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# **Rebirth Fashion: Secondhand clothing consumption values and perceived risks**

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## **Highlights**

- Drivers and barriers to secondhand clothing consumption (SHCC) were examined.
- Major drivers of SHCC are economic, hedonic, ecological, and social values.
- Non-SHC consumers' concerns are quality, cleanliness, style, and social image.
- Easy accessibility of physical and online SHC shops are major enabling factors.
- Segmented SHC consumer groups and retailing strategies are identified.

# **Rebirth Fashion: Secondhand clothing consumption values and perceived risks**

## **Abstract**

In recent years, the circular economy of alternative consumption models for secondhand goods has become a subject of prominence. However, very little research has been carried out to obtain an in-depth understanding of the negative or positive consumer attitudes, motivations, and values behind secondhand clothing consumption. Therefore, the aim of this study is to investigate the perceived risks and barriers to utilizing secondhand clothing and to identify the enabling and disabling factors that influence its consumption. Two empirical semiquantitative studies were carried out among secondhand clothing consumers (n=134) and non-secondhand clothing consumers (n=138) in the UK to investigate their attitudes, values, and perceptions of risk regarding secondhand clothing consumption. The study incorporated a qualitative means-end value model with a quantitative research technique to construct hierarchical value maps. The results show that consumer perceptions of secondhand fashion products and services differ significantly. The five main values identified among secondhand clothing consumers were: economic, self-expressive, hedonic, environmental, and social contribution values. Non-secondhand clothing consumers exhibited concerns about used clothing consumption due to perceived poor product quality and cleanliness, limitations in the degree of possible self-enhancement and expressibility of self-identity, and a perceived social image of the clothes as low-class and having low social acceptance. The study's findings concerning secondhand clothing consumption values held by the market and consumers' perceived risk dimensions can assist retailers and marketers to create a more tailored retailing and promotional strategy.

**Keywords:** secondhand clothing; means-end value chain; consumer values; perceived risks; sustainable consumption; secondhand clothing retailing

## **1 Introduction**

Current fast production and consumption trends are accelerating the ever-greater volume and value of wasted clothes. Every year, £140m of clothing that is still wearable is disposed of in landfill in the UK alone (Waste and Resources Action Programme [WRAP], 2012). A significant number of fashion-related products are often discarded, even though the products have a considerable prospective life. It has been estimated that up to 95% of clothing textiles could be recyclable (King and Wheeler, 2016) and that 30% of non-clothing fabrics could be reused (WRAP, 2012). Furthermore, more than 30% of clothes owned by the average UK consumer have not been worn for at least one year, with a total value of £30 billion (WRAP, 2012).

These underutilized secondhand fashion-related products can be re-activated through the facilitation of alternative consumption models and a circular economy. According to WRAP (2012), extending clothing life by just nine months of active use could decrease the environmental impacts of water waste and carbon footprints by approximately 20%–30%. Utilizing secondhand clothing (SHC) generates environmental and financial advantages by a reduction in the materials, water usage, production costs, and landfill spaces associated with new clothing production (King and Wheeler, 2016). Life cycle assessments (LCAs) show that reuse of clothes and textiles is the best option to minimize environmental impacts compared with recycling or incineration of materials (Nørup et al., 2019). Similarly, Farrant et al. (2010) found that the purchase of 100 items of SHC was estimated to reduce the purchase of between 60 and 85 virgin clothes, depending on the place of reuse. Replacement of new garments with SHC can lead to a 14% reduction in global warming caused by the cotton T-shirt and to a 45% reduction in human toxicity caused by polyester cotton garments (Farrant et al., 2010). Consequently, SHC can significantly contribute to the reduction of the negative environmental impacts the fashion industry has on the earth.

Several studies have investigated sustainable clothing consumption models and consumer behaviors. Armstrong et al. (2015) examined use-oriented product-service systems (PSSs) including rental, swapping, and clothing consultancy services. Their research shows that use-oriented PSS has the ability to achieve reduction of unsustainable consumption through promoting alternative clothing consumption and facilitating creativity via active utilization of existing products. Similarly, Bly et al. (2015) identified consumer motivational and contextual factors that influence sustainable fashion consumption. Although they found many factors to be involved with the adoption of sustainable behaviors, they identified novelty, creativity, and aesthetics as the most critical elements for sustainable fashion consumption. Jägel et al. (2012) argue that five dominant consumer motivations drive ethical clothing consumption—environmental, altruistic and ethical concerns, well-being, economic value, and personal image. These studies established the key consumer drivers of sustainable consumption practices from consumer perspectives. However, previous studies have been mainly concerned with consumer motivations and values surrounding sustainable fashion consumption in general and have not particularly focused on the roles of SHC consumption in consumers' perceptions, values, and concerns.

Meanwhile, the supply chain side of the impact of SHC has been extensively investigated by a number of researchers (Baden and Barber, 2005; Brooks, 2015; Nørup et al., 2019). Of the relatively few prior studies that have attempted to identify SHC consumers' values and motivations, Nørup et al. (2019) investigated general secondhand shoppers' motivations, although their research was not specifically concerned with the clothing context. Cervellon et al. (2012) examined differences in behavior between purchasers of vintage clothing and SHC, and Xu et al. (2014) carried out a cross-cultural study of secondhand clothing consumption between the American and Chinese markets. Nevertheless, the field of SHC consumption studies is relatively young and there remain unexplained aspects of it. Little research has been carried out into the cognitive complex value chain that explains why some people use SHC and others do not. There is almost no research into non-SHC consumers' perceived risks and the barriers to optimizing their uptake of SHC. Identification of consumers' perceptions of SHC attributes, their personal values, and the barriers to using SHC can allow the supply side to better serve different types of consumer groups.

This research identifies the major drivers of and barriers to SHC consumption through comparison studies of SHC consumers' and non-SHC consumers' underlying values and perceptions of risk. Consumer-perceived images of SHC are evaluated using a means-end chain (MEC) analysis (Gutman, 1982; Jägel et al., 2012). The study incorporates a qualitative (MEC analysis) and a quantitative research technique to construct a hierarchical value map (HVM). The distinct product attribute (A)–consequences (C)–value (V) systems have been identified with respect to SHC consumption, and the findings are presented using HVMs of SHC. The influence of enabling and disabling factors on the optimization of SHC consumption is discussed.

Beyond identifying the profile of SHC users, this study goes further to examine the similarities and differences between SHC users and non-users, delineating a profile of non-SHC users. It supports the establishment of a typology of consumer groups among SHC consumers and non-SHC consumers. The findings of this research assist in the better understanding of SHC consumer groups and support the development of SHC retailing and marketing communication strategies including those that could be aimed at the currently untapped non-SHC consumer market segments. Future directions of research are suggested in the area of retailing and sustainability marketing in fashion.

## **2 Material and methods**

### ***2.1 Research design***

This study adapted the MEC model (Gutman, 1982) and Schwartz's 10 value domains (Schwartz, 2012) to obtain a deeper understanding of the motivational values held by SHC consumer and non-SHC consumer groups. The MEC approach aids in understanding the consumer-perceived attributes of the products and how those product features are associated with the reduction of complexity in their chosen action (Gutman, 1982). Consumers use products or services that contain meaning to help them achieve the realization of their main values (Gutman, 1982; Jägel et al., 2012). The MEC model is helpful in overcoming some of the issues with quantitative methods by integrating objective methods for the collection and evaluation of qualitative information (Hines and O'neal, 1995).

The laddering technique has been employed to understand how product attributes are associated with personal values. The MEC model and laddering techniques can act as a bridge between the limitations of qualitative methods that are challenging to quantify and quantitative models that lack meaning (Hines and O'neal, 1995). The MEC approach is a semi-qualitative research method that investigates individuals' cognitive constructions (Wagner, 2007). The underlying premise of MEC is that the decision-making process is based on cognitive links between product attributes, consequences in the eyes of the consumer, and the personal values of consumers.

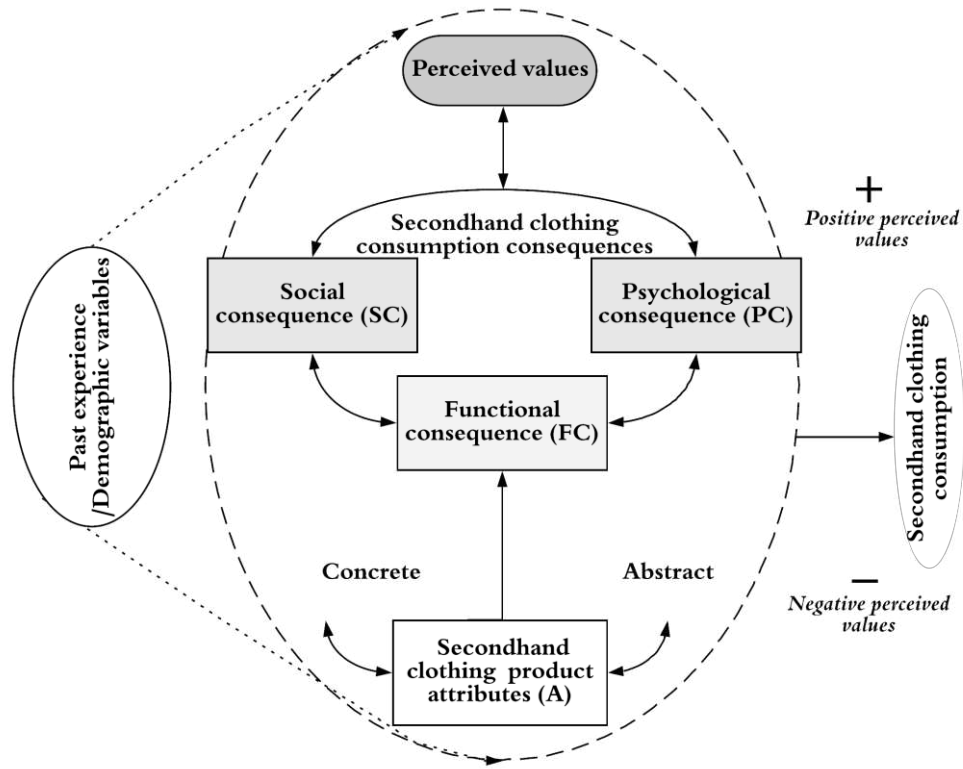


Figure 1: Research framework using the MEC model with value domains (adapted from Gutman, 1982; Overby et al., 2005; Schwartz, 2012).

The MEC entails product attributes (A), consequence of product use (C), and the personal values (V) associated with the product use. The A–C–V sequence is referred to as laddering or the MEC. Attributes (A) entail product and service characteristics or features. Prior studies (Gutman, 1982; Overby et al., 2005) have suggested that characteristics exist in two classifications: (1) concrete attributes (CA) that are physical product or service characteristics or features directly perceivable by the consumer, such as color, size, materials, and price and (2) abstract attributes (AA) consisting of intangible characteristics of the products, such as quality, reliability, and fit, that cannot be directly observed by the customer through the senses (Overby et al., 2005; Reynolds and Gutman, 1984). The consequences (C) are the advantages and disadvantages or risks arising from the use of a product or service in the context of use situations. Previous studies have identified three categories of consequences (Overby et al., 2005). The first is functional consequence (FC), defined as the experiences of consumers with products or services arising from their functional or utilitarian purposes. The second is personal or psychological consequence (PC), which strengthens the self-image (e.g., self-esteem) of consumers by means of symbolic significance; PC is associated with how the consumer feels about the product attributes and features, and whether this feeling is negative or

positive (Zachariah and Jusan, 2011). The third type of consequence is social consequence (SC), which derives from the depiction of the consumer to others in accordance with the social norms of others.

The value (V) is defined as the highest level of desired end-states (DES), which are cognitive conceptions of the customer's goals and needs (Overby et al., 2005). Values can be classified as instrumental (IV) and terminal (TV) (Rokeach, 1973). Instrumental values (IV) are preferred behavioral types that assist in achieving our TV. Terminal values (TV) are the desirable "end-states of existence" in life. Overby et al. (2005) identified the key characteristics of values as something that is (1) perceived by users, (2) influenced by specific actions or use situations attached to products or services, and (3) a worthwhile trade-off between what a consumer obtains from sellers and what he/she gives up. Based on Rokeach's study (1973), Schwartz (1994) further categorized 10 universal value types: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. Consequently, the fundamental notion of the MEC theory is that customers are cognitively linking product-related information and memory content to particular product attributes, consequences, and desired end-states, forming them into means-end chains.

## **2.2 *Sample and data collection***

Three empirical studies were carried out to investigate personal beliefs around and intentions toward consuming SHC and the factors that influence consumers' values and concerns regarding used clothes. An initial face-to-face interview series was followed by two MEC-based studies—study 1 (SHC consumers) and study 2 (non-SHC consumers). The preliminary phase consisted of the conduction of 20 semi-structured face-to-face interviews; a purposeful sampling approach was deployed by visiting a clothing exchange event and charity shops in Leeds in the UK in 2019. A paper-based questionnaire was given to participants. Participatory action research was conducted for this particular study. Purposeful sampling was used to gain an initial understanding of the mechanisms that operated within the community. Transcribed interview data was analyzed using NVivo 12 and thematic analysis and means-end value chain methods were used to analyze the results.

The purpose of the pilot study using face-to-face interviews was to refine the overall questionnaire to enhance the efficacy of the larger-scale studies for hard-laddering online data collection. After identification of the feasibility, acceptability, and



effectiveness of the questionnaire design with the interview process, the hard-laddering questionnaire was developed. Leon et al. (2011) suggest that pilot study data should not be united with the main study in order to avoid contamination by previous exposure to the questionnaire that then minimizes the validity of the answers. Face-to-face interview participants in the pilot study were therefore excluded from the main studies and the data analysis.

A quota sample of 150 SHC consumers and 150 non-SHC consumers was recruited. A total of 134 SHC consumers and 138 non-SHC consumers fully responded to the questionnaire. Only fully completed surveys were used for data analysis. A purposeful sampling method was used based on consumers' past experiences with SHC consumption. Individuals who had experience in SHC consumption completed study 1's survey, and non-SHC consumers completed study 2's survey. Only UK consumers were invited to complete either survey.

An asynchronous interview approach was used for the data sampling process. An online asynchronous interview questionnaire is a more appropriate tool with which to ask sensitive questions as, with greater anonymity, respondents can more openly offer honest opinions, leading to more accurate and reliable content. The advantage of asynchronous interviews is that they allow a saving of costs and time (Ratislavová and Ratislav, 2014). Interview questionnaires were issued to SHC communities and invitations to participate were disseminated by e-mail in a snowball sampling approach; additional participants were recruited by a UK research agency by offering a small incentive for participation. The participants were informed of the purpose of study, ethical considerations, and the completion deadline for the online interviews. Participants were encouraged to reveal honest opinions by anonymization of the online questionnaire. The purpose of the study and the specific requirements of participation were indicated clearly to the respondents at the outset.

### **2.3 Data analysis procedure**

The qualitative MEC analysis and Schwartz's 10 value domains were adapted to analyze the data. Sentiment analysis was carried out to identify how past experiences influence the consumer's attitudes and values. According to Schwartz (2012) attitudes are evaluations of events, objects, people, and behaviors (whether concrete or abstract) using positive or negative scales. These attitudes are underpinned by values, which

are the foundation for our evaluations that either positively support or negatively threaten our attainment of those valued goals (Schwartz, 2012).

The open-ended questionnaire data was analyzed based on major themes and contexts of means-end value. Data analysis methods were adapted from Jägel et al. (2012). Initially, each response was categorized into a group of meaning and the key elements of the MEC for each respondent were defined. Each key theme was coded based on consumers' perceived product attributes; functional, social, and emotional consequences of SHC consumption; and key personal values.

The interview questions were designed in six thematic sections (see table 1). The first section consisted of five sociodemographic closed-ended questions. Using the MEC theory, laddering interview questionnaires were developed for both SHC consumers and non-consumers to delineate the characteristics of both groups and to determine the classifications of the MEC. Finally, consumer and non-consumer barriers and enabling factors in relation to SHCC were examined.

Table 1: Questionnaire design for SHC consumers and non-consumers

Category	Questionnaire items
<b>Sociodemographics</b>	<ul style="list-style-type: none"> <li>• Gender</li> <li>• Age</li> <li>• Marital status</li> <li>• Employment status</li> <li>• Household income</li> </ul>
<b>Perceived SHC product attributes</b>	<ul style="list-style-type: none"> <li>• What major distinctive product and service attributes come to mind when you think of second-hand clothes? (Product attributes can involve quality, style, colour, materials, size, fit, price, brand, cleanness, availability, sustainability, etc.)</li> <li>• What major distinctive product or service attributes are important to you when you choose second-hand fashion products?</li> <li>• If you haven't had experience wearing second-hand clothes or you have hardly ever worn them, what are your main reasons for not wearing or using second-hand clothes and accessories?</li> </ul>
<b>Perceived SHC consequences</b>	<ul style="list-style-type: none"> <li>• Taking into consideration the product or service attributes that you mentioned above, what kind of positive consequences do you think using second-hand fashion products has?</li> <li>• Please state any functional benefits or consequences (e.g. product performances, fit, utility, styling, financial, etc.) of second-hand clothes.</li> <li>• Please state any perceived negative functional consequences of second-hand clothes.</li> <li>• Please specify social benefits achieved when you use second-hand clothes (e.g. social stature, social relationship, and acceptance).</li> <li>• Please provide more details of your perceived negative social consequences of second-hand clothes.</li> <li>• Please specify emotional benefits achieved when you use second-hand clothes (e.g. self-enhancement, self-identity).</li> <li>• Please provide more details of your perceived negative emotional consequences regarding second-hand clothes.</li> </ul>
<b>Perceived values and risks of SHC</b>	<ul style="list-style-type: none"> <li>• Why are the above consequences (functional, social and emotional benefits) important to you?</li> <li>• Have you had any negative experiences (e.g. issues or stigma) with using second-hand fashion products? If yes, could you tell us what negative experiences you had?</li> </ul>

<b>Enabling factors</b>	• Please describe any factors or circumstances that would make it easy for you to use or buy second-hand garments in the near future.
<b>Disabling factors</b>	• Please list any factors or circumstances that would make it difficult for you to use second-hand garments in the near future.

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The analysis of the laddering data comprised four main steps and the major themes were identified in both inductive and deductive ways. First, consumer-perceived product attributes and features of secondhand clothes were investigated. The open-ended qualitative text data were read through word by word and line by line using an open-coding process. The qualitative text data were analyzed using NVivo 12 Plus to identify nodes and themes and word frequency. Sentiment analysis was also conducted alongside thematic analysis to investigate positive, neutral, and negative emotions toward SHC consumption using the auto code feature in NVivo 12.

Second, after completion of the first set of codes, the meaningful consequences that were associated with those SHC attributes and features were obtained. Both positive and negative consumer attitudes toward SHC were examined. Axial coding was carried out to identify underlying concepts and relationships among the open codes and categorize the subcodes in line with MEC theory. These main and subthemes were further quantitatively analyzed by measuring the frequency of subthemes in NVivo 12. For example, the text data were categorized based on similar meaning (e.g. low cost, cost-effective, good price, cheap, bargain, economical) and then classified by common theme nodes to quantitatively rate the code categories. Examples of main and subthemes are presented in appendices A, B and C. Saturation points were considered to be reached and an association recorded with each theme if the respondents commented at least three to five times (Jägel et al., 2012). Therefore, this study's cut-off level of each theme is constituted at 5, and a frequency of more than five commented responses are presented on the HVMs.

The third cluster of laddering questions explored how both positive and negative consequences are connected with personal values and evaluated what was really important to consumers. Both positive and negative associations within each theme were further evaluated to investigate the direct and indirect relationship with product attributes, consequences, and values. The results were presented as a hierarchical value map displaying A–C–Vs for different consumer group segments. The results were presented using an MEV model with the HVM with respect to positive and negative perceptions of SHC and enabling and disabling factors' influence on the optimization of

SHC consumption were discussed. The selected major themes and identified major consumer groups were presented using HVMS (see figures 2 and 3).

Finally, after completion of the HVMS, emerging consumer groups were identified based on their personal values, the reported consequences for them of using SHC, and perceived SHC attributes. Both SHC and non-SHC consumer attributes, characteristics, and values were further compared and unique characteristics of subconsumer groups were identified. The implications for sustainable fashion retailing strategies were recognized, and the major findings were visually illustrated in figure 4 with a discussion of the overall research.

### 3 Results and discussion

#### 3.1 Sample profile

A total of 134 SHC consumers and 138 non-SHC consumers responded for this research. Table 2 shows the socio-demographic profile of each group. The majority of respondents in both groups were female (n=112 for study 1 and n=109 for study 2). The age range of the SHC consumer group was mainly 25 to 44 years, whereas the non-SHC consumer group's age range was predominantly 18 to 34 years. Half of respondents in both groups were single or never married. Around 60% of the SHC consumer group was in either full-time (39.55%) or part-time employment (20.9%), while 49.28% of the non-SHC consumer group were in full-time employment. The majority of all respondents reported annual household income ranging from £20,001 to £50,000, but SHC consumers' income levels were slightly lower than those of non-SHC consumers.

Table 2: Secondhand clothing (SHC) consumers: Sample profile

		<b>Study 1 SHC consumers n=134</b>		<b>Study 2 Non-SHC consumers n=138</b>	
Gender		%	Frequency	%	Frequency
	Male	16.42%	22	21.01%	29
Age	Female	83.58%	112	78.99%	109
	Under 18	0.75%	1	0.72%	1
Age	18–24	14.93%	20	22.46%	31
	25–34	35.82%	48	31.88%	44
	35–44	27.61%	37	21.01%	29
	45–54	10.45%	14	13.04%	18
	55–64	8.21%	11	7.25%	10
	Above 64	2.24%	3	3.62%	5
	Single or Never married	48.51%	65	52.17%	72
Marital status	Married	43.28%	58	34.06%	47
	Separated	1.49%	2	3.62%	5
	Divorced	6.72%	9	6.52%	9
	Widowed	0.00%	0	1.45%	2

Employment status	Prefer not to say	0.00%	0	2.17%	3
	Full-time employment	39.55%	53	49.28%	68
	Part-time employment	20.90%	28	13.77%	19
	Unemployed	2.99%	4	3.62%	5
	Self-employed	12.69%	17	5.80%	8
	Homemaker	14.18%	19	6.52%	9
	Student	6.72%	9	15.22%	21
	Retired	2.99%	4	3.62%	5
	Military	0.00%	0	0.00%	0
	Other	0.00%	0	2.17%	3
Household income	Below £10,000	9.70%	13	9.42%	13
	£10,001 to £20,000	20.15%	27	13.77%	19
	£20,001 to £30,000	11.19%	15	13.04%	18
	£30,001 to £40,000	20.15%	27	15.22%	21
	£40,001 to £50,000	12.69%	17	9.42%	13
	£50,001 to £60,000	9.70%	13	6.52%	9
	£60,001 to £70,000	5.22%	7	8.70%	12
	£70,001 to £80,000	2.24%	3	5.80%	8
	Above £80,000	3.73%	5	7.25%	10
	Prefer not to say	5.22%	7	10.87%	15

### 3.2 Study 1: SHC consumers—Perceived product attributes, consequences and values

The first set of questions dealt with the fundamental product attributes, followed by an evaluation of the fundamental functional, emotional, and social consequences of SHC consumption that connected the products to the users' personal values. The six most frequently cited words for SHC product attributes were "price" (n=52), "quality" (n=49), "brand" (n=30), "styles" (n=19), "sustainability" (n=14), and "charity" (n=13). The perceived functional attributes of SHC were mainly associated with intrinsic qualities of the products; most respondents referred to price- and quality-related SHC attributes including cleanliness, style, materials, color, size, and product availability. Sentiment analysis was conducted to identify respondents' images of SHC. Among the 134 respondents from the SHC consumer group, 35.8% commented on what they saw as the very positive aspects of SHC attributes, 44.75% mentioned attributes with moderately positive or neutral comments, 13.59% spoke of mixed feelings toward SHC attributes, and 5.7% cited negative attributes of SHC.

When respondents were also asked why they had first started to find SHC appealing, the main reasons were shaped by: (1) good value for money (n=44), (2) hedonic experiences (e.g., "treasure hunting") among a unique array of product options (e.g., nostalgia and vintage looks) (n=30), (3) the holistic benefits of SHC (e.g., that it provided value for money to purchase branded products of good quality), (4) the environmental benefits of ethical consumption (n=17), (5) recommendations from family and friends (n=15), and (6) the opportunity to help charities (n=14). In most cases,

personal situational factors (e.g., financial circumstances, maternity leave, and personal weight change) influenced the experience of SHC consumption. Recommendations from family and friends also greatly shaped SHC's likability among respondents.

In line with past studies (e.g., Farrant et al., 2010; Guiot and Roux, 2010; Gullstrand Edbring et al., 2016) reusing clothes was not particularly driven by environmental concerns. Financial motives are a major driver of secondhand consumption and were the most frequently mentioned by respondents. Frugality influences the shopping intentions of the secondhand shopper (Cervellon et al., 2012), which is frequently related to consumers' limited financial incomes (Xu et al., 2014).

Five psychological consequences (PC) of SHC consumption were identified from coding the interview data: (1) feeling unique and enhancing one's creativity and individuality (n=40), (2) the satisfaction of a good financial decision (n=27), (3) feeling happy to support the environment (n=16), (4) helping a cause (n=16), and (5) feeling good about oneself (n=11). Major distinctive psychological consequences of SHC consumption were associated with intrinsic product attributes that help the user to experiment with a different fashion style economically. Accordingly, SHC consumption enriches users' personal creativity and self-identity, leading to emotional satisfaction.

Respondents also mentioned experiential and hedonic values, which are an important factor in shaping positive attitudes toward SHC, gained from seeking out the originality of the products and finding nostalgic pleasure. Prior studies (Jägel et al., 2012; Stern et al., 1995) have shown that sustainable consumption is commonly driven by altruistic motivations and environmental and social concerns; however, the research of Bly et al. (2015) suggests that a primary driver of sustainable consumption is aspects of self-interest. Sustainable consumption can be motivated by a desire for "enchantment" or by the experience of choosing alternative consumption rituals (Bly et al., 2015). Clothing is often associated with self-expression and creative values, particularly linked with identity. The findings of this study thus echo the findings of Bly et al. (2015) that consumption of SHC is directly linked to consumers' personal values, particularly their hedonic and self-expressive values, which are more strongly associated with the consumers' value chain than ethical values.

Major social consequences (SC) were identified as: (1) being environmentally friendly (n=17), (2) positive social impacts by supporting local charities and communities (n=13), (3) financial benefits to engaging in these social activities (n=9), (4) social disapproval (i.e., signaling financial disability) (n=9), (5) social engagement with peers

(n=6), and (6) personal image as a “good person” (n=5). Major social consequences were associated with the positive outcomes of both the environmental and social impacts of their activities, while nine respondents mentioned the perceived risks of undesirable social status that the lower-income group of SHC consumers were often portrayed as holding.

Previous research has shown that environmental concerns can only provide subsidiary customer value and that the environment is not a crucial factor for individuals when purchasing secondhand products (Gullstrand Edbring et al., 2016; Niinimäki and Hassi, 2011). However, although environmental and ethical values are not major drivers of SHC consumption, they still play important roles in SHC consumption. Of people who have more experience in buying SHC, more of those frequently mentioned sustainability-related values as figuring in their decision to buy SHC. Similar to the findings of Guiot and Roux (2010), the motivations of SHC purchasers are based on criticism of conventional shopping experiences and opposition to (and an escape from) the homogeneity of high-street fashion experiences. These critical environmental and ethical values are related to a desire to minimize clothing and textile waste and extend the lifetime of clothes through SHC consumption. Positive social impacts to the local community and the charity organization are also important aspects of the social benefits of SHC consumption. These social consequences (SC) directly influence psychological consequences (PC) and lead to the personal happiness of taking the responsible decision to support nature or the local community. Examples of respondents’ comments regarding perceived SHC attributes and psychological and social consequences are listed in appendix A.

The cognitive structural map in figure 2 illustrates the aggregate consumer values of SHC. It displays a number of connections created by the perceived product attributes, consequences, and terminal values of SHC consumers. Only dominant perceptual patterns are depicted. In an adaptation of the HVM methodology of Jägel et al. (2012), the node size and line thickness illustrate the number of respondents and their association within the laddering information.

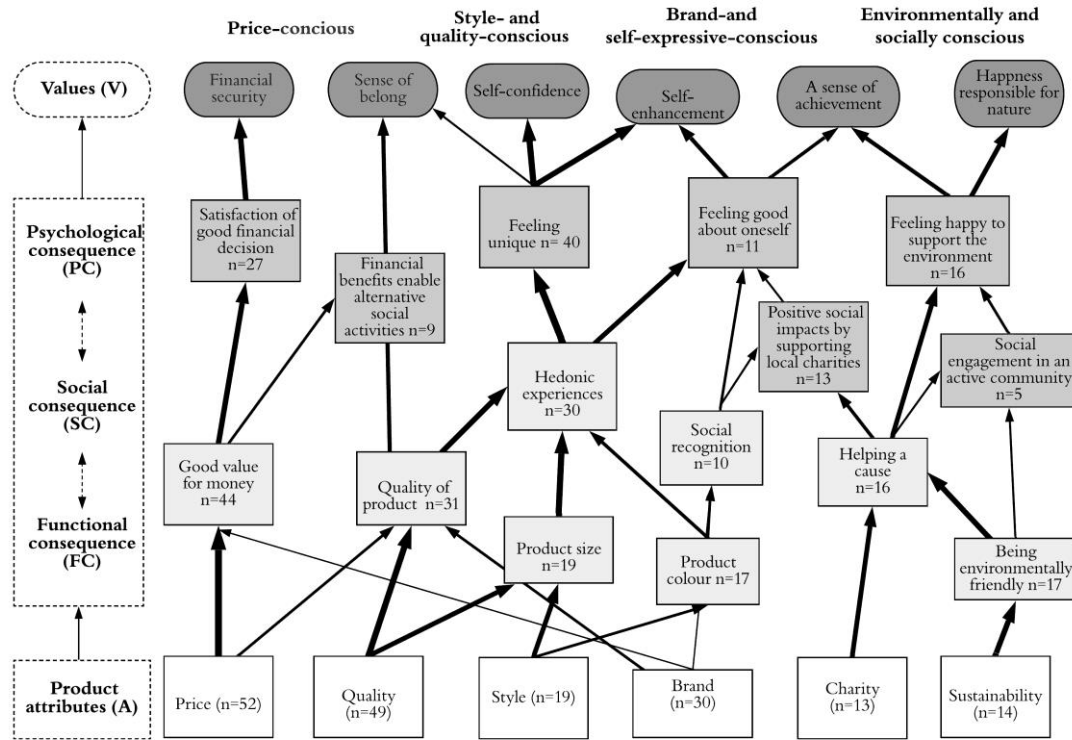


Figure 2: Hierarchical value map of SHC consumption (positive A–C–V sequence of SHC consumers)

From study 1 featuring the SHC consumer group (n=134), four distinctive consumer subgroups were identified: (1) price-conscious, (2) quality- and style-conscious, (3) brand-conscious, and (4) environmentally and socially conscious.

**(1) Price-conscious:** This consumer group showed the highest association of the SHC product attributes, consequences, and values among SHC consumers:

- (a) A: low price (cheap)
- (b) FC: saving money
- (c) PC: satisfaction of a good financial decision
- (d) SC: financial benefits enable alternative social activities
- (e) V: financial security and a sense of belonging through preserving or enhancing one's public image

*“To me, pricing is key. The pricing should reflect the fact that the product is used so I shouldn't be paying more or as much as [if] the product is new; the quality should still be decent and if not then the price should be reduced massively to reflect this.”*

This group is highly price-sensitive and prioritizes financial security, but they also seek a good quality of product. *“I couldn't afford good quality clothes, so I started looking in*



*charity shops and found hardly used great quality clothes for a fraction of the price.”*

The price and quality of the products are highly interconnected in the consumer decision-making process.

**(2) Style- and quality-conscious:** The second dominant consumer group was the style- and quality-conscious group.

- (a) A: quality and style of the SHC
- (b) FC: experiment with various styles, colors, genres, quality, and sizes
- (c) PC: feeling unique
- (d) SC: social engagement related to second-hand or vintage styling clothing communities
- (e) V: self-enhancement and self-confidence

*“I’m particularly fascinated with the 60s mod scene and started buying rare clothes from that genre”; “I think you can get a lot of vintage clothing that is nice and fashionable within society today.”* In relation to Schwartz’s (2012) theory of basic values, the domains of hedonism, stimulation (novelty seeking) and self-direction are distinctly connected with the style-conscious group. McNeill and Moore (2015) referred to this group as “self-conscious consumers” who focus on the self; they are more concerned with the style of the clothing and hedonic needs. Their consumption is often driven by self-focused needs, seeking to find cool or unique products or styles.

**(3) Environmentally and socially conscious:** This consumer group bases their decisions on their critical views of the potentially negative environmental and social consequences of their purchase. Their attitude manifests in a stance against the current capitalized fast-fashion system and looks for more ethical and responsible consumption.

- (a) A: sustainable products
- (b) FC: being environmentally friendly and helping a cause
- (c) PC: feeling happy to support the environment and the local charity
- (d) SC: social engagement in an active community
- (e) V: a sense of achievement through protecting the environment and a social contribution through preserving and enhancing the welfare of people and nature

In connection to Schwartz’s (2012) value theory, the domains of achievement, universalism, and benevolence distinctively motivate this consumer group. Respondents feel a sense of accomplishment or happiness for supporting the welfare of the local community. McNeill and Moore (2015) refer to this consumer group as “sacrifice consumers”; Guiot and Roux (2010) describe them as a consumer group driven by critical

motivations and who have high levels of environmental concern, striving for a reduction of their environmental and social impacts. Experiential values can also be achieved through social engagement with a local community group.

**(4) Brand-and self-expressive-conscious:** The brand-conscious respondents can be divided into two subsegments: consumers who search for luxury fashion brands to enhance their social image and consumers who seek to avoid cheap high-street fast-fashion brands due to those products' limited material lifetime and reusability.

- (a) A: low-value or high-value branded products
- (b) FC: quality of branded products/saving money
- (c) PC: enjoyment and satisfaction in searching for branded items
- (d) SC: Social engagement through SHC consumption
- (e) V: self-enhancement or social recognition

Twenty respondents mentioned that brand name is not essential to them, but they check brand name to avoid poor product quality. Respondents mentioned that they saw branded products as a quality indicator. Ten respondents from the luxury brand-conscious subsegment mentioned that the process of hunting down branded products offered hedonic experiences akin to treasure hunting.

Overall, although the aggregated data reveal four major segments of the SHC market, consumers act differently depending on their personal situations, affected by such things as financial circumstances, local community engagement, and recommendations from friends and family. SHC consumers often seek out polymorphous values rather than only one value alone. However, consumers often trade one value off against another, as SHC retailers offer nonstandardized quality, price, style, and quantity of products. Consequently, SHC values considerably intertwine intrinsic personal factors (e.g., personal enjoyment level of SHC shopping, personal financial circumstances, and body size changes) with extrinsic factors (such as family background, reference group recommendations, and social community engagement levels).

### **3.3 Study 2: Non-SHC consumers—Perceived product attributes, consequences and values**

Respondents' perceptions of SHC attributes differed significantly, depending on their past experience of SHC consumption. The majority of non-SHC consumers (n=138) had the opposite perceptions of SHC attributes to the SHC consumer group. A total of 69.44% people held either very negative (15.08%) or moderately negative (54.36%)

attitudes toward SHC attributes. A further 17.7% displayed moderately positive attitudes and 12.86% saw SHC as having very positive attributes. The six most frequently cited words for SHC product attributes were: (1) “quality & style” (n=50), (2) “price” (n=33), (3) “cleanliness” (n=30), (4) “sustainability” (n=14), (5) “charity” (n=13), and (6) “brand” (n=12). SHC attributes were mainly negatively associated with product quality and styles. Some respondents described SHC as “old and tatty,” “out of fashion” or “ill-fitting,” “hippy old-fashioned low production,” “poorly cleaned,” and “not the best quality, and stains and tears.” This group’s positive associations with SHC attributes were related to environmental and social benefits. Although consumers were aware of the positive environmental and social impacts of using SHC, however, their negative perceptions of product quality, style, and cleanliness prevented their purchase of SHC. Compared to study 1, those values that were positive in the SHC consumer group were weaker in the non-SHC group, with the exception of environmental and social benefits, and a negative A–C–V sequence emerged from non-SHC consumers.

The main reasons for not wearing or using SHC were the perceived poor material quality (n=61), absent or unfashionable style (n=45), perceived unclean state (n=35), size and fit issues (n=35), unpleasant smell (n=16), lack of transparency and confidence in the product (n=24), that buying new clothes was a better option (n=16), lack of accessibility of SHC (n=14), lack of personal time (n=6), concerns pertaining to social image (n=7), unpleasant personal experiences in SHC shops (n=5), cheap brands (n=5), overpriced stock (n=4), lack of branded products or specialty goods (n=4), concerns around health (n=5), and unclear product information (n=4).

Respondents were mainly concerned about SHC product attributes and their perceived negative functional consequences (FC), such as poor product quality (e.g., bad smell, size issues, and materials) as well as unpleasant SHC store environments. This FC was directly associated with psychological consequences (PC) and social consequences (SC). Three distinctive PCs were identified among the non-SHC consumer group: (1) concerns around expressing self-identity and self-enhancement due to lack of product choice (n=32), (2) an unpleasant feeling due to poor product quality and cleanliness (n=22), and (3) feeling poor or cheap (n=21) that led to concerns of self-confidence and a sense of not belonging to the right social groups. Respondents indicated the negative social consequences (SC) as being (1) risks to self-perceived social status (n=43), (2) risks to social acceptance by others (n=26), (3) perceived risks to their social image related to appearance (n=14), and (4) negative images of charity shops (n=8).

The most frequently cited issue was the perceived negative social image of being lower class. “I wouldn't be happy telling people that I am wearing secondhand clothes, I would find it embarrassing and would think people would assume I couldn't afford new clothes.” Examples of respondents' comments regarding nonconsumers' perceived SHC attributes, consequences, and risks can be seen in appendix B. Figure 3 displays the nonconsumers' cognitive structure of the negative consequences and perceived risks of buying SHC.

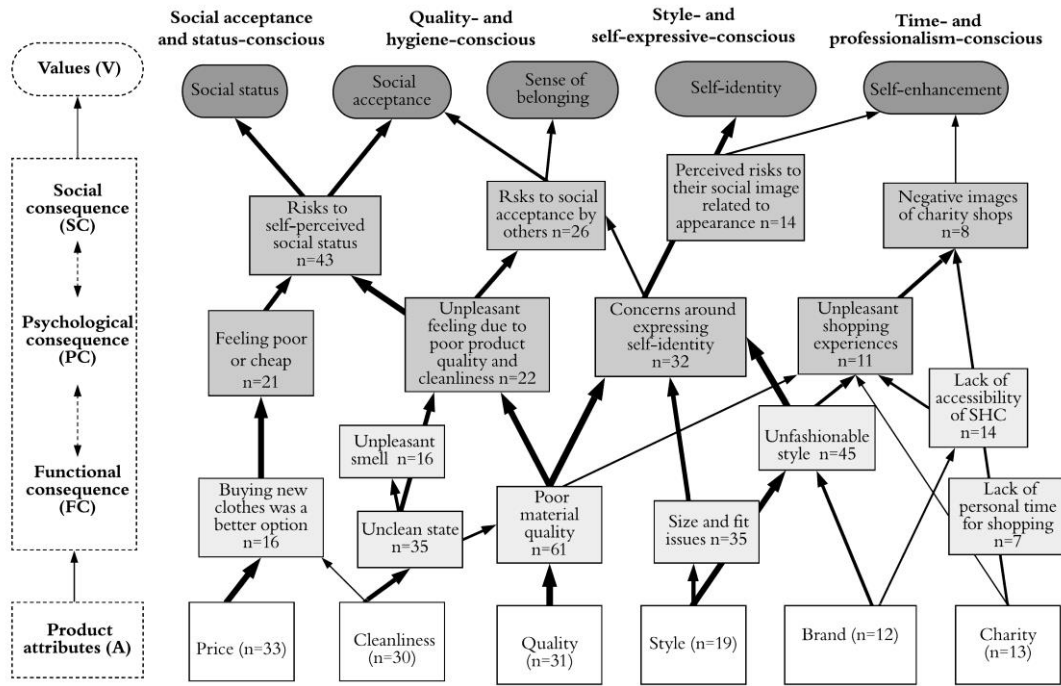


Figure 3: Hierarchical value map of SHC consumption (negative A–C–V sequence of non-SHC consumers)

There were four distinctive non-SHC consumer subgroups identified by MEC analysis: status-conscious, quality- and hygiene-conscious, style- and self-expressive-conscious, and time- and professionalism-conscious groups.

#### (1) Social acceptance and status-conscious:

- (a) A: cheap product with poor quality
- (b) FC: poor product quality with no style
- (c) PC: feeling cheap or self-conscious or worried about a poor self-portrayal
- (d) SC: concerns of social judgement
- (e) V: concerns of social acceptance and social status

*“Some higher-class people may see someone buying secondhand clothes as a sign of lack of wealth or laziness”; “Suppose it would be embarrassing if anyone knew you was wearing secondhand clothes, unfortunately this is the way of the world now”.*

**(2) Quality- and hygiene-conscious:** The second dominant pattern of the non-SHC consumer group was concerns over poor product quality and cleanliness. These perceived negative product attributes led to feeling less secure about the product and to concern around a sense of belonging in a social group.

- (a) A: unclean and poor-quality material
- (b) FC: poor quality or uncertainty about product quality/bad smell
- (c) PC: feeling dirty or not fresh/concerns about hygiene due to lack of transparency
- (d) SC: concerns around social image deriving from product quality
- (e) V: concerns of a sense of belonging in a social group

*“I might feel ‘unclean’ wearing someone else’s clothes”; “Items can sometimes smell and will leave a stale odor even when the item is washed.”* Although the stigma around SHC is gradually decreasing in Western countries (Xu et al., 2014), this research shows that some people still display a strong lack of acceptance of SHC due to its lack of cleanliness. This finding consequently reinforces the assertion of Gullstrand Edbring et al. (2016) that negative perceptions of the unhygienic nature of secondhand goods are one of the key barriers to optimizing SHC uptake.

**(3) Style- and self-expressive-conscious:** The perceived image of SHC as being unfashionable and offering limited style options had influenced the consumers’ feelings that it limits self-expression and creativity. Having limited product options involves more effort and time when shopping for SHC.

- (a) A: unfashionable clothes or limited product choice
- (b) FC: difficult to find the right style, size, and color
- (c) PC: feeling uncool, restricted in the ability to express individuality or creativity
- (d) SC: social image concerns of being perceived as not caring about appearance
- (e) V: risks to self-confidence and social confidence and expression of self-identity

*“I would feel that wearing someone else’s clothes would mean that they didn’t fit me properly or suit me”; “I wouldn’t want my friends and family to know that I wear secondhand clothes. It’s important to me how I look and dress.”*

**(4) Time- and professionalism-conscious:**

- (a) A: image of unknown brands or cheap brands
- (b) FC: unknown product information/not professionally cleaned
- (c) PC: wasting time trying to find the right products
- (d) SC: concerns around social status and self-enhancement
- (e) V: risks to social status and self-enhancement

*“Not smart enough for a professional environment”; “If the quality of material and construction are good and the garment fits a person's aesthetic, I have no negative association with secondhand clothes. It just takes too much work to try and find those pieces.”* Some participants did not have negative social images of SHC but expressed the point that it often takes more time to find appropriate garments.

### **3.4 Optimization of SHC consumption: Enabling & disabling factors**

There are five main barriers to optimization of SHC from the perspectives of existing SHC consumers: (1) lack of local shops and accessibility (n=17), (2) lack of product availability (size, quality, colors) (n=18), (3) value for money and the perception that the clothes are getting too expensive (n=12), (4) availability of personal time for shopping (n=11), and (5) the perception/fact that it is not easy to find good products due to lack of serviceability (n=8). Other disabling factors also identified were financial difficulty, lack of information, social pressures and influences, local shops' opening times (with a call to extend them), lack of a good online SHC shopping platform, lack of quality products, a no-returns policy in some SHC e-commerce outlets and brick-and-mortar stores, and an unpleasant shopping experience due to SHC's smell.

Meanwhile, six major obstructions were identified that hindered non-SHC consumers' SHC consumption: (1) lack of choice and availability of the right garments (quality, style, size, colors) (n=27), (2) lack of personal time for shopping (n=7), (3) concerns about personal and social image (social status) (n=7), (4) lack of local shops and accessibility (n=6), (5) cleanliness (n=5), and (6) value for money (n=5). Additional factors indicated that there is a lack of awareness of the actual quality of SHC shops. Some respondents thought that SHC shops were often smelly and badly organized with jumbled rails and unclear information on products and pricing.

Availability of good-quality SHC and accessibility of local shops are one of the major barriers, as SHC shops are only located in specific areas. *“Charity shops or local vintage shops are closing down nowadays and the city I live in has a large elderly population so most of the charity shops stock clothing that is very dated looking.”*

On the other hand, within the stores available, non-SHC consumers revealed concerns to do with limited availability of desired sizes, quality, and styles of SHC. These consequences directly negatively influenced their perceived risks to self-enhancement and expression of self-identity. Non-SHC consumers were concerned with the unpleasant feeling of SHC consumption and threats to their identity construction using the limited resources afforded by secondhand clothes. There were also perceived risks related to a lack of transparency around who had worn the clothes. One of the respondents mentioned, *“I personally don't like the thought of wearing [clothes of] someone who I don't know.”* Respondent comments organized into thematically analyzed barriers to optimizing SHC are shown in appendix C.

Participants from both SHC and non-consumers were asked to describe any factors or circumstances that would make it easy for them to use or buy secondhand garments in the near future. Eight major enabling factors were identified for optimizing SHC consumption among both SHC consumers and non-consumers: (1) availability and easy accessibility of physical SHC retailers or local charity shops (n=46), (2) availability and easy accessibility of SHC online shops (n=40), (3) product availability (quality, style, size, and colors) (n=40), (4) product quality control and transparency (past user information) (n=20), (5) better marketing to minimize the negative social stigma around SHC and to instead create positive images (n=18), (6) more information regarding SHC shops and a more positive SHC shopping experience (n=10), (7) better merchandising and window display (n=10), and (8) offering curated SHC sections and up-to-date trends in online and offline shops (n=9).

Additional factors that enable SHC consumption include social support from friends, family, and community, an easy delivery and return service, lifestyle changes, better store layouts, availability of personal shopping time for SHC shopping, cheaper registration fees for selling clothing in SHC marketplaces, extended opening times of SHC shops, and better search engines in online shops. Enabling factors expressed by respondents are illustrated in table 3.

Table3: Enabling factors for optimization of SHC from both SHC and non-SHC consumers

Major themes	Sample responses
<b>Multidistribution channel strategies</b>	
Availability and easy accessibility of physical SHC retailers or local charity shops (n=46)	<p>Lots of charity shops and an upmarket secondhand shop nearby</p> <p>Lots of availability in my local area, including a shop dedicated to pre-loved designer clothes</p> <p>More physical shops/events selling secondhand so I can actually hold the garment and try it on</p> <p>Bigger stores or stores with more presence/ I think it would be good if charity shops expanded</p>

Availability and easy accessibility of SHC online shops (n=40)	If there was a reputable online shop for secondhand clothes like there are for store retailers, I would buy from it.
	Ability to browse and buy online
	A specialist online shop that I trusted, a quality secondhand shop near me
	If there was a dedicated online shop
	Easy access [to] online apps or shops for secondhand clothing
	Ease of online auction
	If charity shops had online sections
<b>Product sourcing &amp; quality control strategies</b>	
Product availability (quality, style, size, and colors) (n=40)	Availability in my size and price
	Having more bigger sizes donated
	Brand names on deal. A large selection from a big secondhand shop
	Newer styles, good condition
	I am autistic and I find the environment difficult sometimes as the racks are so close to each other and sometimes many people are looking.
Product quality control & transparency (n=20)	Knowing where it came from
	If they were always washed and ironed by professionals
	Clothing smell in secondhand shop
	Proper cleaning of items
	If I knew who owned the clothes
<b>Marketing strategies</b>	
Better marketing to minimize negative social stigma around SHC and create positive images of SHC (n=18)	More and better advertising on TV, radio, social media
	Publicize the benefits of wearing secondhand clothes more and the positive effects this would have on the environment
	Better search engines on online secondhand shops such as eBay if you are hunting for a specific type of item
	Knowing where to go locally
	If I knew where to go for good charity shops
More information regarding SHC shops & a more positive experience of SHC shopping (n=10)	If I visited some vintage secondhand shops
	If I walk past the shop
	Rethinking where I shop
<b>Merchandising strategies</b>	
Better merchandising & window display (n=10)	If I saw more fashionable items in charity shop windows
	If charity shops were better cared for. They can feel so unloved and uninspiring.
	Good organization in charity shops
	Shops to have a clearer layout
	A well-organized/themed secondhand store (rather than have a whole bunch of secondhand clothes in one area)
Curated sections and up-to-date trends (n=9)	Easier to display in shops that weren't too cramped
	If I could have a catalogue of what was available each month.
	If it were easier to find things in my size and style
	Better presentation instead of sifting through rails or boxes
	The clothes being cleaner and maybe organized by size better
More fashionable secondhand stores	

### 3.5 Study 1 and 2: Implications of the research

This research examines SHC consumption values and the perceived risks of consumption using MEC, which is specifically helpful in deriving practical values for the development of a future SHC retailing strategy. Understanding the consumers' values that are associated with product attributes and consumers' perceived functional, emotional, and social consequences of SHC use can help to offer tailored services that are implemented by a retailing strategy and management. SHC distributors can serve different types of consumer needs by tailoring more sophisticated retail strategies



to each group. Figure 4 illustrates the summary of points of optimization that can be leveraged by SHC retailing strategies across the four major segmented SHC groups.

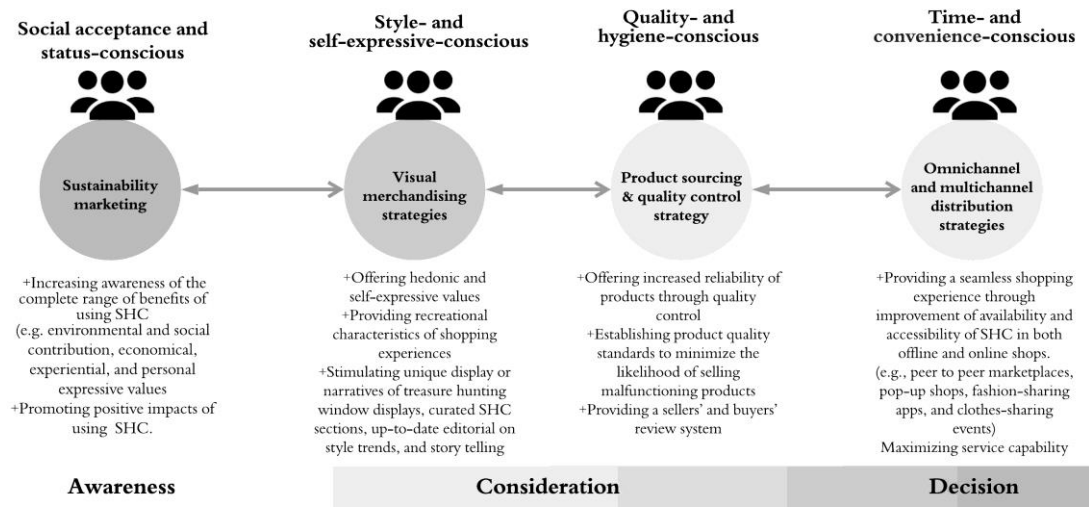


Figure 4: Optimization of secondhand clothing (SHC) consumption strategies for key consumer groups

(1) **Sustainability marketing for social acceptance and status-conscious users:** There is a lack of awareness of the complete range of benefits of using SHC. Sustainability marketing often emphasizes the environmental and social benefits of SHC only (Hur and Cassidy, 2019), and it will therefore be important to promote multiple SHC values such as economical, experiential, and personal expressive values alongside the traditional environmental and social contribution values. To do this, changing negative perceptions of SHC is important though better marketing campaigns, as is the promotion of positive perceptions of SHC. The MEC tool can promote a more customer-focused strategy by integrating a perceived value and risk structure into the shopping decision process (Mitchell and Harris, 2005; Reynolds and Gutman, 1984). The findings of this research from the MEC relating to both positive and negative perceptions of SHC can support marketers in defining a more tailored marketing strategy for the target group in their SHC marketing campaigns.

(2) **Visual merchandising strategies for Style- and self-expressive-conscious users:** Recreational characteristics of shopping experiences are commonly expressed and delivered through retail channel design through, for example, stimulations of unique display or narratives of treasure hunting in a social context among peers or family (Guiot and Roux, 2010). There are opportunities for retailers and charities to attract hedonic experience-sensitive users by optimizing offline and online visual merchandising strategies such as window displays, curated SHC sections, up-to-date

editorial on style trends, and storytelling. To successfully influence consumers to utilize SHC, multiple strategies are required to address segmented consumer needs that take into consideration the prepurchase, purchase, and postpurchase activities of SHC consumers.

- (3) **Product sourcing & quality control strategy for quality-sensitive users:** The product attributes are directly associated with emotional and social consequences that connect with desired personal values and happiness. Lack of transparency around the previous owner of the products and unclear product information, coupled with an unpleasant feeling about the products, makes people skeptical of the benefits of SHC consumption. Using a perceived risk structure via the MEC, retail managers could identify consumer groups who are sensitive to product quality and cleanliness and take steps to reduce these risks. There is also opportunity for upper- and middle-market SHC retailers by offering increased reliability of products through quality control, especially in terms of hygiene issues, and establishing product quality standards to minimize the likelihood of selling malfunctioning products. Peer-to-peer marketplaces could enable the identification of the product's owner and clothing information could be delivered in a more transparent and effective way by providing a sellers' and buyers' review system. Retailers could develop tactics that assist SHC buyers to make confident choices and thus increase their level of trust.
- (4) **Omnichannel and multichannel distribution strategies for time and convenience-conscious users:** Adoption of an omnichannel strategy can provide a seamless shopping experience through improvement of availability and accessibility of SHC in both offline and online shops. SHC consumers show a preference for brick-and-mortar stores, as the actual product quality is more visible. On the other hand, non-SHC consumers tend to prefer to shop in online stores or via apps and prioritize convenience and a less time-consuming experience to find tailored SHC products to meet their needs. As secondhand fashion items are often available only in limited quantities and vary in quality with limited product information, the alternative multichannel merchandising models (e.g., peer to peer marketplaces, pop-up shops, fashion-sharing apps, and clothes-sharing events) could be facilitated further to optimize SHC consumption. Retailers could maximize service capability (e.g., better delivery and returns service, introduction of a product catalogue, and improved stock management) and experiential marketing using multiple senses for middle- and upper-market SHC consumers.

### **3.6 Conclusions: Theoretical and managerial contribution**

In sum, this research has presented consumers' values and concerns pertaining to SHC consumption through examination of the relationship of SHC product attributes to complex psychological and social consequences and terminal value levels. Four distinctive SHC consumer groups were identified from this research: (1) price-conscious, (2) quality- and style-conscious, (3) brand-conscious, and (4) environmentally and socially conscious groups. The major drivers of SHC consumption comprise good value for money, hedonic experiences derived from a unique array of product options (e.g., nostalgia and vintage looks), and the holistic benefits of SHC and the environmental and social benefits of ethical consumption.

At the same time, four major non-SHC consumer groups were classified: (1) social acceptance-seeking and status-conscious, (2) quality- and hygiene-conscious, (3) style- and self-expression-conscious, and (4) time- and professionalism-conscious groups. Their key barriers to SHC consumption include: the perceived poor material quality, outdated/unfashionable styles, perceived unclean state and lack of transparency in the product, lack of accessibility of SHC in both online and offline shops, and concerns about personal and social image and acceptance.

The identified enabling and disabling factors for optimizing SHC consumption can be used to meet the expectations of hidden consumer values and minimize consumers' perceived risks of SHC consumption. The findings of the research reveal the connection between the specific features of SHC products and services and the underlying motivational values of SHC consumers, thus decreasing the shortcomings of present consumer-perceived value and risk theories related to SHC consumption. These findings can assist retailers and marketers to discern and appreciate the different types of SHC consumer value chains and segments to create a more tailored retailing and promotional strategy.

Implications of this research show that four major retailing strategies can be utilized for fostering SHC consumption: (1) omnichannel and multichannel distribution strategies can enable SHC retailers to better serve time- and convenience-conscious users through improvement of availability and accessibility of SHC in both offline and online shops; (2) a product quality control strategy is an essential element to serve quality-sensitive users by monitoring SHC attributes such as hygiene and malfunctioning product features and by improving transparency around the product's owner and descriptive information; (3) visual merchandising strategies can be utilized to stimulate and attract

style- and self-expression-conscious users through unique window displays and narratives of treasure hunting; (4) sustainability marketing can play an important role in cultivating SHC consumption. Marketers can promote multiple SHC values, including ecological, ethical, economic, experiential, and personally expressive, which can attract social image- and status-conscious users by minimizing the negative social stigma around SHC consumption.

Overall, this research contributes to the body of literature in sustainable fashion retailing and the enrichment of sustainable SHC consumption. The findings of research contribute original knowledge of differentiated SHC consumer groups and identifies deeper insights into both the perceived core values and risks associated with SHC consumption. The proposed typology and classification of SHC consumer groups can serve as a practical tool for SHC retailers and potential entrepreneurs who seek to facilitate alternative SHC consumption. Consequently, each strategy proposed can foster long term sustainable consumption leading to each consumer group being valued SHC more significantly.

Existing studies predominantly focus on SHC consumer values and often overlook non-SHC consumers' perceived risks and barriers of utilizing SHC consumption. These research findings influence SHC retailers and charity organizations to have informed decisions to understand SHC consumer's values and non-consumers' perceived risks by facilitating economic, environmental, social prosperity. Understanding the hierarchy of consumer motivations and perceived risks of SHC consumption can enhance our knowledge of the fundamental personal values of consumers and how those values can be associated with functional, social, and psychological consequences that link up with personal values of SHC consumption. The frameworks of values and perceived risks can be useful to sustainability marketers in reducing uncertainty surrounding consumer values and concerns. Lastly, it points to paths along which future research could further travel by investigating consumer distribution channels and retail format preferences in relation to the various consumer segments identified.

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Clothes Exchange, Repair Cafe Leeds and Zero waste Leeds for sharing their insights of secondhand clothing community groups.

## Appendix A

Product attributes, psychological and social consequences of SHC consumption from SHC consumers

Major themes	Sample responses
<i>Perceived SHC attributes</i>	
1) Price (n=52)	<ul style="list-style-type: none"> <li>It is generally very inexpensive so even if we don't like something after all, we can easily donate it back</li> <li>Often great value for money, being able to buy brands which I couldn't otherwise afford new</li> <li>Secondhand clothes tend to be cheaper than new clothes unless they are bespoke items. They tend to be sold mainly in charity shops.</li> <li>Cheap, but you can get some good quality stuff second hand</li> </ul>
2) Quality (n=49)	<ul style="list-style-type: none"> <li>Usually if I'm specifically looking for a second-hand item, it is of superior quality, so it stands the test of time</li> <li>Nearly new items, hardly worn, and in good clean condition and of good quality materials</li> </ul>
3) Brand (n=30)	<ul style="list-style-type: none"> <li>Good quality clothing for a fraction of the price</li> <li>I look for a good brand item in good condition that I would get lots of use from</li> <li>Brand, and whether there's tags in it</li> <li>The clothes should be high end brands</li> </ul>
4) Style (n=19)	<ul style="list-style-type: none"> <li>That no one else will have the same clothes as me.</li> <li>It's mostly about the style for me</li> <li>Styles that may not currently be in stores</li> <li>Wide variety of styles. I like having clothing that isn't found on high street.</li> </ul>
5) Environmentally friendly (n=14)	<ul style="list-style-type: none"> <li>Saves clothes from landfill, cheaper than new clothes</li> <li>The main reasons I shop for secondhand clothes now are for the price and for sustainability reasons.</li> <li>Better to reuse than replace.</li> </ul>
<i>Psychological consequences (PC)</i>	
1) Feeling unique and enhancing one's creativity and individuality (n=40)	<ul style="list-style-type: none"> <li>I feel free to experiment at times with what I buy, and this enhances my identity.</li> <li>I can find a more unique style, as when shopping new, many people end up with the same style.</li> <li>Self-identity is important to me.</li> <li>I also enjoy vibrant colours, which are often hard to find outside the summer months.</li> <li>You can make a fashion identity of yourself in the clothing you choose; some items being of a different era can give you a sense of achievement where you feel comfortable within yourself.</li> </ul>
2) Satisfaction of good financial decision (n=27)	<ul style="list-style-type: none"> <li>I would say that I have satisfaction that I have saved money and achieved the look I have been looking for at a fraction of the price without a significant loss in quality.</li> <li>I worry less about finances. The money goes to a charity, so someone somewhere benefits.</li> <li>You feel more relaxed because you're not worrying about finances, etc.</li> <li>Immensely satisfying – something new for a reasonable price.</li> <li>Happy due to value for money.</li> </ul>
3) Feeling happy to support the environment (n=16)	<ul style="list-style-type: none"> <li>Feels good to repurpose something rather than throwing it away.</li> <li>It's nice to know you're minimising your impact on such things as the environment</li> <li>Feels good to recycle rather than buy new.</li> <li>I feel more satisfied with myself if I've bought second-hand or reused clothes.</li> <li>Making a positive impact on the environment and on others</li> <li>I feel good spending less and contributing to sustainability.</li> <li>The feeling of helping the environment by reusing an item.</li> </ul>

4) Helping a cause (n=16)	<ul style="list-style-type: none"> <li>• Happy I have helped a charity.</li> <li>• Gives you a positive feel knowing you're supporting not only local shops but also charity in general.</li> <li>• I would personally feel better in myself knowing I've helped the community or a local charity.</li> <li>• I enjoy knowing I have a new item of clothing, which I have purchased from a charity and like knowing I am supporting a cause.</li> </ul>
5) Feeling good about oneself; self-enhancement (n=11)	<ul style="list-style-type: none"> <li>• The feel of wearing a certain brand might make you feel good about yourself.</li> <li>• I feel very good about myself.</li> <li>• Less guilt for not contributing to fast fashion.</li> <li>• If the item suits you, it is nice getting compliments from friends.</li> </ul>
<b><i>Social consequence (SC)</i></b>	
1) Being environmentally friendly (n=17)	<ul style="list-style-type: none"> <li>• I feel better about myself as I'm wearing clothes that have been recycled so there is minimum carbon footprint.</li> <li>• I feel good saving clothes from landfill.</li> <li>• I think others view the sustainability aspect positively, even if they wouldn't necessarily wear second-hand clothes themselves.</li> <li>• I don't really talk about my clothes socially in that way, other than to my partner at times, who, I suppose, admires the sustainability aspect.</li> </ul>
2) Positive social impacts (n=11)	<ul style="list-style-type: none"> <li>• Keeps the local shops in business.</li> <li>• Helping good causes.</li> <li>• I would mainly buy second-hand clothes from a charity shop, so you do get a feeling of having made a difference rather than fuelling commercialism.</li> <li>• I never refuse second-hand clothes from friends, so my friends always feel comfortable offering them to me.</li> </ul>
3) Financial benefits to engaging in these social activities (n=9)	<ul style="list-style-type: none"> <li>• I don't believe there are any social benefits other than having the spare money saved to do things with friends socially.</li> <li>• I am happy to let my friends know I got a bargain at the charity shop.</li> <li>• When I was a teenager my friends laughed about me being inside a charity shop and this put me off buying until I became older and wiser; also, the hard times in life financially taught me not to be shallow and fussy.</li> </ul>
4) Social disapproval (n=9)	<ul style="list-style-type: none"> <li>• My parents don't like me wearing second-hand clothes, because they think this shows financial disability.</li> <li>• When I was younger, people would look down at you if you shopped at a second-hand shop, but these days a lot more people shop there.</li> <li>• Stigma attached that it is cheap or that you must be poor.</li> </ul>
5) Social engagement with peers (n=6)	<ul style="list-style-type: none"> <li>• Second-hand items can create conversation amongst people and create an individual style in the midst of groups.</li> <li>• Shopping in second-hand shops with friends and family improves my social relationships.</li> </ul>
6) Personal image as a 'good person' (n=5)	<ul style="list-style-type: none"> <li>• You are looked upon as a good person; depending on the type of clothes you buy; your purchase could show support for a certain cause.</li> <li>• I think people are impressed when I wear second-hand clothes as they are more sustainable and look different to many other clothes.</li> </ul>

## Appendix B

Product attributes, psychological and social consequences of SHC consumption from Non-SHC consumer group

Major themes	Sample responses
<b><i>Perceived SHC attributes</i></b>	
1) Quality & style (n=50)	<ul style="list-style-type: none"> <li>• Quality of secondhand clothes would be first on my list, how worn are they and what is the quality of the garment like.</li> <li>• Makes me think items may be stretched or faded due to washing.</li> <li>• Material not as reliable as if purchased brand new, more likely to rip, etc.</li> <li>• Quality can be questionable and needs a lot of hunting down. Fit can be difficult too.</li> <li>• Ill-fitting, small sizes</li> <li>• Hippy old-fashioned low production</li> </ul>
2) Cleanliness	<ul style="list-style-type: none"> <li>• The thing that concerns me mainly in cleanness.</li> </ul>

(n=30)	<ul style="list-style-type: none"> <li>• Cleanliness, depending on where you buy them, can sometimes not be great.</li> <li>• Poorly cleaned and they may have a slight odour</li> <li>• Old, tatty, not particularly clean</li> <li>• Not always so clean, can smell musty</li> <li>• Hard to find appropriate things and not always clean</li> <li>• Possibly poor quality and the product being unclean.</li> </ul>
3) Price (n=33)	<ul style="list-style-type: none"> <li>• A bit cheap</li> <li>• Cheaper than new</li> <li>• Dirty cheap price, possibly smelly history of them</li> </ul>
4) Sustainability (n=14)	<ul style="list-style-type: none"> <li>• It's good for the environment to purchase and wear second-hand clothes</li> <li>• Better for the planet</li> <li>• Often supports good causes</li> <li>• Sustainable way to buy clothes, but no point buying if they don't fit or don't suit your style, which makes it harder to shop second-hand effectively than first-hand.</li> <li>• Good for sustainability</li> </ul>
5) Charity (n=13)	<ul style="list-style-type: none"> <li>• The charity-shop smell fraying not up to date with fashion you buy from normal retailers faded colours</li> <li>• Oxfam. Help the aged."</li> <li>• Often supports good causes</li> </ul>
6) Brand (n=12)	<ul style="list-style-type: none"> <li>• Poor, cheap-quality clothing items that aren't always branded</li> <li>• Secondhand clothing is normally dated and rarely from fashionable brands</li> <li>• Cheap brands</li> </ul>
<b>Psychological consequences (PC)</b>	
1) Concerns around expressing self-identity and self-enhancement (n=32)	<ul style="list-style-type: none"> <li>• You don't have as much choice of what to buy in secondhand shops as it's just what people have donated</li> <li>• I would feel that wearing someone else's clothes would mean that they didn't fit me properly or suit me</li> <li>• People buy clothes to accommodate their own image; it would be hard to find your own self of style in secondhand clothes.</li> <li>• Don't always allow you to express their individuality</li> <li>• Feels like I'm imitating the previous owner. I feel unoriginal, and not unique</li> </ul>
2) An unpleasant feeling due to poor product quality and cleanliness (n=22)	<ul style="list-style-type: none"> <li>• It feels strange knowing a stranger has worn them first.</li> <li>• Items can sometimes smell and will sometimes have a stale odour.</li> <li>• I personally don't like the thought of wearing clothes once worn by someone who I don't know.</li> <li>• I might feel an aura of someone else on the clothes, due to particular detergent used</li> <li>• New clothes are more exciting and make you feel better if you're wearing something new</li> <li>• Feels grubby to wear clothes worn by someone else</li> <li>• I might feel "unclean" wearing someone else's clothes</li> </ul>
3) Feeling poor or cheap (n=21)	<ul style="list-style-type: none"> <li>• It would probably make myself feel poor, so I wouldn't be very self-enhanced at all.</li> <li>• It's seen as embarrassing to wear secondhand clothes, as some brands can be just as cheap.</li> <li>• Personally, I would feel as if I couldn't provide for my family and myself if I had to resort to wearing second-hand clothes.</li> <li>• Lack of confidence as people may think that it is all I can afford</li> <li>• I think I might feel tatty or inadequate</li> <li>• I can feel bad for people in poverty, using clothing banks, charity shops and jumble sales, especially as their choices may be restricted</li> <li>• I work hard and like to feel good. Wearing someone else's clothes would make me feel like I was struggling in life</li> </ul>
<b>Social consequence (SC)</b>	
1) Perceived risks to self-perceived social status (n=43)	<ul style="list-style-type: none"> <li>• There is a stigma around second-hand clothes, and it may paint a picture of the owner being poor or not able to afford new clothes.</li> <li>• I would feel embarrassed wearing second-hand clothes and feel that people would think that I couldn't afford to buy new.</li> <li>• Some people I know may look down on others due to these reasons or not trust that they can manage their money</li> <li>• My family may think that I am on hard financial times and be worried. Also, there seems to be a lot of pride for some people from buying something new.</li> <li>• If you got seen shopping for second-hand clothes, people may think you can't afford new clothes or may think your dirty</li> </ul>
2) Perceived risks to social	<ul style="list-style-type: none"> <li>• People would notice I had second-hand clothes on and judge me</li> </ul>

acceptance by others (n=26)	<ul style="list-style-type: none"> <li>• People sometimes see second-hand clothes as a negative and don't accept people wearing them which can affect relationships</li> <li>• People would notice I had second-hand clothes on and judge me</li> <li>• Not smart enough for professional environment</li> <li>• Open to ridicule, especially if it's a school child wearing second-hand clothes</li> <li>• People think you're poor and wear horrible clothes</li> <li>• I may feel a little stressed if family started asking questions, and also I may feel a bit odd about clothes not being washed in a way I am used to.</li> <li>• Some people view second-hand clothes as being dirty or commonly bought/worn by those that aren't as fortunate to afford new items.</li> </ul>
3) Perceived risks to their social image related to appearance (n=14)	<ul style="list-style-type: none"> <li>• I wouldn't want my friends and family to know that I wear secondhand clothes. It's important to me how I look and dress.</li> <li>• Not cool. Items tend to be out-dated</li> <li>• People thinking that I am dressed poorly</li> <li>• People may think I don't care about my appearance.</li> <li>• Out of fashion items, which look already worn and possibly shabby.</li> </ul>
4) Negative images of charity shops (n=8)	<ul style="list-style-type: none"> <li>• I'm not a snob and I would wear them, but I just don't like the charity shops</li> <li>• Embarrassing to be shopping in second-hand stores</li> <li>• Always a smell when you walk into the second-hand shops</li> <li>• I don't trust people that sell second-hand clothes.</li> </ul>

## Appendix C

### Disabling factors that influence SHC consumption

Major themes	SHC consumers Sample responses	Non SHC consumers Major themes	Sample responses
<b>Disabling Factors</b>			
Lack of local shops and accessibility (n=17)	<ul style="list-style-type: none"> <li>• Distance of charity shops</li> <li>• Charity shops closing / my local shops close.</li> <li>• If I moved somewhere that didn't have charity and vintage shops</li> <li>• The city I live in has a large elderly population, so most of the charity shops stock clothing that is very dated.</li> <li>• Hard to find quality of goods sold online that are second-hand</li> </ul>	Lack of choice and availability of the right garments (n=27)	<ul style="list-style-type: none"> <li>• Living in a place where the only people who donate clothes are 60+</li> <li>• Availability of clothes that I like in second-hand shops. Not being able to find the garments I want</li> <li>• If none were available in my size and style.</li> <li>• Don't usually find items I like, there's nowhere local to get second-hand clothes,</li> <li>• Not enough bigger sized clothes donated</li> </ul>
Lack of product availability (size, quality, colours) (n=18)	<ul style="list-style-type: none"> <li>• The second-hand market may not immediately provide the second-hand option when I am looking to purchase the garment.</li> <li>• If there were a lack of second-hand garments available, that would make it difficult to use them.</li> </ul>	Lack of personal time for shopping (n=7)	<ul style="list-style-type: none"> <li>• Lack of time in being able to find what I'm looking for</li> <li>• I do not have the free time to browse the variety available in secondhand shops. Furthermore, I tend to shop for specific items, which makes shopping in secondhand shops more difficult as it's more suited to "surprise" finds.</li> </ul>
Value for money (n=12)	<ul style="list-style-type: none"> <li>• If they became more expensive than new clothes</li> <li>• If prices of second-hand clothing went up, I would find it difficult, but I can't see that happening anytime soon.</li> </ul>	Concerns about personal and social image (n=7)	<ul style="list-style-type: none"> <li>• Feel embarrassed to wear them</li> <li>• My own embarrassment, it's silly I know but I don't want to be seen going into a charity shop</li> <li>• The continuing stigma surrounding buying from charity shops.</li> </ul>



Availability of personal time for shopping (n=11)	<ul style="list-style-type: none"> <li>• Work hours make it difficult to go to charity shops</li> <li>• Shopping for secondhand clothing can be quite time consuming due to the nature of everything being very different</li> <li>• I am trying not to buy many clothes, difficulty finding more time as it is more time consuming</li> </ul>	Lack of local shops and accessibility (n=6)	<ul style="list-style-type: none"> <li>• Charity shops are only open when I am at work</li> <li>• Lack of access to secondhand clothes shops</li> <li>• Small shops with a lack of varied stock, lack of stores</li> </ul>
Not easy to find good products due to lack of serviceability (n=8)	<ul style="list-style-type: none"> <li>• Shops, which aren't laid out well and require a lot of digging through. I haven't got time for that.</li> <li>• When it's like a jumble sale and you have to rummage. If items don't look clean (I always wash before I wear anyway).</li> </ul>	Cleanliness (n=5)	<ul style="list-style-type: none"> <li>• I just can't bring myself to wear something that a stranger has worn before me and sweated in.</li> <li>• Process of cleaning clothes.</li> <li>• If they still smelled dirty</li> <li>• Smell when you walk in the shop. The smell of old 'stuff'</li> </ul>
Personal & social images (n=3)	<ul style="list-style-type: none"> <li>• If people are judgemental towards my choices, that puts me off massively.</li> <li>• It has a stigma attached, so if I hear people talking negatively behind my back, I would re-consider it</li> <li>• If wearing them is going to affect my social networking or even future job prospects</li> </ul>	Value for money (n=5)	<ul style="list-style-type: none"> <li>• Increasing the price so that they match those in high street retailers</li> <li>• Sometimes secondhand shops put their prices up because their clothes are 'vintage' or branded. This can make it difficult to use secondhand garments.</li> <li>• If they are overpriced</li> </ul>

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