, Thorpe & Jackson, 2015). It is important to consider patters in between the different categories. The goal is thus to create concepts, which lead into theory.

Therefore, as a second step, theorization follows. Especially from a constructionist viewpoint building theoretical concepts can “serve as interpretive frames” (Charmaz, 2006, p.140) and can make the researcher understand the different relationships between the concepts.

In this context Charmaz (2006) underlines the thought that the resulting theory is interpretative. The author continues, that a constructionist considers how everyone regards his situation. Hence, the empirical work is not only theorized, but also interpreted. Creating grounded theory does consequently mean to “extend the theoretical reach further than those that identify a process, outline its phases, and then describe them” (Charmaz, 2006, p.137).

We created our concepts by using the idea of the product life cycle with its three phases: purchase, usage and disposal. We then assigned each phase two themes, which represents our conceptualization process. All six concepts will be analyzed and discussed subsequently.

## 4 Analysis

Considering the conducted interviews, we will now analyze and discuss the data more thoroughly. For this purpose, we developed six different concepts (see Figure 9) stemming from the participants' answers. These six concepts will be used to draw relevant, new conclusions, which will be scrutinized afterwards. Finally, the findings are related to the literature, which will reveal our main theoretical contributions and practical implications.



*Figure 9: Concepts divided into the useful life of a garment*

To guarantee a structured and thorough analysis, we applied the idea of the product life cycle. The idea behind the life cycle of a product emphasizes the different phases through which a product goes during its useful life. As we think that product-service systems cannot be assigned and applied to only one phase of the life cycle, we developed several concepts alongside with the life cycle phases as a guidance. Consequently, the analysis is divided into three parts containing two developed concepts respectively.

The first phase is the purchase phase, where we will illustrate the complexity of purchase decisions for children's clothing as an environmentally conscious parent and the wish to keep or give up certain control. In addition, we will depict how pragmatism influences the way green parents make their purchase decisions and how a sensitivity for quality and price impacts these variables.

Second, during the actual usage phase, the ownership and meanings of the clothing play a crucial role, next to the stereotypical perceptions of motherhood. These will be scrutinized with regards to established norms and expectations originating from today's society.

Last, the disposal phase highlights the importance of own circular networks among the green parents and how convenience influences the parents' disposal behavior.

With the aid of these concepts we will ultimately be able to make inferences regarding the prevailing norms and set up a framework for a successful normalization process of PSSs in the children's clothing industry.

## 4.1 Purchase Phase

The purchase phase is the first of three phases through which a product goes during its useful life. This phase centralizes the idea of acquiring a product and considering all the different factors that are involved in the decision-making process when it comes to making a purchase. For environmentally conscious parents this phase bears several challenges and constraints as the following sections demonstrate.

Generally, all interviewees considered the well-being of their child as the most important priority when it comes to making purchasing decisions for them. However, a majority argued that the products still should be affordable as children need a lot of different products and a constantly renewed assortment of clothing. It also became apparent that the parents try their best to act as environmentally friendly as possible so that certain inconveniences such as a higher price and more invested time may occur and result in a higher complexity than a conventional consumption lifestyle. Hereby, the quality of the products plays a major role concluding that the parents always seek for the best option for their child. Despite these limitations, green parents proved to be flexible and applied a pragmatic way of seeing things. In addition, some of the parents were even ready to give up a certain degree of control and responsibilities, which may lead towards an easier handling of the purchases.

We recognized two groups of factors that influence the way environmentally conscious parents handle the purchase of clothing for their children and thus affect the way in which product-service systems should be constructed to be perceived normal.

### *Complexity and Control*

The first group is composed of (1) *complexity* and (2) *control*.

#### *Complexity*

For an environmentally conscious mother that justifies her purchase decisions not only on her own well-being, there is a certain degree of complexity that this form of consumption brings with it. For Sofia, it is the process of *finding the right option*:

“I am a little bit torn with organic products. I buy few things for my home, but when it comes to food for example, I am aware that pursuing an organic lifestyle here means that if everybody lived like that we would not have enough food in the planet to meet everybody’s needs. So, I am kind of torn between those two ideas.” (Sofia)

Also, there is the fact that *children can complicate the life* as an environmentally conscious parent as Lara and Sofia state:

“I think it was easier to live sustainably without kids. Children consume a lot. They consume a lot of clothes, they consume a lot of toys because they grow.” (Lara)

“I have bought quite few organic clothes for my son and it is more expensive, it is way more expensive. On the other hand, he then has fewer clothes, but hopefully it is good.” (Sofia)

Another mother explained that for her, pursuing a sustainable lifestyle means to *give up the pleasure of shopping* to a certain degree as she is missing the instant gratification one receives when buying something:

“You need to think about the cost-benefit analysis of the shopping experience which we all like. We all like going out and buying new things. And the instant gratification that you get from that. You have to be fully informed what you are doing, to be able to give up that instant gratification towards a more sustainable long term future goal.” (Anna)

Finally, the factors *time and flexibility* also play a crucial role regarding the purchase of new children’s clothing as Christina and Pia explain:

“And that is the bottleneck, it requires a bit more time to find the specific pair of shoes in eight different second-hand shops compared to just going to a specific, normal shop, where you can buy it. So, it is more time consuming.” (Christina)

“You have to give it a bit more of a thought. You cannot just go and buy the cheapest things and throw them away.” (Pia)

As all four women illustrate it takes effort to make decisions as an environmentally conscious parent and consequently the purchasing process can become more complex. Especially the purchase process is characterized by a variety of norms, which influence the way green parents shop for their children. Relating these findings to the research carried out by Young, Hwang, McDonald & Oates (2010), the green parents’ answers verified their assumption that green consumers invest more effort into the research decision-making process.

The parents aim for finding clothing for their children, which often cannot be purchased at a conventional shop since it is second-hand or fair fashion clothing. Hence, it is necessary for them to do research to detect these stores and locations. Also, especially if parents receive their first child, there is usually a certain pleasure of shopping and arranging a nice setting for the newborn. Hereby, the shopping of clothing plays a crucial role. However, as green parents rethink the conventional consumption patterns, they give up part of this pleasure. Additionally, since green parents have to invest more time in the preparation and search of information, they are at the same time less flexible, which characterizes the whole purchase process. As a result, the concept of consumption of clothing as such is reinterpreted by the green parents.

All mentioned factors such as (a) *finding the right option*, (b) *an increased difficulty in living sustainably*, (c) *giving up the pleasure of shopping* and (d) *less time and flexibility* do hence determine the complexity of a sustainable lifestyle as a green parent and their norms in terms of the purchase of children’s clothing.

## *Control*

Contrary to the efforts that parents have to take into account and the complexity involved in sustainable purchase decisions, there is the importance of control. Especially as a parent the days are structured meticulously and contain a lot of activities and appointments. There is hence a huge number of daily decisions that have to be made every day. Therefore, we could recognize that parents either strongly appreciate the possibility to give up some of their responsibilities, whereas others want to keep the control without handling it over to someone else.

Especially with regards to making purchase decisions, Melanie highly appreciates the idea of a renting system for clothing as she can give away some of the responsibilities such as the selection and purchase of clothing especially because of the fast growing of her children:

“Then I do not have to take care of it myself, like the physically buying process. I am not a big shopper so that would be great [...] I would probably choose an option like a curated shopping type where you can say I am this type of customer, please send me something. And I would definitely also choose the model where I send back the clothing once the kid outgrows the clothing.” (Melanie)

Contrary to Melanie, Pia considers inconvenience as a logical consequence, which she accepts to live a sustainable life:

“It takes more time, it is not that available. Because when you have to find clothes or food, you have to dig much deeper. In this way it is hard. And for example, I do not use the microwave, even if it is more work. I warm the food in natural ways [...] So this is less convenient but I know this is better for me [...]” (Pia)

Also, Denise prefers to keep control over her own consumption as she mentions to make her own food and informing herself about the ingredients when she buys food:

“When it comes to food I try to buy as much as I can afford organic. I try to find an information what is good or not. I also try to read the ingredients on the stuff that I buy [...] What interests me is the country of origin and the ingredients. I try to make my food at home, that is also part of sustainability. Also, I try not to buy in chain shops. Because I am quite aware that people who are making these clothes they get very badly paid and come from very poor countries and I do not want to support that.” (Denise)

Thus, for Pia and Denise it is of central importance to be in charge of making a purchase decision themselves and having full control over their choices. This is closely interlinked with prevailing norms in society. It is still normal for mothers to carry a certain degree of responsibility and oversee the care of the children. There are certainly shared responsibilities between the father and the mothers, but still the mothers carry special responsibilities such as the nursing. Melanie on the other hand, considers the possibility to give up control as liberating. Therefore, the parents appreciate a certain degree of freedom when it comes to making purchasing decisions.

### *Pragmatism and Sensitivity for Quality and Price*

As the section before has highlighted, green parents consider their lifestyle to be more complex in terms of making the right decisions for themselves and their children including several variables such as time, flexibility and the pleasure of shopping. Also, the degree of control allowing them to steer their decisions into a certain direction plays a crucial role for them. Next to this group of factors, we will observe another group, which thematizes (1) the *parents' pragmatism* and (2) their *sensitivity for quality and price*.

#### *Pragmatism*

During the interviews, we could recognize a certain degree of pragmatism in terms of balancing a sustainable lifestyle as a parent. When asking Pia for her reasons for a sustainable consumption, she answered:

“A lot of it is voluntarily, but some is also due to not having much money. We do not have a car and buy a lot of second-hand, which is something I like, but it is also a good way to save money. I try to buy organic food when I can afford it. Some stuff like bananas I buy organic and coffee. I try to buy organic but it is more expensive.” (Pia)

It becomes apparent that Pia's sustainable lifestyle is triggered by the aim to contribute to a better world on the one hand, but to also save money on the other hand. Also, Christina consumes in a similar way as Pia:

“I don't always buy organic cotton or used materials, I think the reason is that I believe that if you wash the clothing a few times then it balances out, but then of course all the chemicals are going into the drain from the clothes so it is still there. I am sustainably focused wherever it hits my kids, so the food they eat, the clothes they wear.” (Christina)

For both, it is important to act in accordance with the environment, but it also becomes evident that pragmatism is central for them. They want the best for themselves and their children, but accept the fact that they can reach a certain point, where a conventional and an environmental-friendly lifestyle collide, so that they must make compromises. This also confirms Moisander's (2007) research, who found out that even green consumers sometimes opt for standard products.

For Viola, seeing a sustainable lifestyle from a pragmatic angle is crucial:

“The way we do it, it is not hard if you make it a part of your lifestyle, like I don't need to think like damn I have to do this. I mean I like biking or buying something that makes the planet and also the people producing it and my life better. I don't think it is hard.” (Viola)

Accepting certain compromises such as buying conventional cotton or non-organic food are then not considered as 'breach of rules' by the interviewees, but are viewed as pragmatic solutions that enable a resource-saving way of living, both on a financial and environmental level.

### *Sensitivity for Quality and Price*

Besides the fact that environmentally conscious parents base their consumption patterns to some extent on pragmatic solutions, we could also detect a sensitivity for quality and price. This sensitivity emerged as soon as the parents commented the renting system for clothing:

“I like the idea, but it has to be cheaper than buying the clothes because it has to appeal to people. I think that for certain types of clothes, e.g. clothes that you do not use every day this would be good. These special clothes are normally expensive and you do not use them so much.” (Lara)

For Lara, there should be a real benefit for the customer, which she defined by offering special clothing to rent. Hence, according to her it is of central importance for the development of a renting system to be able to choose from clothes that she would find too expensive to buy. Also, Patrice confirms these thoughts and adds the necessity of a good quality:

“I would like to be able to choose which types of clothing I rent and I would like the clothing to have a good quality. Because sometimes when a garment has been passed over to many different people the quality can lessen [...]. If there is a renting system it is important that the clothes, which are circulating are still nice looking, especially if you pay for it.” (Patrice)

Supporting Patrice’s and Lara’s arguments, Viola explains why she thinks that a renting concept would not add any benefit to her life and the purchase decisions she has to make as a mother:

“If it is normal clothes that you can rent, then I don’t think it will change anything, as here we have an active Facebook group in our village where everyone who lives here is in the group. When people don’t need something like a t-shirt or pajamas, they just take a picture of it and either you get it for free or buy it for like 10 kronor, so I don’t know if this renting service would probably be more expensive than the one I already use in the village. I can walk to pick it up because maybe the seller is my neighbor.” (Viola)

All three answers picture the relevance of a reasonable quality-price ratio. As clarified by the parents, they consider a rather low price, but a high quality as prerequisites in order for the product-service systems to be accepted on the market.

### *Summary of Purchase Phase*

Bringing both groups of factors together, we were able to notice a tendency that is pivotal when it comes to making purchasing decisions as environmentally conscious parent. The first group of factors emphasizes the complexity of purchase decisions as a green parent and conceptualizes the fact that the degree to which parents want to keep control over their purchases can differ. The second group demonstrates the parents’ pragmatism and their sensitivity for quality and price.

Consequently, we could observe how green parents handle the so-called social dilemma. A social dilemma can be defined as a situation “in which short-term self interest is at odds with longer-term collective interests” (Van Lange, Joireman, Parks & Van Dijk, 2013, p.125). As the participant’s answers have illustrated, they are confronted with challenges in terms of making the right purchase decision, keep or giving up control, considering their lifestyle in a more pragmatic manner and finally decide between the relationship of quality and price. We can say that the parents did not only pursue a sustainable lifestyle in areas such as food or



transportation, but also with regards to their clothing consumption for themselves and their child. Therefore, we cannot confirm the assumption made by Ritch and Brownlie (2016) that a sustainable consumption is not transferred to other areas. This is of course limited to our chosen sample containing green parents.

Resultantly, we can then deduce that parents that are not only interested in a sustainable lifestyle, but also live accordingly to these values, do not face social dilemmas in a way that conventional parents do. We relate this conclusion to Thøgersen (2008) who stated that even though people know about the advantages and the need to act more environmentally friendly, they opt for the conventional way and do not pay attention to environmental concerns. During our interviews, we clearly recognized the tendency that the parents always based their decision on the children's well-being with regards to providing a good future. Hence, they put their own immediate advantages such as spending less money, making faster and easier decisions or being less flexible on hold. This finally results in overcoming the social dilemma in a way that they consider their child's well-being and future more important than their own situation. However, as green parents have to make complex decisions, their way of overcoming the social dilemma still remains difficult for them. It takes a lot of effort and incorporates trade-offs.

## 4.2 Usage Phase

The second phase of the product life cycle is the usage phase. Here, we will discuss all the different aspects green parents related to the usage phase of their children's clothing and what different norms they attached to it. As clothing carries cultural and symbolic meanings, it was interesting to see the different assumptions related to the usage phase of clothing such as the norms related to the washing and repairing of the clothes, the perceptions about second-hand clothing and the importance of the style of the clothes.

Throughout the interviews, it became apparent that the families were very mindful concerning the usage of the clothes. They often used the clothes extensively until they were unusable. They also washed and cared for the garments in a way that was less harmful for the environment. We found out that especially the maintenance of clothing was attached to traditional norms of motherhood.

### *Ownership and Cultural Meanings and the Perception of Motherhood*

Hence, we developed two themes that emerged throughout many interviews with the parents concerning the usage phase of the clothes. These themes are (1) *ownership and cultural meanings* and (2) *the perception of motherhood*.

#### *Ownership and Cultural Meanings*

When the participants were asked about the use-oriented service model, where the ownership is kept within the company and is not transferred to the customer, most the interviewees had not used this kind of renting or leasing service before for their children, and therefore demonstrated a lot of concerns regarding the fact that the consumer does not own the products. Many interviewees were skeptical of the service and did not consider it as a suitable option for everyday clothing.

As the renting service was rather new for many of the mothers, they were concerned about the terms and conditions of the service as illustrated by Pia and Viola:

“I would be afraid of having stains on it. What would happen then? And if you buy the clothing you can still choose if you want to sell it, to continue the circle yourself.” (Pia)

“What happens if the clothes get dirty?”. (Viola)

In some cases, it seemed that the interviewees were not ready to use a renting system as the concept of renting clothes is so peculiar to them. It is still not the norm to rent clothes, thus they perceive it to be more work and effort. This made the mothers unsure about the necessity of such as system, since second-hand clothing can be purchased for a low price from other sources.

The interviewed mothers also seemed to have an emotional attachment to some of their children’s clothing. Sofia illustrates how it could be problematic when she would not own the garments. However, when she was asked about emotional attachments, she denied it:

“Yeah, I don’t know because I haven’t experienced it as such, but just thinking about it, how I work with renting, okay now this has to be returned, mentally this is not mine and this has to be given back. So, I am just thinking, how it might affect it or maybe it is completely alright, I don’t know.” (Sofia)

“No, I don’t have emotional attachment to clothing as such, apart from my son’s birth. Then, the first pieces of clothing are very important but generally there is no emotional attachment to most pieces of clothing I would say.” (Sofia)

One could argue that as the norm of owning clothes instead of renting is so strong, individuals can have difficulties give away the ownership, as they might feel that they never actually possessed the rented clothing. According to McCracken (1986) this phenomenon may occur if the possession ritual of the individual was not successful and therefore makes the individual feel that an object is not truly theirs. Therefore, one can argue that individuals cannot practice the possession ritual to rented clothing the same way as for purchased clothing, as they know they must part from it eventually.

Contrary to Sofia, Lara does not believe that she has an emotional attachment to her child’s clothing, as demonstrated below:

“For example, for New Year’s Eve we bought a dress for our girl because she really wanted it. But she only used it twice. And we paid a lot of money for it. But we gave it away to someone and they also benefited from it.” (Lara)

Many of the interviewees mentioned that they would rather rent garments for special occasions than everyday clothing. The reason behind this may be that garments for special occasions are seldom used and more expensive to buy. Still, it is paradoxical as clothing for special occasions can carry more memories than everyday garments.

All the interviewed parents bought second-hand clothing for their children and some also for themselves. Still it seems that certain stigmas are linked to second-hand clothing, especially in certain cultures. As our interviewees had different cultural backgrounds, we found that the cultural heritage can have great impact on the perception of second-hand clothes.

Sofia, who is originally from India, had concerns about the hygiene of used clothing:

“As I said, I am Indian and I find it, little harder for me to buy second-hand clothing from someone I don’t know. Just sort of mental hygiene perspective. Though I know you can wash it in 30 to 40 degrees and it will all die, but I think, I have changed and I have worked with that and tried because I know the environmental benefits of it.”  
(Sofia)

She also felt that she did not want to sell her son’s used clothes and earn money with them, but rather give it to charity:

“I don’t sell them, I feel, I have tough time to sell something that has been used so much. Yeah, mentally I feel like I don’t want to make money from it because I feel like it has been used and it is just good if someone else can take it forward and use it further.”  
(Sofia)

Denise, originally from Poland, was not concerned about someone wearing the clothes prior to her child. She rather viewed it as a benefit as the clothes are softer and easier to dress on the child:

“I am not that concerned that other kids wore it. That would not be an issue for me. If it is just washed it is okay. If the colors would fade away I would not mind either because what matters is that it is good quality and the kids feels comfortable in it. And the general rule is that when you have a little kid is that the best clothes you can get are those that are already used or second-hand because there are very soft and stretched. It is easier to put them on and kids hate to get dressed an undressed. So, you try to make this moments as short as possible. So, it is really good with old clothes. That’s the rule that I learned.”  
(Denise)

Therefore, the interviewed parents considered the softness to be a crucial factor when it comes to the usage of second-hand clothing. Even though the green mothers bought and received a lot of second-hand clothing, the style of the clothes also seemed to be an important aspect. This became apparent when the mothers expressed concerns with regards to choosing the style of the clothes that would be available in the renting concept. As discussed earlier, clothes can carry meanings. Parents can use their children’s clothing for their own identity construction projects. We argue that this is the reason why some parents were concerned about the styles of the clothing. If we adapt McCracken’s (1986) theory about rituals, one could say that by giving their children certain types of clothes (*exchange ritual*), parents hope that the children absorb the qualities of the garment and what it symbolizes. Below, Viola is concerned about if she can influence the selection of the rented clothes:

“How would I choose the clothes? Would it be the company choosing the clothes for me or would it be me?”

Researcher: “Which one would you prefer?”

“I would prefer selecting them myself.” (Viola)

“And maybe they would have models that doesn’t exist anymore because kids’ clothes changes so much, every season it is new, so maybe you could find print that where from before.” (Viola)

## *Perception of Motherhood*

Next to the first theme of *ownership and cultural meanings*, we identified the role of motherhood to be central regarding stereotypical perceptions of mothers, as it is connected to a variety of values and norms. In our society, there is a strong image of the ‘*perfect mother*’ taking care of the children and the household and how she should be and act. Mothers can feel pressure to conform with the dominant norms and roles, and act accordingly even though it might be against their own values.

The interviewed mothers felt that as a parent, they take care of their child and it involves also the maintenance of the children’s clothing. When presenting the idea of an advice-service in form of either a washing service or repair service, most of the parents felt that they do not need such advice on how to take care of their children’s clothing. They almost perceived themselves as experts and portrayed themselves as mothers who can do a task that a mother is supposed to do. Additionally, many of the mothers did not consider the advice service worth the effort as they felt there was no added value.

The reactions of the mothers were rather negative towards the idea of any advice service, as if their capabilities as a mother were questioned. Additionally, they added that they know how the clothes are to be handled and that washing them in a certain way does not make them last longer:

“I am not sure if I would get some help from it as I am quite aware of how to wash the clothes and to fix it.” (Pia)

“It sounds super complicated for a tiny little button or whatever, that was my first thought. I think that somehow simplicity matters and that is why I reacted a bit to it because in my mind our kid’s clothes don’t last longer because of the washing or the detergent or the fact if we repair the holes.” (Christina)

Albeit, the mothers claimed that receiving an advice on washing or repairing was unnecessary for them, they still admitted that they rarely repair the clothes by themselves. In many cases, it was their mothers who did the repairing work as Melanie and Viola explain:

“I think it is hard to convince people to send something for repair. For me personally I would not use it because I have my mother. And then I would not really see the point in sending something and receiving it back. Even if it is for free.” (Melanie)

“I usually repair everything. Well, I do not repair it, but my mother does it because she is good at sewing. So, she repairs almost everything.” (Melanie)

“If it is broken, if it is kindergarten clothes, it doesn’t matter if it is a bit broken, but if it is nice clothes, either I will fix it or my mom will fix it to me.” (Viola)

One mother even felt embarrassed to admit, that it is her own mother who repairs the children’s clothes:

“Yes, I, this is embarrassing, I get my mom to do it whenever she is in town, so I pile them up, she is very good with the needle and thread, she helps with that.” (Sofia)

It might be embarrassing or difficult to admit that one cannot act accordingly to the norms that are linked to traditional motherhood. As mentioned earlier, the common conception of the role

of a mother pressures women to fit into these roles. Still, the modern woman can be different from the previous generations and might not be able to fulfill tasks such as sewing or repairing.

Many of the mothers also tried to adapt a certain behavior after becoming mothers such as repairing or making clothes for the children. This kind of behavior can be related to the identity construction of a mother and trying to adapt to the norms. Still, some of the interviewees admitted that it is not easy for them:

“Just few months back I got a sewing machine, but honestly, I have not tried it yet.”  
(Christina)

“I do repair clothing. I have a sewing machine that I bought when I got my kid. As much as I can I try to make own clothing for him and I find it really funny and interesting, but I do not have the time to do it. Most of my repairing, just small stuff, those I try to make on my own.” (Denise)

### *Summary of Usage Phase*

We captured new insights from the interviews concerning the symbolic and cultural meanings the usage phase involves. The green parents use clothing to present their own values and to show who they are. The manner how they handle children’s clothing and the usage of second-hand clothes assigns the parents with a certain kind of image. We argue that the primary reason for the interviewed parents to purchase sustainable clothing is indeed the environmental aspect. However, the way they use sustainable products can result in a construction of a greener self. Moreover, one can argue that these green parents wish to transfer the values of a sustainable lifestyle to their children through second-hand and organic clothing in form of an exchange ritual.

We uncovered that in certain cultures, second-hand clothing still has a stigma. Cultural differences can be vast, as norms vary depending from the social context. Another important aspect that was evident from the interviews was that the ownership of the garments is still very important. One can argue that even green consumers are not yet fully ready to give up the ownership of the clothes. The feeling of possession is important and it might hinder the normalization of different renting and leasing services. Few of the participants felt that the ease of renting clothes is more important than the ownership, which indicates that the convenience of the use and disposal of clothing can work as a driver to change current perceptions concerning the traditional shopping model and ownership.

Additionally, we discovered that the perception of motherhood affects green parents as they try to engage in certain activities perceived as normal for mothers such as repairing and making clothes for their children. Still it was obvious that the modern green mothers were not fully able to complete these chores as they had delegated it to their own mothers. Hence, they felt not comfortable using a repair service, but rather considered it unnecessary, albeit they were not able do these chores by themselves.

## 4.3 Disposal Phase

The last phase of the product life cycle emphasizes the disposal of a product. Hereby, it is crucial to bear in mind that the useful life of a product always depends on the type of the product itself. As we focused on children's clothing in our research, the life span of a children's garment on average is rather short.

During our interviews, we noticed that environmentally conscious families are very aware of these short usage periods. Therefore, we could identify several peculiarities about the extension of the useful life of children's clothing.

### *Own Circular Networks and Convenience*

Considering the interviewees' disposal behavior and their opinion on this topic, we identified two tendencies which describe how green parents handle the disposal of their children's clothing. First, all interviewed mothers portrayed their (1) *own circular networks*, which they built up among family and friends. Within this network, they share and hand over children's clothing, so that the clothing circulates constantly. Second, we observed a certain degree of (2) *convenience*, which resonated throughout all interviews. The parents clearly demonstrated a strong understanding of how to prolong the useful life of the garment on the one hand, but also expressed the wish for convenient and straightforward solutions on the other hand.

### *Own Circular Networks*

For environmentally conscious parents handing over children's clothing to their family and friends emerged to be a rather naturally and extremely commonly accepted practice. Apart from one interviewee with an Indian background, all participants described how they created their very own networks that serve as means to prolong the useful life of their children's clothing. These networks were not perceived as something extraordinary or exceptional. On the contrary, for the interviewed parents it was considered normal to exchange clothing within the family and friends. For the majority, it was matter of course to either keep the clothing or hand it over so that the next child could wear it.

“As we have a network it is very easy to pass over the clothing. Especially now I have many friends who have babies as well. So, I can either inherit stuff from others or I can hand it over to them.” (Patrice)

“I think like that: When we buy clothes for my daughter we normally give it to friends when she has outgrown them and we also get a lot of clothes from our friends. That's how we have a circle among our friends.” (Lara)

However, the parents also pointed out certain doubts regarding the disposal of the clothing once it has reached the end of the circle:

“I usually keep the clothes because I have younger kids. I give them to the cousins. It is like our own circular economy. I will probably give away the clothing once we have reached the end of the cycle.” (Melanie)

“I keep the clothing because we want more children. It is all in boxes. Because in my boyfriend’s family, they are all done with children that’s why we got all their clothes. So everything I wanted to keep I kept for the next baby. And once I am done with family I would give it to the next person. Of course, I do not know what will be still usable. Because after seven generations of kids one part will be damaged.” (Patrice)

The parents’ idea to keep the clothing in the loop as long as possible indicates that the idea of circular principles is already existent. Notwithstanding, it can reach a point, where also environmentally conscious parents do not know where to give the used clothing to or are hesitant to give it to charity for example as Christina states:

“I am a bit reluctant to just give it away to charity because the clothes are actually too good. And it is not because other kids can’t have that piece but I feel that there is too much money in this to just put it away.” (Christina)

Therefore, a big majority of the parents highly appreciated the idea of a take-back system in combination with the receipt of a voucher:

“It would be great to get like 10 % discount or something, it would help a lot. It would encourage me to give the clothes back. I give it away anyways nowadays, but that would encourage to take it back to the store, probably use that voucher and buy more organic clothes. I think it is a good idea.” (Sofia)

“I would have a bigger incentive to make it happen if there is money involved.” (Christina)

One can clearly see here that the idea of a monetary incentive to foster the recycling behaviors seems to be favored and accepted by the parents. Hence, it becomes apparent that for environmentally conscious parents the idea of using a garment as long as possible is central. This tendency can even be enhanced by offering monetary incentives as a voucher, which can be cashed in the next purchase.

### *Convenience*

Directly connected with the idea of establishing circular networks is the fact that the participants expressed an ambition for finding convenient solutions regarding the disposal of their children’s clothing. More specific, we could observe the convenience being manifested in two variables: worthiness and space.

Melanie argued that for her, it is not worth to go to a flea market and sell the children’s clothing there as the effort she has to take into account might be much higher than the actual financial gain:

“I will probably give away the clothing once we have reached the end of the cycle. I think I would probably give it away for free because usually on a flea market you get 50 cents for a baby body. I am a bit lazy in that matter. At the end, I would probably only take 20 euros home with me. This is not really worth it.” (Malanie)

Just as Melanie, Lara does not see the benefit when she must invest much time into the process of selling the clothing:

“A few times when she has had a really nice piece that is still in good quality I try to sell it. But it is so much work. And I think I am a little bit lazy.” (Lara)

Next to Melanie’s and Lara’s preference to be able to dispose the clothing in an easy way, Denise mentions the problem of storage and how this can be solved with a take-back system:

“The biggest advantage is that I would not have to store the clothing. Something I am forced to do now. Because my son is growing so fast, he only wore some clothing two or three times. So, for that I would love the idea. My son is born in October and he needed a lot of small winter clothes. If my second kid will be born in July then I still need to buy new clothes because it is a different time of the year. So. I think it is a great idea and it would work for me totally.” (Denise)

Consequently, despite the existing circular network that the parents have built up, there are still challenges, which have an influence on the disposal behavior of environmentally conscious parents.

#### *Summary of Disposal Phase*

As the parents’ answers have shown, there is a strong sense of responsibility regarding the disposal of the children’s clothing. The parents have created their own circular economies within their nearest environment of friends and families, so that most of the children’s clothing is constantly kept within this loop. Thus, the green parents endeavor to ensure an extensive usage of clothing, so that only broken and unusable clothing is given or thrown away.

From these observations, we can then conclude that not only do parents use their networks as easy means to give away the children’s clothing, but there is also the aspect of communities, which comes into play. As discussed before, communities offer the possibility to share experiences and knowledge (Muniz & O’Guinn, 2001). Therefore, the creation of own circular networks is more than the mere advantage for the environment or cost savings, but also the aspect of socialization and exchanging ideas and opinions.

Another aspect that reinforces these thoughts on communities is the parents’ pursuit for monetary incentives and the expectation to be rewarded for their behavior. If the circular networks were only a means to being able to give the clothing to someone else excluding any social aspect, then the parents would not have expressed such a strong appreciation for the possibility to being rewarded financially as the take-back system suggests. As Joung and Park-Poaps (2013) stated, the consumer’s main motivation regarding reuse and resale behavior is to save money. This means that for parents the circular networks are primarily a way to communicate and help each other. Hereby, the monetary benefit is kept out totally. However, if they are offered an additional possibility to give away unused clothing, they would appreciate the possibility to use take-back systems and receive a voucher. Hence, the idea of own circular network still prevails, but can be supplemented by external services.



# 5 Discussion and Conclusions

This last section will highlight our main theoretical contributions as well as the practical implications. We will discuss how our empirical material and the executed analysis have resulted in the answer of our research question and how future research can be carried out to scrutinize some aspects more in-depth.

## 5.1 Research Aims

As demonstrated, our main research focus centered the idea of looking at PSSs in the children's clothing industry from a new angle, in our case through normative theory. Having discovered that PSSs are still rarely used in the children's clothing industry, it was interesting to look at this topic from a different research perspective, find reasons for it and give design recommendations for the construction of a PSS. To find adequate solutions, the research field of normative theory provided us with concepts such as the normalization process, which proved to suit our research design.

As a result, we developed our research question as follows:

*How can product-service systems be designed to become accepted as the norm?*

The first two chapters of the thesis provided the background containing information about the current problems of the fast fashion industry and illustrated the situation in which environmentally conscious parents find themselves when they make purchase decisions for their children's clothing. Resulting from this, we defined our research question with a focus on the normalization process of product-service systems. We then approached our research question through a thorough literature review that was centered around circular economy concepts and business models on the one hand and normative theory focusing on green family consumption on the other hand.

In the third chapter, we specified the chosen research approach and design. We decided to base our empirical study on semi-structured interviews to reveal the underlying norms and perceptions of green parents concerning children's clothing and how they handle the useful life of a garment. This led us to a grounded analysis focusing on the three phases of sorting the data, reducing it and arguing for our decisions.

Last, the fourth chapter dealt with the analysis and discussion of the empirical material. We divided our findings according to the useful life of a garment and assigned our developed concepts to each of the three phases. Taking the concepts and analyzing them, we could make inferences about the prevailing norms, which are dominating each of the three phases and are representative for green parents.

## 5.2 Theoretical Contributions

Our main theoretical contributions can be divided into three main parts as illustrated by Figure 10.

- Filling the *gap between product-service systems and normative theory*
- Identifying the *norms* affecting the normalization process of PSSs in the children's clothing industry with regards to green parents
- Understanding the *influencing factors*, which can restrain or facilitate the successful integration of PSSs in the clothing industry in general

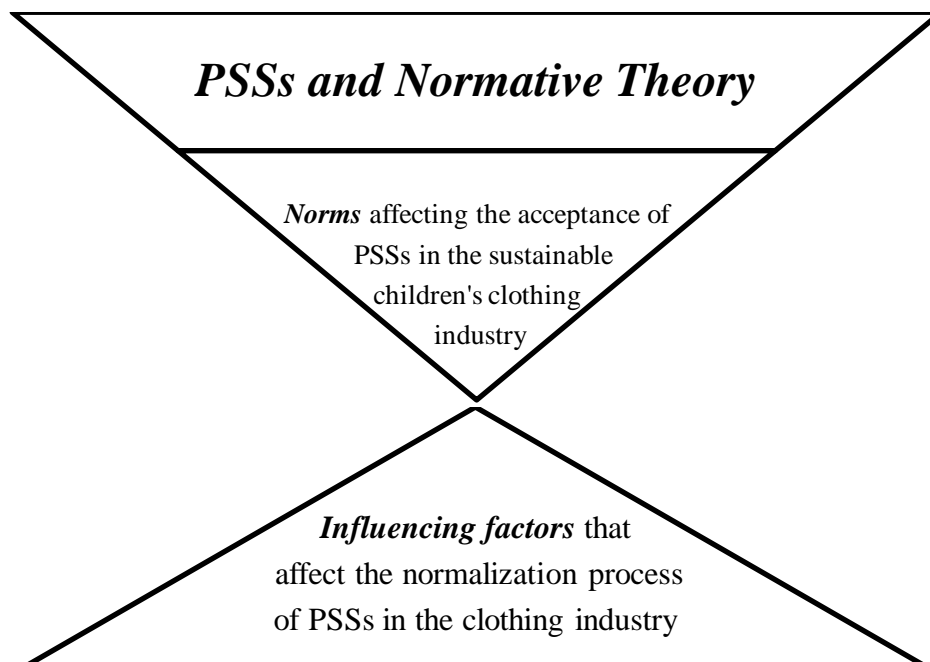


Figure 10: Knowledge generation from detailed towards general implications

First, we revealed a *research gap* relating to PSSs in the children's clothing industry. We related this gap to how environmentally conscious parents handle the consumption of children's clothing. As we discovered that there are circular business models that can solve the problem of a linear clothing consumption, we applied it to the children's clothing industry.

Second, we could specify *six different norms* with regards to the useful life of clothing (see Figure 11). All six norms were developed with the aid of the insights we gathered through our empirical data. This allowed us to widen the existing literature field of norms and PSSs.

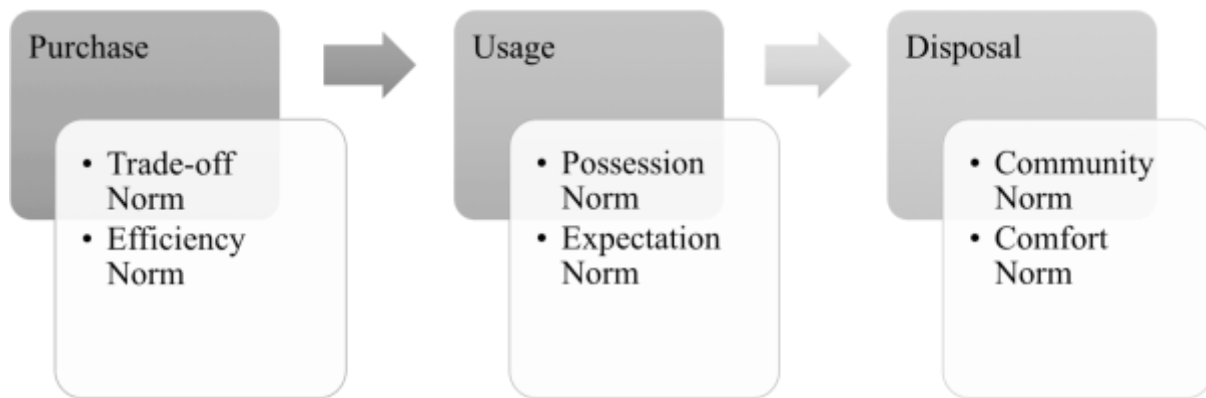


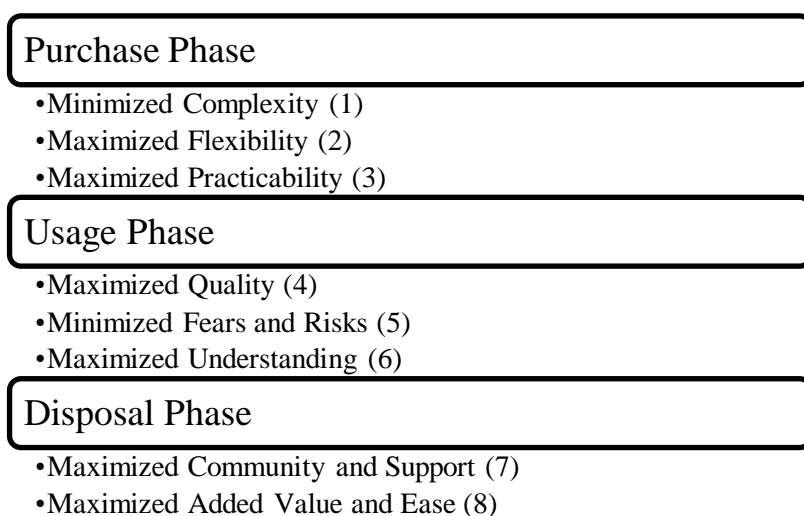
Figure 11: Norms affecting the normalization process of PSSs in the children's clothing industry

Third, our research enabled us to understand how the norms are holding back a successful integration of PSSs in the clothing industry. We think that comprehending the prevailing norms will support the normalization process of PSSs and make the concept more feasible for the public. With the aid of the developed norms, we offer a possibility to understand *the influencing factors* during the normalization process of PSSs in the clothing industry in general.

Consequently, our theoretical contribution encompasses the combination of PSSs and normative theory resulting in a possibility for PSSs to become more common and be accepted as the norm. This is directly connected with the idea of combining two different research fields.

In the following, we will depict the *six developed norms* according to each life cycle phase. Hereby, each norm describes the current situation and perception of PSSs in the green parents' life. We will consequently illustrate why these norms exist and how they developed.

Finally, we will illustrate how these norms can be interpreted on a more general level, so that our insights can be applied to PSSs in the clothing industry in general and be used for future. Hereby, we created *influencing factors* based on the *maximization and minimization of variables* capturing the norms that affect the normalization of PSSs. These insights can then serve as a theoretical base for the development of PSSs in the clothing industry and therefore integrate the normalization process of PSSs as illustrated in Figure 12.



*Figure 12: Influencing factors during the normalization process of PSSs in the clothing industry*

## ***Purchase Phase***

The purchase phase highlighted that environmentally conscious parents face several challenges and must make compromises when it comes to making purchase decisions.

### *Trade-off Norm*

The green parents' consumption practice as such differs from parents that do not pay attention to environmentally friendly consumption. Since green parents cannot find suitable clothing in every shop and as they try to consume less in general, the typical pleasure of shopping, which is important in our consumer society, cannot be reached. This results in the need to invest more time and being less flexible. Again, two variables, which are contrary towards today's society and people's consumption behaviors. Nowadays, consumers can buy everything they want wherever they want. Environmentally conscious parents have to distance themselves from this situation and therefore created a ***trade-off norm***, which incorporates the extra effort they acknowledge. This norm also integrates the idea of keeping control over their own purchase decisions. Therefore, the trade-off norm is characterized by the combination of the complexity of environmentally friendly purchase decisions and the degree of control one wants to keep during the actual purchase decision.

### *Efficiency Norm*

Moreover, we could observe the importance of pragmatism and the parents' sensitivity for quality and price. As children outgrow their clothing extremely fast and parents continuously have to look for suitable clothing, they developed pragmatic solutions and a pragmatic perception of how they see their lifestyle. Therefore, they distance themselves from too determined consumers in terms of choosing only the best sustainable options. Sometimes their role as parent requires a rethinking and the choice of a less environmental solution such as the purchase of non-organic products. However, they still aim to find the best option regarding quality and price. Green parents consider quality as extremely important, but also the price plays a crucial role for them. Hence, also green parents consider the ***efficiency norm*** as part of their consumption. They want to make the best possible solution in terms of quality and price and allow themselves to be pragmatic from time to time. All these variables are part of a norm, which is centered around the idea to reach efficient solutions.

### ***Theoretical Implications of the Trade-off and Efficiency Norm***

Both norms, the trade-off and efficiency norm, have illustrated two tendencies, which lead towards the development of generalized assumptions, which can be useful for the normalization process of PSSs overall. The three influencing factors are (1) ***maximized flexibility*** (2) ***minimized complexity*** and (3) ***maximized practicability***.

#### ***Influencing Factors 1 and 2: Maximized Flexibility and Minimized Complexity***

The trade-off norm has shown that green parents do acknowledge complexity and shoulder responsibility for their consumption. However, this norm also shows that to make PSSs more attractive for consumers, circular business models should solve this complexity and take over some of people's responsibilities. Hence, one can transform the trade-offs into a chance for PSSs to fill a gap ***minimizing complexity and maximizing flexibility***. This would directly lead towards easy applicable and flexible concepts of PSSs, which provide the consumer with room for making own adjustments so that the chosen service fits his lifestyle and does not complicate it.

#### ***Influencing Factor 3: Maximized Practicability***

Regarding the efficiency norm, it becomes apparent that in order for PSSs to be commonly accepted, they have to be designed in a way that does not hinder people to make efficient decisions. This leads towards a state, where the relationship of variables such as quality and price should be considered, as well as the fact that people prefer to be pragmatic. Consequently, ***practicability is a key prerequisite*** when it comes to the normalization process of PSSs in the clothing industry incorporating the idea of efficiency. If consumers perceive PSSs as practical and as a solution that solves their actual needs efficiently, PSSs can become a norm.

### ***Usage Phase***

When the parents were confronted with the idea of a renting system, most of the mothers were not familiar with this service, and therefore showed either scepticism or curiosity. Only few of the mothers supported the renting service, as they perceived it to be beneficial, as the service would provide them more free time.

#### ***Possession Norm***

One possible reason why the mothers found this option less attractive can be explained due to the fact, that the mothers knew they would eventually have to part from the clothing. They also raised concerns about the terms and conditions, implicating that they would not feel as comfortable dressing their children in rented clothing, as children tend to be messy and damage clothing. This let us conclude that individuals have difficulties with temporary possessions knowing that they have to give back the children's clothing after a while. Consequently, the mothers cannot conduct possession rituals and make the clothes mentally their own, which leads towards a feeling that the clothing does not belong to them. This can be one of the underlying reasons why renting clothes has not become more popular yet. Therefore, we summarized these findings as ***possession norm***, which describes the green parents' wish to possess clothing.

### *Expectation Norm*

Additionally, we discovered that most of the interviewed mothers took the role of motherhood seriously and we consequently derived the norms attached to motherhood to be rather strong. Women feel compelled to act accordingly to the role, even though they do not have the skills to do so such as repairing clothes and washing their children's clothes correctly. Still, they deny that there is a need for a service that could help them in their everyday life. These observations lead us towards the definition of an ***expectation norm***, which summarizes the traditional roles and responsibilities of a mother resulting in the completion of these expectations.

### ***Theoretical Implications of the Possession and Expectation Norm***

Our research shows that the possession and expectation norms are strong among green parents. Therefore, we could derive three influencing factors with regards to a successful implementation of PSSs referring to the usage phase of clothing. The three factors are (4) ***maximized quality*** (5) ***minimized fears and risks*** and (6) ***maximized understanding***.

#### *Influencing Factors 4 and 5: Maximized Quality and Minimized Fears and Risks*

Thus, one can argue that the possession norm could be even stronger for the average consumer who is not familiar with PSSs or other forms of a more sustainable consumption. For the average consumer, it might seem peculiar and unnecessary to use a PSS, as the market offers cheap fast fashion that is available for anyone to purchase. The possession norm may be less distinctive if the consumer feels that he is gaining more out of it than if he purchased and owned the garment. Important factors here could be the ***quality of the clothes*** compared to the poor quality of fast fashion and ***taking off potential fears and risks*** that restrict them from using the PSSs. We discovered from our research that the green mothers were more open to renting special garments for certain occasions such as weddings or New Year's Eve. This could be the starting point for the average consumers, eventually spreading to everyday clothing and changing the norms of ownership and possession.

#### *Influencing Factor 6: Maximized Understanding*

In addition, we consider the expectation norm to have a great influence on the green mothers. Our society and culture has created a certain role of a mother, which individuals try to reach. The same expectation norms affect the average consumers, as they try to live up to the expectations and role of the perfect mother, created by the society. The expectation norm can be transferred to other aspects of life, as people try to act accordingly to certain roles generated by the society such as radiating success and integrity as business woman/man. Here it is important to ***understand people's main motivations to fit these roles and create customized solutions, which respond to people's aspirations***.

## ***Disposal Phase***

The disposal of clothing has turned out to have a special importance for environmentally conscious parents in terms of social benefits and convenience.

### *Community Norm*

During our interviews, we could recognize how the parents have built up their very own circular networks through which they exchanged clothing with families and friends. These networks proved to work not merely as means to give away clothing, but also work as a community. Therefore, green parents distance themselves from an anonymous society, which stands for the pursuit to live your life as independent as imaginable. We could observe that the interviewed parents challenge exactly this state by creating their own communities. On these grounds, they developed a ***community norm*** that centers their ideals of collaborating and helping each other.

### *Comfort Norm*

Additionally, we could observe how green parents consider convenience to be crucial regarding the disposal of clothing. Not only were they in favor of receiving monetary incentives when handing in worn clothing, but they also appreciated the idea not to have to sell the clothing themselves. Thus, their opinions can be related to a ***comfort norm***, which centers the idea of making not too complicated decisions on the sustainable disposal of children's clothing.

### ***Theoretical Implications of the Community and Comfort Norm***

Also, the community and comfort norm proved to reveal theoretical implications, which can be used during the normalization process of PSSs. We discovered that both norms influence the disposal behavior of children's clothing. Therefore, we claim that the influencing during the disposal phase are (7) ***maximized community and support*** and (8) ***maximized added value and ease***.

#### *Influencing Factor 7: Maximized Community and Support*

Transferring the concept of a community and comfort norm to a more general level, it becomes apparent that working together and receiving rewards is crucial when it comes to the implementation of PSSs. As the community norm has highlighted, people do appreciate the help of others and the communal feeling to be part of a group. Therefore, PSSs can be applied successfully if ***people's aspirations to be part a community and to receive support*** are considered. Especially at the beginning when PSSs are a new concept and consumers are unfamiliar with it, it can be crucial to build up a community around the PSS and make people feel that they contribute to the community positively. Also, users should be given the possibility to receive support to facilitate the familiarization with the concepts as such.

#### *Influencing Factor 8: Maximized Added Value and Ease*

Environmentally conscious parents also appreciate comfort. Therefore, we suggest building PSSs, which embrace the idea of convenience. This can finally result in offering a service, which can be ***easily implemented in one's daily life and that offers an added value***. The normalization process of PSSs would be hindered, if people perceive it to be more expensive

and if the service does not add any value. Hence, these points should be properly integrated when it comes to the design of PSSs in the clothing industry.

### *Summary of Theoretical Contributions*

First, we filled the research gap between PSSs and normative theory. We reached this by combining the social normalization process with the concept of PSSs. Second, our interviews revealed norms that affect the consumption of sustainable children's clothing. As these six norms are based on the insights gathered from the interviews, they provide unique and new viewpoints how norms are related to PSSs in the clothing industry: (1) Trade-off Norm (2) Efficiency Norm (3) Possession Norm (4) Expectation Norm (5) Community Norm (6) Comfort Norm.

Third, we took the developed norms and analyzed them from a more general perspective. This enabled us to craft eight influencing factors concerning the social normalization process of PSSS in the clothing industry: (1) Minimized Complexity (2) Maximized Flexibility (3) Maximized Practicability (4) Maximized Quality (5) Minimized Fears and Risks (6) Maximized Understanding (7) Maximized Community and Support (8) Maximized Added Value and Ease. These eight influencing factors can then be used for the design of PSSs in the clothing industry.

## 5.3 Practical Implications

Next to the described theoretical contributions, we also emphasize the importance of relevant practical implications. As depicted in the section before, we revealed many new insights about norms linked to sustainable children's clothing, which can offer useful implications to companies engaging in circular business models in the clothing industry.

### *Purchase*

In general, the parents showed a high willingness to make compromises. Especially during the purchase phase, it became evident that environmentally conscious parents strive towards the ***integration of flexibility and the acceptance of trade-offs*** and difficulties to make a sustainable lifestyle for themselves and their children possible. Hence, we recommend companies to pay attention to three aspects.

First, it is crucial to consider the complexity of the purchase decisions that green parents are confronted with. If product-service systems are designed and communicated in a complex manner, they will not be perceived as alternative to conventional products. Thus, firms should offer easy solutions, which ***communicate less complexity and more freedom*** compared to normal products. The customer should be able to feel comfortable using the product-service system and understand the positive impacts he can make. Therefore, the firm should not only focus on the benefit for the environment, but rather market the benefit for the parent, namely an easy usable service, which can be used flexibly. The customer should not feel that when using a PSS, he still faces the daily struggles related to making the right decision, but the company takes over this responsibility.



Second, the participants expressed different opinions regarding the degree to which they want to keep the control of the purchase themselves. Some wanted to keep full control and have all responsibilities assigned to them, whereas others expressed a desire to give up responsibility and control. To make this a part of the PSSs, companies should offer *a balanced service system*, which allows the parents to be able to give away a certain degree of control on the one hand, but also provide the possibility to keep control on the other hand. This can be reached by offering customized selection schemes for the renting system of clothing letting the consumer make individual decisions.

Last, all parents demonstrated a sensitivity for quality and price. Therefore, it is first important to *offer good quality products, but for a reasonable price*. The PSS should be in a reasonable price range communicating good quality and a good turnout and value for customer. He should understand that it is worth to use the PSS instead of purchasing the actual product. As the parents' answers showed, all participants applied rather pragmatic solutions when it comes to the purchase of children's clothing. Having children does implicate to sometimes act according to own rules to deal with daily life challenges as a parent. Therefore, firms should encounter this and design the product-service system without a moralized undertone, which restricts the customer too much.

### *Usage*

It became apparent that the ownership of clothes is still important, even to green consumers. Owning clothes instead of renting them is such a strong norm that it can hinder the appropriation of use-oriented services. Some of the interviewed mothers considered the renting service as a positive option as it can help with time management, since one does not have to go to the shop to buy clothes. Renting clothes can also be beneficial if one does not have a lot of space to store clothes, or does not have their own circular network among families and friends.

Therefore, companies that want to design a renting service should focus on marketing the beneficial aspects of the service, which allows the parents to concentrate on other aspects of their lives else than shopping and storing clothes. Another aspect that we discovered were doubts regarding the terms and conditions of the renting service. This implicates that as the service is rather new to the parents, they raise questions regarding possible damages of the clothing and the renting period itself. Hence, companies should *be open and transparent* concerning the terms and conditions, so that the consumer feels safe using the concept and can use garments as they were her own. This may be one factor that can help consumers to slowly accept other modes of consuming, rather than just owning clothing.

Few of the interviewed mothers mentioned that *they prefer to buy used clothes*, as it is easier to dress on the child as the materials are softer due to previous usage. This is an interesting finding, which companies could use to promote the benefits of second-hand clothing. This could also change the perception of second-hand clothing from old and worn to soft and ready to wear.

Another important implication for companies is to understand that cultural backgrounds affect our perception and norms. One mother with Indian heritage was not fond of second-hand clothes because she did not know who wore it before and if it was clean. This way of thinking is in her genes and can be difficult to change. The other mothers we interviewed were not concerned about who might have worn the clothes before or that the garments might not be hygienic. *Cultural differences* have a vast effect on our behavior and should be taken into

consideration when designing PSSs. Another way to make second-hand clothing less intimidating is to portray the used clothes in a more personal light, by offering the consumers information on the person who has worn the previously.

The advice service caused discomfiture among the interviewed mothers. It was clear that the mothers did not want to receive advice from a company as they had a strong belief that they knew how to care for the clothes. This was clearly linked to their own perception as a mother, being capable to perform tasks that are central for the role of a mother. If a company offered an advice service, they should be very sensitive about how it is communicated to the mothers as they could feel it is offensive and attacking them as a mother. The advice should be presented in a way that mothers can feel it is their own choice to use it, not because they need it due to their inadequate skills, but because they chose to. One can argue that norms about how mothers should behave and what it means to own clothing are still very strong and it takes time for these norms to change. These issues are very sensitive, and if marketed to consumers, *a well-thought-through communication* is needed so that the parents do not feel that their parenting skills or values are offended.

### *Disposal*

We could observe that for green parents having own circular networks and exchanging clothing amongst each other is extremely normal. Not only do these networks help the parents to prolong the useful life of children's clothing, but they also serve as possibility to *build up a strong community*. Hence, community values are central when it comes to designing PSSs within the children's clothing industry. The parents should be given the possibility to be a part of a community and be connected with each other. Therefore, it is the company's responsibility to offer forms of networks, which allow an exchange of opinions and ideas. The whole PSSs should thus be designed in a personal manner, so that it does not appeal to be too abstract for the parents.

Next to the communal aspects characterizing PSSs for children's clothing comes the *importance of convenience*. A predominant majority of the parents considered convenience as key factor in terms of opting for a product-service system or not. If a PSSs is too complicated to use as a parent or if it was more expensive than buying the clothes, then these services will not be accepted by the consumers.

As we could see, the circular networks are so important for the parents since they can help and support each other. Even though they did not specifically express to use these networks as means to save money, we can make this assumption as all parents highly appreciated the idea of being offered a voucher when they give back used clothing to the company. Consequently, offering the possibility to *receive a monetary incentive* when using a PSS should be considered when designing it. Also, creating an easy and user-friendly logistics system is crucial. If it takes too much effort for parents to order and send back clothing, then they will opt for other alternatives.

### Practical Recommendations for Pitupi

With the insights gained from our research, it is possible provide recommendations for Pitupi on how they can design their own PSS.

Pitupi is an ecologically and socially responsible children’s clothing company based in Sweden (Pitupi, 2017a). The company sells colorful, sustainably and socially responsible produced children’s clothing made from toxin free materials in a sustainable way (Pitupi, 2017b). Pitupi emphasizes its transparency and the consumers get information with every purchase and the seamstress who made the garment (Pitupi, 2017b).

The fair fashion startup is a sustainable company but has no experiences with circular business models or PSSs. We believe that PSSs would suit Pitupi’s business model and could provide them with new business opportunities and a change to engage the customers and build a community around the brand.

According to our findings and analysis, we designed a structured guide to give recommendations on the suitability of the different circular business models. Hereby, we based our suggestions on the discovered norms and information on the most preferred product-service systems that we collected during the interviews.

As a first step, we recommend Pitupi to establish a take-back business model. During our research, we discovered that green parents mostly appreciated **result oriented** business models before use or product oriented ones. Therefore, we think that offering a take-back service would encourage consumers to engage in circular business models.

We applied the **cyclical model of normalization** (Jensen & Wagoner, 2009) and assigned the recommendations accordingly to each of the four phases (see Figure 13).

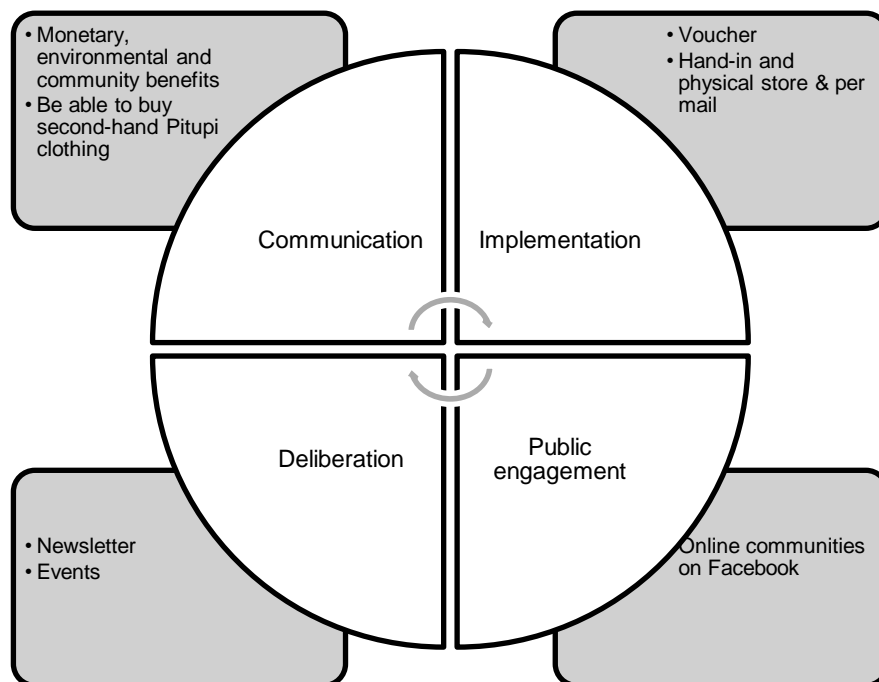


Figure 13: Cyclical model of normalization containing practical recommendations for Pitupi

### *Communication*

The first step within the normalization process is communication. For the take-back business model to be accepted on the market, Pitupi should design its communication strategy in an effective way highlighting especially the benefits for the parents. As we discovered during our interviews, green parents value the fact to be part of a community, being able to save money when receiving a voucher and contribute to a more sustainable textiles industry. However, these last aspects should not be put into forefront as the monetary incentive and community aspect are clearly more important for the parents. Additionally, Pitupi should make clear that by offering the opportunity to give back used clothing the customers will then have the possibility to shop second-hand clothing. This aspect of a mixed assortment with new and second-hand clothing was also appreciated by the interviewees. Possible communication channels could be Pitupi's corporate blog, social media, newsletter and collaborations with influencers that spread the new concepts.

### *Implementation*

After the communication follows the implementation phase. During this second phase, the take-back service should be implemented thoroughly and accordingly to the consumer's wants and needs. As already discussed, the customers would receive a voucher after the hand-in of old Pitupi clothes. There should only be the possibility to hand in used Pitupi garments to guarantee good quality second-hand clothing in the web shop afterwards. Once Pitupi has taken back a used garment it can either be resold in their web shop and labelled as second-hand. If the clothing has stains or holes on it, we would recommend to either let it be repaired or upcycled directly in Sweden. Additionally, Pitupi should consider offering the possibility to hand in old clothing in physical stores. A clear majority of the interviewed parents considered a convenient logistics systems as crucial. Therefore, it can be beneficial if Pitupi asks some retailers that are already selling the Pitupi brand if they would be willing to accept used clothing for sale. This would consequently facilitate the whole hand-in process for the parents.

### *Public Engagement*

The third step is to engage the public and encourage them to start using the service. This is a crucial part of the normalization process, as through public engagement new ideas start to spread to a wider audience. As for Pitupi, we would recommend them to encourage their consumers to engage in an online community, where customers can communicate with each other's and with the brand.

The online community could be developed through a Facebook group, which is administered by one Pitupi employee. It would provide a platform, where they connect with other parents interested in sustainable children clothing and with the brand. As a result, Pitupi would create a strong online community that adds value and attracts new customers.

### *Deliberation*

Deliberation is part of the final stage of the normalization process, where one can eventually see if people will adapt the take-back service or not. In this stage, it is crucial to remind people to use the service and engage in the community. We recommend Pitupi to send regular emails and maintain the relationship with the customers, reminding them to be a part of a community and clarify the goal, what the community can achieve together, leading towards a more sustainable planet and future of their children.

The way the message is compiled is important, as normative messages can have a positive effect on people's behavior when considering sustainably related aspects. This means that as soon as people start to feel part of an idea or movement, they are more likely to accordingly.

Pitupi could organize community events, where they invite Pitupi customers to have an afternoon coffee with their families. These events will emphasize the importance of PSSs and strengthen the communal aspect, which makes the service more feasible for people.

In case Pitupi will implement the take-back system successfully and is able to launch a prosperous take-back service, the next step in the future could be to move from result oriented business models to product and use oriented, as the customers have started to familiarize themselves with PSSs.

### *Summary of Practical Implications*

As we assigned our practical implications to the product life cycle, our main findings are structured according to the purchase, usage and disposal phase.

First, companies should offer easy and flexible solutions regarding the design of PSSs to be perceived as equal alternative to conventional products. Also, we recommend firms to integrate customization providing people with the possibility to control their choices. Additionally, the price-quality ratio is crucial for a successful implementation.

Second, firms should market the benefits of the PSSs combined with a transparent and open communication of the terms and conditions of the chosen PSS. Moreover, companies should consider the customer's cultural background to facilitate the acceptance of the PSS as cultural differences can strongly affect the perception of PSSs. It is also crucial to formulate and communicate the idea behind the PSSs in a sensitive way so that the customers perceive the PSS in a positive way without feeling pressured.

Third, firms should focus on the development of communities, which provide the customers with a possibility to exchange opinions and engage with others. This idea can even be enlarged by offering additional support offered directly by the company. Also, the PSS should be as convenient as possible so that the customer is given a valuable alternative to a conventional product.

## 5.4 Limitations and Further Research

As our research focused on the sustainable consumption behavior of children's clothing we made several restrictions concerning the sampling strategy, which allowed us to gather suitable data. Below, we demonstrate our decisions and how they can affect the final results.

Different kinds of design dilemmas may occur when conducting a research. Firstly, researchers should decide on unit of analysis, which forms the basis of any sample (Easterby-Smith, Thorpe & Jackson, 2015). Our sample was formed from different individuals, who we interviewed concerning children's clothing and PSSs. These individuals were environmentally conscious parents, who buy organic children's clothing.

Another limitation in our study could be the small sample of individuals that were interviewed. As we conducted intense, semi-structured interviews, a smaller sample of people who fulfilled our criteria was more beneficial than a large sample with people who are not educated in the matter of sustainability.

All the interview participants were female. This was because no male participants were found with the snowball sampling. As women still handle majority of the clothing shopping for children in the family (Mader & Schneebaum, 2013) we considered this appropriate for our research.

One limitation regarding the interviews is the fact that people do not necessarily reveal their real motives or they might not be aware of them (McClellan, 1965). People might show themselves in a more favorable light when it comes to sustainability and purchasing children's apparel. Here the responsibility is on the researchers, and the way the data is analyzed and how the results are derived from it. According to Alvesson (2003) the researcher should not idealize the interview situation by assuming that the interviewee is able and competent to tell the truth and offer the data needed to reveal his or her perceptions or values about the matter at hand. Alvesson (2003) continues that the interview situation requires theoretical understanding and a reflexive approach. He argues that without these approaches, there is a risk of naive and unsound interpretations of the data. Our research is based on a strong theoretical pillar, which enabled us to apply reflexivity throughout the interviews. This finally allowed us to interpret the participants' answers in a realistic and pragmatic manner.

### *Future Research*

Since our research revealed new insights on the influencing factors for the acceptance of PSSs in the clothing industry in general, we suggest future research to focus on how strongly these influencing factors affect the normalization process of PSSs in the clothing industry. This can be reached through a quantitative analysis such as surveys. We think that it could be useful for companies to know, which influencing factors have the biggest impact on the normalization process of PSSs being measured in numbers.

With regards to our research sample, we would recommend future research to include the gender aspect, which can eventually result in different insights. Consequently, we suggest a sample consisting of a mixture of men and women.

According to Raymond (2003), customers will be more active and influential in markets in the future. However, markets in general are going to be fragmented and not following any logical

patterns. In the future, there will not be an average customer who follows the trends but instead several small groups of customers who behave irrationally, emotionally and chaotically. Radical consumer groups might lead the markets in more complex developments also in the eco-clothing field (Niinimäki, 2010). Therefore, we suggest future research to focus on the changing behavior of parents as we could observe that especially the idea of parenthood and the consumption patterns will change in the future. During our interviews, we could observe certain trends such as the need for external help on clothing repair and the importance of internal communities, which could facilitate the acceptance of PSSs. Therefore, it would be of interest to scrutinize external trends and their influence on PSSs.

# References

- Alvesson, M. (2003). Beyond Neopositivists, Romantics, and Localists: A Reflexive Approach to Interviews in Organizational Research, *The Academy of Management Review*, vol. 28, no. 1, pp.13-33
- Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative variables, *Journal of Experimental Social Psychology*, vol. 6, pp.466–487
- Arela (2017). Arela for good, Available Online: <https://www.arelastudio.com/pages/for-good> [Accessed 28 March 2017]
- Baltes, P.B. (ed.) (1978). *Lifespan Development and Behavior*, New York: Academic Press
- Bamberg, S., Hunecke, M. & Blöbaum, A. (2007). Social context, personal norms and the use of public transportation: two field studies, *Journal of Environmental Psychology*, vol. 27, no. 3, pp.190–203
- Barnes, L., Gabrielli, V., Baghi, I. & Codeluppi, V. (2013). Consumption practices of fast fashion products: A consumer-based approach, *Journal of Fashion Marketing and Management: An International Journal*, vol. 17, no. 2, pp.206-224
- Benyus, J. M. (2002). *Biomimicry - Innovation inspired by nature*, New York: Harper Perennial
- Bertoldo, R., Castro P. (2016). The outer influence inside us: Exploring the relation between social and personal norms, *Resources, Conservation and Recycling*, vol. 112, pp.45-53
- Berkowitz, L. (ed.). (1977). *Advances in experimental social psychology*, New York: Academic Press
- Besch, K. (2005). Product-service systems for office furniture: barriers and opportunities on the European market, *Journal of Cleaner Production*, vol. 13, pp.1083-1094
- Bicchieri, C. (2006). *The grammar of society. The nature and dynamics of social norms*, Cambridge: Cambridge University Press
- Bocken, N.M.P., Pauw, I., Bakker C., Van der Grinten B. (2015). Product design and business model strategies for a circular economy, *Journal of Industrial and Production Engineering*, vol. 33, no. 5, pp.308–320
- Boztepe, A. (2012). Green Marketing and Its Impact on Consumer Buying Behavior, *European Journal of Economic & Political Studies*, vol. 5, no. 1, pp.5–21,
- Bryman, A. & Bell, E. (2015). *Business Research Methods*, Oxford: Oxford University Press
- Cairns, K., Johnston, J. & MacKendrick, N. (2013). Feeding the ‘organic child’: Mothering through Ethical Consumption, *Journal of Consumer Culture*, vol. 13, no. 2, p.97-118
- Chapman, A. (2010). *Mistra Future Fashion - Review of Life Cycle Assessments of Clothing*. [pdf] Available at [http://www.oakdenhollins.com/media/232/2010\\_mistra\\_review\\_of\\_life\\_cycle\\_assessments\\_of\\_clothing.pdf](http://www.oakdenhollins.com/media/232/2010_mistra_review_of_life_cycle_assessments_of_clothing.pdf) [Accessed 2 March 2016]
- Charmaz, K. (2006). *Constructing Grounded Theory*, London: SAGE Publications



- Chatvijit Cook, S. & Yurchisin, J. (2017). Fast fashion environments: consumer's heaven or retailer's nightmare? *International Journal of Retail & Distribution Management*, vol. 45, no. 2, pp.143 - 157
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places, *Journal of Personality and Social Psychology*, 58, pp.1015–1026
- Dawes, R. & Messick, D. (2000). Social Dilemmas, *International Journal of Psychology*, vol. 35, no. 2, pp.111 - 116
- Derlega, V.J., Grzelak, J. (eds.). (1982). Cooperation and helping behavior: Theories and research, New York: Academic Press
- Diekmann, A. & Preisendörfer, P. (2003). Green and Greenback: The Behavioral Effects of Environmental Attitudes in Low-Cost and High-Cost Situations, *Rationality and Society* vol. 15, no., 4, pp.441–472,
- Easterby-Smith, M., Thorpe R. & Jackson, P. R. (2015). *Management & Business Research*, London: SAGE Publications
- Ellen MacArthur Foundation (2015). The concept of a circular economy, Available Online: <https://www.ellenmacarthurfoundation.org/circular-economy/overview/concept> [Accessed 17 March 2017]
- Ellen MacArthur Foundation (2012). Towards a circular economy: Business rationale for an accelerated transition [pdf] Available at: [http://www.ellenmacarthurfoundation.org/assets/downloads/TCE\\_Ellen-MacArthur-Foundation\\_9-Dec-2015.pdf](http://www.ellenmacarthurfoundation.org/assets/downloads/TCE_Ellen-MacArthur-Foundation_9-Dec-2015.pdf) [Accessed 23 March 2017]
- Elliott, R & Wattanasuwan, K. (1998). Brands as symbolic resources for the construction of identity, *International Journal of Advertising*, vol. 17, no. 2, pp.131-144
- European Environment Agency (2016). Circular economy in Europe: Developing the knowledge base [pdf] Available at: <http://eco.nomia.pt/contents/documentacao/thall6002enn-002.pdf> [Accessed 23 March 2017]
- FashionRevolution.org (2017). About. Available Online: <http://fashionrevolution.org/about/> [Accessed 17 March 2017]
- Fletcher, K. (2009). *Sustainable fashion and textiles: Design journeys*, London: Earthscan
- Gam, H.J., Cao, H, Farr, C. & Kang, M. (2010). Quest for the eco-apparel market: a study of mothers' willingness to purchase organic cotton clothing for their children, *International Journal of Consumer Studies*, vol. 34, pp.648-656
- Geertz, C. (1977). *The interpretation of cultures*, New York: Basic Books
- Glaser, B. G. (1978). *Theoretical sensitivity*, Mill Valley, CA: The Sociology Press
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*, Chicago: Aldine
- Golden-Biddle, K. & Locke, K. (1993). Appealing Work: An Investigation of How Ethnographic Texts Convince, *Organization Science*, vol.4, no.4, pp.595- 616
- Greenpeace, 2016. Fast fashion is “drowning” the world. We need a Fashion Revolution! Available at: <http://www.greenpeace.org/international/en/news/Blogs/makingwaves/fast-fashion-drowning-world-fashion-revolution/blog/56222/> [Accessed 28 April 2017]

- Hawken, P., Lovins, A., Hunter Lovins L. (2002). *Natural Capitalism. Creating the Next Industrial Revolution*, Boston: Back Bay Books
- Jacobs, H.E. & Bailey, J.S. (1982). Evaluating participation in a residential recycling program, *Journal of Environmental Systems*, vol. 12, no. 2, pp.41–152
- Jansson, J. & Dorrepaal, E. (2015). Personal Norms for dealing with Climate Change: Results from a Survey Using Moral Foundations Theory, *Sustainable Development*, vol. 23, no. 6, pp.381-395
- Jensen, E. & Wagoner, B. (2009). A Cyclical Model of Social Change, *Culture & Psychology*, vol. 15, no. 2, pp.217–228
- Joung, H. (2014). Fast-fashion consumers' post-purchase behaviours, *International Journal of Retail & Distribution Management*, vol. 42, no. 8, pp.688-697
- Joung, H-M. & Park-Poaps, H. (2013). Factors motivating and influencing clothing disposal behaviours, *International Journal of Consumer Studies*, vol. 37, no. 1, pp.105- 111
- Köksal, M. H. (2007). Consumer behaviour and preferences regarding children's clothing in Turkey, *Journal of Fashion Marketing and Management: An International Journal*, vol. 11 no. 1, pp.69-81
- Lacy, P., Rutqvist, J. (2015). *Waste to wealth: The circular economy advantage*, Basingstoke, Hampshire: Palgrave Macmillan
- Linder, M. & Willander, M. (2017). Circular Business Model Innovation: Inherent Uncertainties, *Business Strategy and the Environment*, vol. 26, pp.182–196
- Mader, K. & Schneebaum, A. (2013). The gendered nature of intra-household decision making in and across Europe, *Department of Economics Working Paper Series*, 157. Vienna: WU Vienna University of Economics and Business
- McClelland, D.A. (1965). Achievement and Enterprise, *Journal of Personal Social Psychology*, vol. 1, pp.389-392
- McCracken, M. (1986). Culture and Consumption: A Theoretical Account of the Structure and Movement of the Cultural Meaning of Consumer Goods, *Journal of Consumer Research*, vol. 13, no. 1, pp. 71 – 84
- McDonough, W. J. and Braungart, M. (2009). *Cradle to cradle: Remaking the way we make things*, London: Vintage Books
- McNeill, L. & Graham, T. (2014) Mother's choice: An exploration of extended self in infant clothing consumption, *Journal of Consumer Behaviour*, vol. 13, no. 6, pp.403-410
- Meredith Corporation (2017). *The Ultimate Guide to Green Parenting*, Available at: <http://www.parents.com/parenting/better-parenting/green/the-ultimate-guide-to-green-parenting/> [Accessed on May 11 2017]
- Moisander, J. (2007). Motivational Complexity of Green Consumerism, *International Journal of Consumer Studies*, vol. 31, no. 4, pp.404–409
- Muniz, A. & O'Guinn, T. (2001). Brand Community, *Journal of Consumer Research*, vol. 27, no.4, pp.412–432

- Niinimäki, K & Hassi, L. (2011). Emerging design strategies in sustainable production and consumption of textiles and clothing, *Journal of Cleaner Production*, vol 19, no. 16, pp.1876 – 1883
- Ostenwalder, A., Pigneur, Y. & Tucci C.L. (2005). Clarifying Business Models: Origins, Present, and Future of the Concept, *Communications of the Association for Information Systems*, vol. 16, pp.1-25
- Peattie, K. (2010). Green Consumption: Behaviour and Norms, *The Annual Review of Environment and Resources*, vol. 35, pp.195–228
- Pitupi (2017a). People to people, Available Online: <http://www.pitupi.de/en/> [Accessed 27 March 2017]
- Pitupi (2017b). Creativity in design, Available Online: <http://www.pitupi.de/en/creativity-in-design/> [Accessed 27 March 2017]
- Pookulangara, S., Shephard, A. (2014). Slow fashion movement: Understanding consumer perceptions – An exploratory study, *Journal of Retailing and Consumer Services*, vol. 20, no. 2, pp.200-206
- Rennstam, J., Wästerfors, D. (2015). Från stoff till studie: om analysarbete i kvalitativ forskning, Lund: Studentlitteratur
- Rettie, R., Burchell, K. & Barnham, C. (2014). Social normalisation: Using marketing to make green normal, *Journal of Consumer Behaviour*, vol. 13, no. 1, pp. 9–17
- Ritch, E. L., Brownlie, D. (2016). Doing It for the Kids: The Role of Sustainability in Family Consumption, *International Journal of Retail & Distribution Management*, vol. 44, no. 11, pp.1100–1117
- Saldana, J. (2009). *The Coding Manual for Qualitative Researchers*, Los Angeles, CA: SAGE Publications
- Stahel, W. R. (2010). *The performance economy*, UK: Palgrave Macmillan
- Stål, I & Jansson, J. (2017). Sustainable Consumption and Value Propositions: Exploring Product–Service System Practices Among Swedish Fashion Firms, *Sustainable Development*, vol. 25, no. 1, pp.1-13
- Swedish Chemicals Agency (2014). Chemicals in textiles – Risks to human health and the environment [pdf] Available at: <https://www.kemi.se/files/8040fb7a4f2547b7bad522c399c0b649/report6-14-chemicals-in-textiles.pdf> [Accessed 28 April 2017]
- Thompson, C.J. (1996). Caring consumers: gendered consumption meanings and the juggling lifestyle, *Journal of Consumer Research*, vol. 22, no.4, pp. 388–407
- Thøgersen, J. (1999). The ethical consumer: moral norms and packaging choice, *Journal of Consumer Policy*, vol. 22, no. 4, pp.439–460
- Thøgersen, J. (2002). Direct experience and the strength of the personal norm–behavior relationship, *Psychology and Marketing*, vol. 19, no.10, pp.881–893
- Thøgersen, J. (2006). Norms for environmentally responsible behaviour: An extended taxonomy, *Journal of Environmental Psychology*, vol. 26, pp.247-261

- Thøgersen, J. (2008). Social norms and cooperation in real-life social dilemmas, *Journal of Economic Psychology*, vol. 29, no. 4, pp.458–472
- Thøgersen, J. (2009). The Motivational Roots of Norms for Environmentally Responsible Behavior, *Basic and Applied Social Psychology*, vol. 31, no. 4, pp.348–362
- Tischner U, Verkuijl M, & Tukker, A. (2002). Product-service systems: best practice document: SusProNet
- Tukker A. (2004). Eight types of product-service system: Eight ways to sustainability? Experiences from Suspronet, *Business Strategy and the Environment*, vol. 13, no. 4, pp.246-260
- Tukker A. & Tischner U. (2006). Product-services as a research field: past, present and future. Reflections from a decade of research, *Journal of Cleaner Production*, vol. 14, no. 17, pp.1552-1556
- Tukker, A. (2015). Product services for a resource-efficient and circular economy - a review, *Journal of Cleaner Production*, vol. 97, pp.76-91
- Unilever (2013). How children inspire sustainable living - Research among parents and their children in the US, UK, India and Indonesia [pdf] Available at: [https://www.unilever.com/Images/unilever-project-sunlight-white-paper\\_tcm244-417250\\_en.pdf](https://www.unilever.com/Images/unilever-project-sunlight-white-paper_tcm244-417250_en.pdf) [Accessed 28 April 2017]
- Van Lange, P.A.M., Joireman, J., Parks, C.D. & Van Dijk, E. (2013). The psychology of social dilemmas: A review, *Organizational Behavior and Human Decision Processes*, vol. 120, no. 2, pp.125–141
- Vigga (2017). English, Available Online: <http://www.vigga.us/in-english/> [Accessed: 28 March 2017]
- Wang, P. (2007) Consumer behavior and willingness to pay for organic products. MS Thesis. San Jose State University, San Jose, CA
- Young, W., Hwang, K., McDonald, S. & Oates, C. J. (2010). Sustainable Consumption: Green Consumer Behaviour When Purchasing Products, *Sustainable Development*, vol. 18, no. 1, pp.20–31

# Appendix A

## Interview Topic Guide

### **Interviews structured into two parts:**

Introduction: Our research focuses on the textiles for children and how one's clothes can be reused and used longer in general so that it is good for the environment.

First, we want you as environmentally conscious parent to reflect upon your current way of handling clothing for your child. Then, we will give you scenarios and ask for your thoughts and opinions on it.

### PART 1

#### *Today's situation without PSSs*

#### **Purchase phase:**

1. Can you tell me a bit about how you normally buy or receive clothing for your child? Can you give me a concrete example?

- Do you receive or inherit children's clothing from family or friends?
- What do you know about organic cotton, reused materials, labels of different producers

2. Why do you choose these alternatives? Specific reasons?

#### **Usage phase:**

4. Do you take care of the clothes so that they would last longer? Such as washing or repair? Can you give me a concrete example?

5. Are there any techniques how you try to prolong the usage phase of children clothing?

#### **Disposal phase:**

6. How do you get rid of children's clothing and why? Can you give me a concrete example?

7. What do you consider the main challenges with regard to the disposal of clothing? Can you give me a concrete example?

## PART 2

### *Future's situation: 3 scenarios*

We will give you three possible scenarios for PSSs and we would like to comment on all three.

#### **FIRST SCENARIO:**

A) **Lease/Renting:** You can rent organic children's clothing for a certain time period (a few days or you can subscribe for a monthly period and you will be sent a new package every month or when the child has outgrown the garments). The price depends on the agreed renting form (either fixed on a monthly price or flexible price per item). After the agreed time frame, you will send back the clothes to the shop. They will clean it and prepare it for the next customer.

1. Have you heard or used leasing or renting services for your child's clothes before?
2. If no, what does come up to your mind hearing of this for the first time?
3. If yes, please tell your experiences and motivations to choose it.
4. What could be the biggest gain for you if you used the renting and leasing service? Why would this be beneficial for you?
5. What can be potential drawbacks from it? Also think of how it can negatively influence or complicate your life. What aspects can hinder people to use it and consider it normal?
6. How should the leasing and renting model be constructed so that it would help you in your daily life and make you opt for sustainable children's clothing?

#### **SECOND SCENARIO:**

B) **Advice:** When purchasing new organic garments the shop offers you advice on how to break in the garment, wash it correctly with their offered washing powder and prolong its useful life. Additionally, you will be offered a repair service in case your organic garment is damaged. These services are free of charge and you can send in the garment per mail.

1. Have you used advice services for your child's clothes before?
2. If no, what does come up to your mind hearing of this for the first time?
3. If yes, please tell your experiences and motivations to choose it.
4. What could be the biggest gain for you if you used an advice service? Why would this be beneficial for you?
5. What can be potential drawbacks from it? Also think of how it can negatively influence or complicate your life. What aspects can hinder people to use it and consider it normal?
6. How should the advice service model be constructed so that it would help you in your daily life and make you opt for sustainable children's clothing? Is there any other service you would like to have?

### **THIRD SCENARIO:**

C) **Take-back service:** The shop offers you the possibility to take back brand's own worn garments, which will be reused or resold. In return, you will receive a voucher that can be cashed for the next purchased.

1. Have you used take-back services for your child's clothes before?
2. If no, what does come up to your mind hearing of this for the first time?
3. If yes, please tell your experiences and motivations to choose it.
4. What could be the biggest gain for you if you used a take-back service? Why would this be beneficial for you? (how big should the percentage discount of the voucher be in order to be attractive?)
5. What can be potential drawbacks from it? Also think of how it can negatively influence or complicate your life. What aspects can hinder people to use it and consider it normal?
6. How should the take-back service model be constructed so that it would help you in your daily life and make you opt for sustainable children's clothing?

### **TOP THREE:**

- Which scenario would you prefer personally or in which order would you place the scenarios and why?
- How long will it take from today to implement it?
- Do you think others than you would be attracted? Why/not others?