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Out with the Old and in with the New

Consumer Clothing Practices and how they contribute to a
Circular Fashion Market

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Abstract

A transition to a circular fashion market requires substantial changes in the way consumers purchase, use and dispose of clothes. Nevertheless, the concept has not yet been researched from a consumer perspective. The aim of this study was to close this gap by identifying consumer clothing practices in Sweden, and discuss how these practices can contribute to a circular fashion market. Semi-structured interviews were conducted with Swedish consumers, addressing the everyday enactment of clothing practices. The practice theory perspective enabled the study to capture behaviour, rather than intention, in all three phases of the clothes consumption process: purchase, use and disposal. The findings resulted in the identification of five practices relevant to the practical implementation of a circular fashion market and their varying contributions. Two of the practices were divided in to different versions, as they varied in their contribution. Those deemed to contribute were second hand purchasing, doing laundry through alternative methods, mending, and disposing of clothes through selling or donation. Those deemed to not contribute to a circular fashion market were doing laundry in the traditional sense, clearing out and disposing of clothes in the general waste. In conjunction, the findings revealed a partial implementation of the circular economy concept in the Swedish fashion market, which this article argues could lead to increased consumption. The nature of the findings further enabled the identification of problematic practice elements, which culminated in a discussion of how consumer practices can be reconfigured to be more in line with a circular fashion market.

Keywords: Circular Economy, Practice Theory, Fashion Industry, Consumer Behaviour

1. Introduction

The concept of the Circular Economy has since its introduction in the 1970's experienced a steady increase in attention, especially in academia (Geissdoerfer, Savaget, Bocken & Hultink, 2017). It has also gained traction at policy-level, for instance with the European Commission's '2018 Circular Economy Package' (European Commission, 2018), as well as industry-level, with many companies realising the concept's value potential (Geissdoerfer et al., 2017). In Sweden, the context of this study, several companies are now referring to circularity in their sustainability reports, and some have implemented circular activities in their business

models (Stål & Corvellec, 2017). However, whether the concept of the circular economy has been influential in consumer behaviour is still an underdeveloped area (Camacho-Otero, Boks & Nilstad Pettersen, 2018). In theory, the circular economy is an attractive alternative for businesses wanting to stay profitable without damaging the environment, but it is relevant to question the practical implementation of the concept (Stål & Corvellec, 2017) and its effect all the way down to consumer level (Camacho-Otero et al., 2018). Thus, this article will investigate the practical implementation of the circular economy, by identifying and analysing consumer clothing practices associated with the concept.

Recent years has seen a drastic increase in clothing consumption across the globe: between 2000-2015 the total numbers nearly doubled (Ellen MacArthur Foundation, 2017). A connection can be made with the similarly drastic increase in ‘fast-fashion’ business models (Vehmas, Raudaskoski, Heikkilä, Harlin & Mensonen, 2018), influencing consumers view of clothes as disposable “throwaway goods” that should be replaced several times a year (Birtwistle & Moore, 2007). Increased clothing production causes problems throughout the whole consumption cycle, not only by intensifying the environmental impact of the textile production itself (Boström & Micheletti, 2016; Ellen MacArthur Foundation, 2017), but also in an overflow of discarded clothing items (Gwozdz, Steensen Nielsen & Müller, 2017). Even if some clothes are resold, recycled, donated to charity or used for other functional purposes, the majority of clothes end up as general waste (*ibid*). In Sweden, 13.9 kilos of clothes were consumed per person during 2017 (Naturvårdsverket, 2018). Out of these, 7.5 kilos of clothes ended up in the residual waste, going to incineration (*ibid*), even though it is estimated that more than half of the textiles found in the residual waste is undamaged and could be reused (S.M.E.D., 2016).

The environmental issues associated with the fashion industry are highly complex and multifaceted, and this in combination with the wide range of actors involved makes the perfect solution difficult to find (Boström & Micheletti, 2016). Efforts must be placed on improving a wide range of aspects simultaneously; including business offerings, relevant technology and the sourcing of materials, but also on changing consumer behaviour (Sandin, Peters & Svanström, 2015) An important step highlighted by scholars is *limiting the number* of clothing items consumed, and in extension produced, as this would decrease the intensity of impact throughout the whole production process and limit the overflow of discarded items (Bocken, Short, Rana & Evans, 2014; Sandin et al., 2015;

Roos, Zamani, Sandin, Peters & Svanström, 2016; Gwozdz et al., 2017).

The concept of the circular economy has been presented as a way to unite economic activity and environmental wellbeing (Geissdoerfer et al., 2017; Murray, Skene & Hayes, 2015) by thinking in terms of closed loops instead of open-ended systems (Urbinati, Chiaroni & Chiesa, 2017). In the context of the fashion industry, this implies keeping clothes, fabric and fibres at their highest value during use and make them re-enter the economy after use (Ellen MacArthur Foundation, 2017). While firms indeed have a large impact on consumption through value propositions, infrastructures and marketing messages (Sanne, 2005; Stål & Jansson, 2017), the viability of a circular market must be viewed as highly dependent on the consumers and their willingness to partake in circular clothing practices. The circular economy concept requires a radical transformation of the way we use resources in both production and consumption (Camacho-Otero et al., 2018; Urbinati et al., 2017). For a circular fashion market to be viable; the product life of clothes has to be extended, the rates of reuse have to increase and large-scale recycling of clothes, fabrics and fibres has to be in place (Ellen MacArthur Foundation, 2017; Sandin & Peters, 2018). Consequently, the circular economy concept implies changes in the everyday lives of the consumers (Camacho-Otero et al., 2018). For example, consumers have to engage in caring for and repairing clothes to prolong the product life, as well as to return used clothes to reuse and recycling (*ibid*). Further, consumers must be prepared to purchase second-hand clothes and garments manufactured from recycled materials (Vehmas et al., 2018), as well as reconsider the need to own clothes and start using clothing rental services instead (Camacho-Otero et al., 2018). Thus, moving towards a circular fashion market will require substantial changes in the way consumers purchase, use and dispose clothes. Gwozdz et al. (2017, p. 2) further highlight the importance of this, as consumers are

“instrumental in determining the number, frequency, and type of clothing items purchased, how these items are used and maintained, and the means of disposal once items are worn out or no longer wanted”.

Existing literature often highlight the symbolic value of clothing and its strong connection to identity creation. These are indeed aspects and drivers of clothing consumption, but so are the structures involved in the enactment of everyday life (Shove & Pantzar, 2005). This article argues that certain behaviours in the process of clothing consumption are best described as routine practices - habits which are enacted daily and with little reflection (Woermann & Rokka, 2015) For example, activities during the use-phase (such as washing and drying clothes), as well during the disposal-phase (such as donating and discarding clothes), should be viewed as routine practices. Routine practices are considered highly relevant in the context of environmental sustainability, as they are rarely questioned but tend to be detrimental in their usage of water, material and energy (Røpke, 2009).

Further, considering how sustainable consumption in general - and the circular economy concept in particular - requires changes throughout the whole consumption cycle (Camacho-Otero et al., 2018), it can be viewed as problematic that the majority of sustainable consumption research is focused on the purchase-phase, not considering the use- and disposal-phase of the consumption process (Fletcher, 2014; Ekström & Salomonsson, 2014; Gwozdz et al., 2017; Stål & Jansson, 2017). Due to its ability to include all phases of consumption in the analysis, practice theory should therefore be regarded as especially suitable for research focused on sustainable consumption (Røpke, 2009; Warde, 2014). Another benefit of the practice theory approach is that by studying the actual behaviour of consumers and how they approach consumption in their everyday life it can address the problematic yet established attitude-behaviour

gap, where consumers express environmental concerns but does not act correspondingly (Welch & Warde, 2014). Thus, practice theory should be viewed as an interesting and relevant perspective to study the phenomena of circular clothing consumption.

This article addresses a clear gap in the current literature on circular consumption. First, the implementation of the circular economy concept has not been researched on a consumer level, despite the importance of consumer adaptation for the concept to be viable (Camacho-Otero et al., 2018). Previous studies have provided a business view of the practical implementation of the circular economy among Swedish fashion firms (Stål & Corvellec, 2017; Stål & Jansson, 2017). This article intends to take this one step further and investigate how the implementation of the circular economy concept has been adapted by consumers, in order to discuss the practical viability of the concept. Second, there is a lack of research covering clothing consumption through the lens of practice theory, despite the fact that many of the activities involved can be argued to be routine, everyday practices.

Consequently, this study aims to *investigate consumer clothing practices in the Swedish fashion market during all phases of the consumption process, and discuss how these practices contribute to a circular fashion market.*

Thus, this article intends to broaden the understanding of the circular economy concept by providing a consumer perspective, through addressing the following research questions:

- *What consumer clothing practices relevant to a circular fashion market can be identified in Sweden?*
- *How do the identified practices contribute to a circular fashion market in Sweden?*

This article is organised as follows. Initially, an overview of the theory behind the circular economy concept and how it applies to the fashion industry is provided. With the purpose of giving a context, a section discussing the current practical implementation of circular solutions in the Swedish market follows. The theoretical perspective of practice theory is then discussed and applied to the topic of clothing consumption. The method chapter describes the research process in detail, after which the findings are presented and analysed. In the conclusion the most vital findings are highlighted and the theoretical contributions discussed, and lastly the managerial implications of the findings are considered.

2. A Circular Fashion Market

In the context of the fashion industry, the concept of a circular economy entails keeping clothes, fabric and fibres at their highest value during use and make them re-enter the economy after use (Ellen MacArthur Foundation, 2017) through initiatives that encourage extended product life, reuse and recycling (Sandin & Peters, 2018). The development of the circular economy concept in the apparel industry has to a large extent been driven by the Ellen MacArthur Foundation, which has issued many publications in the area and collaborated with businesses, policy makers and academia to actuate the transition (Geissdoerfer et al., 2017). Different strategies to achieve a circular system have been discussed, and since the circular economy concept has mainly been researched from a production point of view the focus has been on circular business models (Camacho-Otero et al., 2018). These are relevant to consider in this study, as businesses to a large extent provide the material infrastructure in which clothing consumption practices take place (Sanne, 2005).

2.1. *Slowing Resource Loops*

Although the name of the circular economy refers to a circular thinking of *closing* resource loops, an equally important part of the circular economy is

slowing the resource loops, in order to delay waste output (Bocken, De Pauw, Bakker, & Van Der Grinten, 2016; Murray et al., 2015). In the context of clothing, this entails *extending product life* by increasing the average number of times a garment is worn, and according to the Ellen MacArthur Foundation (2017), this is the most direct way to capture value, and to avoid waste and environmental damage. From a business point of view, this means delivering qualitative clothing that makes durability more attractive and viable (Ellen MacArthur Foundation, 2017; Mistra Future Fashion, 2018). Additionally, producers can provide services that prolong product life, such as repairing and remaking services (Mistra Future Fashion, 2018). However, research suggest that the product life of clothing items tends to be similar independent of their quality and durability (Gwozdz et al., 2017), suggesting that other factors determine how long a garment is used. From a consumer point of view, extending product life can be achieved by using the garment a higher number of times, as well as taking care of the garment to make it possible to use it for a longer period of time (Mistra Future Fashion, 2018). For example, mending of clothes is essential to be able to extend the product life (Camacho-Otero et al., 2018), whereas washing and drying wears out the clothes (Roos, Sandin, Zamani & Peters, 2015; Mistra Future Fashion, 2018). Considering environmental sustainability in general, washing and drying have large negative impacts in terms of energy-use (Fletcher, 2014). Thus, even if businesses can make durability more attractive and viable, in the end the length of the product life of clothing items is up to the consumer.

Another activity with the purpose of extending product life is that of *reuse*, (Sandin & Peters, 2018). Reuse implies extending product life by transferring clothing items to new owners (*ibid*) through for example second hand shops, online marketplaces, charities and clothing libraries (Ellen MacArthur Foundation, 2017). Thus, consumers can contribute to increased reuse by

ensuring that the clothes are sold or donated after use, in addition to the practices mentioned in relation to extending product life. According to the research of Mistra Future Fashion (2018), if the average garment is used three times longer than today, its climatic effect would decrease with 65% and water usage would decrease with 66%. This is however based on the assumption that the garment replaces a newly produced garment out of virgin raw material (*ibid*), which is not necessarily the case.

2.2. Closing Resource Loops

An activity aimed at closing resource loops is *recycling*, which entails capturing value from waste by reprocessing textile waste for use in new textile or non-textile products (Sandin & Peters, 2018). Even though recycling implies a great potential in preventing textile waste from clothes that cannot be reused (*ibid*), several barriers hinders the adoption of recycling at a large scale; such as a lack of technology, a lack of collected textiles and a lack of economic viability (Elander & Ljungkvist, 2016). Therefore, most of the textile recycling that exist today constitutes *downcycling*, meaning that textiles are transformed into products of lower value/quality than the original products (Ellen MacArthur Foundation, 2017; Sandin & Peters, 2018; Schmidt, Watson, Roos, Askham & Poulsen, 2016). For example, textiles are downcycled into industrial rags, insulation materials and upholstery (Schmidt et al., 2016). The technologies required for textile-to-textile recycling are still under development, and thus, very little textile-to-textile recycling exist today (Sandin & Peters, 2018; Schmidt et al., 2016). While the issues surrounding technology and infrastructure are business-related, it is the responsibility of the consumer to ensure that their used clothes end up in the recycling system. It can be argued that this is currently lacking, as the volume of collected textiles has been identified as a barrier to increased textile-to-textile recycling (Elander & Ljungkvist, 2016).

Research does suggest that recycling and reuse has the potential to result in a substantial reduction of the environmental impact of the industry, with reuse being the most favorable of the two (Sandin & Peters, 2018; Schmidt et al., 2016). This is also evident in the waste hierarchy established by EU, which states that the best option to handle waste is through reuse, followed by the option of recycling or other ways of recovering, and lastly disposal (European Union, 2010). However, the absolute benefit of reuse is dependent on a number of factors; such as the replacement rate of the products and the transportation of the products that are to be reused (Sandin & Peters, 2018). Second hand stores and clothing rental services are generally considered a more sustainable way of acquiring clothes, but it this is highly dependent on the transportation mode of the consumer to and from the store (Gwozdz et al., 2017). The impact of recycling as well as reuse should thus be seen as positive yet problematic in terms of sustainability, in particular due to an assumption in much research that both these activities generate a replacement rate of 1:1 (Sandin & Peters, 2018). A replacement rate of 1:1 assumes that each reused or recycled item will be used as many times as a newly purchased item, and thus replaces the production of a new garment (*ibid*). This has proven to be unrealistic in the case of reuse, and possible yet unlikely in the case of recycling (Sandin & Peters, 2018). Dahlbo, Aalto, Eskelinen and Salmenperä (2017) agree and state that it is unclear to what extent increased reuse replaces the production of new clothes, and suggest that it might instead create new markets. On the other hand, Schmidt et al. (2016) mean that even if the substitution factor is less than 30%, reuse is still the preferred alternative compared to recycling and incineration.

2.3. The Circular Economy in the Context of the Swedish Fashion Market

For a circular economy to be viable, circular solutions enabling circular consumption practices must be in place (Stål & Jansson, 2017). These

circular solutions can be provided by the government, companies and not-for-profit organisations. In the context of the Swedish fashion market, different circular value propositions exist which support circular practices during the three consumption phases.

2.3.1. Purchase- & Use-phase

Between 2005 and 2015 the average Swedish household increased their clothing consumption with 24 % (Roos, 2016), thus following the global trend in the industry. In terms of pre-used apparel, the market consists of a few large brands, including not-for profit organisations such as Myrorna, Erikshjälpen and Emmaus as well as vintage chains such as Beyond Retro, but also an indefinite number of independent second-hand stores, online communities and buying and selling -platforms (Sweet, Aflaki & Stalder, 2019). However, the numbers suggest that the market for pre-used apparel is rather limited. During 2016, 3.8 kilo of textiles was collected per person by charity organisations, while only 0.8 out of these was reused in Sweden (S.M.E.D., 2018). Similarly, rental services in the shape of clothing libraries exist, but only at a small scale and mainly in the context of occasion-dress (*ibid*). In terms of addressing the maintenance of apparel, few of the large players in the industry extend beyond increasing consumer awareness through the instructions on the laundry tag. A few actors (such as Nudie Jeans and Houdini) enables maintenance by offering an in-store repair service, whereas others highlight durability as a part of their product offering (Elander, Watson & Gylling, 2017). Third-party repair services also exist in the form of independent tailors (*ibid*).

2.3.2. Disposal-phase

To be able to perform the activities of reuse and recycling and obtain a circular system, a material infrastructure which enables large-scale clothing collection needs to be in place (Ellen MacArthur Foundation, 2017). In Sweden, consumers can donate used clothes to charities (Elander et al., 2017), or alternatively sell them through

consumer-to-consumer platforms such as Tradera and Sellpy (Sweet et al., 2019). Additionally, there is an alternative of handing in clothes through retailers 'take-back systems' in store (Elander et al., 2017). Take-back systems has been implemented by the majority of the large retailers in the Swedish fashion industry: such as H&M, Gina Tricot, Lindex and Kappahl (Stål & Corvellec, 2017). The general aim of take-back systems is that the collected clothes are going to be resold, reused or recycled (Elander et al., 2017; Ellen MacArthur Foundation, 2017), and to incentivise people to return clothes through take-back systems, companies often use monetary compensations such as discount vouchers (Ellen MacArthur Foundation, 2017). This is problematic as it could fuel further consumption (Stål & Jansson, 2017).

In their study of disposal habits of consumers in Sweden, Germany, Poland and the U.S, Gwozdz et al. (2017) found that the majority of respondents used environmentally friendly disposal methods, with only 14.1% of clothes being discarded in the general waste. However, statistics show that 13.9 kilos of clothes were consumed per person in Sweden during 2017, and out of these, 7.5 kilos ended up in the residual waste (Naturvårdsverket, 2018), even though it is estimated that more than half of the textiles found in the residual waste is undamaged and could be reused (S.M.E.D., 2016). This suggest that there is room for improvement in terms of environmentally friendly disposal methods among Swedish consumers.

3. A Practice Theory Approach to Clothing Consumption

With roots in philosophy, sociology and cultural theory, practice theory is best described as a collection of ideas, and can be defined as "a loose but nevertheless definable movement of thought" (Røpke, 2009, p. 2490). As a theoretical approach, it highlights the significance of everyday, routine practices in the analysis of social events (Welch & Warde, 2014) rather than individuals and their

decision-making (Hargreaves, 2011). Shove, Pantzar and Watson (2012) strive to explain the dynamics of social practices, how and why they change or stay the same. They define practices to consist of three elements: *materials*, *meanings* and *competences*, and the “active integration” of these elements that is achieved when the practice is enacted (Shove & Pantzar, 2005; Shove et al., 2012, p. 25). For the practice to be viewed as a recognisable and coordinated entity, it has to be enacted regularly and by large groups of people (Warde, 2005; Røpke, 2009)

The competence element highlights the skills and knowledge required by the practitioner (Shove et al., 2012). The knowledge can be explicit in the shape of rules and principles, or implicit and viewed as a general know-how of how things should be done (Røpke, 2009). The meaning aspect refers “the social and symbolic significance” of the practice (Shove et al., 2012, p. 23), if its good or bad, as well as any beliefs and common understandings related to the practice (Røpke, 2009). Lastly, the material element includes tangible objects of all sorts, infrastructures, tools and the body of the practitioner (Shove et al., 2012).

Considering the various elements of practices related to the consumption of clothing, their multiplex nature becomes evident. For example, the competences necessary to perform the various practices could include the knowledge surrounding how and why to purchase, care and dispose of apparel: both in a practical as well as symbolic sense. Practical in how it is physically performed, and symbolic in knowing the socially accepted form of the practice. Examples of competences include know-how of how clothes should be washed and mended, as well in what is appropriate clothing to wear in various social situations. The meaning element, referring to the purpose of the practice and the tasks involved, could in this case also be both utilitarian and symbolic. For example, meanings associated with washing practices are likely to be both utilitarian

in the sense of taking care of the clothing items, but also symbolic, as consumers are not likely to want to be perceived as unhygienic. The element of materials includes monetary assets as well as modes of transportation, but also the infrastructures enabling practices.

It can be argued that in the context of clothing consumption, material infrastructures are strongly influenced by fashion firms. Sanne (2005) and Stål and Jansson (2017) argue that to understand the complexities of consumption it is not enough to exclusively focus on consumer behaviour, since “producers construct the field of consumption to satisfy their interests” (Sanne, 2005, p. 318), thus guiding consumers by designing the infrastructure surrounding the practices. Hargreaves (2011) further argues that informing and motivating individual consumers towards making better decisions are likely to be fruitless, as in order to drive a change in the consumption patterns of consumers the focus should be on evolving the structures of the relevant practices. Strong emphasis is placed on the material and structural context of the practice: highlighting in this study the importance of businesses providing consumers with the material elements necessary to evolve the practice of consuming clothes towards more sustainable alternatives. Thus, it is crucial to investigate not only consumer practices in isolation, but in relation to the market in which they exist, as it can be argued that the market shapes the performance of the practice. Consequently, practice theory enables an analysis of consumer behaviour as practices; in which materials, meaning and competences are shaped by both consumers and producers.

Considering the evolvement of practices, Røpke (2009) highlights how the habitual element of practices often leave their environmental impact unnoticed by practitioners. This impact must be imbedded in the meaning element of the practice if the routine is to be questioned, and ultimately reconfigured (Røpke, 2009). Shove et al. (2012) further suggest that the relationship between the

elements is essential in the evolution of a practice, and in turn, the consumption related to that practice. If one element changes, the others are likely to follow. A relevant example in the context of clothing consumption is the introduction of e-commerce platforms, a material element, changing the practices related to the purchase-phase of consumption.

4. Methodology

The research aim of investigating circular clothing practices in the Swedish fashion market is a topic that has received little attention up to this date. Due to the limitations of existing research, an exploratory research approach was deemed the most appropriate (Saunders, Lewis & Thornhill, 2009), and in line with this the study took an abductive approach by combining deductive and inductive procedures (Eriksson & Kovalainen, 2014). A qualitative method selection followed naturally, as is suitable when desiring to develop a deeper knowledge rather than quantifiable results of the topic at hand (*ibid*).

The practice theory perspective highlights the emphasis put on behaviour in this study: the doings and sayings of consumers. There is an established attitude-behaviour gap among consumers, especially in the context of sustainable consumption, where consumers despite displaying environmental concerns does not act accordingly (Niinimäki, 2010; Vehmas et al., 2018). It was thus deemed vital to design the research to capture behaviour rather than intention. It was however also considered highly relevant to understand *why* respondents performed certain practices, in order to identify the ‘meaning’ element in each practice. This guided the method selection of primary data collection towards qualitative interviews. Semi-structured interviews can provide elaborate answers as to both “what” and “how” in relation to behaviour (Eriksson & Kovalainen, 2014), and within those answers it is possible to identify their understanding in regard to the meaning of the practice. Non-participant observations were also

considered as a potential data collection method. However, while observations can provide data on actual behaviour, they do not provide insights to why the actions are performed (*ibid*). Observations was also considered inappropriate as the main form of data collection due to the nature of the practices under investigation - most often taking place sporadically, over a long time period and in the home of the respondents. Thus, semi-structured interviews were selected as instrument of primary data collection for this study.

4.1. Pre-study

The first step of the research process consisted of an examination of various academic journals, to provide a general understanding of the research field and identify potential gaps. Once a gap was identified concerning the practical implementation of the circular economy concept, representatives of three businesses operating in the Swedish fashion industry were interviewed: Gina Tricot, Filippa K Second Hand and Sellpy. These were selected with the purpose of representing different circular value propositions available on the market: Gina Tricot provides a take-back system in their stores, Filippa K Second Hand facilitates consumers wishing to buy as well as sell used Filippa K garments in store, and Sellpy is a third-party online platform providing a service which enables consumers to buy and sell used garments of all kinds. Attempts were made to include a rental service in this part of the process, but these were unsuccessful. Few rental services operate in the Swedish market, and none of the ones contacted were able to participate due to time constrictions. Similar issues were later encountered when probing for consumers using rental services, which can be assumed to reflect the small scale on which this business model is currently operating on the Swedish fashion market.

The interviews with the business representatives focused on the practical aspects of the circular solution or business model, which is part of the

the material element of clothing consumption. These findings provided an input into the business view of circular consumption practices, and guided the secondary as well as primary research process. A summary of the businesses and their representatives interviewed can be found below, in Table 1.

Table 1: Business Representatives

Business	Business Model	Representatives
Filippa K Second Hand	In store Second Hand	Owner
		Store employee
Gina Tricot	Fast Fashion Chain	CSR Manager
		Store Employee
Sellpy	Third-Party Online Selling Platform	Head of Sustainability

Additionally, an expert within the field of textile recycling was interviewed in an early stage of the research process, providing insights to the most pressing issues as well as future opportunities in technology advancements. These findings aided the authors general understanding of the sustainability issues facing the fashion industry, and guided the secondary research process.

4.2. Data Collection

Secondary sources used in this study consisted mainly of academic journals. However, reports published by the Ellen MacArthur Foundation, as well as Mistra Future Fashion and various other government funded reports were also utilized to get an understanding of the impact of the circular economy concept on a policy- and industry level.

In terms of primary data collection, an interview guide was developed with the research aim and the theoretical perspective in mind. The guide was thus divided into questions regarding practices within the purchase- use- and disposal-phase of clothes consumption. In line with the practice theory approach, questions were not formulated to

address the circular or sustainability aspect of consumption, but rather the everyday behaviour of consumers in relation to the three consumption phases (Mylan, Holmes & Paddock, 2016). The questions were also formulated in a simple, neutral and direct manner, with the purpose to capture a spontaneous, genuine response from the respondents (Eriksson & Kovalainen, 2016). In total, 15 interviews were conducted.

The respondents in the consumer group were selected through purposive sampling, as is appropriate in a qualitative study where the quality and relevance of the data collected is of greater concern than its generalizability (Saunders et al., 2009; Eriksson & Kovalainen, 2014). In order to ensure a varied sample, the authors aimed to include users of the businesses interviewed in the pre-study phase. This was achieved in all cases but one: the Gina Tricot take-back system, where the lack of users made access unfeasible. Efforts were placed on establishing a variety of gender and age in the sample, and thus the respondents range from 18 to 85 in age, and consist of 9 women and 6 men. The interviews averaged at around 20 minutes each, which was deemed sufficient as the aim of the interviews was to discover routine behaviour rather than underlying thought patterns. 11 of the interviews were conducted face-to-face, while 4 were conducted over Skype.

A summary of the respondents can be found in Table 2, below.

Table 2: Respondent Summary

	Gender	Age	Business Connection
R1	Man	29-39	None
R2	Man	18-28	Sellpy
R3	Man	18-28	Sellpy
R4	Man	18-28	None
R5	Man	29-39	Filippa K SH
R6	Man	18-28	Filippa K SH
R7	Woman	75-85	None
R8	Woman	18-28	Filippa K SH
R9	Woman	18-28	None
R10	Woman	40-50	Filippa K SH
R11	Woman	18-28	Sellpy
R12	Woman	51-61	None
R13	Woman	18-28	None
R14	Woman	51-61	Filippa K SH
R15	Woman	29-39	Sellpy

4.3. Coding & Analysis

With the consent of the respondents, the interviews were recorded and transcribed in order to allow for coding and analysis. All interviews except one were conducted in Swedish, and thus any direct quotes in following sections has been translated by the researchers. A qualitative content analysis approach was taken in order to code, categorise and interpret the findings (Eriksson & Kovalainen, 2014). In line with this approach, the coding scheme was developed through a combination of theory and insights from the data (*ibid*). The initial stage of coding aimed to reveal and define circular practices and versions of practices performed by the consumers in relation to each consumption-phase. These were identified according to practice theory guidelines, which are discussed in detail in the findings-section of this article. Once these practices were identified within the data, findings were coded based on the categorisation provided by the practice theory perspective: meanings, materials and competences. This allowed for a clear overview of the data, and enabled the identification and interpretation of patterns within and between elements that constitutes the

practices, which developed into an analysis of their contributions to a circular market.

4.4. Trustworthiness

The *dependability*, *transferability*, *credibility* and *conformability* were assessed continuously throughout the whole research process (Eriksson & Kovalainen, 2016). As the article accounts for previous research and connects this to the findings of the study, it can be argued that the criteria of transferability is fulfilled (*ibid*). Furthermore, to guarantee credibility, a familiarity of the topic was attained through the study of academic journals and industry reports, as well as through interviews with business representatives and an expert within textile recycling. The quality of the primary data collected was ensured by following the guidelines provided by Eriksson and Kovalainen (2016) regarding qualitative data collection during every stage of the primary research process, which can be argued to further strengthen the credibility of the study (*ibid*). Additionally, through a well-documented research process, the dependability of the study is ensured (Eriksson & Kovalainen, 2016). Lastly, the aspect of conformability was achieved through an extensive coding, organisation and interpretation process, following the theoretical guidelines appropriate for a practice theory approach (*ibid*). The findings are to a large extent presented in the shape of direct quotes followed by their interpretation, thus allowing the reader to assess the logic of the arguments.

5. Findings & Analysis

Within each consumption phase, practices relevant for the practical implementation of the circular economy concept were identified in accordance to the practice theory guidelines (Kuijer, 2014). The relevance of each practice for the practical implementation of the circular economy concept was evaluated with the help of literature on the circular economy concept, and will be covered in more detail under each practice heading.

When using practices as a unit of analysis, the question of defining a target practice becomes relevant. Kuijer (2014, p. 55) suggests that in order to ensure a valuable analysis the definition should not be too extensive, yet be specific enough to “isolate a sub-group of practitioners”. In line with this, the purchase-phase revealed one practice highly relevant to the practical implication of the circular economy: the practice of Second Hand Purchasing. During the use-phase of clothing consumption, two practices were identified: the practice of Doing Laundry, as well as the practice of Mending clothes. Lastly, the disposal-phase was identified as a process which consists of two practices: the practice of Clearing out and the practice of Disposing. According to theory, several versions of one consumption related practice can exist simultaneously, since the elements and their linkages can vary to the point that explaining them as various performances within the same practice is not enough - they should instead be viewed as a separate versions of the same practice (Woermann & Rokka, 2015). Within the practice of Doing Laundry two versions of the practice were identified: Wash & Dry and Alternative Methods. This is due to the combination of elements being substantially different between the versions, even though the purpose of the practices is the same (Woermann & Rokka, 2015). On similar grounds to the division of Doing Laundry, three versions of the Disposing-practice were identified as Selling, Donating and Discarding.

A summary of the identified practices and the different versions can be found in Table 3.

Table 3: Identified Consumer Practices

Consumption-phase	Practice	Versions of Practices
Purchase	Second Hand Purchasing	-
Use	Doing Laundry	Wash & Dry Alternative methods
	Mending	-
Disposal	Clearing out	-
	Disposing	Selling
		Donating
		Discarding

5.1. Purchase-phase

Within the purchase-phase, one practice was identified: the practice of Second Hand Purchasing.

5.1.1. The practice of Second Hand Purchasing

The practice of Second Hand Purchasing refers to the activity of buying clothes that previously have been used by another consumer. This can be done in physical second hand shops (such as Filippa K Second Hand), charity shops, and through online platforms (such as Tradera and Sellpy). The practice of second hand purchasing is relevant since it prolongs the product lives of clothes through reuse, and thus slows down the resource loops (Sandin & Peters, 2018). However, this only applies if the purchase of second hand clothes (to some degree) replaces the purchase of newly-produced clothes (*ibid*).

When asked about second hand purchasing, some of the respondents stated that they had bought second hand at some point, even if it was clear that newly-produced garments are purchased more frequently. Nonetheless, considering the meaning element, buying second hand is seen as a good practice, and associated with environmental concerns. This was made clear with the respondents expressing themselves in terms of “No I’m really bad at that (R9)” and “I have started to consider the environment more,

actually buying some second hand from Tradera (R2)". Among the few respondents who frequently purchase second hand items, additional meanings of second hand purchasing were identified. For example, one respondent said that she is able to find second hand items that do not exist in regular stores, and another viewed it as a good alternative when looking for fancy dress clothes. In the same sense, one respondent said: "[...] then [when shopping second hand] you find a lot more fun, unique stuff (R5)". This suggests that the meaning of second hand purchasing as "a good practice" is not sufficient motivation for performing the practice: the consumer has to see an additional motive for purchasing second hand. At the same time, one of the respondents that do buy second hand added that he finds it easier and more practical to buy new things, suggesting that the competence element also play a part since specific know-how in where to find second hand items is required to perform the practice.

The material element seemed to be critical, since several respondents mentioned the lack of second hand stores as a reason for them to not buy second hand. For example, one respondent said: "*I like to buy second hand but there are not a lot of second hand shops where I live, they have closed down almost all of them (R13)*". Furthermore, several respondents stated they used to buy second hand clothes when they lived abroad, because of the wider selection of stores. Elements of meaning also seemed to hinder second hand shopping. Second hand is viewed by some respondents as an alternative for people who can not afford new clothes, especially by respondents who does not shop second hand: "[...] if it can be of use for someone who can't afford to buy new clothes it's better than me throwing it out (R11)". Also, the findings display that second hand clothing can be seen as unhygienic. For example, one respondent said: "*Clothes is a thing that I buy and I do not want them worn by another person (R11)*".

5.1.2. Purchase-phase discussion

These findings suggest that second hand purchasing as a practice exist in Sweden, and when performed it does contribute to a circular fashion market by increasing the rate of reuse (Sandin & Peters, 2018). However, the findings further suggest that the practice of buying second hand is far from as equally established as the purchasing of newly-produced clothes. This is in line with the data presented in the literature review regarding the rates of reused textiles: during 2016, 0.8 kilo of textiles was reused per person in Sweden (S.M.E.D., 2018), which can be compared to the 13.9 kilos of textiles that is consumed every year (Naturvårdsverket, 2018). Thus, even if some reuse exists, newly-produced clothes accounts for the biggest part of clothing consumption in Sweden.

The findings further suggest that there are issues surrounding the material element of the practice, in terms of a lacking supply of second hand stores. Considering the meaning element, even if most of the respondents are aware of the environmental benefits of purchasing second hand, the perception of second hand clothes is mainly negative. This is partly due to a connection to people that can not afford 'regular' clothes, but also because it is considered unhygienic. A perception of second hand shoppings as "good" and "environmentally friendly" exist, however this is not enough for the majority of the respondents to buy second hand. In the few cases where respondents have incorporated second hand purchasing as a practice, it is mainly done with the purpose of finding unique clothes. Thus, the findings in this study suggest that second hand purchasing does not substitute the practice of purchasing new clothes, but is instead a different market entirely. This is in line with the ideas of Dahlbo et al. (2017), suggesting that increased reuse might result in new markets.

5.2. Use-phase

Within the use-phase, two practices were identified: the practice of Doing Laundry and the practice of Mending.

5.2.1. *The Practice of Doing Laundry*

The practice of Doing Laundry traditionally refers to the routine activity of washing and drying clothing items, but also includes alternative methods of keeping clothes clean. This practice is relevant for circular consumption as the frequency impacts the life of the garment: excessive washing and drying lowers the quality of the item (Mistra Future Fashion, 2018) and thus minimises the chance of an extended product life. Therefore, alternative methods, such as airing out, could be considered preferable from a circular perspective. Additionally, the use of washing machines and dryers are associated with high levels of energy use (Fletcher, 2014) and a low frequency is thus desirable from an environmental perspective as well.

5.2.1.1. Wash & Dry. This version of the practice, using a washing machine and a dryer, should be viewed as the most conventional method of doing laundry. The frequency of this activity was dependent on several factors and varied greatly between the respondents. The purpose of the practice is for clothes to become clean, but how cleanliness is identified vary greatly and is influenced by both the element of competence as well as material. In terms of competence and know-how, some respondents decide based on smell, others by whether it looks clean, and some simply by following the “rules” they have been taught in how often a garment should be washed: *“I’ve been taught that everything that touches the body you should only wear one day (R2)”*. Frequency is also dependent of type of garment and material, with jeans being mentioned as a garment that should be washed less frequently, and underwear as something that should be washed after each wear. Considering the material element, access to a washing machine is mentioned as an aspect determining behaviour,

and those who share with others in an apartment complex had adapted to washing less frequently: *“[...] it’s not as easy to do washing, and it matters quite a lot (R11)”*.

While the frequency of washing varies, it is evident that being perceived as clean is considered important for all respondents, and there is a strong emphasis on this aspect in the meaning element of the practice. One respondent stated that she washes her clothes too much, referring to environmental concerns: *“I know it’s not good to wash your clothes too often (R13)”*. The specifics concerning the environmental issues associated with washing was however not known by the respondent, and no other respondent referred to environmental aspects in their reasoning.

5.2.1.2. Alternative Methods. A few alternatives to washing and drying was mentioned. For example, the activity of “airing out” items by hanging them outside was mentioned by several respondents as an alternative way of keeping clothes clean. Another method mentioned by a few respondents was putting jeans in the freezer for a while instead of in the washing machine, and the motivation behind this was that *“[...] they don’t last as long if they are washed (R10)”*. Similar statements were made regarding garments made from wool. Thus, a tendency to not wash certain garments to avoid wear and tear was found, and the findings generally suggest that more effort is placed on expensive clothes to be cared for according to instructions. Additionally, it can be argued that competence is required to perform this version of the practice, in the sense of being aware of alternative ways of keeping clothes clean.

5.2.2. *The Practice of Mending*

The practice of Mending refers to activities performed with the purpose of repairing ripped, stained or otherwise damaged clothing items. This practice is relevant in regard to circular consumption since repairing damaged clothes is

essential to enable an extended product life (Camacho-Otero et al., 2018).

The monetary value of the item was highlighted as the main basis on which a decision to mend or not would be made. For example, one respondent said: “[...] *could mend a broken button on an expensive jacket (R1)*” and another said: “*If they are worth it I might mend them, otherwise I might throw them away (R12)*”. A third respondent stated that she mends if possible, “[...] *but it depends on if it's a cheap t-shirt (R9)*” because then she buys a new one. A monetary motivation can thus be identified as an important aspect of the meaning element in this practice. Access to materials such as a sewing machine was also mentioned as important: “*My mother has a sewing machine and she is good at it so I give it to her (R9)*”. This can also be linked to a lack of competence, since several respondents said that they give it to someone who is competent at sewing: a few uses a tailoring service, whereas others give it to friends or family members. One respondent mentioned that he now does it himself, but that when he lived in China he had convenient access to low-cost tailors which he then used: “[...] *in China you can walk out on the street and someone will fix it for you cheap (R3)*”. Considering the meaning element, there is a shared understanding among the respondents that it is important for clothes to be undamaged in most situations. There are situations that are viewed as exceptions, such as doing sports or performing certain kinds of household tasks. It does however only seem to matter if people can see it, which is displayed by one respondent stating that “[...] *you don't want your shirt mended right at the front (R9)*”, and another explaining that it did not matter if his T-shirt was ripped since he usually wore a sweater on top anyway. Lastly, mending is viewed by the vast majority of the respondents as something one ought to do if possible. This is for example displayed in the statement of a woman who says she tries to mend her clothes, but that she “[...] *could be even better at it than I am (R15)*”.

5.2.3. Use-phase discussion

Considering how excessive washing and drying damages garments (Mistra Future Fashion, 2018), the practice of doing laundry by washing and drying as it is currently being performed should not be seen as a circular practice, thus not contributing to a circular fashion market. However, doing laundry by using alternative methods, such as airing out and putting clothes in the freezer, can be defined as a circular version of the practice. The version contributes to a circular fashion market in the sense that caring for clothes by avoiding wear and tear allows the consumer to use the garment for a longer period of time, enabling extended product life (Mistra Future Fashion, 2018). Further, the practice of mending can be defined as a circular practice since it is likely to result in extended product life (Camacho-Otero et al., 2018). Thus, it has a potential to contribute to a circular fashion market, but it can be argued that the practice is currently not performed to a sufficient extent.

The findings suggest that the material elements as well as the necessary competences are in place to perform the practices during the use-phase in a circular manner - to wash and dry less, use alternative methods to keep clothes clean and mend clothes when broken. The issue seems to lie in a lack of environmental concerns in the meaning element. Considering doing laundry, frequency of washing was highly dependent on following the social norm of being perceived as clean, and the one respondent mentioning environmental concerns in relation to washing was not certain of how or why the practice matter. Mending broken items was recognised as something positive, but was highly dependent on convenience, and it was considered vital that the mend would not be visible. The environmental aspect was not highlighted by any of the respondents in relation to mending. Clothing items with a high economic value were more likely to be cared for in a circular manner, both in terms of how they are being kept clean and also because they are more likely to be mended if

broken. This suggests that the circular practice of mending and the circular version of doing laundry are driven by a monetary motivation, rather than environmental. The findings of this study thus suggest that consumers are not fully aware of the environmental concerns related to the practices of doing laundry and mending, and these concerns can therefore not be said to be part of the meaning element of these practices. This reflects the ideas of Røpke (2009), stating that environmental impacts are often unnoticed in the performance of routine practices.

Røpke (2009) further state that environmental concerns must be embedded in the meaning element for the practice to be questioned. Thus the lack of sustainability considerations in the meaning element of the practices identified in the use-phase can be viewed as problematic, as this limits circular practices to specific situations and to certain types of garments, more specifically when it is convenient and when the clothes are of a high economic value. If environmental concerns would be embedded in the meaning element in the form of motivation to perform the practices of mending as well as doing laundry, consumers might be more inclined to care for all their items despite their perceived economic value. Instead, clothes are still viewed as highly disposable; reflecting the throwaway-culture of the market.

5.3. Disposal-phase

The practices occurring in the disposal-phase of clothes consumption was determined highly relevant in terms of circularity, as the method of disposal strongly influences the potential for recycling and reuse (Camaro-Otero et al, 2018). The first step of this phase was identified as the practice of Clearing Out, followed by the practice of Disposing, which included several versions.

5.3.1. The Practice of Clearing Out

The practice of “clearing out” refers to sorting and organising clothes with the purpose of identifying items to be disposed of. This was recognised as a practice for the vast majority of the participants.

Considering the meaning element, the purpose of the practice varies, but several respondents referred to the aspect of making room for new garments. One stated that she clears out when she has the feeling of “ [...] *out with the old and in with the new (R9)*” while another stated that “[...] *clearing out makes it easier to see what you need (R4)*”. Further, the storage space is a relevant aspect when considering the material element, as a lack of space was mentioned by several respondents as a motivation for clearing out. For example, one of the participants explained that her frequency of clearing out has increased since she moved to a smaller apartment. When deciding which clothes to keep and which to dispose of, the probability of future use was often mentioned as a consideration. While some have rules such as “[...] *if the garment has not been used during the last year or two it should be discarded (R11)*”, others base the decision more on a feeling that the garment will not be used anymore. Some participants base their decision on if they still like the garment or not, and if they ‘feel sick’ of the garment: “*It is based on feeling, what I am sick of and what I am not sick of. Depending on [...] if I still like it. (R1)*” Lastly, there is a shared understanding among the majority of the respondents that clearing out is something that one should do regularly. This was displayed by responses such as “*Too rarely (R6)*” or “*Not as often as I should (R12)*” when asked about frequency. Storing clothes that is not used frequently is viewed as poor practice, made evident by responses such as: “[...] *maybe you should have a rule that if you have not used it for a while, you should get rid of it. But I am bad at that [R9]*”.

5.3.2. The practice of Disposing

After clearing out, the practice of disposing follows. It is defined as removing clothes from one's home. Here, several versions exist: selling, donating and discarding as general waste.

In terms of the meaning element, there seem to be a common understanding that one *should* donate

and/or sell used clothes. The vast majority of the participants share the idea that donating or selling their unwanted garments is good practice, and it is identified by several as something that has increased in recent years in line with their awareness of environmental sustainability issues. It was also described as something that made the respondents feel good about themselves. In some cases, the donating and selling of used clothes was put forward as something inconvenient that one has to do. For example, when asked about the service Sellpy, one respondent described it as a service where you “[...] *send [clothes] away and then they solve it for me (R11)*”. However, the selling and discarding of clothes was also identified as a trend: “[...] *there is a trend now that you should recycle (R1)*”.

5.3.2.1. Selling. Selling clothes to other consumers can be done through services such as those provided by Sellpy and Filippa K Second Hand. Other than these models, the online consumer-to-consumer platform Tradera was also mentioned during the interviews.

Considering the meaning element, several respondents highlighted that they would be more prone to sell branded garments as these are perceived as economically valuable. For example, one respondent said: “*I sell branded clothes on Tradera (R12)*”, and another explained that she was motivated to use Sellpy as she had some branded items that she thought she “[...] *might get something for (R15)*”. A third respondent stated that he views each clothing purchase as a potential investment, and will thus prior to purchase consider the potential to sell the item after use: “*I like to buy things [...] where I can get the majority of the money back (R3)*”. The disposing-version of selling thus requires a certain level of competence and skill, both in terms of knowing how to use the various selling platforms available, but also knowing the second-hand value of items. Further, the material element in terms of infrastructure surrounding selling was identified

by several respondents as critical in influencing their disposal-behaviour.

5.3.2.2. Donating. Donating is defined as giving away clothes, either to friends and family, to non-profit organisations (for example Myrorna, Erikshjälpen, Emmaus) or through producers take-back systems (for example H&M, Gina Tricot, Lindex and Kappahl). Donating to non-profit organisations can be done by handing in directly in store or through collection-boxes. The version of donating through producers’ take-back systems was only mentioned during one of the interviews. The respondent said that they had a collection box from H&M at one of her earlier jobs, and then added: “*I don't know if they exist in Stockholm, I am looking for them (R10)*”.

The findings suggest that donating is a common method to dispose the clothes, especially when the clothes are not perceived to have a high economic value. Several respondents stated giving away to friends or family as a first step: “*I usually ask friends first if anyone wants something. Then my sister and my mum, and if neither of them wants it I'll donate it (R11)*”. Donation to non-profit organisations is often seen as a second option where the rest of the clothes go: “*I might check if someone I know would want it, if it's something nice that I don't want to leave in the recycling-box (R9)*”. Another respondent mentioned that he gives his “[...] *nice clothes (R4)*” to his cousin and donates the rest. A third respondent stated that she donates a lot to charity, but that “[...] *it's not the nicer things, it's the bland, jeans and T-shirt and such (R10)*”. In line with other findings, the material element in terms of infrastructure surrounding donation boxes is critical. One respondent said that she has started donating since moving to Gothenburg, due to the easy access to donation boxes: “*It's convenient that I don't have to use the car or bring clothes with me on the tram (R11)*”. Another respondent simply stated that “*It's very convenient. It's just there, where you recycle (R13)*”. Additionally, one respondent mentioned that he sometimes brings his clothes to

a charity shop, but does it rarely as he finds it inconvenient.

Furthermore, the findings indicated a widespread misunderstanding around the word “recycling”, which can be connected to the element of competence as well as meaning. Most respondents used the terms “donating” and “recycling” as synonyms to describe any occasion where the garments are given to a third party. Only one respondent distinguished between the concept of “recycling” and “donating”, saying that “*If they are broken I will leave them to textile recycling, but if they are alright and maybe just doesn’t fit me anymore I could donate them instead (R1)*”. This was however an exception, and there seems to be a general belief that ‘to recycle something’ means giving it to a third party, regardless of what the third party does with it.

5.3.2.3. Discarding. Discarding is defined as throwing clothes in the general waste. This is the least preferred alternative according to EU’s waste hierarchy (European Union, 2010), since then the textiles go directly to incineration, which is not in line with a circular system (Ellen MacArthur Foundation, 2017).

If not sold or donated, the clothes are in some cases discarded as general waste. This version could be connected with a lack of competence, since the practices of selling as well as donating requires a certain level of know-how from the consumers - knowing where, how and what should be sold/donated. When this competence is lacking, consumers tend to turn to discarding their clothes in the general waste. For example, one respondent answered: “*I don’t know what to do with them. [...] I’d like to [use a donation-box] (R8)*”, while another respondent stated that she throws damaged clothes in the general waste, as she “*[...] haven’t found an alternative on what to do (R15)*”. Further, considering the meaning element, discarding clothes as general waste is viewed as the only option when the clothes are perceived as unusable. Several respondents

expressed that they never donate ripped, stained or worn out items, stating things such as “*I don’t put damaged things in the recycling (R7)*”. Similarly, underwear and socks were identified as things most consumers discard in the general waste. This appear to be deemed the good and acceptable form of performing the practice by the majority of the respondents. However, in a few cases the respondents could see alternative uses for broken items, saying that “*If they are broken I will leave them to textile recycling (R1)*” and “*I use them when I work out or paint [referring to torn t-shirts] (R5)*”.

5.3.3. Disposal-phase discussion

Considering the practices and the versions included in the disposal-phase of clothes consumption, they vary greatly in their contribution to a circular fashion market. The practice of clearing out could be viewed as neutral in this aspect, as it is highly dependent on the version of the disposing practice that follows. However, the motivation for clearing out and disposing of clothes was often connected to making room for new garments, both in a purely physical sense in terms of storing space, but also in an emotional sense of getting an excuse to buy new clothes. In this light, the practice of clearing out should be viewed as problematic in terms of aiding circularity. Further, selling and donating should be considered circular versions of the practice of disposing, since they contribute to a circular fashion market in the sense of increasing reuse (Camaro-Otero et al, 2018), whereas discarding in general waste is a non-circular version of the practice as this practice results in the product leaving the cycle (Gwozdz et al., 2017).

The findings display that it is considered good practice to ensure that clothes somehow become reused or recycled, rather than being discarded as general waste. According to the respondents, this had changed in recent years due to an increased awareness concerning the environmental issues surrounding the textile industry. Thus,

environmental concerns were identified as an aspect in the meaning element of disposal-practices, which has led to a reconfiguration of how the practice is performed. However, the findings also display a confusion among consumers around the concept of "recycling", where the term is used to describe all types of third-party donations. Consumers seem to believe that recycling encompasses a process where their old clothes are turned into new clothes, which is problematic since it is rarely the case (Sandin & Peters, 2018; Schmidt et al., 2016). Considering the practice of clearing out, the shared meaning by the vast majority of the respondents is that clearing out is something one should do on a regular basis. The findings further display that items rarely are cleared out due to being broken or worn out, but rather because the respondents had grown tired of them. This implies that clothes have a limited life-span, which is based on a feeling of wanting something new rather than the condition of the garment.

It was clear that the material infrastructure surrounding the circular versions of disposal were crucial, and it could thus be suggested that the convenience and easiness in selling, donating and handing in clothes is pivotal in going from linear to circular disposal practices. Additionally, a lack of competence hindered the adoption of circular disposal practices, as the respondents who discarded their clothes in the general waste did so because they did not know of any alternatives. They also did it despite being aware that it was not a good or accepted form of the practice. Thus, even though environmental concerns are embedded in the meaning element of the disposal-

practice, competence and material infrastructures must also be in place for the circular versions of the practice to be performed.

6. Conclusion & Contributions

Addressing the first research question, this article has identified practices among Swedish consumers that are relevant for the practical implementation of the circular economy concept in the Swedish fashion market. Further, addressing the second research question, the identified practices has been evaluated in their ability to contribute to a circular fashion market. The identified practices which directly contribute to a circular fashion market are second hand-shopping and mending. As for the rest of the practices, several versions with different contributions to a circular fashion market was found. In the case of doing laundry, the practice was divided into the version of washing and drying as well as the version of using alternative methods, due to their diverse contribution to a circular fashion market, while still sharing the common purpose of keeping clothes clean. Similarly, the practice of disposing was divided into three versions: selling, donating and discarding, where the versions of selling and donating contributes to a circular fashion market, while the version of discarding does not. Lastly, the contribution of the practice of clearing out is to a large extent dependent on the following disposal-method. However, the meaning element of the practice can be seen as problematic in its tendency to contribute to increased consumption.

These findings are summarised in Table 4, below.

Table 4: Identified Consumer Practices and their Circular Contributions

Consumption-phase	Practice	Versions of Practices	Contribution to a Circular Fashion Market
Purchase	Second Hand Purchasing	-	Contributes when performed
Use	Doing Laundry	Wash & Dry	Does not contribute
		Alternative methods	Contributes
	Mending	-	Contributes when performed
Disposal	Clearing out	-	Problematic, depends on disposal method
	Disposing	Selling	Contributes
		Donating	Contributes
		Discarding	Does not contribute

The findings of this study display a clear connection between the practices during the disposal-phase and the purchasing of new clothes. This was made evident by analysing the practices and their elements in relation to each other. First, the meaning element of the clearing out-practice revealed that the main motivation for consumers to clear out clothes from their closet is to buy new clothes: both in a purely physical sense in terms of storing space, but also in an emotional sense of getting an excuse to buy new clothes. The meaning element of the clear-out practice also disclosed that clothes are cleared out when the consumers have grown tired of them, rather than due to their condition. This is in line with the findings of Gwozdz et al. (2017), who states that the quality and durability of garments does not extend their product life. Second, the findings display a misunderstanding of the concept of "recycling": consumers seem to believe that recycling encompasses a process where their old clothes are turned into new clothes, which is problematic since it is rarely the case (Sandin & Peters, 2018; Schmidt et al., 2016). Despite this, several companies use the term "recycle your clothes" in their communication (H&M, KappAhl, Lindex). This confusion is likely to lead to an overestimation of the

environmental benefits stemming from textile collection, where returning old garments is viewed as an 'environmental compensation' which justifies new purchases. This is in line with the findings of Stål & Jansson (2017, p. 555), who states that "voluntary take-back systems evoke certain caveats and may ultimately legitimize increased material consumption through dubious assertions of recycling". Third, the findings related to the practice of second hand purchasing disclose that the purchasing of second hand clothes do not replace the purchase of newly-produced clothes among Swedish consumers, thus not contributing to a circular flow of clothes. In conclusion, these findings clearly show that consumers clear out and dispose of garments with the aim of being able to purchase new clothing items.

In line with the above reasoning, this article argues that the circular economy concept has been partially implemented in the Swedish fashion market. It is evident that the concept has been influential in the disposal-phase of consumption, with environmental concerns influencing the decision when choosing between the different versions of the disposing-practice. As a result, the majority of consumers in this study donate or sell their

clothes after use, which is supported by the findings of Gwozdz et al. (2017, p. 19), who states that “consumers widely use environmentally friendly means of discarding their unwanted items”. During the purchase- and use-phase, the circular practices did not seem to be as established, with consumers not treating second hand purchasing as an alternative to buying newly-produced clothes, nor putting time and effort in caring for their currently owned clothes to enable a long life of the clothes. Thus, the circular economy concept does not seem to be efficiently implemented in the purchase- and use-phase in the Swedish fashion market. This partial implementation has resulted in a situation where clothes are being disposed of according to the circular economy concept - but still purchased, used and cared for in a linear fashion. As a consequence, the environmental benefits of donating and selling are currently used as an excuse by consumers to increase clothing consumption. This stands in clear contrast to the drastic decrease that is identified by several scholars as necessary to achieve a sustainable fashion industry (Bocken et al., 2014; Sandin et al., 2015; Roos et al., 2016; Gwozdz et al., 2017) Thus, not only does this partial implementation hinder a circular flow of textiles, but it can also be argued to have detrimental environmental effects.

In order for the circular economy concept to be fully implemented in the Swedish fashion market, the majority of the practices identified in this study must be reconfigured. Considering the purchase-phase, the material element in the shape of a larger selection of stores is necessary to increase the enactment of second hand purchasing. The meaning element must also be addressed by changing the negative perceptions of second hand purchasing. Within the use-phase, the competences and material elements were identified as being in place, but the issue lies in the meaning element - the circular practices

were mainly motivated by monetary concerns, limiting them to convenient situations and expensive clothing items. Building on the ideas of Røpke (2009), it is argued that if environmental concerns were imbedded in the meaning element of these practices, they would potentially be performed with greater frequency. Lastly, while it is argued that the circular economy concept is implemented in the majority of the practices in the disposal-phase, there is still room for improvement. In the case of clearing out, the meaning element of the practice must be addressed to limit the associations with the activity of buying new clothes. In the practice of disposing, the material- as well as competence element are identified as important aspects in ensuring further enactment; more specifically by ensuring convenience in performing the circular versions of the disposing-practice and raise awareness of the various options available and how they should be performed.

7. Theoretical Contribution & Managerial Implications

In line with the research aim, this article has aided the theoretical understanding surrounding the practical implementation of the circular economy concept by providing a qualitative consumer perspective. This was achieved by identifying clothing consumption practices among Swedish consumers and discussing their potential contribution to a circular fashion market. The nature of the findings further enabled problematic practice elements to be revealed, which led to a discussion of how the identified practices could be reconfigured to be more in line with a circular fashion market. Thus, this article complements the business perspective of the circular economy implementation in the Swedish fashion market provided by Stål and Corvellec (2017) and Stål and Jansson (2017).

Considering managerial implications, the findings of this study provides insights to how the practical implementation of the circular

economy concept is reflected in the clothing practices of Swedish consumers. This insight could be helpful for businesses in developing circular business models that enables and facilitates circular consumer practices. For example, considering the purchase-phase of consumption, the findings indicate on a wish for a larger selection of second hand stores. However, the findings also reveal that the perception of second hand clothes must be improved, which can be achieved through marketing efforts. During the use-phase of consumption, consumers are the ones having the largest impact on the ability to enact circular practices. However, businesses can be helpful in providing circular solutions such as repairing services. Businesses can also be more engaged in increasing the awareness around the environmental impact of activities such as washing and drying, as well as guiding the consumers in how to keep the clothes clean in a more environmentally friendly manner. Considering the disposal-phase of consumption, the circular business models has to enable a convenient handing in of used clothes, and the communication surrounding the circular solutions has to guide the consumers in where and how to hand in used clothes. Lastly, there is a need to decouple the association between the practice of clearing out and the buying of new clothes. As a first step, it could be suggested that businesses should avoid the use of vouchers in connection to their take-back systems.

8. Limitations & Future Research

In terms of limitations, a few can be identified in connection to the research method. Despite repeated attempts, neither consumers using a rental service or an in-store take-back system were accessed and therefore not included in the sample. These consumers could have provided valuable insights, and this should thus be considered a limitation for this study. Additionally, while observations were deemed impractical due to the scope and nature of the study, if performed they could have

strengthened the trustworthiness of the findings by providing a first-hand perspective of the practices as they were being performed.

Due to the qualitative nature of the study, the findings can not be generalized. Therefore, future research could benefit from applying a quantitative method to this research area, in order to establish quantifiable and generalizable results. Future research should also aim to investigate the consumption practices of consumers using rental services as well as the take-back systems of the fashion chains. Each practice identified could also benefit from being investigated more thoroughly. Such findings would expand the insights provided by this article, and aid in the understanding of consumer practices in relation to the fashion market. Furthermore, building on the findings of this study future research could focus on the connection between the disposing of clothes and the purchasing of new clothes, as this behaviour carries the risk of resulting in increased consumption.

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