



Drivers and barriers influencing consumers' online collaborative clothing consumption practices in the South African market

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DISSERTATION

M Con Sci (Clothing Management)

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**Drivers and barriers influencing consumers' online collaborative clothing consumption
practices in the South African market**

by

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Dissertation submitted in partial fulfilment of the requirement for the degree

M Con Sci (Clothing Management)

in the

Department of Consumer Science and Food Sciences
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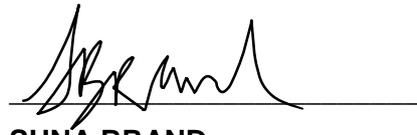
Supervisor: Dr B Jacobs
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October 2021

DECLARATION

I, **Suna Brand**, declare that the dissertation which I hereby submit for the Master's in Consumer Science (Clothing Management) in the Faculty of Natural and Agricultural Sciences of the University of Pretoria is my own original work and has not been submitted at any other university.

I further declare that all sources cited are acknowledged in a comprehensive list of references.



SUNA BRAND

29/10/2021

DATE

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ABSTRACT

Drivers and barriers influencing consumers' online collaborative clothing consumption practices in the South African market

by

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Faculty: Natural and Agricultural Sciences, University of Pretoria

Degree: M Con Sci (Clothing Management)

The overall objective of this study was to explore and describe the drivers and barriers influencing consumers' online collaborative clothing consumption practices in the South African market. The research focused specifically on consumers' **actual behaviour** that influences participation in three online collaborative clothing consumption business models, namely renting, swapping, and buying second-hand clothing. Furthermore, the influence of **motivational drivers** (i.e., *environmental benefits, economic benefits, hedonic dimensions, need for uniqueness, convenience and social identity (community)*) as well as specific **barriers** (i.e., *hygiene issues, unfamiliarity with the concept, materialism, online trust*) on consumers' online collaborative clothing consumption practices were investigated. The term 'collaborative clothing consumption' is a relatively new concept, but falls under the sharing economy umbrella. These innovative business models centre around usage in the clothing industry rather than ownership, which could promote economic growth as well as mitigate the environmental impact of the fashion industry. It was considered essential to conduct this research in a South African context as most research on this topic thus far has been conducted in developed markets, such as the USA and Europe. Therefore, in a complex and diverse market like South Africa, research on collaborative clothing consumption is long overdue, especially with regard to the drivers and barriers that influence consumers' participation.

The study followed a survey research design and quantitative approach and was exploratory-descriptive in nature. Data were collected through an online self-administered questionnaire developed on Qualtrics from existing scales. The scales were adapted in accordance with the

specific research objectives of the study. Prior to data collection, the online questionnaire was pre-tested to clarify the statements and eliminate any errors before data collection. Primary data were collected from the larger South African consumer population (n= 766) over the age of 18 living in South Africa and who indicated that they participated in online shopping. Although existing scales were used for this study, they have, to date, not been used to establish the relevance of constructs related to South African consumers' behaviour. Therefore, an exploratory factor analysis (EFA) was performed to isolate relevant constructs and concepts in the dataset and validate the measures' internal consistency. Subsequently, a confirmatory factor analysis (CFA) was performed to confirm the relationships and factorial validity of the model obtained from the EFA. Finally, the measurement model was accepted as the goodness-of-fit statistics indicated satisfactory fit indices.

The sharing economy, and in this case, collaborative clothing consumption, has been hailed as a global paradigm shift that would radically shift consumer attitudes towards ownership. However, the findings of this study, confirmed that the uptake of these new business models in South Africa is still in its infancy. Despite the fact that these consumption models are widely revered for being a sustainable and environmentally beneficial solution to overconsumption, the results did not reflect environmental concern as a key driver for participating. Results indicated that consumers still attach too much value to materialism (ownership), economic gains and having fun (hedonism), and far less value on actually changing their consumption practices to aid the environment. As far as the three models were concerned, it was clear that renting, at this stage, has a weak foothold in the South African market. Almost 80% of the participants have never rented clothing which indicates that renting is still very novel amongst the participants. With regard to swapping, this model as an online platform is also not yet commonplace. Most swapping occurs in person between friends and family, and rarely online. Furthermore, very few apps/websites currently facilitate this method of collaborative clothing consumption models seamlessly and effortlessly. The buying of second-hand clothing had a far better uptake amongst the participants, with almost 50% currently buying second-hand clothes. The stigma around buying second-hand is dissolving, as more and more middle to upper-class consumers are 'thrifting' for the thrill of finding unique items. Whether these business models will take off in South Africa on a mass commercial scale remains to be seen but based on the results, they will face several challenges to find a foothold in the consumer's mind at this stage. Retailers considering entering the collaborative clothing consumption market should focus on leveraging the key drivers and addressing the key barriers as highlighted by the findings of this study, in order to entice consumers to participate in these practices.

Keywords: Sharing economy, collaborative clothing consumption, South Africa, emerging economy, drivers, barriers, renting, swapping, second-hand clothing

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CHAPTER 1: THE STUDY IN PERSPECTIVE

This chapter provides background information and insight into the research topic, namely collaborative clothing consumption. First, the research problem is outlined, followed by the justification of the study and thereafter the research objectives for the study are formulated. Finally, the chapter concludes with definitions of relevant concepts used in the study and an outline of the succeeding chapters.

1.1 BACKGROUND

Forty years ago, Yi-Fu Tuan (1980:472) said that “we are what we have and possess”. Belk (1988) reiterated this statement, claiming that ownership forms an integral part of ourselves and literally defines who we are. However, this seems to no longer be the case due to the emergence of a global, cultural and economic paradigm shift in consumer consumption, where, according to Belk, “consumers are no longer what they *own*, but rather what they can *access*” (Belk, 2014b:1595, Todeschini, Cortimiglia, Callegaro-de-Menezes & Ghezzi, 2017). A new culture of sharing has shifted consumer attitudes, allowing people to access products through various online networks (Bucher, Fieseler & Lutz, 2016). This phenomenon is often referred to as the ‘gig economy’, ‘peer economy’, ‘access-based consumption’ and ‘collaborative consumption’, however, these models all fall under the most commonly used collective term for this concept, namely the ‘sharing economy’ (Akbar, Mai & Hoffmann, 2016; Becker-Leifhold & Iran, 2018; Mara, 2020). Currently, there is no consensus on which term best describes these new developments, but collaborative consumption (which is the term this study focuses on) specifically represents a business model where a monetary fee or some form of financial benefit is at play for the parties involved (Belk, 2014a; Mara, 2020).

Collaborative consumption facilitates access to products or services amongst strangers at a cost (Belk, 2014b). This interaction between buyer and seller differs from the actual act of sharing, where the motive is a selfless act to help others rather than to gain financial benefits (Belk, 2014a). Sharing, therefore, is not just caring – it makes good business sense, as at least one party stands to gain financially from the transaction (Mara, 2020). Globally renowned examples include Airbnb, Uber and more recently, within the fashion industry, Rent-the-Runway (Perlacia, Duml & Saebi, 2017). Whether there is consensus or not regarding the correct definition for this business model, one thing is agreed upon: the sharing economy has brought forward many alternatives across industries and is set to continuously disrupt and curb the impact of current consumption patterns across the globe, including within the African continent (Hamari, Sjöklint & Ukkonen, 2016).

This study focused on South African consumers, where traditionally sharing is nothing new: a large informal economy has always existed and thrived across the African continent (Manavhela

& Henama, 2019). However, the sharing economy has now been formalised and monetised by companies such as Airbnb and Uber, bringing a significant entrepreneurial upside to alleviating poverty and curbing unemployment (Mara, 2020). The exponential scaling of the sharing economy across all sectors has been brought about by the development of and access to various technologies around smartphone applications, including the clothing industry (Ertz, Durif & Arcand, 2016; Mara, 2020). When referring to the clothing industry, the term 'collaborative clothing consumption' (CCC) has been widely implemented in prior literature (Becker-Leifhold & Iran, 2018). The concept of collaborative clothing consumption refers to when two or more individuals engage in a joint online activity to save resources through the shared utilisation of clothing items (Dall Pizzol, Ordovás de Almeida & Do Couto Soares, 2017). In the case of collaborative clothing consumption, this could entail renting, swapping or buying second-hand clothing instead of owning or buying new ones. Therefore, the potential for this business model to lower resource consumption and become increasingly resource-light in the long term is clear (Becker-Leifhold & Iran, 2018; Adomaitis & Saiki, 2019).

In an emerging economy such as South Africa, which is defined as a low-income, rapid-growth country, the transition to online commerce is still in its infancy, and many challenges, such as unequal economic and infrastructure distribution still exist (Hoskisson, Eden, Lau & Wright, 2000; Alexander & Mason, 2017). As a result, South African companies wanting to invest in collaborative business models have a unique set of challenges in providing affordable access to the Internet if these business models are to thrive (Morris, 2018). Therefore, understanding the mass market perception of e-commerce in South Africa could shed some light on consumer attitudes and the several factors that impact their decision-making to participate in online collaborative clothing consumption (Morris, 2018).

According to predictions made by World Wide Worx in 2016, the dominant trend for online consumption in the South African e-commerce sector was that it would continue growing at a rate of more than 20% per annum (Alexander & Mason, 2017). However, by 2020, due to the coronavirus-induced lockdowns that could not have been predicted, e-commerce grew by 66%, rendering earlier estimates entirely off (Daniel, 2021). Furthermore, high mobile penetration is also driving buyers' online shopping behaviour, which in 2018 only accounted for 1% of the country's overall retail sales (Mapande, Vivian & Appiah, 2018). In 2020, this shifted to 4%, again highlighting the opportunity for exponential growth within this sector (Daniel, 2021). However, suppose e-commerce (including online collaborative clothing consumption) is to achieve consumer adoption and reach its full potential in South Africa, several important social issues that influence behaviour and decision-making within this market will have to be addressed. These issues include lack of education, expensive data costs, inadequate wi-fi infrastructure, income inequality, e-commerce safety and cultural norms (Morris, 2018). Hence, one could argue that the

success of online collaborative clothing consumption in South Africa depends on these issues first being addressed to achieve a more significant foothold and market penetration within this country.

Besides this digital divide in South Africa, as mentioned above, other drivers and barriers concerning collaborative consumption have been documented in research. Yet, very few explicitly focus on collaborative clothing consumption such as renting, swapping or buying second-hand clothing (McNeill & Venter, 2019). Much of the literature thus far has hailed collaborative clothing consumption as a more sustainable and environmentally beneficial solution to a society that suffers from an overconsumption problem (Becker-Leifhold & Iran, 2018). That said, it is essential to note that other drivers, besides environmental benefits, also play a key role in online collaborative clothing consumption (Hamari *et al.*, 2016). One such driver is the economic benefit gained from participating in collaborative clothing consumption, as per Park and Armstrong (2019). According to their research, the motivation most frequently cited by consumers who take part in collaborative clothing consumption is economical, i.e., saving money. Through activities such as sharing, renting, and swapping, consumers can access more products when using these services, which may be cheaper than buying new products (Hamari *et al.*, 2016; Fota, Wagner & Schramm-Klein, 2019).

Hedonic dimensions are considered another significant driver. It refers to consumer behaviour that invokes the multisensory, fantasy, and emotional aspects derived from products or shopping (Hirschman & Holbrook, 1982; Böcker & Meelen, 2017; Lang & Armstrong, 2018). When participating in collaborative clothing consumption platforms, the thrill of the treasure hunt, for example, is paramount in enhancing hedonic pleasure (Chiquoine, 2017). The delight in finding a unique one-of-a-kind item is part of the entertainment value of collaborative clothing consumption (McNeill & Venter, 2019). Additionally, the need for uniqueness can also be described as a key driver and refers to an individual's aim to develop and enhance his/her own personal and social identity (Lang & Armstrong, 2018). Acquiring second-hand clothing, swapping or renting provides an individual with the opportunity to be creative and self-expressive, which is more challenging to achieve if only buying from mainstream retailers (McNeill & Venter, 2019). There is also a steady rise in consumers' demands for convenience, as they are more time-starved than ever (Seiders, Voss, Godfrey & Grewal, 2007; Duarte, P., e Silva, S.C. & Ferreira, M.B., 2018). Therefore, when a collaborative clothing consumption activity saves time and energy, and provides comfort or well-being to the individual, it can be seen as another driver that influences participation (Seiders *et al.*, 2007; Dall Pizzol *et al.*, 2017). Lastly, social identity relating to community and the sense of belonging is also a key driver. Collaborative clothing consumption is an example of an online community where participants can share resources and engage with one another (Dall Pizzol *et al.*, 2017). The interactions, therefore, do not occur to the individual's detriment but instead

demonstrate connectedness, shared values, norms, and meanings between members (Albinsson & Perera, 2012). Therefore, it is clear that consumers are motivated by many factors, of which acting environmentally sustainably is just one of them (Hamari *et al.*, 2016). In fact, according to Iwanow, McEachern and Jeffrey (2005), price is often considered more important than ethical/sustainability concerns, despite the cognitive dissonance that some environmentally aware consumers may feel.

Similarly, some challenges or barriers around consumers' adoption of collaborative clothing consumption have also been identified, which may halt or prohibit participation (Becker-Leifhold & Iran, 2018). Research has shown that consumers need many coercive practices and incentives to participate as they do not trust other users or feel a natural affinity to the business model (Catulli, Lindley, Reed, Green, Hyseni & Kiri, 2013). One such barrier covered in this study is hygiene issues, which is a problematic association to break in consumers' minds, especially seeing that clothing items are very intimate items to share (Santana & Parigi, 2015; Becker-Leifhold & Iran, 2018). The outbreak of the COVID-19 pandemic would have heightened this fear amongst consumers; hence collaborative clothing consumption businesses will have to strategically respond to these concerns due to the immediate threat of contact with the virus (Baek & Oh, 2021). Another significant barrier is unfamiliarity with the concept, i.e., consumers' reluctance to use a service for the first time because they do not have prior experience with it (Möhlmann, 2015; Becker-Leifhold & Iran, 2018). For many consumers, the practice of collaborative clothing consumption is relatively new, and this lack of knowledge creates a perceived risk for potential losses; hence there is naturally a reluctance to participate (Bhatti *et al.*, 2018; Fota *et al.*, 2019). Materialism and the need to retain ownership of goods is another notable barrier as ownership is closely associated with social status and control (Ozanne & Ballantine, 2010; Becker-Leifhold & Iran, 2018). When individuals attach too much meaning to their possessions, it is challenging to change what they believe is a natural and acceptable way of consuming (Belk 1988). For these consumers using collaborative clothing consumption services could, for example, carry a stigma that he/she is unable to afford their own items (Catulli *et al.*, 2013). Therefore, it is clear that a consumer's bond to material goods and social status may negatively impact their participation in collaborative clothing consumption (Lang & Armstrong, 2018). Lastly, lack of online trust when dealing with online services is also a considerable barrier. Hidden or recurring costs, issues pertaining to correct sizing/quality, and low responsiveness of the online service provider to complaints and queries are all at play with regard to this barrier (Catulli *et al.*, 2013; Becker-Leifhold & Iran 2018). To summarise, certain drivers and barriers exist that impact on consumers' participation in collaborative clothing consumption practices. These drivers and barriers will be further discussed in Chapter 2, as well as an in-depth look at three collaborative clothing models, namely renting, swapping or buying second-hand clothing.

1.2 RESEARCH PROBLEM

Online collaborative consumption business models have been known to create several disruptions in various industries across the globe (Dreyer, Lüdeke-Freund, Hamann & Faccar, 2017). However, the impact has mainly been observed by researchers within developed economies with extensive infrastructure for online commerce, unlike South Africa, where e-commerce is still hampered by perceived risks such as financial loss, parcel theft and the lack of product evaluation before purchasing (Makhitha & Ngobeni, 2021). These findings are in line with research done by Mair and Reischauer (2016). They argue that not enough is known about how collaborative consumption business models may manifest differently across various “institutional and geographical contexts”, specifically in the case of an emerging economy. Therefore, doing this research in a South African context makes for an interesting and exciting field of study. It could potentially offer unique and valuable insight into how acceptable collaborative consumption models are for South African consumers by assessing what the main factors driving these models in developing countries are. This research could also possibly highlight the opportunity for potential economic gains to be made, especially considering South Africa’s extreme levels of inequality and unemployment.

Unfortunately, most of the literature on collaborative clothing consumption has focused mainly on developed economies such as the USA and Europe (Dreyer *et al.*, 2017). Additionally, the concept of collaborative clothing consumption is relatively new, and very little empirical research focuses explicitly on consumer adoption and actual behaviour, specifically within a South African context. Therefore, this study aimed to firstly assess consumers’ current **participation** in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market, and secondly, to establish which drivers and barriers currently influence their participation in online collaborative clothing consumption. Most research thus far has explored consumer attitudes and behavioural intention toward collaborative clothing consumption, but not necessarily actual behaviour. This phenomenon is referred to as the attitude-behaviour gap and refers to when a consumers’ values/attitude does not correlate to their actions (Hamari *et al.*, 2016; Todeschini *et al.*, 2017). Concerning collaborative clothing consumption, there is, for example, often a gap between environmental concern and actual sustainable behaviour. Research abroad has shown that, on the one hand, there is a drive for consumers to prioritise access over ownership due to the increased awareness surrounding the negative environmental impact the fashion industry propagates (Todeschini *et al.*, 2017). On the other hand, consumers are not necessarily motivated enough to change their negative consumption behaviours (Birtwistle & Moore, 2007; Hamari *et al.*, 2016). Clearly then, although altruistic and individualistic reasons for engagement in collaborative consumption exist, economic gains are often a stronger motivator for behavioural intention toward collaborative clothing consumption (Hamari *et al.*, 2016;

Billows & McNeill, 2018). Research thus far has highlighted that consumers are motivated by many other factors as well, not only environmental concerns and economic gains. These additional drivers were identified as *hedonic dimensions* (Böcker & Meelen, 2017; Lang & Armstrong, 2018), the *need for uniqueness* (Lang & Armstrong, 2018), *convenience* (Dall Pizzol *et al.*, 2017) and *social identity/belonging to a community* (Dall Pizzol *et al.*, 2017). Specific barriers that deter from participation have also been identified in prior research, namely, *hygiene issues* (Becker-Leifhold & Iran, 2018), *unfamiliarity with the concept* (Möhlmann, 2015; Becker-Leifhold & Iran, 2018), *materialism* (Ozanne & Ballantine, 2010; Becker-Leifhold & Iran, 2018), and lastly, *online trust* when dealing with online services (Catulli *et al.*, 2013; Becker-Leifhold & Iran, 2018).

Therefore, the purpose of this study is to gain insight into South African consumers' current collaborative clothing consumption practices. Specifically, the drivers and barriers that influence their participation in the three specific collaborative clothing consumption models: renting, swapping and buying second-hand clothing.

1.3 JUSTIFICATION OF STUDY

Thus far, most literature on collaborative clothing consumption, which is a relatively new concept, has focused mainly on developed economies such as the USA and Europe (Dreyer *et al.*, 2017). Empirical research within emerging economies is lacking, especially with regard to consumers' actual participation, and not just intention to participate, in collaborative clothing consumption practices. Therefore, this study aims to theoretically contribute to a foundation on which future researchers can build.

Investigating the driving forces and complexities of collaborative consumption highlights opportunities for consumers and businesses around the globe to stay up to date and engage with innovative business models (Mont & Power, 2010). Furthermore, implementing collaborative clothing models could enable consumers and businesses to pursue economic gains and create social and environmental value (Mont & Power, 2010; Todeschini *et al.*, 2017). Therefore, more profound insight into consumers' engagement and actual participation in collaborative clothing consumption could motivate businesses to engage in this potentially profitable business concept. Furthermore, it could assist businesses/marketers in formulating strategies and promotional frameworks to gain wider access to their target markets and increase their reach amongst all age groups.

Importantly, these findings may guide and assist governments and policymakers in facilitating and generating more efficient strategies relating to alternative clothing consumption practices in future. According to Mont and Power (2010:2232), a very pertinent question that resonates deeply with the concerns facing the contemporary consumption culture is: “...*how does one address climate change and the collapse of ecosystems without threatening the economy, while simultaneously improving the well-being of all people and ensuring social justice and equality...?*”. Even though this study does not delve too deeply into sustainability and the clothing industry, one cannot disregard the findings highlighting the sustainable benefits these models potentially offer. So far, solutions to environmental and human concerns through advancements in technology and policy implementations seem to be outpaced by increasing consumption levels and a growing population (Mont & Power, 2010). This problem makes it very difficult for policymakers and governments to balance sustainability and economic growth. How could new business models, technological innovations, and individual decision-making processes overlap and influence each other and, in so doing, instigate change towards more sustainable levels of consumption (Mont & Power, 2010)? This concept is precisely the issue that collaborative clothing consumption aims to address. How to decouple economic growth with the use of finite resources and instead ensure resources are kept at their highest utility and value at all times during the product life cycle (Todeschini et al., 2017).

Furthermore, this study may also be helpful to conventional businesses currently not competing in this space but who are still considered indirect competitors. These businesses stand a chance to gain a competitive analysis into these new and emerging businesses and assess opportunities and threats that may impact their growth. Regardless of South African fashion retailers' current position towards collaborative clothing consumption, the phenomenon is not expected to slow down in the coming years. Therefore, by understanding the barriers and drivers of collaborative clothing consumption, businesses and consumers can accelerate future business models pertaining to collaborative clothing consumption. The sooner the drivers and barriers of participating in collaborative clothing consumption models are understood, the sooner the fashion industry players can strategically plan for the long-term impact of this ever-expanding business model.

1.4 AIMS AND OBJECTIVES OF THE STUDY

The overall aim for this study is to explore and describe the drivers and barriers influencing consumers' online collaborative clothing consumption practices within the online South African market. Accordingly, the following objectives were formulated for the study:

Objective 1: To explore and describe consumers' **participation** in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market.

Objective 2: To explore and describe the influence of **motivational drivers** (i.e., *environmental benefits, economic benefits, hedonic dimensions, need for uniqueness, convenience and social identity (community)*) on consumers' online collaborative clothing consumption practices within the South African market.

Objective 3: To explore and describe the influence of specific **barriers** (i.e., *hygiene issues, unfamiliarity with the concept, materialism, online trust*) on consumers' online collaborative clothing consumption practices within the South African market.

1.5 DEFINITIONS OF TERMS AND CONCEPTS

Definitions of important concepts and terms used throughout the study are given below in **Table 1.1** for comprehensiveness and to increase the theoretical validity of the study.

TABLE 1.1: DEFINITIONS OF TERMS AND CONCEPTS

Barrier	A barrier refers to a circumstance or obstacle that prevents or prohibits progress amongst individuals (in this case, prohibits engagement in CCC practices) (Oxford Dictionary, 2007).
Economic driver	Certain factors that influence a financial or economic outcome that affects a company's or individual's bottom line (Hayes, 2020).
Environmental driver	Any activity or behaviour that brings about positive changes in the environment (Anastasopoulou, Chobotova, Dawson, Klavankova-Oravska & Rounsevell, 2007).
Circular economy	An economy where resources are recovered for reuse/recycling, ensuring the process is restorative by design, i.e. materials are optimised through each stage of the product life cycle (Catulli <i>et al.</i> , 2013; Todeschini <i>et al.</i> , 2017).
Collaborative consumption	A sharing model under the sharing economy umbrella constituting the re-selling, renting or swapping of services and products involving some form of financial benefit for the parties involved (Akbar <i>et al.</i> , 2016; Belk, 2014b).
Collaborative clothing consumption	Instead of buying new clothing items, a business model where consumers use alternative options to gain either ownership or temporary usage through means of swapping, renting, or acquiring second-hand clothing items (Becker-Leifhold & Iran, 2018).
Driver	A factor that enables a particular phenomenon to happen or develop, i.e., a consumer's motivation to engage in CCC practices (Oxford Dictionary, 2007).
Convenience	Convenience is defined as the perceived time and energy required to complete a task and the ability to provide comfort or well-being to the individual (Seiders, Voss, Godfrey & Grewal, 2007; Dall Pizzol <i>et al.</i> , 2017).
Community	'Community' refers to relational aspects between group members, meaning a common purpose, a sense of interconnectedness and commitment to the group's well-being (Albinsson & Perera, 2012).
Fast Fashion	The rapid and frequent turnover of affordable fashion with a short shelf-life elicit a loss aversion reaction within consumers and, in so doing, stimulates more and more buying (Byun & Sternquist, 2012).
Hedonic dimension	A measure of consumer attitudes relating to all the facets of consumer behaviour that invoke the multisensory, fantasy and emotional aspects derived from products or shopping (Hirschman & Holbrook, 1982).
Hygiene issues	The fear of contamination/contagion influencing a consumer's desire to participate in collaborative clothing consumption practices (Becker-Leifhold & Iran, 2018).
Materialism	An individual's strong emotional bond to and feelings of domain over their worldly possessions, perceiving them as important sources of life satisfaction (Belk & Pollay, 1985:394; Dall Pizzol <i>et al.</i> , 2017).

Need for uniqueness	A personality trait where an individual aims to differentiate their own personal and social identity relative to others through acquiring and utilising material possessions (Tian, Bearden & Hunter, 2001).
Online trust	A confident expectation that one's vulnerabilities will not be exploited in an online situation where there is potential risk (Corritore, Kracher & Wiedenbeck, 2003).
Renting	Renting is a transaction where one party offers another party an item to access for a fixed amount of time in exchange for monetary compensation; therefore, there is no transfer of ownership, only temporary access (Lang & Armstrong, 2018).
Second-hand clothing	Refers to previously owned or used items that are bought, sold or traded between consumers/retailers (HarperCollins, 2019).
Sharing Economy	The 'sharing economy' is a web-mediated e-commerce business model where participants transfer temporary access of goods/services to others for a fee (Kong, Wang, Hajli & Featherman, 2020).
Slow Fashion	A philosophical idea that challenges the fast fashion paradigm by centring itself around sustainability values such as good working conditions, the reducing of environmental destruction, slowing the production process to a more manageable timeframe and focusing on the empowerment of workers (Pookulangara & Shephard, 2013; Henninger, Alevizou & Oates, 2016).
Sustainable Fashion	A part of the slow fashion movement that has developed over the past decades that incorporates one or more aspects of social and environmental sustainability, such as Fair-Trade manufacturing guidelines or fabric organically grown from raw material (Goworek, Fisher, Cooper, Woodward & Hiller, 2012). The term can be used interchangeably with eco-, green-, and ethical-fashion (Haug & Busch, 2016:320).
Swapping	Swapping clothing requires a permanent transfer of ownership between individuals - there is no buying or selling involved, but rather the exchange of one thing and the receiving of something else in exchange. (Perlacia <i>et al.</i> , 2017).
Social Identity	Social identity theory (1974) posits that individuals experience collective identity based on their membership to a group, such as racial/ethnic groups, gender identities and social class (McLeod, 2019).
Unfamiliarity with the concept	Hesitance to use, for example, a sharing service for the first time due to a lack of experience and prior knowledge that goes hand in hand with regularly using this form of consumption (Moeller & Wittkowski, 2010).
Web 2.0	An essential factor in the sharing economy's rigorous growth is enabling two-way interaction between the website and the consumer (Belk, 2014a). This ability differs from Web 1.0, where only one-directional information was possible between users (Belk, 2014a).

1.6 PRESENTATION AND OUTLINE OF THE DISSERTATION

Chapter 1: The study in perspective

This chapter sets out the context of the study by introducing the research topic and detailing the nature and background of the topic. Important components of this chapter include the background, the research problem, the justification of the research, the overall aim and objectives, and definitions of concepts relevant to the research study.

Chapter 2: Literature review, conceptual framework and research hypotheses

Chapter 2 presents a comprehensive overview of relevant literature obtained from various sources that are significant to this research project. This chapter concludes with the conceptual framework that guided this study.

Chapter 3: Research design and methodology

Chapter 3 covers the research design, sample and sampling techniques, online questionnaire development and pre-testing of the questionnaire, data collection, and statistical analysis of the data. The operationalisation of the objectives is also provided, and the measures taken to ensure

the validity and reliability of the study. This chapter concludes with the ethical considerations for the study.

Chapter 4: Results and discussion

Chapter 4 presents the results of the study accompanied by discussions according to the objectives thereof. The data is presented in tables and graphs in relation to the objectives set out in Chapter 3.

Chapter 5: Conclusions of the study

Chapter 5 concludes the study. This chapter offers discussions, conclusions and implications of the findings presented in Chapter 4. In addition, this chapter outlines the research limitations of the study and provides recommendations for future research in the field of collaborative clothing consumption.

1.7 CONCLUSION

Chapter 1 aimed to introduce a broad overview of this study by providing background information and insight into the research problem and a justification for the research. Furthermore, definitions of the key concepts and an outline of the dissertation were included.

CHAPTER 2: LITERATURE REVIEW

This chapter presents an overview of existing literature, including definitions of concepts relevant to this study. The chapter starts with a short overview of the fast fashion business model, setting the context for the next section, namely the sharing economy. Collaborative consumption and collaborative clothing consumption (CCC) are subsidiaries of the sharing economy, which will be further explained in conjunction with the Internet's role in facilitating these models. Furthermore, the various collaborative clothing consumption models and the drivers and barriers that impact a consumer's online collaborative clothing consumption practices are presented and explained. Lastly, this chapter concludes with a visual presentation of the conceptual framework developed for the study.

2.1 FAST FASHION

Fast fashion is the phenomenon whereby the retail industry employs a speed-to-market approach that capitalises on fashion trends that instigate impulse behaviour and an attitude of 'throwaway' fashion (Bhardwaj & Fairhurst, 2010). Although fast fashion is not the key focus of this study, it is essential to contextualise why a need for alternative fashion consumption exists. The industry has received significant criticism for this business model as the environmental and social impacts are substantial (Niinimäki, Peters, Dahlbo, Perry, Rissanen & Gwilt, 2020). Fast fashion aims to produce large quantities of clothing at low prices to satisfy deeply held desires amongst consumers for current high-end fashion trends (Joy, Sherry Jr, Venkatesh, Wang & Chan, 2012; Bick, Halsey & Ekenga, 2018). The problem is that these trends come and go at increasingly rapid speeds: today's trend trumps yesterday's, ultimately condemning more and more garments to the trash can (Joy *et al.*, 2012). This behaviour can only be described as inherent dissonance amongst consumers; most are fully aware of the environmental impact but still insist on subscribing to this throwaway culture (Joy *et al.*, 2012). This trait has led to the industry producing a staggering 8-10% of global CO₂ emissions (4-5 billion tonnes annually) and the consumption of 79 trillion litres of water per year (Niinimäki *et al.*, 2020). Furthermore, it has contributed majorly to industrial water pollution, including 35% contribution to microplastic pollution of the oceans (Niinimäki *et al.*, 2020). What is more, 92 million tonnes of textile waste per year end up in landfills (Niinimäki *et al.*, 2020).

Research by Sonnenberg, Jacobs and Momberg (2014) found that consumers in South Africa base their purchasing behaviour on attributes other than sustainability, such as affordability. Many of the respondents from their study voiced concern for the environment but were not willing to forfeit their usual preferences regarding their clothing consumption habits. This sentiment indicated that more sustainable clothing consumption has not yet gained full acceptance in South Africa. South Africa operates within a highly competitive clothing retail environment as new products are introduced rapidly in line with the retailers' growth strategies (Taljaard, 2015). This business model might seem like a beneficial strategy for retailers in terms of their bottom line.

However, this increase in clothing supply and demand negatively impacts the environment (Du Preez, Visser & Zietsman, 2007). South Africa, albeit an emerging economy, should not disregard environmental issues and concerns but strive to adopt more sustainable practices, such as alternative clothing consumption (Momborg, Jacobs & Sonnenberg, 2012). These alternative consumption methods challenge the fast fashion industry. It draws a sharp distinction between the mass consumption of quickly replaceable products versus the need for a more functional service model, where manufacturers/ retailers retain product ownership (Todeschini *et al.*, 2017). Examples of these models and why consumers would be motivated to participate in alternative consumption models (e.g., rental services, buying second-hand and clothing swaps) will be discussed later in this chapter (McNeill & Venter, 2019).

Many may still argue that sustainability and fashion are two contradictory terms – one is defined by longevity and the other by transience (brevity or shortness of product cycle) (Lundblad & Davies, 2016). Furthermore, despite people becoming more aware of the impact of their consumption practices on the environment, it may still take some time before it resonates with consumers (Birtwistle & Moore, 2007). Very few consumers have an in-depth awareness of the long and complex supply chain of the clothing industry, from the actual agriculture and petrochemical production to producing fibres to the actual manufacturing and distribution processes to the consumer's use of the product, every step, to some degree, contributing to the detrimental environmental impact (Niinimäki *et al.*, 2020). It is, therefore, clear that sustainable consumption in the fashion industry is complex, and it involves many facets of the industry that consumers will not likely have awareness or exposure to (McNeill & Venter, 2019). Bick, Halsey and Ekenga (2018) refer to this impact of the industry as the 'global environmental injustice of fast fashion'. The challenge is ensuring environmental justice is incorporated at each stage of the supply chain, depending on beneficial innovations in textile development, corporate sustainability, trade policies, and consumer habits (Bick *et al.*, 2018). One such innovation is the sharing economy and its many subsidiaries, including collaborative clothing consumption, discussed next.

2.2 THE SHARING ECONOMY

2.2.1 Defining the Sharing Economy

An agreed-upon definition of the 'sharing economy' seems nearly impossible, as, since its origins, the term has garnered widespread ambiguity and even confusion among academics and the public alike (Frenken & Schor, 2019). Heralded initially for its trendiness, innovativeness and strong community ideals, critics argue that the word 'sharing' is now misused to describe this business model in the first place (Belk, 2014a; Guyader, 2018). Many ideological tensions

surrounding the definition of the sharing economy exist, as some scholars debate a departure from a business model initially based on 'feel good' values (Schor, 2014; Pantano & Stylos, 2020). Originally, it was branded as a business model built on solidarity, mutuality and communal belonging that will usher in a better economic model to benefit ordinary people (Schor, 2014).

Recently, the model has been under some contention as aspects have shifted into profit maximisation, self-interest and utilitarianism (Albinsson & Perera, 2012; Schor, 2014; Eckhardt & Bardhi, 2016; Guyader, 2018; Pantano & Stylos, 2020). Both schools of thought offer convincing arguments concerning the exact definition and the term 'sharing economy' should entail. The first group argues that only swapping and situations where individuals grant each other access to underutilised goods should be considered as authentic sharing activities (Acquier, Daudigeos & Pinkse, 2017; Pantano & Stylos, 2020). According to Belk (2014a), sharing is a non-market-mediated act, and there are no profit motives or expectations of reciprocity present. The second group insists that the concept includes all business-to-consumer and peer-to-peer models where transactions are market-driven by profit and non-profit initiatives (Acquier *et al.*, 2017; Pantano & Stylos, 2020). This concept is an example of Belk's 'pseudo-sharing' practices of the sharing economy (2014a). Humans have always shared to foster community and save resources (Belk 2007). Belk emphasised that 'sharing is a phenomenon as old as humankind' (2014a:1595).

What is, however, different about sharing when referring to the 'sharing economy' is the concept of 'stranger sharing' (Schor & Fitzmaurice, 2015). Most people tend to keep sharing amongst immediate family and trusted individuals. Nevertheless, today's sharing platforms facilitate sharing with strangers outside of their usual social networks, and it is very intimate: individuals share their homes, cars, food and clothing (Frenken & Schor, 2019). The solution suggested concerning the ongoing terminology debate is not to choose one approach over the other but rather to clarify which extension of the original concept is being practised (Schor & Cansoy, 2019). Despite the lack of consensus regarding this definitional issue, Kong, Wang, Hajli and Featherman (2020) have put forward a definition of the sharing economy as: 'A web-mediated consumer-to-consumer e-commerce business model where service providers transfer temporary possession of goods to customers for a fee.'

The sharing economy is still rapidly expanding as an economic, social, and technological phenomenon, with the potential to continuously challenge the traditional concept of ownership (Bardhi & Eckhardt, 2012; Pantano & Stylos, 2020). However, Cherry and Pidgeon (2018) have raised a valid concern surrounding the widespread propagation surrounding the economic opportunities that the sharing economy can offer hard-up consumers. They argue that to participate in the first place, one would need ownership of a shareable asset, so that those who possess assets are ultimately more likely to benefit economically. Secondly, they believe that

inherent inequalities relating to class and race exist regarding the participation in these platforms and that it should be addressed. Research indicates that users are predominantly white, middle-class and well educated (Cherry & Pidgeon, 2018). These inequalities indicate that the sharing economy might have a discrimination problem. Initially, the sharing economy was hailed as a prolific 'economic opportunity' that will allow people to earn passive income on their assets or utilise it as a source of income to compensate for instabilities in the labour market (Schor & Cansoy, 2019). However, growing evidence has surfaced that companies like Airbnb/Uber use their market power to control the wages and workers. This issue is beyond the scope of this research topic. However, it is interesting to note that these findings fuel the argument that the sharing economy mainly benefits the highly educated middle class at the expense of the working class (Schor & Cansoy, 2019).

2.2.2 The sharing economy umbrella

The sharing economy umbrella has become quite extensive as many platforms want to associate with the positive rhetoric associated with sharing (Frenken & Schor, 2019). The most recent literature on the sharing economy is focused on the more well-known examples of Airbnb and Uber. However, these two platforms do not reflect all the possibilities and diversity this business model offers. Many other sharing platforms, including several within the fashion industry, will be discussed in more detail later in this chapter. The business models under this umbrella depart from traditional consumption by exhibiting several diverse or alternative practices (Guyader, 2018). Firstly, as an anti-consumption statement, which is driven by altruistic community ideals (Guyader, 2018). Secondly, as a paradigm shift from ownership to access-based consumption (Bardhi & Eckhardt, 2012; Lamberton & Rose, 2012; Guyader, 2018) and thirdly, by practices facilitated through online platforms enabling the exchange of privately owned, underutilised assets (Hamari *et al.*, 2016; Guyader, 2018). Furthermore, these business models require three leading role players, namely, (1) service providers who provide temporary possession of their assets in return for a fee, (2) service enablers, for example, the digital platform, and (3) the customers themselves (Kumar, Lahiri & Dogan, 2018). These models are referred to as access-based consumption, access-based services, non-ownership services and often, collaborative consumption (Bardhi & Eckhart, 2012; Hamari *et al.*, 2016). The latter being the topic of this study, and its subsidiary, collaborative clothing consumption, which will be discussed below.

2.2.3 Role of the internet in the sharing economy

From a historical perspective, the Internet could be described as a publicly accessible computer network made up of services, content, and interconnected devices with worldwide broadcasting and collaborative capability (Lehr, Clark, Bauer, Berger & Richter, 2019). However, to attempt just

one definition is an almost impossible feat. The commercialisation of the Internet gave rise to accessible mobile/wireless networks, smartphones, e-commerce and social networking, thereby revolutionising the computer and communications world like nothing before (Lehr *et al.*, 2019).

The sharing economy thrives on the Internet, especially with two-way interaction between the website and the consumer (Eckhardt & Bardhi, 2016; Hamari *et al.*, 2015). This technology is referred to as Web 2.0, which differs from Web 1.0, where only one-directional information was possible between users (Belk, 2014a). Thanks to the Internet, many businesses across different industry sectors thrive on virtual online platforms that conveniently connect users and providers (Möhlmann, 2015; Parente *et al.*, 2018). One such activity is online shopping, often referred to as e-commerce, which by definition is a wide range of online business activities (Gupta, 2014). Examples include the buying and selling of goods and services whereby parties interact electronically through a computer-mediated network rather than through direct physical contact (Gupta, 2014). M-commerce is an extension of e-commerce but is conducted through a smartphone that enables users to shop online from their mobile phone (Bardhi & Eckhardt, 2012; Hamari *et al.*, 2013; Gupta, 2014; Albertyn-Burton & Scheepers, 2017). A smartphone, by definition, is a mobile device that runs on an advanced mobile operating system enabling mobile applications to be employed (Albertyn-Burton & Scheepers, 2017; Cassavoy, 2017). These mobile applications, or in short, 'apps', are third-party software installed on the device and provide users with a similar service that they would usually access from a traditional desktop computer (Magrath & McCormick, 2013). Smartphones and mobile apps seemed to have opened up a world of possibilities regarding m-commerce in South Africa, where the adoption and diffusion of mobile technologies are gaining rapid traction amongst urbanites and rural dwellers (Albertyn-Burton & Scheepers, 2017, Okonkwo, Huisman & Taylor, 2019). The high mobile penetration rates resulted in approximately 65% growth in online spend via mobile devices between 2015 and 2016, which indicated that South Africans are increasingly opting to make purchases on their mobile devices (Dludla, 2020).

According to Ertz *et al.* (2016), it is essential to note that it is a common tendency to think of the sharing economy as only web-driven. However, the concept is not inherently new and has always existed, but the Internet and web technologies increased the scale and scope of collaborative sharing (Ertz *et al.*, 2016). This observation is remarkably accurate in many African countries, including South Africa, where collaborative, peer-to-peer businesses have thrived. Most Africans have often rented out a spare room, shared their cars, traded in second-hand clothing and taken on a second job (Manavhela & Henama, 2019). However, it is only now that companies like Uber and Airbnb have formalised the sector (Manavhela & Henama, 2019). Collaborative consumption business models are becoming increasingly prevalent in South Africa (an emerging economy)

and understanding the role of the local context with regards to how these platforms are growing, makes for exciting research (Dreyer *et al.*, 2017).

The Internet has dramatically changed consumers' shopping behaviour, including within South Africa, where e-commerce has steadily increased despite lagging behind much of the world (Makhitha, Van Scheers & Mogashoa, 2019). In 2019, according to the London-based market research firm Euromonitor International, e-commerce accounted for about 1.6% (\$1.2 billion) of South African retail sales (the USA was 14.1% in 2019 to put the South African figure into perspective) (Dludla, 2020). However, the outbreak of the COVID-19 pandemic propelled consumers to significantly change their online shopping behaviour (Mckinsey, 2020), with Nielsen South Africa predicting a growth of 200% in online purchases post-COVID (Dludla, 2020). According to the Chief Executive Officer of The Foschini Group (TFG), Anthony Thunstrom, the pandemic forced a quantum shift in dealing with online demand. As a result, they invested heavily into their e-commerce offerings to support continuous uptake in their e-commerce business (Dludla, 2020).

2.2.4 Collaborative consumption

The term 'collaborative consumption' has garnered ongoing debates, but when providers and consumers exchange privately-owned products or services through an online platform, it is considered a collaborative consumption practice (Möhlmann, 2015; Hamari *et al.*, 2016). A definition for collaborative consumption was bedded down in the Oxford dictionary in 2015 as 'an economic system in which assets or services are shared between private individuals, either free or for a fee, typically through the Internet' (Parente, Geleilate & Rong, 2018:53). Considered an innovative and sustainable business model, those involved adopt a collaborative mindset to achieve a sustainable value network through the sharing, lending, trading, renting and swapping of goods/services (Mun, 2013; Hamari *et al.*, 2016; Todeschini *et al.*, 2017). Furthermore, according to Parente *et al.* (2018), the boundaries of collaborative consumption are set around three pillars, namely (1) unlocking the value of underutilised assets; (2) paying for temporary access to products and services as opposed to ownership; and (3) relying heavily on interactions between users on social networks. These criteria make it conceptually different from true sharing, which is socially mediated (Guyader, 2018). Collaborative consumption also stands sharply in contrast with conventional consumption, which traditionally involves a passive consumer that is limited to buying, consuming and discarding (Ertz, Durif & Arcand, 2016). When collaborative consumption is at play, the 'consumer' has the opportunity to take on the role of 'obtainer' and 'provider' of resources/services (Ertz *et al.*, 2016:1). Therefore, the consumer can participate at both ends of the exchange — either by sharing the goods or by benefiting from the goods being shared (McNeill & Venter, 2019; Browning, 2021). This empowerment allows consumers to

collaborate directly to arrange and negotiate the terms and conditions of exchanging goods and services (Ertz *et al.*, 2016).

2.2.5 Collaborative clothing consumption

Clothing consumption is an aspect of consumer behaviour that determines how consumers acquire, store, maintain and dispose of products and how they select the services or experiences that satisfy their needs and desires (McCracken, 1990; McGregor, 2019). Consumer behaviour is an all-encompassing field of study that looks at the processes involved in how consumers select goods or services and how the absence of those goods and services affects them (Schiffman, Kanuk & Brewer 2014). Research has proven that consumption at its current scale threatens the wellness of the planet: every part of the product life cycle pollutes the environment in some form, be it during manufacturing, product distribution, or in the use and disposal phases (Bianchi & Birtwistle, 2012; McGregor, 2019). Collaborative clothing consumption is considered to be more sustainable/pro-environmental consumer behaviour where participants continuously demonstrate a way of consuming in a way that protects natural resources so that future generations can thrive (Bell & Morse, 2008). Therefore, consumers' social responsibility is about sustaining and enhancing the quality of life by ensuring that the production and consumption of goods and services are socially beneficial, economically viable and environmentally benevolent (McGregor, 2019). Collaborative clothing consumption can facilitate more socially responsible consumption as the emphasis shifts from selling *ownership* to selling product *use* (Bardhi & Eckhart, 2012). Therefore, the profit is not driven by the product itself but by how many times its functionality can be sold, making it a very different model to fast fashion, which is based on constantly introducing new products to sell (Bardhi & Eckhart, 2012; Todeschini *et al.*, 2017). Profit and growth are therefore created through how many times one can rent, swap or reuse an item rather than constantly producing new items into the market (Bardhi & Eckhart, 2012; Todeschini *et al.*, 2017). Access to these items is either granted through the transfer of ownership (i.e., gifting, swapping, or buying second-hand) or through temporary usage options for fashion products owned by others (i.e., renting). (Moeller & Wittkowski, 2010; Todeschini *et al.*, 2017; Becker-Leifhold & Iran, 2018).

Examples of collaborative clothing consumption businesses include Poshmark and Thredup, which offers a virtual marketplace for users to sell used and new clothing. All inventory on these sites is created with the users' goods (Perlacia *et al.*, 2017; Armstrong & Park, 2020). According to WGSN (2017), these peer-to-peer resale platforms are primarily successful due to their harnessing of social media. Poshmark and many others like it, integrate with existing social networks or mimic the social experience within an existing platform such as Instagram (Chiquoine, 2017). Another example of a very successful collaborative clothing consumption business is Depop, a mobile application that empowers young entrepreneurs to make money selling vintage

goods. It currently boasts over 6 million users, including influencers and celebrities (Chiquoine, 2017). On Instagram itself, Depop has over 700k followers, allowing them to cross advertise between their two platforms, thereby leveraging engagement and sales between them (Chiquoine, 2017). In South Africa, an example of one such platform is Yaga, which enables users to open their own e-shop and sell their fashion goods online (Yaga.co.za). Buyers can safely and immediately pay online, and Yaga takes a 9% commission fee from each transaction. Currently, Yaga has 62k followers on Instagram (Yaga.co.za).

2.3 COLLABORATIVE CLOTHING CONSUMPTION BUSINESS MODELS

Innovative business models that centre around usage in the clothing industry rather than ownership have recently emerged (Todeschini *et al.*, 2017; Becker-Leifhold & Iran, 2018; Pantano & Stylos, 2020). Collaborative clothing consumption is a subsidiary of collaborative consumption and consists of various business models that promote economic growth based on innovation and the mitigation of environmental impacts of large-scale production. It is, therefore, not just a cultural statement against consumption, but a conscious alternative to adapt collective and individual needs to available resources (Park & Armstrong, 2017; Todeschini *et al.*, 2017).

Botsman (2013) proposes three such collaborative clothing consumption models in which consumers can participate: (1) the renting model: paying for the use of products such as renting or leasing clothing products (e.g., Rent-the-Runway), (2) the swapping model - exchange of clothing products (e.g. The Clothing Exchange), and (3) the buying and re-selling model: redistribution of unwanted clothing products, i.e. re-selling products (e.g. Thredup). The following sections will further explain these three models individually.

2.3.1 Renting

Renting is defined as a transaction where one party offers another access to an clothing item for a fixed amount of time in exchange for monetary compensation (Moeller & Wittkowski, 2010). There is no transfer of ownership with this specific business model, only temporary access (Lang & Armstrong, 2018; Kim & Jin, 2020). Renting clothing instead of owning it permits consumers to wear a wide array of different styles without the burden of ownership (Moeller & Wittkowski, 2010; Becker-Leifhold, 2018). The benefits of renting are twofold; firstly, for the user of this model, renting enables the consumer to update his/her wardrobe without participating in conventional fashion consumption (i.e., actual purchasing) (Lang & Armstrong, 2018; Zamani, Sandin & Peters, 2017). Secondly, renting can contribute to slowing down the speed of fashion, provided the item is worn more times by more than one person instead of bought and used by only one person

before disposing of it (Lee, Jung & Lee, 2021; Zamani *et al.*, 2017). In the US, fashion rental is already a well-established business model, still in an early stage in Europe and very much in its infancy in Africa (Pantano & Stylos, 2020). Nevertheless, market research predicts the clothing rental market to grow at a rate of 9.8% annually, with an estimated value of US\$1.95 billion by 2026 (Future Marketing Insights, 2016). There are two ways to facilitate renting within this model: the Netflix model and the Airbnb model. Each model will be explained below.

The 'Netflix' model offers a business-to-consumer (B2C) model. The retailer owns the clothing item, and the customer rents the item at a fraction of the cost (Gopalakrishnan, 2018; Perlacia *et al.*, 2017). The customer returns the item after wearing it for a set amount of time, making the clothing item accessible to another customer again (Perlacia *et al.*, 2017). Like Netflix, the primary source of revenue is generated through monthly subscription fees (Perlacia *et al.*, 2017). Some companies may offer items only for rent (e.g., The Black Tux, Chic by Choice), and others offer renting with the option of buying the item at the end of the rental period (Gopalakrishnan, 2018). An excellent example of this model is Rent-the-Runway, an online subscription service where subscribers can rent up to four clothing items at a time for about \$159 (i.e., R2200) per month (Lang & Armstrong, 2018). Rent-the-Runway is one of the most popular and well-known clothing rental companies, with over 10 million customers who can choose from about 200,000+ items from their inventory. They also aim to reduce their carbon footprint through responsible wet- and dry-cleaning processes, recyclable and reusable packaging, and by investing in quality clothing items designed to last multiple seasons (Rent-the-Runway, 2019).

The 'Airbnb' model is a peer-to-peer (P2P) model, which provides an online platform that matches owners and renters of fashion, where renters pay for the temporary use of a garment from the owner (Perlacia *et al.*, 2017). Unlike the pure renting models, the service provider does not own any fashion items but instead offers a service to connect consumers wanting to rent out clothing with those looking to rent clothing (Gopalakrishnan, 2018; Lang & Armstrong, 2018). These peer-to-peer businesses often arrange events to meet owners and renters, and the renters can try on the item before renting (Gopalakrishnan, 2018). Their main source of revenue is generated through commission on each transaction, but they also secure income through booking fees and events. An example of this type of model is 'Rentez-vous' (Perlacia *et al.*, 2017).

In South Africa, there is already an established market for renting suits, tuxedos, and wedding dresses. However, the rental market in other areas of fashion is very much still in its infancy. A few examples include Style Rotate, which makes use of the Netflix model and Shared Collective, which makes use of the Airbnb model (Geach 2020; Hartzenberg, 2020).

2.3.2 Swapping

Swapping is the exchange of items, usually not mediated by money, between two or more people (Albinsson & Perera, 2012). Clothing swapping involves exchanging clothing items between consumers and may take place both in person or online through swap websites (Albinsson & Perera, 2009). For this study, only swapping that takes place online is considered. With this business model, the consumer uses the retailer's platform to exchange clothing; therefore, there is a permanent transfer of ownership (Perlacia *et al.*, 2017). Before users can swap their clothing items, they need to upload them to the collective closet first, and once listed, other users can request the items (Perlacia *et al.*, 2017). Revenue for the business platform is created through membership and transaction fees, two examples being The Clothing Exchange and Swapstyle.com (Perlacia *et al.*, 2017). In the process of swapping goods, participants are both a sender and a recipient because they are both gaining new items in exchange for old ones (Grimshorn & Jordan, 2015). In Daniel Nissanoff's book, he eloquently puts the objective of exchanging ownership as 'to have, but not to hold' (2007:109). The recipient selects the items they want on the website and pays for the delivery charges (Mun, 2013). The sender preps the clothing item before the actual swapping occurs, namely cleaning the clothing, taking pictures, posting pictures on the website and responding to potential recipients' questions (Mun, 2013). Therefore, the process is not that simple as there are many steps a participant has to go through to swap goods online (Mun, 2013). In South Africa, swapping occurs mainly in person at swap events like the Fashion Exchange, where participants bring clothing items to trade (Cupido, 2019).

2.3.3 Buying of second-hand clothing

Roux and Guiot defined second-hand buying as 'the acquisition of used objects through specific modes and places of exchange' (2008:66). Second-hand clothing retail involves the re-selling of items that have been previously owned by someone else and includes consignment shops, concession stores, thrift stores and online stores (Gopalakrishnan, 2018). Second-hand clothing is considered more ecologically sound. It does not produce the same amount of carbon dioxide emissions associated with the production, transport or disposal of new clothing production (Allwood, Laursen, De Rodríguez & Bocken, 2006).

For this study, only online second-hand clothing stores will be discussed. Online second-hand stores offer an e-commerce platform where members can sell or buy second-hand clothing (Perlacia *et al.*, 2017). The online resale market also referred to as the re-commerce market, is one of online retail's fastest-growing sectors (Chiquoine, 2017; Chang, 2020). ThredUp's 2019 Resale Report by GlobalData, reports that the resale clothing market has grown 21 times faster

than the new clothing market in the last three years. As a result, the second-hand clothing market will be worth \$64 billion in the next five years (Benjamin, 2021).

Second-hand clothing appeals to consumers for several reasons, including recreational, environmental and economic motivations (Ek Styvén & Mariani, 2020). Additionally, recent innovations in e-commerce have made it easier to sell and buy clothes online. Therefore, more consumers are purging their closets on various resale platforms to make extra income (Chiquoine, 2017; Chang, 2020). With this business model, the transfer of ownership is permanent. In most cases, the retailer or online platform does not own any assets but acts as a broker to facilitate the exchange between the buyer and the seller (Perlacia *et al.*, 2017).

An international example of this is Thredup, a one-stop online shop where users can buy and sell luxury and high-street brands (Perlacia *et al.*, 2017). Customers using this model merely have to create an online profile, upload pictures of the items they want to sell and list the price (Perlacia *et al.*, 2017). Revenue is based on commission and generated for the retailer whenever an item is sold.

The 2019 McKinsey report on the fashion industry predicts that the second-hand market for clothes could outgrow fast fashion within the next ten years (McKinsey, 2019). In South Africa, the second-hand clothing industry has thrived, not only benefitting the less privileged with limited disposable income but also those who sell their clothing (Meyer, 2014.) Thus far, this has primarily occurred in a brick-and-mortar context – where stores buy unwanted items from consumers to re-sell to others (Meyer, 2014). Online re-selling, as described above, is not yet commonplace in South Africa. However, a few online platforms have recently launched, such as Yaga, one of the leading online thrift stores in South Africa (Benjamin, 2021). The app enables safe shopping and selling and offers affordable shipping methods (Benjamin, 2021).

Despite the surge in research on the various sharing economy models, the motivations regarding why consumers participate in collaborative clothing consumption, or not, are less clear (Möhlmann, 2015). Consequently, there is a need for empirical research concerning consumer's motives for or against partaking in these models (Hawlitschek, Teubner & Gimpel, 2016). These drivers and barriers will be discussed in the next section.

2.4 MOTIVATIONAL DRIVERS FOR PARTICIPATING IN COLLABORATIVE CLOTHING CONSUMPTION

Motivation refers to why a given behaviour occurs and is the underlying purpose that drives individuals to satisfy their needs, wants, or attain their goals (Moisander, 2007). According to Wilkie (1990), a distinction can be made between primary motives and selective motives. He defines a primary motive as the purpose behind a consumer's decision to participate (or not) in a particular behaviour, such as behaving in an environmentally friendly manner, whereas selective motives refer to the particular behaviours they want to participate in; in this case, it could perhaps be recycling or swapping clothes. Moisander (2007) argues that primary motives, which are more altruistic, are often covered up by the more immediate, selective motives, which tend to revolve around an individual's own needs, such as saving money and time.

Despite the surge in research on the sharing economy, the motivations regarding why consumers participate or not are less clear (Möhlmann, 2015). A growing number of empirical studies investigating consumer motivations regarding the sharing economy and several drivers have been identified that could influence participation in collaborative clothing consumption models (Cherry & Pidgeon, 2018). From these studies, a key driver for participating in the economic benefit derived from sharing includes monetary compensation and saving time (i.e. convenience) (Hamari *et al.*, 2016; Lamberton & Rose, 2012). Interestingly enough, findings have been mixed in terms of environmental motivation for participating in collaborative clothing consumption. Some studies have found this an essential motivation for some individuals (Piscicelli *et al.*, 2015). In contrast, other studies have found the opposite is true (Bardhi & Eckhardt, 2012, Moeller & Wittkowski, 2010, Möhlmann, 2015, Tussyadiah, 2015). Other researchers have again highlighted belonging to a community as a critical driver for participating in collaborative clothing consumption (Tussyadiah, 2015). There are conflicting and limiting findings, as most literature has mainly focused on how these motivations affect participating in specific sharing economy models like car-sharing and accommodation sharing (Cherry & Pidgeon, 2018).

Understanding the reasons behind consumers' consumption is an incredibly complicated task as many forces are at play, not only at individual levels but also at institutional levels, which influence and affect how people behave (Mont & Power, 2010). Therefore, this study aims to gain a better understanding of the largely unexplored motivational drivers that affect participation in collaborative clothing consumption, specifically within a South African context. The specific drivers that have been selected from previous research are *environmental benefits*, *economic benefits*, *hedonic dimensions*, *need for uniqueness*, *convenience* and *social identity* (community belonging) (Möhlmann, 2015; Hamari *et al.*, 2016; Böcker & Meelen, 2017; Dall Pizzol *et al.*, 2017). The above drivers will be discussed in more detail below.

2.4.1 Environmental benefits

The term 'environmental driver' describes any activity, behaviour, preference, technological development, or governing policy that brings about environmental change (Anastasopoulou *et al.*, 2007). Collectively the effects of these multiple drivers interacting lead to positive changes in the environment (Anastasopoulou *et al.*, 2007). Collaborative clothing consumption potentially has significant environmental benefits since the products are not only used once but several times by different users (Möhlmann, 2015; Zamani *et al.*, 2017; Lang & Armstrong, 2018). In theory, this reduces the likelihood of products ending up in landfills after a period of time (Fota *et al.*, 2019). Several studies have found that environmental sustainability is an essential factor in collaborative clothing consumption as it facilitates a process whereby consumers are given the opportunity to act responsibly to conserve the environment (Hamari *et al.*, 2016; Perlacia *et al.*, 2017; Zamani *et al.*, 2017; Lang & Armstrong, 2018). In 2019, Forbes called out 'responsible consumerism' as a global consumer trend: consumers will seek out companies that help them make better and more responsible choices and companies that align with their environmental and social concerns (Danziger, 2019). Sustainable fashion has developed over the past few decades. It incorporates social and environmental practices that create a sustainable future without sacrificing the environment in the production and consumption of fashion clothing (Kim & Oh, 2020). Examples include abiding by fair-trade manufacturing guidelines, using recycled and organic materials, and considering animal rights (Goworek *et al.*, 2012; Kim & Oh, 2020). The term can be used interchangeably with eco-, green-, and ethical-fashion (Haug & Busch, 2016:320). In their scramble to offer low prices and frequent merchandise turnover, fast fashion companies are often considered the opposite of sustainable fashion, especially when issues arise in the manufacturing and distribution, such as human rights violations, unfair wages and environmental pollution (Kim & Oh, 2020).

Environmentally conscious consumers are expected to consume less and choose more environmentally friendly products to ultimately produce less waste (Tilikidou & Delistavrou, 2004). However, in most cases, literature indicates that the environment is often not the main driver for participating in collaborative clothing consumption and might only be an essential factor for those consumers who have a high regard for acting environmentally conscious to begin with (Hamari *et al.*, 2016; Lang & Armstrong, 2018). Niinimäki (2010) agrees that although the environmental aspect does provide extra value to the consumer, it is not a decisive factor in people's participation in collaborative clothing consumption. According to Moisander's research (2007), most consumers are only driven to act sustainably when another incentive such as an economic one, is at play. They, therefore, are not participating out of concern for the environment. This finding indicates that 'an attitude-behaviour gap' exists in many cases amongst consumers as they have a positive attitude and intention to participate in collaborative clothing consumption, yet it does

not reflect in their behaviours. It sounds terrific on paper but does not necessarily translate into behavioural changes on the consumer's part (Hamari *et al.*, 2016).

In emerging economies like South Africa, encouraging sustainable behaviour is also a challenge, primarily due to a lack of effective communication about sustainability, especially in the more rural populations (Shahzalal & Hassan, 2019). This communication could include education, discourse or active participation to improve people's awareness of sustainable actions (Shahzalal & Hassan, 2019). The perceived cost of going green is another reason why uptake in sustainable behaviour within emerging economies is slow (Anvar & Venter, 2014). South Africa is characterised by severe income inequality, which indicates that consumers will naturally be price-sensitive when buying into more sustainable consumption methods (Anvar & Venter, 2014). Therefore, the expectation is that South Africa's growing middle and upper-class segments should be encouraged to adopt more sustainable consumption habits, as these classes place the most burden on the environment by their typically higher consumption living standards (Taljaard & Sonnenberg, 2019).

Furthermore, awareness among consumers is critical, as even though much of the environmental degradation can be directly attributed to the clothing manufacturers themselves, research has shown that an equal part of the responsibility should be carried by the consumer (Gwozdz, Steensen Nielsen & Müller, 2017). Consumers have control and should not be seen as 'mindless market actors' who do not have any choice over the environmental impact their consumption behaviours have on the environment (Gwozdz *et al.*, 2017:2). The hope is that eventually, consumers will invest in systems that change product lifecycles from disposable to renewable (WGSN, 2018). Therefore, the emergence of the sharing economy is believed to be one of the solutions to drive responsible and mature consumerism (Danziger, 2019; Todeschini *et al.*, 2017).

2.4.2 Economic benefits

The driver, *economic benefits*, refer to factors that influence a financial or economic outcome and often affects a company's or individual's bottom line (Hayes, 2020). Economic motives are influenced by 'price', i.e. the consumer's intention to look at the actual price tag before acquiring; as well as 'value for money', which can be described as paying a perceived reasonable price for an item (Padmavathy, Swapana & Paul, 2019; Roux & Guiot, 2008). According to Bardhi and Eckhardt (2012), *economic benefits* are a significant driver for participating in collaborative clothing consumption. This benefit indicates more individualistic reasons to participate: people want to save money (Hamari *et al.*, 2016). Instead of buying new products they cannot afford, consumers have the opportunity to make use of collaborative clothing consumption as an alternative given their monetary constraints (Hamari *et al.*, 2016, Park & Armstrong, 2019).

Research by Park and Armstrong (2019) indicates that the motivation most frequently cited by consumers who use collaborative clothing consumption (mainly concerning the renting model) is to save money. Significant economic benefits that have been identified from participation in collaborative clothing consumption such as renting include cheaper transaction costs through the Internet, getting more value for less money, and lack of ownership costs (Barnes & Mattson, 2016).

Given the high level of unemployment that characterises the South African labour market and the reality many poor residents face, many of them indicate that they are dissatisfied with income, housing and employment opportunities in this country. Hattingh, Magnus and Ramlakan, (2016) further reported that 79% of South Africa are actively searching for techniques to save money, and hence have started experimenting across various shopping channels to achieve this. Financial costs play a crucial role in determining a consumer's willingness to adopt or use new technologies, such as collaborative clothing consumption (Lubbe & Roberts-Lombard, 2020). From a consumer point of view, there is a cognitive trade-off between the monetary cost and the perceived benefit of using new technology (Venkatesh, Morris, Davis & Davis, 2003). The more the user believes they will benefit financially from using collaborative clothing consumption services, not only in the form of cost-saving but also time, the greater the possibility that they will be motivated to participate in collaborative clothing consumption (Möhlmann, 2015; Hamari *et al.*, 2016). Therefore, against a backdrop of widespread poverty and unemployment, evidence suggests that SA consumers might be motivated to participate in collaborative clothing consumption purely because of the economic benefits it holds for them. As previously stated, platforms like Yaga enable entrepreneurs to open their e-shop and sell their fashion goods online for a monetary benefit.

2.4.3 Hedonic dimensions

Hedonic dimensions measure consumer attitudes relating to all the facets of consumer behaviour that invoke the multisensory, fantasy, and emotional aspects derived from products or shopping (Hirschman & Holbrook, 1982). Consumers often look for fun and enjoyment during shopping experiences, which indicates a far more personal and subjective motive than merely shopping for practical and functional reasons (Hirschman & Holbrook, 1982). Participating in collaborative clothing consumption potentially holds hedonic values for consumers, such as being entertained by the many diverse choices/options available (Hwang & Griffiths, 2017). According to Heuer and Becker-Leifhold (2018), a swapping party emphasises the fun aspect that comes with interchanging clothing. Here, benefits include meeting new people and experiencing the satisfaction of sharing and connecting with a stranger (Gopalakrishnan, 2018). That said, Hamari *et al.* (2016) states that consumers are motivated by more practical needs and benefits such as

saving time and money when participating in collaborative clothing consumption, but meeting new people and helping the environment brings in the element of enjoyment.

Similarly, when considering only online collaborative clothing consumption platforms, entertainment value lies in the thrill of the treasure hunt to find unique one-of-a-kind items (Chiquoine, 2017). When it comes to shopping for second-hand clothing, respondents describe the delight of acquiring a once-off, exclusive item, paramount in enhancing hedonic pleasure (McNeill & Venter, 2019). According to ThredUP (2019), one of the largest second-hand online retailers in the US, 76% of their shoppers reported the fun factor as a significant reason to shop on their platform. This insight shows that instant self-gratification, stimulation, and emotional fun through shopping are vital drivers of participating in collaborative clothing consumption practices (Gopalakrishnan, 2018). Saving money also adds to the fun of shopping as the cost-saving dimension goes hand in hand with the 'fun' dimension - a consumer receives an emotional reward when they perceive a bargain (Kim & Jin, 2020). Excitement could also be generated from shopping through a new retail format, like a collaborative clothing consumption platform where renting, swapping and purchasing second-hand items are still somewhat unique, so the novel experience provides amusement (Kim & Jin, 2020).

2.4.4 Need for uniqueness

Tian *et al.* (2001:50) defined this personality trait as 'the pursuing of differentness relative to others. Through acquiring and utilising material possessions, an individual aims to develop and enhance his/her own personal and social identity (Lang & Armstrong 2018). Clothing is seen as a basic human need for protection against the elements, but clothing is also considered a means of personal communication - a way individuals can express themselves through their unique choices (Gwozdz *et al.*, 2017; Lang & Armstrong 2018). These days, the clothing industry has raced beyond just satisfying basic needs such as physiological and psychological – clothing is seen as significant within a societal and cultural context (Gwozdz *et al.*, 2017). People use clothing in a nonverbal manner to communicate their individuality and creativity in how they dress and avoid similarity with others (Tian *et al.*, 2001). Researchers believe that a consumer's *need for uniqueness* is a personality trait highly relevant to clothing consumption, and it provides excellent insights into consumer behaviour regarding participation in collaborative clothing consumption practices (Lang & Armstrong 2018). According to Ritch and Schröder (2012), this need for novelty can adversely fuel an increased purchasing rate. Many individuals overconsume while pursuing their unique identities, particularly in younger consumers who have a heightened awareness of identity development (McNeill & Venter, 2019). However, as per Lang and Armstrong's research (2018), swapping indicated a very high agreement with *need for uniqueness* among consumers who strive to stand out. This finding makes sense as consumers who

emphasise being different tend to be more open towards new ideas, so the novel experience of online renting and swapping may entice them to participate in collaborative clothing consumption.

In the study done by McNeill and Venter (2019), second-hand clothing also indicated high agreement with the *need for uniqueness* as it is also an opportunity to embrace creativity and self-expression, which is harder to achieve if one only consumes from mainstream retailers. Furthermore, renting also offers a low-risk method of self-expression as it allows for a cheaper way of experimenting with different looks without paying full price for a new item (McNeill & Venter, 2019). Therefore, *need for uniqueness* is a positive driver to entice individuals to participate in collaborative clothing consumption if their goal is to express individuality and stand out from the crowd.

2.4.5 Convenience

Convenience is defined as the perceived time and energy required to complete a task and the ability to provide comfort or well-being to the individual (Seiders *et al.*, 2007; Dall Pizzol *et al.*, 2017). There is a steady rise in consumers' demands for convenience, especially online, as they are more time-starved than ever (Seiders *et al.*, 2007; Duarte *et al.*, 2018). According to Zhang, Yan and Zhao (2016), there are different dimensions of online convenience as proposed by Seiders, Berry and Gresham (2000), namely, 1) decision convenience, 2) access convenience, 3) transaction convenience, 4) benefit convenience and 5) post benefit convenience.

'Decision convenience' is the perceived time and effort a consumer takes to decide between the various options available (Seiders *et al.*, 2000; Bhatti, Saad & Gbadebo, 2018; Padmavathy *et al.*, 2019;). The quicker a consumer can come to a decision, the more convenient he perceives the experience to be (Seiders *et al.*, 2000; Zhang *et al.*, 2016). 'Access convenience' is the perceived time, effort and cost that the consumer has to put in to initiate or request something to be delivered or accessed (Seiders *et al.*, 2000; Zhang *et al.*, 2016). 'Transaction convenience' refers to the perceived time and effort to complete a transaction online, for example, a payment (Seiders *et al.*, 2000; Zhang *et al.*, 2016; Padmavathy *et al.*, 2019). 'Benefit Convenience' is the perceived time and effort to experience the benefits of participating in, for example, a sharing platform. If the requested service/item takes too long to arrive or extra costs are involved, it will likely affect the consumer's participation intention (Seiders *et al.*, 2000; Zhang *et al.*, 2016). Lastly, 'post-benefit convenience' is the perceived time and effort to maintain the connection with the service provider afterwards to facilitate the after-care when a purchase is complete, for example, if there is an error with the order, or a customer wants to issue feedback or leave a recommendation (Seiders *et al.*, 2000; Zhang *et al.*, 2016).

With regards to collaborative clothing consumption, studies done by Tu and Hu (2018) regarded the perceived usefulness and perceived ease of use of renting clothing online. According to their studies, collaborative clothing consumption platforms are convenient when it saves time, when there is an abundance of information about the product, when consumers can compare the prices across different platforms and when platforms meet the demand for fashionable and trendy clothes (Tu & Hu, 2018). Other aspects of convenience are when free shipping is offered, when customers can buy a piece of clothing after renting and when providers ensure all items have been dry cleaned for consumers' peace of mind (Tu & Hu, 2018). In addition to this, online platforms should introduce various payment methods such as credit cards, debit cards and electronic funds transfers (EFTs) and integration into South African digital payment apps such as Snapscan or Zapper (Lubbe & Roberts-Lombard, 2020). Therefore, if the convenience of renting clothing online becomes increasingly similar or better than clothing stores, consumers are more likely to participate in online clothing rental options and other forms of collaborative clothing consumption (Tu & Hu, 2018).

2.4.6 Social identity and community

Much research has been done on what constitutes a community. However, for many researchers, the term 'community' refers to relational aspects between group members, meaning a common purpose, and a sense of interconnectedness and commitment to the group's well-being (Albinsson & Perera, 2012). The social psychologist Henri Tajfel's Social Identity Theory (1974) posits that individuals experience collective identity based on their membership to a group, such as racial/ethnic groups, gender identities and social class (McLeod, 2019). Hence, an individual's self-concept and sense of belonging are based on this membership (McLeod, 2019). Collaborative consumption is an activity that takes place online and is an excellent example of an online community where participants can share resources and engage with one another (Dall Pizzol *et al.*, 2017). This business model indicates that the interactions do not occur to the individual's detriment but instead demonstrate connectedness, shared values, norms, and meanings between members (Albinsson & Perera, 2012). Collaborative consumption enables participants to resist traditional consumer culture and instead share the common goal to reduce excessive consumption (Albinsson & Perera, 2012). Bardhi and Eckhardt (2012) highlight that users and providers of car-sharing is an excellent example of this. According to them, there is symbolic capital gained from usage, as these participants position themselves as modern, trendy, cool and responsible.

Albinsson and Perera's (2012) research into collaborative consumption activities found that experiencing a sense of community is a significant driver of participation in activities that involve sharing and is an essential factor contributing to the success of this business model. The term

'sense of community' is primarily the psychological concept of belonging to a community (Lowe, Stanley & Stanley, 2016) and, as per Lowe *et al.* (2016), is represented by membership, integration, fulfilment of needs and a shared emotional connection between individuals and their respective communities (McMillan & Lorion, 2020). More findings have indicated that although the model is altruistic and ecological, it is very closely related to the desire to develop social links to encourage neighbourliness, solidarity and social equality (Binninger, Mohamed, Waltar, Fabbri, Levecque, Kötz & Schmidt, 2015). A Delphi study conducted by Barnes and Mattsson's (2016) also correlated that social bonding and the idea of moving away from individualism to the community is rated a prominent driver in collaborative consumption involvement.

Collaborative clothing consumption also plays to community belonging, as swapping facilitates peer-to-peer contact, which creates a distinct sense of sharing (Park & Armstrong, 2017; Gopalakrishnan, 2018). Poshmark is an online example of this: a vibrant community powering a connected shopping experience amongst users (Chiquoine, 2017). Furthermore, Beech, Simkin, Kumar and Ferreira's (2020) research focused more specifically on individuals who share the same concern about fashion and the environment. They found that the desire to engage with like-minded people created a safe space for consumers to offer their personal opinions without the consequence of receiving backlash from opposing views. By being part of an online community, a sense of purpose and fitting in is considered one of the key benefits of participating in collaborative clothing consumption (Beech *et al.*, 2020). Respondents also relayed this sense of belonging back to their social media feeds, which have been curated to engage with like-minded people. This alignment with like-minded individuals is achieved by following specific hashtags that match their interests, which leads to interaction with people who share the same concerns and who merely share fun things like where to buy second-hand clothing for a fraction of the retail price (Beech *et al.*, 2020). Social media plays a vital role in social identity, as it is based on connection and belonging, self-expression and receiving recognition from others (Andreotti, Anselmi, Eichhorn, Hoffmann & Micheli, 2017). A consumer's online profile is a curated and conscious endeavour to manage how users want to be perceived by others (Andreotti *et al.*, 2017). Concerning the sharing economy, an experimental study on the facial expressions of Airbnb profile pictures indicated that these photos impact other users' behaviour and perception toward them (Ert, Fleischer & Magen, 2016). This finding touches on the discrimination challenges that the sharing economy faces. For example, some ethnic minorities find it harder to earn from sharing platforms based on their profile pictures (Ert *et al.*, 2016). Discrimination within the sharing economy is not a focus for this study, but will be referred to again in Chapter 5.

2.5 BARRIERS INFLUENCING PARTICIPATION IN COLLABORATIVE CLOTHING CONSUMPTION

Several challenges for collaborative clothing consumption adoption have been identified. These barriers can be described as a circumstance or obstacle that keeps people from participating in collaborative clothing consumption. They have been identified as *hygiene issues*, *unfamiliarity with the concept*, *materialism* and lack of *online trust* (Böcker & Meelen, 2017; Möhlmann, 2015; Hamari *et al.*, 2016).

2.5.1 Hygiene issues

Hygiene issues have been listed as a necessary condition influencing a consumer's desire to participate in collaborative clothing consumption practices as apprehension regarding clothing items is evident in the research (Armstrong, Niinimäki, Lang & Kujala, 2016; Armstrong *et al.*, 2016; Edbring, Lehner & Mont, 2016; Becker-Leifhold & Iran, 2018; Cherry & Pidgeon, 2018). Of the many products offered by collaborative consumption models, clothing is considered intimate, as items have been in direct contact with another person's skin (Santana & Parigi, 2015). The very nature of the collaborative clothing consumption business model rests in the fact that clothing is shared and thus worn by multiple users, so consumers naturally have concerns about hygiene (Lang & Armstrong, 2018).

This fear of contamination/contagion is a problematic association to break in the mind of the consumer; therefore, collaborative clothing consumption service providers should provide a clear policy regarding the maintenance and cleaning of their items to provide peace of mind to their customers (Becker-Leifhold & Iran, 2018; Lang & Armstrong, 2018). Participants expect the service provider to assume responsibility for cleaning the clothing items and guarantee the sanitation of items (Armstrong *et al.*, 2016). This issue requires a high level of trust in the service provider and a high tolerance for risk before consumers engage in collaborative clothing consumption (Lang & Armstrong, 2018). It is interesting to note that consumers have different levels of sensitivity toward hygiene issues across the globe: research among American consumers versus Chinese consumers has indicated that the stigma surrounding second-hand and rental items is decreasing in the USA more so than in China (Xu, Chen, Burman & Zhao, 2014).

An economic link to hygiene also exists: if a consumer has a high level of hygiene concern, their preference for second-hand/rental/swapped clothing items are lower, and their willingness to pay for new products is higher (Huang, Ackerman & Sedlovskaya, 2017). The opposite is also true: if consumers who engage with second-hand/rental/swapped items have lower levels of *hygiene*

issues, then they will most likely have a higher price sensitivity towards new items (Huang *et al.*, 2017; Baek & Oh, 2021). There is also a link between hygiene concerns and the hedonic driver discussed above. If contamination/contagion evoke feelings of repulsion amongst consumers, it will lead to diminished enjoyment and excitement associated with this type of clothing consumption (Baek & Oh, 2021).

The outbreak of the COVID-19 pandemic heightened the need amongst collaborative clothing consumption businesses to strategically respond to consumer concerns about hygiene due to the immediate threat of contact with the virus (Baek & Oh, 2021). Furthermore, the ongoing global pandemic will make consumers more vigilant about shared consumption in the future (Baek & Oh, 2021). Hence, this enforces the research by Armstrong *et al.* (2016) conducted before the pandemic outbreak more now than ever, namely that the service provider must guarantee cleanliness and sanitation to prevent the negative hygiene associations at play.

2.5.2 Unfamiliarity with the concept

For many consumers, the practice of collaborative clothing consumption is a relatively new experience, and this lack of knowledge creates perceived risk among users, which could deter them from participating in these practices (Bhatti *et al.*, 2018; Fota *et al.*, 2019). In addition, questions such as return policies, security aspects, and the process itself has often been raised as concerns in recent studies. In general, the more complexity there is, the more potential disadvantages and risks there might be for users (Fota *et al.*, 2019). Therefore, some consumers may be hesitant to use a sharing service for the first time due to a lack of experience and prior knowledge that goes hand in hand with regularly using this form of consumption (Moeller & Wittkowski, 2010).

Featherman and Pavlou (2003:454) describe risk concerning participating in an e-commerce practice as 'the potential for loss in the pursuit of a desired outcome'. In other words, when users are unfamiliar with using collaborative clothing consumption, there is naturally a perceived risk for the potential of losses when they participate (Zhang *et al.*, 2016). Featherman and Pavlou (2003) identified six dimensions of perceived risk for using e-services, of which four apply to collaborative clothing consumption, namely (1) performance or product risk, which refers to the possibility that service providers may not meet the expected standards in the mind of the consumer (Lee *et al.*, 2021). The consumer cannot touch/inspect a tangible product when participating in e-commerce transactions, hence product risk has a significant impact on collaborative clothing consumption engagement (Bhatti *et al.*, 2018); (2) privacy risk, which pertains to the revealing of personal information and the cyber-crimes associated with users' sensitive information (Bhatti *et al.*, 2018); (3) social risk which reveals the fear users may have that others may judge them for making use

of sharing services which in essence relates to the status of ownership and lastly (Lee *et al.*, 2021); (4) financial risk which refers to potential monetary loss associated with partaking in collaborative clothing consumption models (Zhang *et al.*, 2016). Research has shown that consumers have severe financial risk concerns when using any form of e-commerce. One of the reasons is credit card fraud, which poses a significant financial risk to consumers (Dai, 2007). This risk is especially relevant in South Africa as credit card fraud is increasing according to the South African Banking Risk Information Centre's (Sabric) fraud report, stating that in 2017, credit card fraud amounted to R436.7 million (Rangongo, 2018).

In a research survey done by Beckers and Klerkx (2020), several difficulties experienced by the respondents concerning collaborative clothing consumption was pointed out. Namely, many respondents thought the websites were not easy to use and navigate, the payment system was complicated, and the concept of non-ownership was unfamiliar to them. Möhlmann (2015), too, regards unfamiliarity with the service or process as a barrier that prevents a consumer from participating.

2.5.3 Materialism

According to Belk and Pollay (1985:394), *materialism* can be defined as 'the tendency to view worldly possessions as important sources of life satisfaction'. Consumers who obtain satisfaction and happiness by material possessions tend to be more self-centred and less likely to gain satisfaction by engaging in environmentally friendly practices such as collaborative clothing consumption (McCarty & Shrum, 2001). According to McGregor (2019), highly materialistic people relentlessly seek to build their identity through how much they spend on possessions, but their expectations are never met, leaving them dissatisfied and disenchanting. This feeling leads them to continuously try to fill the void by spending more and more, hence creating a lifestyle that is not sustainable for themselves and the environment (McGregor, 2019). Possessions are seen as a legacy, to be passed on, an outward projection of status and a form of financial security (Wallendorf & Arnould, 1988). Therefore, consumers become attached to their possessions and losing or letting go of them is seen as a tragedy and a violation of the self (Wallendorf & Arnould, 1988). According to Goldsmith, Flynn and Clark (2012), researching materialism is essential for understanding consumer motives and their impact on subsequent behaviours. The perception is that making money and owning things leads to success and happiness in life. This characteristic of an individual lies at the heart of what materialism means to them (Mont & Power, 2010; Goldsmith *et al.*, 2012;). This perception certainly affects consumers' attitudes towards participating in collaborative clothing consumption activities, an act that could benefit society at large but will not offer any pleasure to the individual, so they continue to over-consume (McCarty & Shrum, 2001; Tilikidou & Delistavrou, 2004). The meanings these individuals have attached to

their possessions is too much of a key feature to change what they believe is a natural and acceptable way of consuming (Belk 1988). Possession of goods also helps consumers express their self-identity. In some cases, ownership of goods grants consumers acceptance and belonging to a community which help them to conform and fit in socially (Belk, 1988).

This barrier is of specific interest in South Africa. There is a growing trend among township youth to accumulate expensive fashion brands to portray social status to be noticed by their communities (Dondolo & Madinga, 2017). This behaviour suggests that materialism and group identity are key factors influencing South African township youth's consumption behaviour. Despite low to middle-class families living in townships, this does not deter township youth from spending on high-end branded products (Dondolo & Madinga, 2017). Furthermore, according to their findings, the more expensive and of high quality a clothing item is, the higher the notion that the product is of high status. Therefore, one could deduce that consumption not based on ownership (namely renting and swapping) could clash with some consumers' cultural norms and practices. Traditionally, these consumers care about brands and are seen by peers positively (Catulli *et al.*, 2013). The concern amongst these consumers is that using collaborative clothing consumption services could, for example, carry a stigma that he/she is unable to afford their own items (Catulli *et al.*, 2013). Therefore, it is clear that a consumer's bond to material goods and physical ownership of those goods may negatively impact their participation in collaborative clothing consumption (Lang & Armstrong, 2018).

2.5.4 Lack of trust in online transactions

Corritore, Kracher and Wiedenbeck (2003) attempted to define online trust by explaining it as 'an attitude of confident expectation in an online situation of risk that one's vulnerabilities will not be exploited'. Trust, be it in the offline and online environments, creates cooperation and coordination, mitigates risk, fear and complexity (Corritore *et al.*, 2003). Without it, a robust and interactive online environment would not be possible (Corritore *et al.*, 2003).

Previous studies investigating online activities such as shopping, sharing, and renting clothing have shown that trust is an essential factor in a user's online behaviour (Fota *et al.*, 2019). Trust will only be created when a consumer forms a positive impression of the website/app by believing that the information pertained is accurate (Lubbe & Roberts-Lombard, 2020). Trust is considered a key facilitator in a consumer's likelihood of participating in collaborative clothing consumption services and is mainly dependent on whether they believe the service provider will act with integrity and reliability (Morgan & Hunt, 1994). Consumers should be confident that their valuable personal information will not be exploited by the sharing partner, which will allow for a deeper relationship between the sharing partner and the consumer over time (Bhattacharjee, 2002). The

greater a user's trust in the sharing partner, the more positive their behavioural intentions will be to repeatedly participate in the model (Fota *et al.*, 2019).

These consumer concerns raise the question of how trust can be developed between sharing platforms and users because, in essence, online trust is more challenging to build than offline trust due to the lack of physical contact (Kong *et al.*, 2020). Moreover, offerings amongst the various sharing commerce platforms are non-standardised because, technically, every service provider and user are unique, making the provision of a reliable service unpredictable (Kong *et al.*, 2020). However, a company that has managed to address these trust concerns and build a positive reputation amongst users is Airbnb. Trust was achieved by keeping customers' personal information safe, showing host verifications such as a verified ID, awarding super-host badges, and providing an in-site messaging system where users can chat to a representative in real-time (Lin & Lo, 2016).

Within South Africa, research specifically focusing on trust regarding collaborative clothing consumption is lacking, but findings concerning trust in the e-commerce/m-commerce markets can also be applied to collaborative clothing consumption platforms. Unfortunately, lack of trust is a significant factor influencing the uptake of e-commerce services amongst South African consumers (Joubert & Van Belle, 2013). This cautious behaviour by South Africans is based on concerns regarding online security (Makhitha *et al.*, 2019). Online security can be defined as the extent to which consumers believe that making an online purchase is safe and reliable, especially concerning their personal information and browsing/shopping history (Vijayasarathy, 2004). Goldstuck (2014) found that another critical barrier to South Africans purchasing online is a lack of physical interaction with the product; hence, consumers cannot guarantee that the product will meet their expectations. Users are also exposed to cyber-crime, SPAM, viruses and illegal content (Joubert & Van Belle, 2013). Covid-19 brought about an e-commerce boom. However, many consumers were faced with disappointingly long lead times, poor service delivery, parcel theft, online fraud and high mobile data costs, all of which hindered South Africans' trust in e-commerce (Dludla, 2020).

2.6 CONCEPTUAL FRAMEWORK

As shown by **Figure 2.1**, the following conceptual framework was developed to guide the research and indicate how the relevant concepts of this study interact with one another to ascertain which motivational drivers and barriers influence a South African consumer's online collaborative clothing consumption practices.

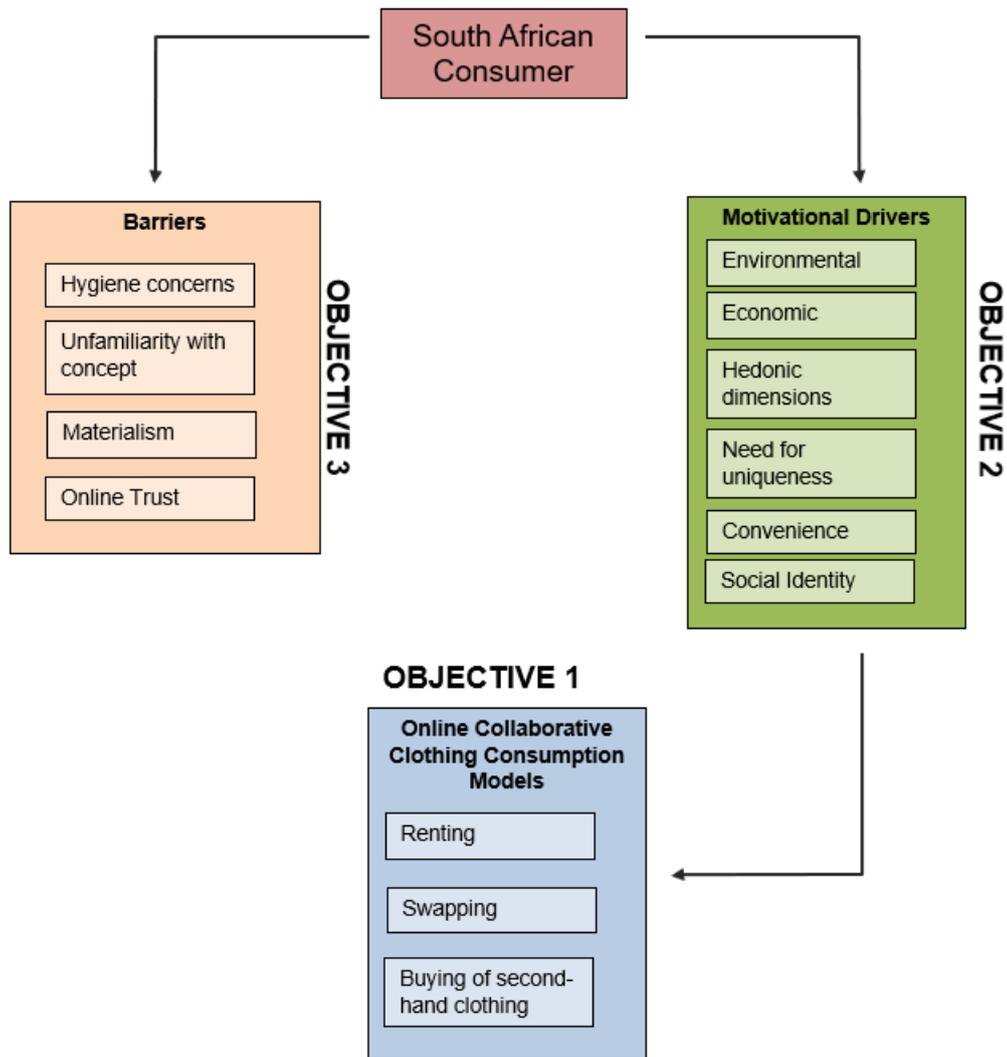


FIGURE 2.1: CONCEPTUAL FRAMEWORK

Understanding consumers' behaviour regarding consumption is an unpredictable and challenging task as there are many forces at play that influence how people will behave (Mont & Power, 2010). The concept of collaborative clothing consumption is relatively new, and very little empirical research on consumer behaviour exists in academic literature, even less so within a South African context. The purpose of this framework is to visually represent the South African consumers' participation in online collaborative clothing consumption practices (renting, swapping and the buying/selling of second-hand clothing) and the drivers and barriers that influence the participation in these models. **Figure 2.1**, Objective 1 indicates three models that South African consumers have access to (i.e., renting, swapping and buying second hand clothing). The drivers and barriers at play that may halt or encourage participation is shown in Objective 2 and 3 respectively. For Objective 2, mentions six motivational drivers, namely: *environmental, economic, hedonic dimensions, need for uniqueness, convenience, and social identity/sense of community*. If the consumer is motivated by any or more of these factors, it should positively impact participation in one or all of the three models. Objective 3, on the other hand, mentions

four barriers: *hygiene issues, unfamiliarity with the concept, materialism, and lack of online trust*. If the consumer cannot advance past these barriers, participation in one or all three of the collaborative clothing consumption models will be unlikely.

2.7 RESEARCH OBJECTIVES

Taking the research problem and relevant literature into review, the following research objectives were developed to explore and describe the drivers and barriers influencing consumers' online collaborative clothing consumption practices in the South African market.

Objective 1: To explore and describe consumers' **participation** in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying in the South African market).

Objective 1.1: To explore and describe which online collaborative clothing consumption model is **most frequently used** by consumers in the South African market.

Objective 1.2: To explore and describe consumers' **preferred** online collaborative clothing consumption model in the South African market.

Objective 2: To explore and describe the influence of **motivational drivers** (i.e., *environmental benefits, economic benefits, hedonic purposes, need for uniqueness, convenience and social identity (community)*) on consumers' online collaborative clothing consumption practices within the South African market.

Objective 2.1: To explore and describe which drivers (as mentioned above) influence **online renting** in the South African market.

Objective 2.2: To explore and describe which drivers (as mentioned above) influence **online swapping** in the South African market.

Objective 2.3: To explore and describe which drivers (as mentioned above) influence **online second-hand buying** in the South African market.

Objective 3: To explore and describe the influence of specific **barriers** (i.e., *hygiene issues, unfamiliarity with the concept, materialism, online trust*) on consumers' online collaborative clothing consumption practices within the South African market.

Objective 3.1: To explore and describe which barriers (as mentioned above) influence **online renting** in the South African market.

Objective 3.2: To explore and describe which barriers (as mentioned above) influence **online swapping** in the South African market.

Objective 3.3: To explore and describe which barriers (as mentioned above) influence **online second-hand buying** in the South African market.

2.8 CONCLUSION

This chapter explained the relevant literature about the sharing economy and then drilled down into collaborative consumption, focusing on collaborative clothing consumption. The literature touched on the importance of the development of the Internet and smartphone technology that has enabled the sharing economy to gain rapid momentum on a global scale. The collaborative clothing consumption model has been hailed as a more sustainable form of consumption, especially concerning the fast-fashion business, which currently drives overconsumption amongst consumers. However, based on the literature, it is clear that many other drivers and barriers influence consumers to participate in the sharing economy, and often the environment is not a top priority, as many would assume. Therefore, this chapter regarded each driver and barrier as well as the various online collaborative clothing consumption business models available to consumers, namely renting, swapping, and buying second-hand clothing. Research of this ilk has mainly been done in developed economies such as Europe and America, and research relating to an emerging economy such as South Africa is still lacking. The chapter ended with the conceptual framework and an outline of the objectives for this study. In the next chapter, the research methodology will be discussed in depth.

CHAPTER 3: RESEARCH METHODOLOGY

In this chapter, the research methodology followed in this study is explained and justified. The chapter covers the research design, purpose and approach, sample and sampling technique; instrument development and operationalisation table; data collection; data analysis; validity and reliability steps to ensure the quality of the data, and lastly, ethical considerations that apply to this study.

3.1 RESEARCH DESIGN, APPROACH AND PURPOSE

The overall aim of this study was to empirically explore and describe the motivational drivers and barriers that influence South African consumers' participation in different forms of online collaborative clothing consumption. The research design refers to the plan used to examine the research question; in other words, what data is required and what methods will be employed to collect and analyse this data (Marczyk, DeMatteo & Festinger, 2010). Therefore, it is a systemic process that involves data collection, drawing up a proposal for the study and conceptualising the overall framework to enhance one's understanding of a specific phenomenon (Leedy & Ormrod, 2005). Trochim (2001) describes research design as the "glue that holds the research project together".

For this study, a cross-sectional survey research design was selected as it allows for a large amount of information to be collected which provides the researcher with greater statistical power when analysing data. The survey was conducted online to collect the data as it is a cost and time-efficient method that is easy to implement (Nayak & Narayan, 2019:36). Survey research is also regarded as a method of data collection that has established validity and reliability (Marczyk, *et al.*, 2010). A quantitative approach was followed for the study by employing various calculations and statistical analysis to examine the relationships among variables numerically. From there, the data collected was employed to make predictions, uncover patterns, verify relationships and generalise findings to the population at large (Babbie & Mouton, 2001; Zikmund, Babin, Carr & Griffin, 2013). A quantitative approach also allows the study to be repeated, as the data is standardised for collection protocols (Babbie & Mouton, 2001; Zikmund *et al.*, 2013).

Because limited empirical findings exist on collaborative clothing consumption in the South African context, the purpose of the study is exploratory and descriptive (Babbie, 2013:90-92). Exploratory research focuses on a relatively new subject that aims to explain the relationships between the variables specified before data collection (Babbie & Mouton, 2001). This type of research emphasises discovering new ideas and exploring the research topic in-depth (Zikmund *et al.*, 2013). On the other hand, descriptive research describes a population concerning an important variable (Zikmund *et al.*, 2013). The primary purpose is to enable the researcher to

describe the in-depth characteristics of a particular group and determine the proportion or frequency of a specific variable within that sample (Babbie & Mouton, 2001; Zikmund *et al.*, 2013).

Furthermore, this study is considered empirical as primary data was collected and used to answer the research objectives (Creswell, 2013). Primary data refers to data collected first-hand by the researcher (Salkind, 2011:1095). Additionally, this research can be classified as a cross-sectional study, meaning it drew a sample of elements from the population of interest at a specific point in time. Hence, the characteristics of the sample members are only measured once (Babbie & Mouton, 2001).

3.2 SAMPLE AND SAMPLING TECHNIQUE

3.2.1 Sample

The target population for this study was South African consumers aged 18 years and older who currently shop online for clothing. Only participants who previously shopped online were considered, as this study is specifically researching web-based collaborative clothing consumption models. As a developing country, South Africa is home to many people of diverse backgrounds and other demographic factors such as age, gender, level of education, level of income, population group, and residing province were also considered and included to assess whether they play a significant role in the participation of collaborative clothing consumption. Research has shown that demographic and socio-economic factors have an impact on the adoption of collaborative consumption practices (Lutz & Newlands, 2018). Therefore, it is important to measure customer segmentation, especially within the context of South Africa based on the unique social conditions and history of this country.

The age limit of 18 and above was set in order to obtain more reliable results. Strode, Slack and Essack, (2010) reiterate that participation requirements for research is highly stringent, and children under the age of 18 have limited capacity to act independently without being assisted by an adult. To guarantee that participants adhered to this age requirement, a screening question was posed at the beginning of the questionnaire to ascertain the participant's age. The current age distribution in South Africa according to the Central Intelligence Agency (2020) is as follows: the 15-24 years segment makes up 16.8%, the 25-54 years segment makes up 42.37%; the 55-64 years segment makes up 6.8%, and the '65 years and over' segment makes up 6.09%. The reason age was included was to assess if it influences a participant's collaborative clothing consumption behaviour. All generational cohorts formed part of this study, but the majority of the participants were classified as Generation Z. This generation is digitally savvy, spends much time

engaging online, is aware of environmental and social concerns, and is highly educated (Pham, Hoang, Nguyen, Do & Mar, 2021). It was, therefore, of interest if these characteristics play a role in the participation of collaborative clothing consumption.

Concerning gender, both male and female participants were included to allow for a broader scope of potential participants. Approximately 51.2% (± 30 million) of the South African population is female (Statistics South Africa, 2019). Research on gender and participation in the sharing economy has found that men (21%) are more likely than women (15%) to have heard of sharing economy platforms, and men and women appear to be geared differently towards the type of sharing services (Andreotti *et al.*, 2017).

Furthermore, the study assessed the level of education amongst participants as this demographic characteristic appears to be one of the most crucial determinants of participation in the sharing economy (Andreotti *et al.*, 2017). Research has indicated that people with a higher level of education are more likely to engage in the sharing economy, either as providers or as consumers (Andreotti *et al.*, 2017; Schor, 2017). The study also considered the income levels of participants and the role this demographic plays in conjunction with the level of education. Some studies report that these two demographics play a role (Richa, 2012), and others have reported it does not (Kanchan, Kumar & Gupta, 2015). South Africa has a considerably high Gini coefficient of 0.65, which points to one of the most unequal societies in the world (Niyimbanira, 2017). During Quarter 1 in 2021, 32,6% of the South African population was unemployed, highlighting that poverty is a key development challenge in social, economic and political terms (Statistics South Africa, 2021). In South Africa, digital inequality refers to the gap between those who can use the Internet for their benefit and those who cannot do so (Choung & Manamela, 2018). This gap links back to the level of education, as internet proficiency allows an individual to be well informed and acquire the skills, information, and knowledge to access collaborative consumption services online (Choung & Manamela, 2018).

Additionally, South Africa has a very diverse population, making up approximately 59 million people, of whom 80.7% are Black, 8.8% are Coloured, 7.9% are White, and 2.6% are either Asian or Indian (Statistics South Africa, 2019). Therefore, all four main categories of the South African population, namely Black, White, Coloured and Indian/Asian, were included in the sample.

In terms of geographical location, all nine provinces in South Africa were included. An effort was made to recruit participants across a broad geographical scope within South Africa's larger metropolitan areas. According to the 2020 midyear population estimates done by Stats SA, Gauteng continues to record the largest share of South Africa's population, with approximately 15.5 million people living there, followed by KwaZulu-Natal with approximately 11.5 million people.

The Western Cape recorded 6.6 million people; the Eastern Cape is at 6.5 million, Limpopo at 5,8 million, North West at 3.9 million, Free State at 2.8 million, and the Northern Cape maintained its status as the province with the lowest population in the country with a population estimated at 1.3 million people (Statistics South Africa, 2019). There is a strong correlation between the sharing economy and geographical location. Urban dwellers tend to know the various sharing economy platforms and are more willing to access (and provide) services/products on these platforms (such as Airbnb and Uber). There is higher demand in the urban areas for these platforms; hence it makes sense for these businesses to concentrate on these locations within South Africa (Andreotti *et al.*, 2017)

3.2.2 Sampling techniques

A non-probability sampling technique was employed for this study. This method is used when individuals included in the sample are selected based on convenience and not selected on a random basis (Acharya, Prakash, Saxena & Nigam, 2013). The researcher, therefore, acknowledges that everyone did not have an equal probability to be selected (Babbie & Mouton, 2001; Zikmund *et al.*, 2013). For this reason, one cannot draw generalisations about the entire population through applying this method (Babbie & Mouton, 2001). The following three non-probability sampling techniques were employed for this study: convenience sampling, snowball sampling, and quota sampling.

Convenience sampling is the most commonly used method, as participants are recruited based on their accessibility and proximity to the researcher (Berndt, Petzer, Kotzé & Higgs, 2011:174). It is cost-effective and time-efficient, but at the same time, this method is not without limitations; variability and bias cannot be measured or controlled, and results from the data cannot be generalised beyond the sample (Acharya *et al.*, 2013). For this study, friends, family and acquaintances were initially approached to participate by sharing the questionnaire link on social media platforms, email and WhatsApp. The sharing of the link, in turn, led to snowball sampling (also referred to as accumulating sampling), which ensured that a more diverse sample could be reached (Acharya *et al.*, 2013). Lastly, quota sampling was implemented, which allows for various subgroups of a population to be included, hence ensuring a variety of participants across all demographic backgrounds (Acharya *et al.*, 2013). Unfortunately, this method was not effective as the sample was skewed.

Final year Consumer Science and Master's students assisted with the data collection. The eventual sample size was 2 655, with 1 759 completed questionnaires, yielding a 66% completion rate. Unfortunately, incomplete questionnaires totalled 896 (34%), meaning participants exited the survey before completing it and were subsequently discarded.

3.3 INSTRUMENT DEVELOPMENT

A structured, online, self-administered questionnaire (**Addendum B**) was developed from existing, reliable scales using Qualtrics, a user-friendly, web-based survey tool. Qualtrics software allows for the easy development of online questionnaires that are sharable via the survey link on social media platforms such as Facebook, LinkedIn, Instagram, Whatsapp, and email.

Before participants commenced with the questionnaire, a cover letter was provided. The cover letter included a consent form that clarified the purpose of the study, the research procedure, confidentiality statement, the withdrawal clause and the potential benefits of the study. It was also made clear that participants willingly agreed to partake in the study and were under no obligation to do so. After participants agreed to the terms and conditions outlined in the consent form, one screening question had to be answered before the commencement of the actual questionnaire to ensure that participants adhered to the prerequisites of the study. In this case, they had to confirm that they were 18 years or older. If participants met the prerequisite of the screening question, they could proceed to the actual questionnaire. The questionnaire consisted of nine sections (Section A, B, C, D, E, F, G, H, J) discussed below. These sections correspond with the relevant constructs measured in **Table 3.1**, presented further in this chapter.

To note: this study formed part of a larger research project on collaborative clothing consumption, conducted by final-year Bachelor and Masters of Consumer Science students at the University of Pretoria. The survey consisted of ten sections relevant to the larger research project; however, section I did not apply to this study; hence this section is not included in the below breakdown.

Section A - Screening question: The screening question related to age to ensure that respondents complied with the preconditions of the study, namely whether they were age 18 years or older. If respondents did not meet this criterion, they were sent to the end of the questionnaire where it was politely stated that they could not continue any further.

Section B: This section included a drop-down list of the field workers' names and respondents were asked to indicate which field worker had distributed the questionnaire to them. Final year Consumer Science and Master's students from the University of Pretoria students were used as the field workers.

Section C - Extent of participating: This section relates to the level of frequency regarding consumers' collaborative clothing consumption practices. Participants were asked to indicate how often they frequent collaborative clothing consumption practices concerning renting, swapping, or buying second-hand clothing. A five-point Likert-type scale (1 = Never to 5 = Always) was used to

record their responses. To measure participation in renting, swapping, and buying second-hand clothing, scale items were adapted and rephrased from Akbar *et al.* (2016).

Section D: This section comprises only one question, namely to determine which of the collaborative clothing consumption practices participants partake in most often, namely 1 = renting clothes, 2 = swapping clothes, and 3 = buying second-hand clothes.

Section E - Purchasing platforms: This section determined which platforms they would most likely access to participate in collaborative clothing consumption, namely in-store only, online-only, or both. This question was critical concerning this study, as it pertains specifically to consumers who use online platforms or both online and in-store. Hence, participants who only use in-store platforms were not included in the final sample for analysis.

Section F - Motivational drivers: This section presented the participants with a series of statements adapted from previous scales and modified to fit the purpose of this research better. These scale items were focused on measuring the motivational constructs. The motivational constructs are the drivers that form the basis of the participant's behaviour and possibly determine the participant's intent to participate in online collaborative clothing consumption. Again, conversational language was used to avoid any complexity, and how the questions were asked did not lead towards the desirable answers, therefore maintaining measurement validity. These motivational drivers include: *environmental benefits*, *economic benefits*, *hedonic dimensions*, *need for uniqueness*, *convenience* and *social identity (community)*. To measure consumers' drivers to participate in collaborative clothing consumption, the following scales were adapted, using a five-point Likert-type scale (1 = Strongly disagree to 5 = Strongly agree). For the *environmental benefits*, four scale items were derived from Hamari *et al.* (2016). The *economic benefits* was measured with four scale items adapted from Hamari *et al.* (2016) and Dall Pizzol *et al.* (2017). Four scale items were derived from Hamari *et al.* (2016) and Hwang and Griffiths (2017) to measure *hedonic dimensions*. The *need for uniqueness* was measured with five adapted scale items from Lang and Armstrong (2018), and for both *convenience* and *social identity*, four scale items each were adapted from Dall Pizzol *et al.* (2017).

Section G - Barriers: This section presented the participants with a series of statements that have been adapted from previous scales, but in this instance, the section was concerned with the barriers that could halter participation in collaborative clothing consumption. The measured barriers included *hygiene issues*, *unfamiliarity with the concept*, and *materialism* (i.e., the importance of ownership). *Online trust* was measured separately in section H. The following scales were adapted to measure consumers' barriers, using a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree). For hygiene barriers, four scale items were

self-developed by researchers in the field of Clothing and Textiles. *Unfamiliarity with the concept* was measured with four scale items derived from Möhlmann (2015). For *materialism*, four scale items were derived from Lang and Armstrong (2018). They were adapted and rephrased to relate to the need for *materialism* as a barrier to collaborative clothing consumption practices.

Section H: This section focused solely on the barrier concerned with *online trust* issues that consumers may have. This section only appeared to respondents who answered that they participate in 'online' or 'both' as a channel of collaborative clothing consumption in Section E. Six items relating to trust were derived from (Möhlmann, 2015) and were adapted for the sake of this study. Respondents' level of agreement was, once again, recorded on a 5-point Likert scale (1 = Strongly disagree to 5 = Strongly agree).

Section J - Demographic information: This section asked direct response questions regarding participants' demographic background information such as age, population group, level of education, geographic location, gender and income per month. The questions were carefully formulated to address and specify each variable to ensure that the participants' demographic profiles could be adequately described.

3.3.1 Pre-testing of instrument

The questionnaire was pre-tested before being distributed to eliminate any errors, ambiguous language or statements that were confusing to participants (Creswell, 2013:170; Berndt *et al.*, 2011:186-188). The pre-test was done on a smaller sample of 25 participants from different cultural backgrounds and language groups to verify the questionnaire's validity and ease of use. This process helped ensure the questions were clear, understandable and non-ambiguous, especially concerning this study where the sample group included more than one culture and language group (Creswell, 2013:161). An effort was made to ensure the demographic make-up of the participants would be similar to the larger sample and they were recruited through convenience sampling techniques. The pre-test was distributed electronically whereby participants received either a link via messaging platforms such as Whatsapp or social media (Facebook, LinkedIn and Instagram) to complete the Qualtrics survey online. An acceptable outcome was achieved in terms of reliability and validity; hence the questionnaire was deemed acceptable. Before commencing with the data collection of the larger population, approval from the Ethics Committee of the Faculty of Natural and Agricultural Sciences at the University of Pretoria was sought and granted in March 2020 (NAS066/2020).

3.4 CONCEPTUALISATION AND OPERATIONALISATION

Table 3.1 summarises the objectives, the primary constructs, the dimensions, as well as the indicators pertaining to each construct. The adapted measuring instruments used to measure the concepts are indicated in the table with the appropriate references.

3.5 DATA COLLECTION PROCEDURE

The data collection process took place from 12 May 2020 till 12 June 2020 through an online, self-administered questionnaire. Twenty-four fourth-year Clothing Retail Management students and Master's students at the University of Pretoria were recruited to collect data. Each one was required to collect a minimum of 25 responses. Thus, the anticipated sample size was 600 (24x25). The questionnaire link was shared by the undergraduate student fieldworkers and Master's students with family, friends, and acquaintances via email and WhatsApp and on their social media pages (e.g., Facebook, Instagram, Twitter, and LinkedIn). As soon as a potential participant clicked on the link, a cover letter opened, explaining the purpose of the study and that it would take approximately ten minutes to fill in. It was also made clear that participation was anonymous and voluntary. Advantages of using an online survey include the low cost, but especially the effortless shareability, which means more participants can be reached (Nayak & Narayan, 2019). Disadvantages include the fact that it excludes individuals who do not have access to the Internet. In addition, the opportunity for participants to explain and elaborate on their responses is not possible (Nayak & Narayan, 2019).

TABLE 3.1: OPERATIONALISATION TABLE

Objective	Construct	Dimension	Indicators	Scales and measurement	Item no.	Adapted scale items
OBJECTIVE 1: To explore and describe consumers' participation in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market.	Collaborative clothing consumption	Renting	No transfer of ownership, only temporary access granted for a fee.	Scale items were derived from Akbar, Mai & Hoffman (2016) and were rephrased to relate to renting as part of collaborative clothing consumption practices. Measured on a 5-point Likert-type scale (1 = Never to 5 = Always)		Please indicate the level of frequency regarding your own Collaborative Clothing Consumption practices:
					Q3_1	I rent clothes for a fee.
					Q3_2	Renting clothes is better than owning clothes.
					Q3_3	I rent more clothes than I buy clothes.
		Q3_4	I prefer renting to buying clothes.			
		Swapping	Exchange of clothing; no buying or selling involved. Transfer of ownership is permanent.	Scale items were derived from Akbar <i>et al.</i> , (2016) and were rephrased to relate to swapping as a part of collaborative clothing consumption practices. Measured on a 5-point Likert-type scale (1 = Never to 5 = Always)	Q3_5	I swap clothing with other people.
					Q3_6	Swapping clothes with other people is a good alternative to buying.
					Q3_7	I swap more clothes than what I buy.
					Q3_8	I prefer swapping my clothes rather than buying them.
		Second-hand buying	Buying second-hand clothing occurs where the transfer of ownership is permanent.	Scale items were derived from Akbar <i>et al.</i> , (2016) and were rephrased to relate to the buying of second-hand clothing as part of collaborative clothing consumption practices. Measured on a 5-point Likert-type scale (1 = Never to 5 = Always)	Q3_9	I buy second-hand clothes.
					Q3_10	I buy more second-hand clothes than new clothes.
					Q3_11	I prefer buying second-hand clothes above buying new clothes.
Q3_12	Buying second-hand clothes are better than buying new clothes.					
OBJECTIVE 2: To explore and describe the influence of motivational drivers (i.e., environmental benefits, economic benefits, hedonic purposes, need for uniqueness, convenience and social identity (community)) on consumers' online collaborative clothing consumption practices within the South African market.	Motivational drivers	Environmental benefits	Concern for the environment drives alternative forms of consumption that is more ecologically friendly.	Scale items were adapted from Hamari <i>et al.</i> , (2016) and measured on a 5-point Likert-type agreement scale (1 = Strongly disagree to 5 = Strongly agree)		Please indicate your level of agreement when taking part in renting / swapping/buying second-hand clothes:
					Q6_1	It helps to save the earth's natural resources.
					Q6_2	It is an environmentally-friendly way of consuming clothing.
					Q6_3	It is better for the environment.
		Economic benefits	The ability to reduce spending on product acquisition or access to lower costs. Financially beneficial to participate in collaborative clothing consumption practices.	Scale items were adapted from Hamari <i>et al.</i> , (2016) and Dall Pizzol, <i>et al.</i> , (2017) and rephrased to relate to the economic driver of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q6_4	It is an environmentally sustainable way of living.
					Q6_5	It saves me money.
					Q6_6	It benefits me financially.
					Q6_7	I can reduce my clothing expenses.
		Hedonic Dimensions	The enjoyment derived from the activity of collaborative clothing consumption itself.	Scale items were derived from Hamari <i>et al.</i> , (2016) and Hwang & Griffiths (2017) and were rephrased to relate to the hedonic driver of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q6_8	It is cheaper than other ways of buying clothes.
					Q6_9	It is fun to participate in these practices (e.g., renting / swapping / second-hand buying).
					Q6_10	It is exciting to take part in these practices (e.g. renting / swapping / second-hand buying).
					Q6_11	It is something I enjoy doing.
		Need for uniqueness	The constant need for novelty to show individuality by adopting new ideas.	Scale items were derived from Lang & Armstrong (2018) and were adapted and rephrased to relate to the <i>need for uniqueness</i> as one of the drivers of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q6_12	It makes me feel good.
					Q6_13	It allows me to get one-of-a-kind products to create my own unique style.
					Q6_14	It is important to me to find something that communicates my uniqueness.
					Q6_15	I combine clothes in such a way to create a personal image that cannot be duplicated.
		Convenience		Scale items were derived from Dall Pizzol, <i>et al.</i> , (2017) and were adapted and rephrased to relate to the convenience driver of collaborative clothing consumption	Q6_16	I try to find a more interesting version of ordinary clothes because I enjoy being original.
					Q6_17	I am often on the lookout for new clothes that add to my personal uniqueness.
Q6_18	These practices (e.g. renting / swapping / second-hand buying) save me time.					

Objective	Construct	Dimension	Indicators	Scales and measurement	Item no.	Adapted scale items
			The ability to provide comfort or well-being to the individual and facilitate their routine.	practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q6_19	It is convenient to be able to choose from a variety of options to satisfy my needs.
					Q6_20	The convenience of using shared clothes fits my lifestyle.
					Q6_21	It is more convenient to take part in these practices (e.g. renting / swapping / second-hand buying) than to buy new clothes.
		Social identity (community)	A person's sense of whom they are is based on their group membership. Often groups to which people belong are an important source of pride and self-esteem.	Scale items were derived from Dall Pizzol <i>et al.</i> , (2017) and were adapted and rephrased to relate to the social identity driver of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q6_22	I feel part of a community when I participate in these practices (e.g. renting / swapping / second-hand buying).
					Q62_23	Taking part in shared practices improves my image in the community.
					Q6_24	These practices (e.g. renting / swapping / second-hand buying) allow me to be part of a group of people with similar interests.
					Q6_25	Belonging to a group that is participating in shared practices is important to me.
OBJECTIVE 3: To explore and describe the influence of specific barriers (i.e., hygiene issues, unfamiliarity with the concept, materialism, online trust) on consumers' online collaborative clothing consumption practices within the South African market.	Barriers	Hygiene issues	Negative evaluations exist regarding hygiene and the satisfactory cleanliness and sanitation of products.	Scale items were self-developed by researchers in the field of Clothing and Textiles to relate to <i>hygiene issues</i> as one of the barriers of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)		Please indicate your level of agreement when renting / swapping/buying second-hand clothes:
					Q7_1	Second-hand clothes might not always be as hygienic as new clothes.
					Q7_2	I worry that if I acquire second-hand clothing, it will be unhygienic.
					Q7_3	Hygiene in terms of second-hand clothing is important to me.
					Q7_4	I have concerns that second-hand clothes are not hygienic.
		Unfamiliarity (with the concept)	Inexperience or lack of knowledge concerning collaborative clothing consumption practices.	Scale items were derived from Möhlmann (2015) and were rephrased to relate to the unfamiliarity of the concept as one of the barriers of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q7_5	I am not familiar with the concept of sharing economy services.
					Q7_6	I have little experience when it comes to these practices (e.g. renting / swapping / second-hand buying).
					Q7_7	Overall, I do not know much about collaborative clothing consumption.
					Q7_8	I do not know how/where I can take part in such practices (e.g. renting / swapping / second-hand buying).
					Q7_9	It is important to me to own a lot of new clothes.
		Materialism	The need for ownership and overconsumption of products.	Scale items were derived from Lang & Armstrong (2018) and were rephrased to relate to the need for <i>materialism</i> as one of the barriers of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)	Q7_10	Some of the most important achievements in life include buying new clothes.
					Q7_11	My new clothes indicate how well I am doing in life.
					Q7_12	I like to own fashionable clothes that will impress the people around me.
		Online Trust	Doubting the reliability and security during a transaction (reverse logistics).	Scale items were derived from Möhlmann (2015) and were rephrased to relate to trust issues as one of the barriers of collaborative clothing consumption practices. Measured on a 5-point disagree-agree Likert-type scale (1 = Strongly disagree to 5 = Strongly agree)		Please indicate your level of agreement when renting/swapping buying used/second-hand clothes ONLINE:
					Q8_1	I am not sure that the clothes on the website are presented accurately.
					Q8_2	I don't know if I will receive the right products.
					Q8_3	I am uncertain whether the products will fit me correctly.
					Q8_4	I am unsure if they offer secure payment facilities.
					Q8_5	Online websites selling second-hand clothing are not safe in terms of cyber security.
Q8_6	I am unsure if they have fair return/exchange policies.					

3.6 DATA ANALYSIS

Once the data collection process was concluded, it was converted into numeric expressions to be statistically analysed. Data analysis is the systematic process of applying analytical and statistical techniques to evaluate data (Creswell, 2013; Babbie, 2013:390). Statistical Packages for Social Sciences (SPSS 26) was used to complete the statistical analysis. A total of 1759 questionnaires were subsequently used to perform statistical analysis. Questionnaires with missing or incorrect values were omitted from the dataset to enhance the raw data quality. In addition, this study focused specifically on collaborative clothing consumption facilitated through the Internet, and participants who indicated they buy in-store only were removed from the sample. In the end, 766 completed questionnaires related to online collaborative clothing consumption practices were used for analysis.

Both descriptive and inferential statistical analysis was used to analyse this study's constructs (i.e., collaborative clothing consumption models, drivers and barriers) and their relationship with one another. Initially, this is presented in a basic descriptive manner, then later on in a more advanced inferential manner utilising exploratory and confirmatory factor analyses. Descriptive statistics summarise the key features of a population; in this case, the demographics (Section J) and the collaborative clothing consumption model most used (Section D). This analysis is done through means, percentages and frequencies (Babbie, 2013:493-494). The demographic stratification of users in the sharing economy paints only one picture of participation and nonparticipation.

Cronbach's alpha reliability coefficients were used to determine the internal consistency and reliability of the constructs and whether items measuring the same construct were answered consistently (Hair, Black, Babin & Anderson, 2014:123). A Cronbach's alpha of 0.7 or higher is considered a good measure of internal consistency, which was this case with this study as values varied between 0.76 (factor 8 - *materialism*) and 0.88 (factor 9 – *hedonic dimensions*) (Tavakol & Dennick, 2011; Hair *et al.*, 2014:123). The Cronbach's alphas for every construct is included in Table 4.4 and discussed in more depth in **Chapter 4**.

To gain a better grasp of participatory behaviour, the motivations and barriers of consumers need to be taken into consideration as well (Andreotti *et al.*, 2017). Inferential statistics allowed the researcher to make these inferences from the data employing an exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and a multiple linear regression (Babbie, 2013:493-494). The results are presented in **Chapter 4**. Exploratory factor analysis (EFA) is a multivariate data reduction technique designed to summarise information and identify a reduced set of dimensions (Mazzocchi, 2008; Williams, Onsmann & Brown, 2010). CFA enables the researcher

to confirm or reject preconceived theories concerning the structure underlying a set of variables (Pallant, 2011; Hair *et al.*, 2014). The researcher can then confirm reliability by assessing how well the scale measured the actual concept (Hair *et al.*, 2014; Brown & Moore, 2012). The difference between EFA and CFA is that the factors are derived from statistical results with the former, whereas the latter is based on existing theory and the theoretical framework presented in chapter two (Mazzocchi, 2008; Hair *et al.*, 2014).

Once the CFA was complete, a multiple regression analysis was employed. Regression is a statistical technique used to explain the relationship between one continuous dependent variable and two or more independent variables (Frost, 2016; Hair *et al.*, 2014). The dependent variable the researchers want to predict is called the dependent variable, and the variables used to predict the dependent variable are the independent variables (Uyanık & Güler, 2013; Frost, 2016). In this study, multiple regression analysis on the three collaborative clothing consumption models (i.e., renting, swapping, buying second-hand clothing) was applied. Therefore, all the independent variables (i.e., motivational drivers - *environmental benefits, economic benefits, hedonic dimensions, need for uniqueness, convenience, social identity*, and barriers - *hygiene issues, unfamiliarity with the concept, materialism and online trust*) were entered into the equation simultaneously to measure their impact on the dependent variables (i.e., renting, swapping and buying second-hand clothes) respectively. Theoretically, all the independent variables are assumed to act as drivers or barriers in influencing a consumer's online collaborative clothing consumption practices. However, not all independent variables were of significant importance. These results will be discussed further in **Chapters 4 and 5**.

3.7 QUALITY OF DATA: VALIDITY AND RELIABILITY ISSUES

According to Berndt *et al.* (2011:5), information is only valuable and accurate when reliable and valid. Therefore, specific steps were taken throughout this study to ensure validity and reliability have been incorporated to eliminate errors.

3.7.1 Validity

Validity is defined as the extent to which a concept is accurately measured in a quantitative study (Creswell, 2013). Simply put, does the instrument measure what it is planned to measure (Leedy & Ormrod, 2013) or how well the research instrument measures what it claims to measure (Hofstee, 2006). To establish the validity of the questionnaire, the following four types of validity was considered.

Theoretical validity evaluates the validity of the researched concepts and whether the researcher provided an accurate explanation of the phenomena. The patterns, concepts, and dimensions that the researchers have gathered must fit together and coherently to produce data supporting the theory. For this study, theoretical validity was established through compiling a comprehensive literature review and a well-structured conceptual framework (Thomson, 2011).

Content validity was checked by ensuring that the measuring instrument covers all the essential topics and meaning related to the research project or concept (Babbie & Mouton, 2001:192). For this study, the constructs, dimensions, and indicators were identified and verified in line with prior literature to ensure clear representation in the questionnaire. In addition, to ensure content validity, scale items were adapted from existing scales (see **Table 3.1**).

Construct validity confirms whether one can draw logical relationships related to the studied variables (Babbie & Mouton, 2001:244; Leedy & Ormrod, 2013). Construct validity is mainly accomplished through implementing definitions, measurement instruments and scales from prior literature and research studies (Creswell, 2013:242). For this study, constructs were clearly defined to avoid confusion among participants. Three types of evidence can be used to establish whether a research instrument has construct validity (Heale & Twycross, 2015). Firstly homogeneity, meaning that the instrument measures only one construct. Secondly, through convergence which ensures the instrument measures concepts similar to that of other instruments and thirdly, through theory evidence which indicates when behaviour is similar to theoretical propositions of the construct (Heale & Twycross, 2015). The online self-administered questionnaire was pre-tested to ensure that the constructs were correctly measured and that participants understood the questions.

Face validity simply means whether the measuring instrument measures what it is supposed to measure at face value (Babbie, 2013:201). For this study, face validity was achieved by modifying scale items from previous studies that researched similar constructs. Also, the EFA is a good indicator of acceptable face validity if the analysis groups similar constructs, therefore confirming that the correct constructs were measured.

3.7.2 Reliability

Reliability refers to *consistency*, therefore the likelihood that a given measurement procedure will yield approximately the same response each time it is applied (Babbie & Mouton, 2001:119; Zikmund *et al.*, 2013). Reliability is confirmed when the instrument measures the same concept multiple times, and the outcome is always basically the same (Delpont & Roestenburg, 2011:177). Reliability does, however, not ensure accuracy; therefore, the researcher used established scales

that have proven their reliability to collect data for this study (Babbie & Mouton, 2001). Therefore, it is not always possible to give an exact reliability calculation, but a few different measures can achieve an estimate of validity and internal consistency. One such measure is Cronbach's alpha values test, which was applied to this study (Heale & Twycross, 2015). Cronbach's α is most commonly used to determine an instrument's internal consistency, and the result is a number between 0 and 1 (Delpont & Roestenburg, 2011). A score of 0.7 and higher will indicate an acceptable reliability score (Delpont & Roestenburg, 2011; Heale & Twycross, 2015). Furthermore, reliability can also be achieved through the following measures: through pre-testing to guarantee that the correct constructs were measured and adequate instructions were given to participants to avoid errors that might have occurred when completing the questionnaire. Other measures taken to enhance the reliability of this study were keeping the participants' identity confidential, ensuring truthful responses, not intimidating or forcing participants into partaking in the study, and attaching a cover letter to clearly state the purpose of the research study (Salkind, 2012). Lastly, adequate instructions were given to participants to avoid errors that might have occurred when completing the questionnaire.

3.8 ETHICAL CONSIDERATIONS

Ethical clearance was obtained before the commencement of the data collection process by the Faculty of Natural and Agricultural Sciences at the University of Pretoria on 26 March 2020 to ensure the ethical execution of data collection procedures. (Reference Number: NAS066/2020, **Addendum A**). In addition, the following ethical aspects were taken into consideration to ensure that the individuals who participated in the study and the generated information were conducted and compiled in an acceptable manner.

- **Voluntary involvement:** It was made clear that participation in the research is voluntary and anonymous and that participants may withdraw at any time without any consequences (Leedy & Ormrod, 2013).
- **Confidentiality and anonymity:** The participants were assured of their anonymity throughout the process. No information given by them can be traced back to them (Leedy & Ormrod, 2013). Under no circumstances did the research report the nature and quality of the respondent's performance (Leedy & Ormrod, 2013).
- **Contributing parties:** The name and contact details of the researcher and the institution through which the research was conducted were visible on the cover letter.
- **Objectivity:** The findings were reported honestly without misrepresenting the data (Leedy & Ormrod, 2013).

- **No harm to participants:** The emphasis was placed on the fact that no risk of harm to the participants would occur during the research process.

The researcher was also made aware of the importance of obtaining truthful information during the data collection process. Therefore, all literature used was appropriately referenced, and any form of plagiarism was guarded against for this study (Hofstee, 2006). Hence, a declaration of originality is submitted with the final dissertation.

3.9 CONCLUSION

This chapter presented the research methods involved in conducting this study. First, the research methodology elements, namely research design, approach and purpose was specified. This was followed by sample and sampling procedures, instrument development, data collection and analysis. Furthermore, an operationalisation table was included to lay out the theoretical concepts into measurable variables. Finally, validity and reliability were discussed, how the researcher aimed to achieve quality and accurate data, and how ethical considerations were applied to this study.

CHAPTER 4: RESULTS AND DISCUSSION

Chapter four presents the results of the study. Data about the online collaborative clothing consumption practices were obtained from an online questionnaire and the results relating to this data are presented according to the research objectives outlined in Chapter one. More specifically, this chapter is divided into the following sections: 1) an overview of the demographic characteristics of the sample, 2) the frequency of participation in different collaborative clothing consumption practices, 3) an exploratory factor analysis and confirmatory factor analysis of the motivational drivers and barriers, and lastly 4) multiple regression modelling to determine which motivational drivers and barriers influence the consumers' participation in the three different online collaborative clothing consumption practices, namely renting, swapping and second-hand buying.

4.1 DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

The subsequent section presents an overview of the demographic characteristics of the sample. The results are presented by means of descriptive statistics (i.e., frequencies and percentages) in the form of tables, graphs and numerical summaries. This information provides a suitable background for the results given in the remainder of the chapter. For this study, the sample had to comply with specific demographic requirements to explore and describe the current participation in three collaborative clothing consumption models and specific drivers and barriers that may influence their online collaborative clothing consumption participation in the South African market.

The larger research project, of which this study formed part of, accumulated a sample size of 2655 by 12 June 2020. Of this total amount, 896 incomplete questionnaires were discarded, resulting in a total of 1759 completed and usable questionnaires. As this study focused specifically on collaborative clothing consumption facilitated through the Internet, participants who indicated they buy in-store only were removed from the sample. Due to this specification, the sample size for this study was eventually 766.

A summary of the demographic results can be seen in **Table 4.1** below. Thereafter, every demographic characteristic is discussed in more detail.

TABLE 4.1: SAMPLE DEMOGRAPHICS

Sample variable	Frequency	Percentage (%)
Gender (n = 766)		
Male	89	11%
Female	673	88%
Prefer not to say	4	1%
Age Groups (n = 766)		
18 - 24	536	70%
25 - 34	110	14%
35 - 44	53	7%
45 - 54	39	5%
55 - 64	20	3%
65 and older	8	1%
Level of Education (n = 766)		
Less than Grade 12	7	1%
Grade 12	236	31%
Grade 12 + Degree/ diploma	375	49%
Postgraduate	148	19%
Total Monthly Household Income (n = 766)		
Less than R5000	357	48%
R5001 - R15000	201	26%
R15001 - R25000	80	10%
R25001 - R35000	53	7%
R35001 - R45000	41	5%
More than R45000	34	4%
Population (Classification according to the Employment Equity Act) (n = 766)		
White	641	85%
Black	48	6%
Indian	34	4%
Coloured	17	2%
Prefer not to say	26	3%
Residing Province (n = 766)		
Eastern Cape	25	3%
Free state	10	1%
Gauteng	463	61%
KwaZulu-Natal	132	17%
Limpopo	25	3%
Mpumalanga	14	2%
North West	14	2%
Northern Cape	3	0%
Western Cape	81	11%

4.1.1 Gender

Even though this study was based on male and female consumers' online participation in collaborative clothing consumption, most of the sample was made up of female participants (n = 673, 88%), while only 89 (11%) were male participants. Out of the 766 participants, four (1%) participants selected the 'prefer not to say' option as visually presented in **Table 4.1**. This low participation rate amongst men and subsequent imbalanced representation can possibly be explained by the fact that, in general, women are more likely to participate in surveys (Smith, 2008). However, there are other variables at play that influence response behaviour that is independent of gender. One such variable could be that the questionnaire was distributed amongst the Consumer Science faculty, where the majority of the students are female. Women possess characteristics that are more consistent with

their connective selves than men; hence one would expect a higher survey response rate from females than males (Smith, 2008). In theory, women prefer exchanging information, whereas males are more likely to engage in activity characterised by the seeking of information (Smith, 2008).

Gender differences also exist around sustainable behaviour and social responsibility (Luchs & Mooradian, 2012). They argue that women tend to demonstrate higher levels of agreeableness and conscientiousness regarding the perceived importance of sustainability. Research has further indicated that the age group between 18 and 34 especially are, on average, more informed, aware, and passionate than men concerning the sustainability practices in various fields (Gazzola, Pavione, Pezzetti & Grechi, 2020). This finding implies that when it comes to collaborative clothing consumption, women tend to consider the impact their consumption behaviour has on the environment more than men, and hence, they are more likely to participate in such practices. Lastly, to further explain the lower male response rate, females are stereotypically deemed more frequent shoppers than men and are motivated by emotional, experiential and social factors. Simply put, women enjoy shopping more than men (Pradhana & Sastiono, 2019). Hence, the survey topic may conventionally not have been in line with a male respondent's field of interest, as women tend to have a greater interest in and knowledge of fashion cues and are therefore more likely to complete questionnaires on the subject (Kaiser, 1997).

4.1.2 Age

It was a prerequisite for all participants to be older than 18 years. Further effort was made to include a diverse group of participants regarding age to allow the researcher to explore potential differences amongst various age groups regarding collaborative clothing consumption. The participants indicated their age within five pre-determined categories that are summarised in **Table 4.1**. The majority of the participants were in the youngest age category, i.e., 18-24 years (70%; n = 536), and form part of 'Generation Z', which according to Dimock (2019), consists of individuals born between 1997 and 2012, making the cut-off age in 2020, 23 years old. This result can be attributed to the study and data collection process being conducted in and around a university, ultimately having a younger population. Furthermore, the nature of the recruitment process, i.e., convenience sampling in conjunction with snowball sampling, meant that the student fieldworkers would, in turn, distribute the questionnaire among their friends and peers as well. South Africa is made up of a young population overall. According to the mid-year estimates of 2019, the youth aged 18–34 make up almost a third of South Africa's population (17,84 million) (Statistics South Africa, 2019). Therefore, understanding Generation Z consumer behaviour and decision-making towards collaborative clothing consumption provide valuable insights and opportunities for the clothing industry. This is a well-educated, well-informed generation surrounded by technological devices that aid in their consumption choices (Naidu, 2018).

The second-largest age group, 25 – 34 years, made up 14% (n = 110) of the participants. This population group forms part of the Millennial cohort, the so-called “Generation Y”. It is followed by the next age group, 35-44 years (7%; n = 53), which overlaps with this generation, as it includes anyone born between 1981 and 1996, making them between the ages of 24 to 39 years in 2020 (Dimock, 2019). According to the Theory of Generation, a generation (although the term cohort is more appropriate) is a group of individuals of similar ages who have had formative experiences in their youth, such as a noteworthy historical event within a set period (Pilcher, 1993). Therefore, the researcher has included the 7% of the participants who fall between 35 – 44 years into this cohort. This grouping was done because participants who fall just out of the millennial timeframe (i.e., those between 40 – 44 years) can be seen as a ‘buffer generation’. Pilcher (1993) explains that individuals do not necessarily have to fit into this time frame to be part of the same generation. Instead, it is important to experience a similar socio-historical environment that shaped people's social consciousness during their younger years (Pilcher, 1993). Generation Y also have an inclination toward technological inventions as well as everyday usage of the Internet and mobile applications (Činjarević, Kožo & Berberović, 2019). They, too, have grown up in the era of social media; hence collaborative clothing consumption presents a natural fit that aligns with their values. They are aware of their consumption choices and the impact these choices have on social, communal and environmental issues (Hwang & Griffiths, 2017). They are also seen as an influential generation that continues to shape social and economic trends worldwide (Činjarević *et al.*, 2019).

The older age groups were not well represented within the sample. These cohorts, known as Generation X, born between 1965 – 1980, making them between 40 and 55 years in 2020, formed approximately 5% (n = 39) of the participants. The remaining sample was Baby Boomers, born between 1945 – 1964, making them between 56 – 64 years (3%; n = 20) and 65 and older (1%; n = 8) (Dimock, 2019). Generation X participants can be described as a mature, career- and family-oriented group with a tendency to spend most of their expenditure on housing, home goods and education (Schiffman *et al.*, 2014). Lissitsa and Kol (2016) researched the differences between Generation X and Generation Y's online behaviour. They found that typically, Gen X'ers are more traditional in their decision making and want to be well informed about a product and its features before buying, which indicates a high level of risk avoidance. Furthermore, as they get older, their findings show that among Generation X, the probability of online shopping decreases with age, as opposed to Generation Y, where the probability of online shopping increases with age (Lissitsa & Kol, 2016). That said, Generation X is not to be ignored as a segment of interest regarding collaborative clothing consumption, as this generation typically has more spending power than any other generation (Lissitsa & Kol, 2016). Furthermore, according to a research article by Perren and Grauerholz (2015), this generation finds collaborative consumption appealing, indicating that a healthy market potential exists.

Some researchers have questioned whether it is age that prevents the user from an internet transaction, or rather a lack of experience, which happens to be more evident amongst older consumers (Hernández, Jiménez & Martín, 2011). Therefore, if an older consumer gains more experience and overcomes the initial barrier of participating in online activities, such as collaborative clothing consumption, then it is probable that their purchasing behaviour will be similar to any other online user, independent of age (Hernández *et al.*, 2011). Of course, over time, the average age of consumers participating in online services is continually rising as more generations are becoming technologically inclined over time (Hernández *et al.*, 2011).

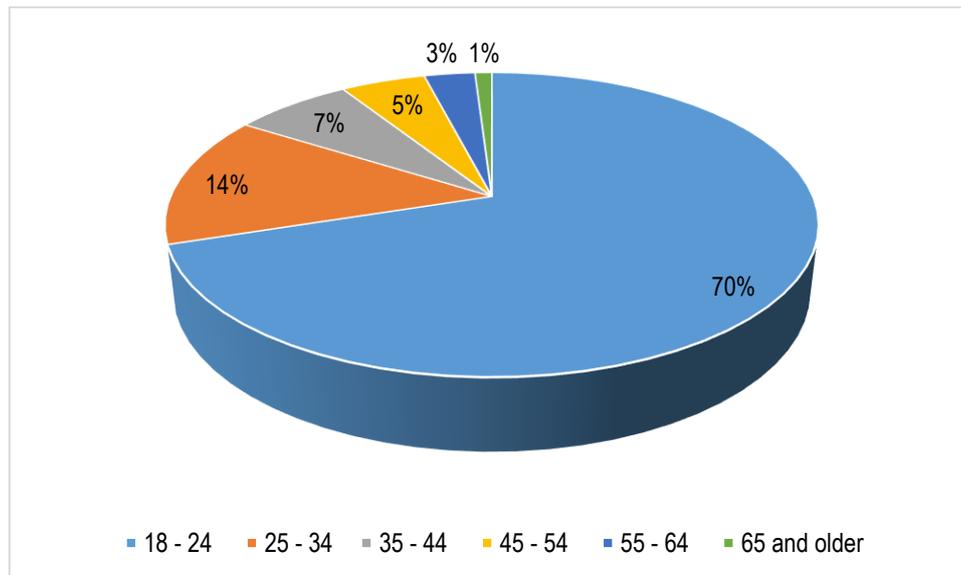


FIGURE 4.1: AGE BREAKDOWN OF PARTICIPANTS

4.1.3 Level of education

The level of education amongst participants was also included as a demographic variable for this study, as it might also influence consumers' online collaborative clothing consumption practices. As indicated in **Figure 4.2**, almost half 49% (n = 375) of the participants have an education level of Grade 12 plus a Degree/Diploma, followed by 31% (n = 236) with Grade 12, and 19 % (n= 148) with Postgraduate degrees. The remaining 1% (n = 7) of the participants have less than Grade 12. Again, these results can be attributed to the sampling method used (i.e., convenience and snowball sampling), indicating that student fieldworkers recruited the initial participants. Therefore, participants mainly belonged to a student population who either acquired their diploma or are working on their postgraduate studies. Overall, one can conclude that the sample consisted of a highly educated group. According to Lindblom and Lindblom's (2017) data, education plays a significant role in the participation of collaborative clothing consumption. According to their findings, the lower the education level, the lower the participation and intention to participate in collaborative clothing consumption. Moreover, digital inequality refers to the gap between those who can use the Internet for their benefit and those who do not (Choung & Manamela, 2018).

This gap links to education within South African society. Education in internet technologies allows individuals to be well informed and acquire the skills, information, and knowledge to access collaborative consumption services online (Choung & Manamela, 2018).

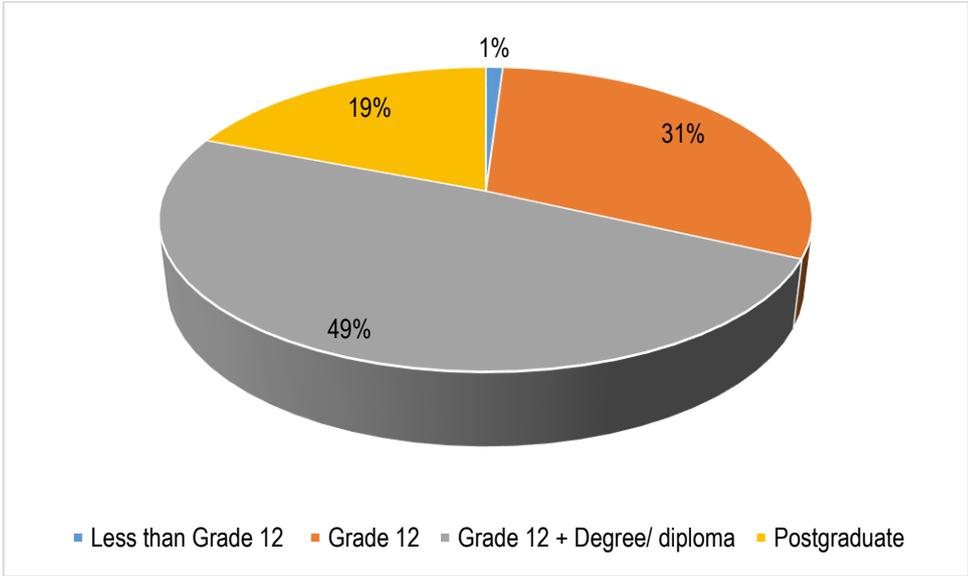


FIGURE 4.2: LEVEL OF EDUCATION OF PARTICIPANTS

4.1.4 Monthly household income

Figure 4.3 indicates the total monthly household income of the participants, where almost half of the participants, 47% (n = 357), indicated that their income per month is ‘Less than R 5 000’. Once again, this can be attributed to the predominantly young age group, where participants are either still studying or make up part of the relatively inexperienced working class. Just over a quarter of the sample, 26% (n = 201), earn between R5001 and R15000, which could be attributed to a relatively young working class. The remaining 10% (n = 80) of the participants earn R15001 – R25000 (n = 80) followed by 7% (n = 53) earning R25001 – R35000, 5% (n = 41) earning R35001 – R45000 and 4% (n = 34) earning > R45000. An individual’s income levels can be seen as a variable that may encourage or prevent participation in e-commerce (Hernández *et al.*, 2011). Traditionally, research indicated that the higher the individual's income, the lower the perceived risk in participating in online purchases seem to the user. The opposite is true for the lower-income users – their inability to withstand possible financial losses discouraged them from participating in online transactions (Hernández *et al.*, 2011). Most users across the income spectrum acknowledge the advantages that come with using the Internet for online shopping and CCC, so once they have acquired more experience, their technological behaviour is no longer influenced by their level of income (Hernández *et al.*, 2011). Even though the participants earn relatively little concerning this study, they are not necessarily part of the lower LSM population groups. As mentioned above, they are highly educated and in a position of privilege.

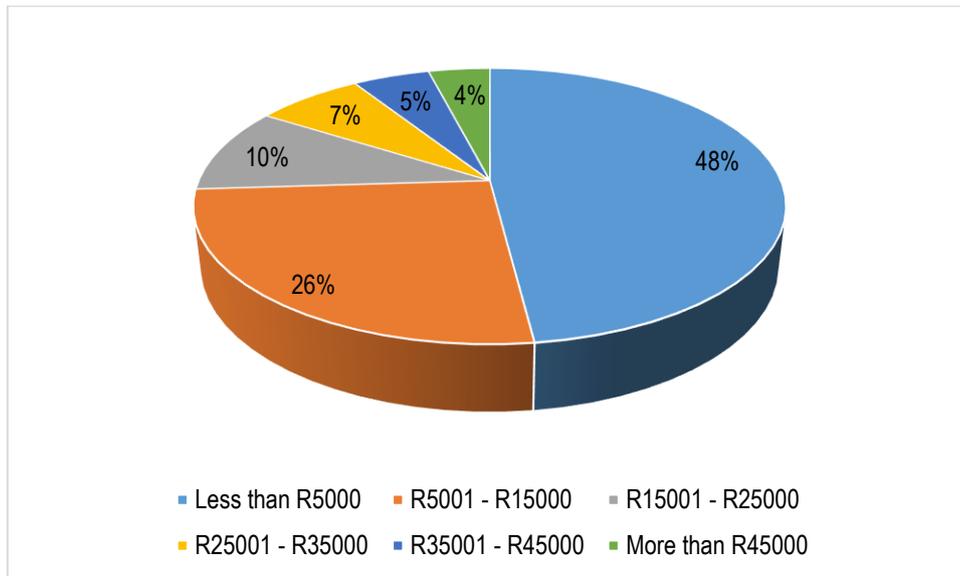


FIGURE 4.3: TOTAL MONTHLY HOUSEHOLD INCOME OF PARTICIPANTS

4.1.5 Population group

South Africa is a country characterised by a diverse population. By looking at the percentages of participants from different population groups who participated in this study, it is clear that it is not representative of the larger South African population. Based on the South African Employment Equity Act, the categories specified in the questionnaire were White, Black, Coloured, Indian, and 'Prefer not to say'. From **Figure 4.4**, it is clear that most of the participants were White (84%; n = 641). As previously stated, convenience and snowball sampling may be attributed to the low frequencies of Black (6%/ n = 48), Coloured (2%; n= 17) and Indian (4%; n = 34) participants. However, this could also be attributed to the digital inequality gap amongst various population groups in South Africa, where usage, skill, online access and motivation to access the Internet may differ (Choung & Manamela, 2018). In South Africa, most of the population is Black (80.48%), which is not represented in the sample (Statistics South Africa, 2019). However, this study was conducted for exploratory purposes, and thus results cannot be generalised. **Figure 4.4** presents the different population groups included for analysis.

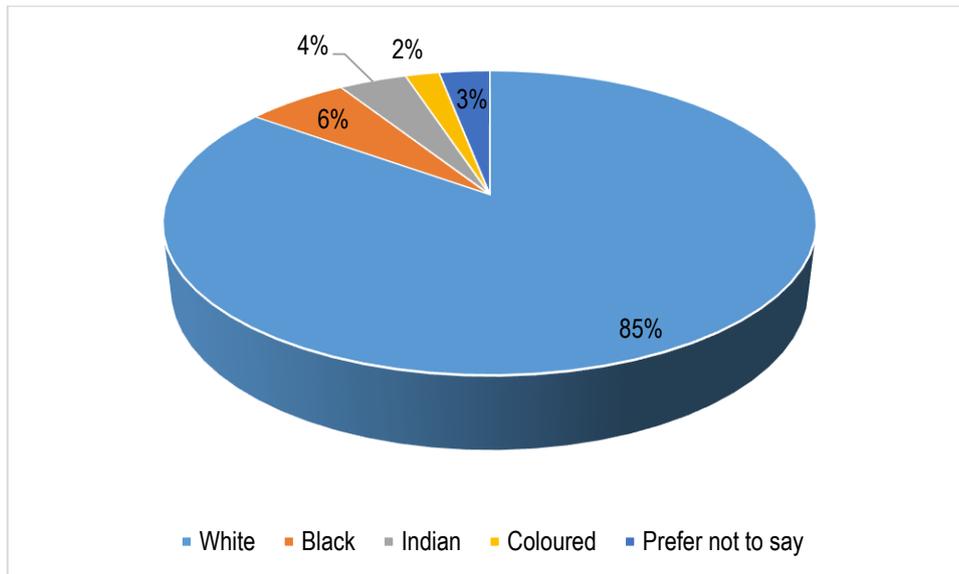


FIGURE 4.4: REPRESENTATION OF THE POPULATION GROUPS

4.1.6 Area of residence

Participants who took part in the study were recruited across all nine provinces in South Africa. As indicated in **Table 4.1**, the majority of the participants reside in Gauteng, namely 61% (n = 463). It is noted that the study was first rolled out to residents in Gauteng, specifically the Consumer Science students based in Pretoria, who distributed the questionnaires to their peers and family, who also potentially reside in Gauteng. This method of snowball sampling would have contributed to a more significant percentage of participants from this province. Even though Gauteng may be the smallest in geographical size, it comprises the largest share of the South African population, with approximately 15.5 million people (25.8%) living in this province. Furthermore, almost 30% of youth (5.10 million/ 28.6%) specifically reside in Gauteng (Statistics South Africa, 2019). The second most significant area of residence amongst participants was Kwa-Zulu Natal, with 17 % (n = 132), which is in line with results from Statistics South Africa (2019), indicating that KwaZulu-Natal has the second largest population, with an estimated 11.3 million people (19.2%) living there. In fact, according to Statistics South Africa (2019), almost half of South Africa's youth reside either in Gauteng, as mentioned above or in KwaZulu-Natal and 3.47 million (19.4%) making up almost half of all youth in South Africa. participants from the Western Cape made up 11% of the sample size (n = 81), making up the third biggest province in South Africa with approximately 6.8 million residents (Statistics South Africa, 2019). Therefore, 88% of participants live in regions that comprise prominent metropolitan and densely populated areas in South Africa, and hence can be described as primarily urbanites. The remaining 11% of participants were from Eastern Cape (3%), Limpopo (3%), North West (2%), Mpumalanga (2%), Free State (1%) and Northern Cape (0%). In general, urbanites tend to have more knowledge of the various sharing economy platforms and are more willing to access (and provide) services/products on these platforms. There is higher demand in the urban areas for these

platforms; hence it makes sense for these businesses to concentrate on these locations within South Africa (Andreotti *et al.*, 2017).

4.2 ONLINE COLLABORATIVE CLOTHING CONSUMPTION PRACTICES

4.2.1 Frequency of participation in online collaborative clothing consumption models

Objective one aimed to explore and describe consumers' **participation** in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market. Two sub-objectives were also formulated namely: to explore and describe which online collaborative clothing consumption model is **most frequently used** by consumers in the South African market (Objective 1.1), and to explore and describe consumers' **preferred** online collaborative clothing consumption model in the South African market (Objective 1.2). To sensitise participants regarding collaborative clothing consumption practices, they were provided with a definition first: "*Collaborative Clothing Consumption is the sharing, lending, buying, renting, and swapping of second-hand clothing items for a monetary fee or some financial benefit*".

To gain insights into which collaborative clothing consumption model is used most frequently by participants, they had to indicate their frequency level in each of the three collaborative clothing consumption models. participants were asked to rate their level of frequency on a Likert-type scale where 1 = Never and 5 = Always. Twelve questions related to participation in the different collaborative clothing consumption models were included: Q3_1-4 referred to the renting of clothes, Q3_5-8 related to swapping of clothes, and Q3_9-12 involved questions relating to buying second-hand clothing. The results indicated in **Table 4.2** showcase the percentages and frequencies to display the most frequent collaborative clothing consumption model. The last column shows the combined percentage of "most of the time" and "always" to indicate the participants' frequency of participation in the different collaborative clothing consumption models.

TABLE 4.2: COLLABORATIVE CLOTHING CONSUMPTION PRACTICES (N=766)

Item Percentage (%) Frequency (n)	Never Percentage (%) Frequency (n)	Sometimes Percentage (%) Frequency (n)	About half the time Percentage (%) Frequency (n)	Most of the time Percentage (%) Frequency (n)	Always Percentage (%) Frequency (n)	Total % of participation
Renting						
Q3_1 I rent clothes for a fee	79.24% 607	16.58% 127	1.04% 8	1.17% 9	1.96% 15	3.13%
Q3_2 Renting clothes is better than owning clothes	54.05% 414	37.99% 291	4.44% 34	2.61% 20	0.91% 7	3.52%
Q3_3 I rent more clothes than I buy clothes	89.56% 686	8.36% 64	1.04% 8	0.78% 6	0.26% 2	1.04%
Q3_4 I prefer renting to buying clothes	71.67% 549	23.24% 178	2.61% 20	1.57% 12	0.91% 7	2.48% [10.17%]
Swapping						
Q3_5 I swap clothing with other people	33.55% 257	50.26% 385	8.88% 68	5.61% 43	1.70% 13	7.31%
Q3_6 Swapping clothes with other people is a good alternative to buying	11.88% 91	41.64% 319	13.84% 106	20.63% 158	12.01% 92	32.64%
Q3_7 I swap more clothes than what I buy	70.50% 540	21.67% 166	4.83% 37	2.87% 22	0.13% 1	3.00%
Q3_8 I prefer swapping my clothes rather than buying it	50.13% 384	33.94% 260	10.31% 79	4.44% 34	1.17% 9	5.61% [48.56%]
Buying second-hand						
Q3_9 I buy second-hand clothes	23.63% 181	49.74% 381	11.75% 90	10.97% 84	3.92% 30	14.89%
Q3_10 I buy more second-hand clothes than new clothes	52.61% 403	25.98% 199	11.36% 87	6.01% 46	4.05% 31	10.06%
Q3_11 I prefer buying second-hand clothes to buying new clothes	30.94% 237	39.16% 300	13.05% 100	11.23% 86	5.61% 43	16.84%
Q3_12 Buying second-hand clothes are better than buying new clothes	17.62% 135	39.03% 299	17.49% 134	14.62% 112	11.23% 86	25.85% [67.64%]

Regarding renting, the results in **Table 4.2** reflected that this model is still in its infancy amongst the participants. Only 3.13% of participants indicated that they rent clothes for a fee or believe renting is better than buying new clothes (3.52%). The table also indicates that they do not rent more clothes than what they buy: only 1.04% of participants do this currently, and only 2.48% prefer renting clothes to buying clothes. Concerning swapping, almost a third (32.64%) of participants agreed that swapping clothes with other people is a good alternative to buying. However, very few are currently swapping more clothes than what they are buying (3%). Furthermore, only 5.61% indicated that they prefer swapping to buying new clothes. Concerning second-hand buying, 14.89% of participants indicated they are currently buying second-hand clothing. Additionally, a quarter (25.85%) of the participants agreed that this model is better than buying new clothes. Currently, only 10.06% of the participants are buying more second-hand clothing than new clothing, and 16.84% prefer buying second-hand clothing to buying new clothing. **Figure 4.5** below visually shows the various items grouped within their respective

dimensions (i.e., buying second-hand clothing, swapping and renting). From the below figure, it is clear that renting (in yellow) had the lowest uptake amongst participants. Swapping (in green) also indicated relatively low participation, except for the outlier Q3_6, at 32.64%, which is where participants indicated that they believe swapping is a good alternative to buying. Second-hand buying (pale blue) was the most frequented model with all items above 10%.

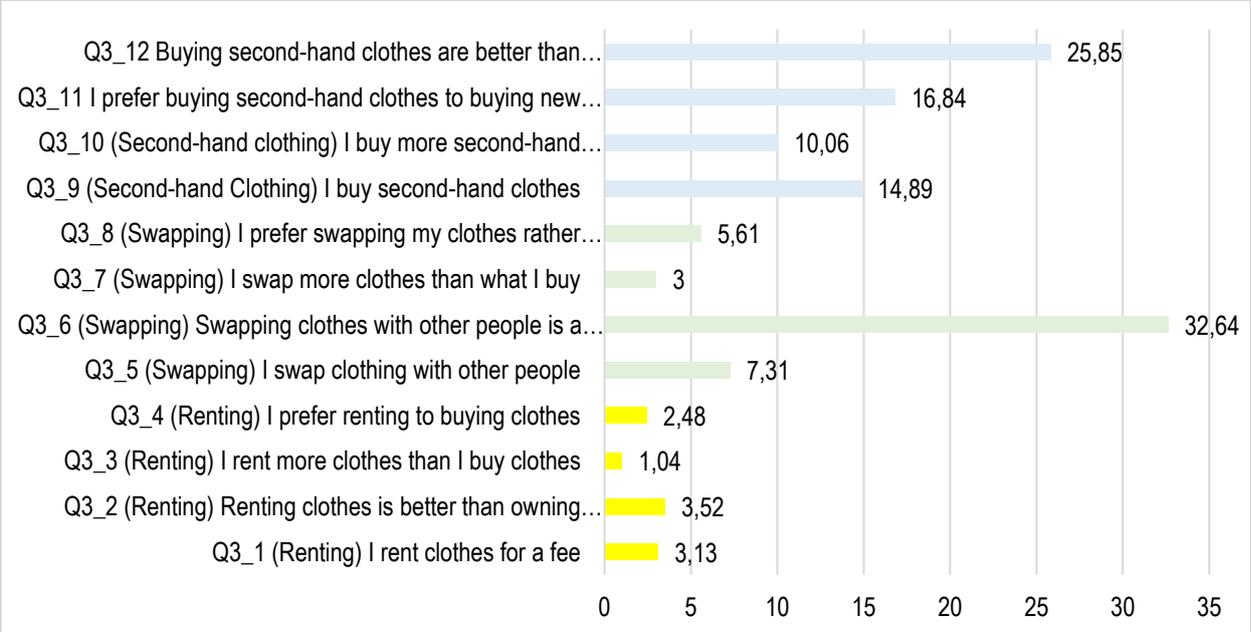


FIGURE 4.5: REPRESENTATION OF COLLABORATIVE CLOTHING CONSUMPTION PRACTICES

4.2.2 Most preferred online collaborative clothing consumption model

Objective 1.2, question four, asked the participants which collaborative clothing consumption model they most preferred. Participants could only select one model. The results confirmed that buying second-hand clothing was the most preferred option amongst participants (67%; n= 509), as indicated by **Table 4.3**. Buying second-hand clothing is followed by swapping clothing (26%; n = 201) and, lastly, renting (7%; n = 56). Overall, buying second-hand clothing seems to be the collaborative clothing consumption practice most participants prefer to participate in. **Table 4.3** presents the most preferred collaborative clothing consumption model, as discussed above.

TABLE 4.3: PREFERRED COLLABORATIVE CLOTHING CONSUMPTION MODEL

ITEM	FREQUENCY	PERCENTAGES (%)
Which one of the following do you take part in most often?	N = 766	(100%)
Renting clothes	56	7
Swapping clothes	201	26
Buying second-hand clothing	509	67

4.3 DRIVERS AND BARRIERS RELATED TO ONLINE COLLABORATIVE CLOTHING CONSUMPTION PRACTICES

The following section presents the results of objectives two and three. Objective two aimed to explore and describe the influence of motivational drivers (i.e., *environmental benefits, economic benefits, hedonic purposes, need for uniqueness, convenience and social identity (community)*) on consumers' online collaborative clothing consumption practices in the South African market. Where objective three set out to explore and describe the influence of specific barriers (i.e., *hygiene issues, unfamiliarity with the concept, materialism, and online trust*) on consumers' online collaborative clothing consumption practices in the South African market.

Scale items to measure the motivational drivers and barriers were derived from previous studies and adapted to investigate the above within a South African context. A five-point Likert-type scale with response options ranging from 1 = Strongly disagree to 5 = Strongly agree was used. Because scale items were adapted for this study and have not been used to establish the relevance of constructs related to a South African consumer's behaviour, exploratory factor analysis (EFA) was performed to isolate relevant constructs and concepts in the dataset. After that, confirmatory factor analysis (CFA) was performed to confirm the relationships as specified in the conceptual framework for this study.

4.3.1 Exploratory factor analysis

As explained in Chapter 3, the objective of an EFA is to take a large amount of information and identify a reduced set of dimensions (Mazzocchi, 2008; Williams, Onsman & Brown, 2010; Pallant, 2011; Hair, Black, Babin, Anderson & Tatham, 2014). By doing this, correlations between the original variables and a smaller set of new variables to explore and describe the underlying theoretical structure of the phenomena, can be established (Mazzocchi, 2008; Pallant, 2011). An EFA hence allows the researcher to focus on essential factors rather than considering many variables that may be insignificant. Therefore, an EFA was done in order to group constructs into meaningful factors (Mazzocchi, 2008:219). SPSS software was used to perform the EFA, utilising Principal Axis Factoring as the extraction method and Varimax with Kaiser Normalisation as the rotation method. Once the factors were extracted under various criteria, they were labelled accordingly. The eigenvalue rule states that only factors with a value of at least 1 are acceptable, and the EFA for this study produced nine factors with eigenvalues ≥ 1 (Pallant, 2011; Hair *et al.*, 2014).

According to Pallant (2011), two main issues exist when determining whether a particular dataset is acceptable for factor analysis: the size of the sample and whether the factors can explain the

interrelationships among the variables. In other words, is the relationship between the variables strong enough? Jackson, Voth and Frey (2013) recommend that a sample size of 200 or more requires a minimum threshold of 0.40 to be relevant, and a sample of 350 or greater only requires a factor loading of at least 0.30 to be significant (Hair et al., 2014:115). Factor analysis is sensitive to even minor variations in sample size, and in general, the larger the sample size, the better (Siddiqui, 2015). Regarding this study, the sample size consisted of 766 participants and could therefore be classified as 'good' (Williams *et al.*, 2010). An initial EFA was performed on entire dataset (n = 766) and included all items relating to the drivers and barriers of collaborative clothing consumption practices (i.e., 25 items relating to the drivers and 18 items relating to the barriers). Nine factors were extracted, of which factor nine, namely *hedonic dimensions*, had the lowest factor loadings. Besides this observation, all factors were also scrutinised for cross-loadings, and once again the *hedonic dimensions* presented some challenges; however, the decision was made to retain this factor as is and examine the results in the CFA, as it was deemed necessary to this study's objectives (Hair *et al.*, 2014). Additionally, a decision was made to eliminate one item relating to the motivational driver of *convenience* (Q6_19) because of low factor loadings across the various factors. A second EFA was performed on the remaining 42 items relating to the drivers and barriers and subsequently all factor loadings exceeded the minimum recommended threshold of ≥ 0.4 , ranging from 0.47 to 0.77. The resulting 9-factor solution, as seen in **Table 4.4**, was labelled as follows:

Factor 1: Collaborative lifestyle

Factor 2: Need for uniqueness

Factor 3: Online trust

Factor 4: Environmental benefits

Factor 5: Economic benefits

Factor 6: Hygiene issues

Factor 7: Unfamiliarity with the concept

Factor 8: Materialism

Factor 9: Hedonic dimensions

TABLE 4.4: RESULTS OF THE EXPLORATORY FACTOR ANALYSIS (N = 766)

Q#	ITEMS IN THE QUESTIONNAIRE	FACTORS AND FACTOR LOADINGS								
		Factor 1: Collaborative lifestyle	Factor 2: Need for uniqueness	Factor 3: Online trust	Factor 4: Environmental benefits	Factor 5: Economic benefits	Factor 6: Hygiene issues	Factor 7: Unfamiliarity with the concept	Factor 8: Materialism	Factor 9: Hedonic dimensions
Q6_18	These practices (e.g., renting/ swapping/ second-hand buying) save me time.	0.62	0.10	-0.06	-0.04	0.22	-0.08	-0.02	-0.02	-0.03
Q6_21	It is more convenient to take part in these practices (e.g., renting/ swapping/ second-hand buying) than to buy new clothes.	0.62	0.12	-0.03	0.01	0.28	-0.16	-0.12	-0.06	0.00
Q6_20	The convenience of using shared clothes fits my lifestyle.	0.52	0.13	-0.10	0.09	0.21	-0.19	-0.15	-0.06	0.16
Q6_22	I feel part of a community when I participate in these practices (e.g., renting/ swapping/ second-hand buying).	0.50	0.29	-0.09	0.26	0.10	-0.03	-0.10	0.04	0.20
Q6_23	Taking part in shared practices improves my image in the community.	0.49	0.23	-0.06	0.16	0.06	0.03	0.04	0.15	0.01
Q6_24	These practices (e.g., renting/ swapping/ second-hand buying) allow me to be part of a group of people with similar interests.	0.49	0.30	-0.07	0.23	0.07	-0.02	-0.09	0.05	0.26
Q6_25	Belonging to a group that is participating in shared practices is important to me.	0.48	0.23	-0.06	0.18	0.12	-0.02	-0.03	0.03	0.12
Q6_16	I try to find a more interesting version of ordinary clothes because I enjoy being original.	0.23	0.73	0.01	0.11	0.07	-0.04	-0.07	-0.04	0.06
Q6_14	It is important to me to find something that communicates my uniqueness.	0.14	0.72	-0.03	0.20	0.08	0.04	-0.06	0.11	0.03
Q6_15	I combine clothes in such a way to create a personal image that cannot be duplicated.	0.26	0.66	-0.08	0.03	0.04	-0.09	-0.01	0.08	-0.01
Q6_17	I am often on the lookout for new clothes that add to my personal uniqueness.	0.11	0.60	-0.06	0.10	0.06	0.00	-0.11	0.20	0.12
Q6_13	It allows me to get one-of-a-kind products to create my own unique style.	0.24	0.60	-0.01	0.20	0.13	-0.09	-0.12	-0.06	0.23
Q7_4	I am unsure if they offer secure payment facilities.	0.01	-0.05	0.76	-0.03	-0.06	0.07	0.08	0.07	-0.05
Q7_2	I don't know if I will receive the right products.	-0.07	-0.02	0.68	-0.15	0.00	0.19	0.18	0.04	-0.09
Q7_1	I am not sure that the clothes on the website are presented accurately.	-0.13	0.01	0.68	-0.04	0.06	0.19	0.15	0.05	0.02
Q7_5	Online websites selling second-hand clothing are not safe in terms of cyber security.	0.09	-0.07	0.62	-0.11	-0.07	0.06	0.10	0.14	-0.26
Q7_3	I am uncertain whether the products will fit me correctly.	-0.11	-0.01	0.60	0.03	0.00	0.12	0.06	0.02	0.09
Q7_6	I am unsure if they have fair return/exchange policies.	-0.10	-0.05	0.59	0.04	-0.06	0.11	0.15	0.04	0.03
Q6_2	It is an environmentally-friendly way of consuming clothing.	0.14	0.14	-0.02	0.77	0.19	-0.05	-0.08	-0.09	0.10
Q6_3	It is better for the environment.	0.11	0.17	-0.05	0.75	0.17	-0.01	-0.07	-0.10	0.07
Q6_1	It helps to save the earth's natural resources.	0.11	0.13	-0.04	0.66	0.19	-0.03	-0.11	-0.06	0.07
Q6_4	It is an environmentally sustainable way of living.	0.15	0.16	-0.07	0.65	0.23	0.06	-0.16	-0.07	0.09
Q6_6	It benefits me financially.	0.20	0.13	-0.02	0.17	0.73	-0.02	-0.06	-0.02	0.07
Q6_5	It saves me money.	0.13	0.08	-0.06	0.17	0.72	-0.10	0.01	-0.02	0.05
Q6_8	It is cheaper than other ways of buying clothes.	0.22	0.07	-0.03	0.17	0.69	0.00	0.00	-0.04	0.05
Q6_7	I can reduce my clothing expenses.	0.22	0.06	0.00	0.22	0.63	0.01	-0.05	-0.07	0.06
Q7_4	I have concerns that second-hand clothes are not hygienic.	-0.09	-0.10	0.25	-0.09	-0.06	0.76	0.20	0.21	-0.15
Q7_2	I worry that if I acquire second-hand clothing, it will be unhygienic.	-0.16	-0.11	0.23	-0.07	-0.02	0.76	0.20	0.18	-0.14

Q#	ITEMS IN THE QUESTIONNAIRE	FACTORS AND FACTOR LOADINGS								
		Factor 1: Collaborative lifestyle	Factor 2: Need for uniqueness	Factor 3: Online trust	Factor 4: Environmental benefits	Factor 5: Economic benefits	Factor 6: Hygiene issues	Factor 7: Unfamiliarity with the concept	Factor 8: Materialism	Factor 9: Hedonic dimensions
Q7_1	Second-hand clothes might not always be as hygienic as new clothes.	-0.09	-0.05	0.25	-0.08	-0.06	0.63	0.17	0.21	-0.05
Q7_3	Hygiene in terms of second-hand clothing is important to me.	-0.05	0.05	0.14	0.11	-0.01	0.54	0.08	0.03	0.04
Q7_7	Overall, I do not know much about collaborative clothing consumption.	-0.09	-0.08	0.17	-0.13	-0.02	0.14	0.76	0.07	-0.07
Q7_6	I have little experience when it comes to these practices (e.g. renting/ swapping/ second-hand buying).	-0.18	-0.16	0.25	-0.08	-0.09	0.19	0.61	0.12	-0.09
Q7_8	I do not know how/where I can take part in such practices (e.g. renting/ swapping/ second-hand buying).	-0.03	-0.07	0.24	-0.06	-0.02	0.14	0.59	0.06	-0.06
Q7_5	I am not familiar with the concept of sharing economy services.	-0.04	-0.04	0.11	-0.12	0.00	0.11	0.54	0.16	-0.07
Q7_9	It is important to me to own a lot of new clothes.	-0.13	0.05	0.10	-0.09	0.00	0.08	0.12	0.73	-0.02
Q7_10	Some of the most important achievements in life include buying new clothes.	0.14	0.07	0.10	-0.09	-0.12	0.14	0.06	0.64	-0.12
Q7_11	My new clothes indicate how well I am doing in life.	0.08	-0.03	0.10	-0.10	-0.05	0.12	0.14	0.64	-0.03
Q7_12	I like to own fashionable clothes that will impress the people around me.	0.00	0.17	0.01	0.02	0.02	0.08	0.03	0.59	0.15
Q6_9	It is fun to participate in these practices (e.g., renting/ swapping/ second-hand buying).	0.41	0.26	-0.07	0.27	0.15	-0.14	-0.22	0.00	0.53
Q6_11	It is something I enjoy doing.	0.36	0.32	-0.13	0.20	0.16	-0.18	-0.27	-0.02	0.49
Q6_10	It is exciting to take part in these practices (e.g., renting/ swapping/ second-hand buying).	0.39	0.27	-0.07	0.28	0.21	-0.10	-0.23	0.05	0.47
Q6_12	It makes me feel good.	0.39	0.31	-0.05	0.27	0.14	-0.19	-0.16	0.00	0.47
	Cronbach Alpha value	0.81	0.84	0.84	0.86	0.84	0.84	0.79	0.76	0.88
	Eigenvalue	10.26	4.53	2.72	2.04	1.97	1.48	1.34	1.30	1.00
	% Variance explained	23.39	9.68	5.37	3.76	3.62	2.42	2.11	2.00	1.35
	Standard deviation	0.74	0.79	0.97	0.69	0.73	0.95	1.02	0.99	0.88
	Mean	3.23	3.92	3.69	4.41	4.12	3.76	3.16	2.70	3.87

As indicated in **Table 4.4**, the means for the nine factors varied between 2.70 for Factor 8 (*materialism*) and 4.41 for Factor 4 (*environmental benefits*). As the scale ranged from 1 to 5, a mean of 3 would be in the middle. On the one hand, this indicated that participants did not feel a strong sense of agreement or disagreement with the statements relating to *materialism* (M = 2.70), however it did lean more toward the disagreement side, indicating that the participants did not always agree that *materialism* and new, fashionable clothing is important to them. At the same time, participants indicated a strong level of agreement with the statements measuring the *environmental benefits* factor (M = 4.41), agreeing that collaborative clothing consumption practices are environmentally friendly and more sustainable. The standard deviations, which measure variability in the dataset, ranged between 0.69 and 1.02. This result indicated that the factors were reasonably close in value to the means and thus acceptable in the research study. The reliability of the variables was confirmed by calculating the Cronbach's alpha coefficient for

every factor. An acceptable value is within the range of 0.7 to 0.95 (Tavakol & Dennick, 2011). This result indicates a good measure of internal consistency (Mazzocchi, 2008:10). The Cronbach's alpha values indicated that the reliability for each factor was high, varying from 0.76 (factor 8 - *materialism*) to 0.88 (factor 9 – *hedonic dimensions*). The cumulative % variance explained totalled 53.71%, and within the social sciences domain, a total variance of at least 60% is generally required (Hair *et al.*, 2014:107). However, because there is no final agreed-upon threshold for all applications, total variance of less than 60% is deemed acceptable (Hair *et al.*, 2014:107). The results and interpretation surrounding the nine factors will be discussed in further detail below.

Factor 1: Collaborative lifestyle

The EFA grouped four items from the *social identity (community)* construct and three items from the *convenience* construct into factor 1, namely, Q6_18, Q6_20, Q6_21, Q6_22, Q6_23, Q6_24 and Q6_25. The initial items were derived from Dall Pizzol *et al.* (2017) and were adapted and rephrased to measure *convenience* and *social identity* as drivers of collaborative clothing consumption. These two constructs merged into one factor, which has been relabelled as *collaborative lifestyle*. The statements that were retained were: these practices (e.g., renting / swapping / second-hand buying) save me time; the convenience of using shared clothes fits my lifestyle; it is more convenient to take part in these practices (e.g., renting / swapping / second-hand buying) than to buy new clothes; I feel part of a community when I participate in these practices (e.g., renting / swapping / second-hand buying); taking part in shared practices improves my image in the community; these practices (e.g., renting / swapping / second-hand buying) allow me to be part of a group of people with similar interests and lastly, belonging to a group that is participating in shared practices is important to me. The item, Q6_19, 'it is convenient to choose from a variety of options to satisfy my needs', showed low communality and was removed from the scale and excluded from the factor analysis. Collaborative clothing consumption often takes place on online social networks, which would suggest that interactions do not occur to the detriment of the individual. Instead, it takes place as a community-based activity where participants can share resources and engage with each other (Dall Pizzol *et al.*, 2017). At the same time, there is also a steady rise in consumers' demands for convenience, which also influences their participation. *Collaborative lifestyle* had an eigenvalue of 10.26, which is very good and explained most of the variance at 23.39%. A Cronbach's alpha value of 0.81 was achieved, indicating that the factor was reliable and responses had internal consistency. The collaborative lifestyle mean was 3.23, indicating a slight lean towards participants' agreement with the statements. The standard deviation was 0.74, which indicates moderate variation in the data.

Factor 2: Need for uniqueness

The need for uniqueness was measured with scale items derived from Lang and Armstrong (2018) and were rephrased to relate to the *need for uniqueness* as one of the drivers of collaborative clothing consumption practices. All five items that measured this factor were retained (Q6_13, Q6_14, Q6_15, Q6_16, Q6_17). Items measuring agreement or disagreement with this driver consisted of the following statements: It allows me to get one-of-a-kind products to create my own unique style; It is important to me to find something that communicates my uniqueness; I combine clothes in such a way to create a personal image that cannot be duplicated; I try to find a more interesting version of ordinary clothes because I enjoy being original and lastly, I am often on the lookout for new clothes that add to my personal uniqueness. These scale items tapped into how consumers are driven by their need to pursue, as Tian *et al.* (2001:50) explain “differentness relative to others”. Therefore, how important it is for an individual to develop and enhance his/her own personal and social identity through their unique clothing choices (Gwozdz *et al.*, 2017). An eigenvalue of 4.53 was achieved for this factor, and it explained 9.68% of the variance, which is much less than *collaborative lifestyle*, but still second most of all the constructs. A high Cronbach’s alpha value of 0.84 indicated good internal consistency in responses to these items. The mean for *need for uniqueness* was 3.92, which indicated a reasonably strong association amongst participants regarding employing collaborative clothing consumption practices to provide a different outlet for them to develop and expand their *need for uniqueness*. The standard deviation was 0.79, which also indicates moderate variation in the data.

Factor 3: Online trust

To measure *online trust*, scale items for this factor were adapted from Möhlmann (2015) and rephrased to relate to *online trust* issues as one of the barriers of collaborative clothing consumption practices. Six items were employed and retained to measure this factor (Q8_1, Q8_2, Q8_3, Q8_4, Q8_5, Q7_6). Statements that were measured include: I am not sure that the clothes on the website are presented accurately; I don't know if I will receive the right products; I am uncertain whether the products will fit me correctly; I am unsure if they offer secure payment facilities; Online websites selling second-hand clothing are not safe in terms of cyber security, and lastly, I am unsure if they have fair return/exchange policies. Trust is an important factor in a consumer's online behaviour (Fota *et al.*, 2019). Therefore, the greater a user's trust in the online sharing partner, the more positive their repeated participation in the model will be (Fota *et al.*, 2019). This factor had an eigenvalue of 2.72 and explained 5.37% of the variance, which is still deemed acceptable. In addition, a Cronbach’s alpha value of 0.84 was achieved, indicating that the factor is reliable. The mean for *online trust* was 3.69, indicating a moderately strong agreement amongst the participants that online collaborative clothing consumption practices are not always trustworthy, and that it tends to be a barrier when taking part in online collaborative

clothing consumption practices. With standard deviation of 0.97, moderate variation in the data was achieved.

Factor 4: Environmental benefits

The *environmental benefits* factor related to consumers opting to participate in more sustainable clothing practices for the environment's sake. Scales were derived from Hamari *et al.* (2016) and were rephrased to relate to a motivational driver of collaborative clothing consumption practices. All four items (Q6_1, Q6_2, Q6_3, Q6_4) were retained for this factor. The statements that participants had to agree or disagree with included whether they believe collaborative clothing consumption practices help to save the earth's natural resources, whether it is an environmentally friendly way of consuming clothing, whether they believe it is better for the environment, and whether it is an environmentally sustainable way of living. Hamari *et al.* (2016) found that acting environmentally sustainably is essential in collaborative consumption, influencing a consumer's drive to participate. Environmentally conscious consumers are expected to buy and consume less, choose environmentally less harmful products, produce less waste and are potentially more likely to participate in collaborative clothing consumption models (Tilikidou & Delistavrou, 2004). *Environmental benefits* had an eigenvalue of 2.04 and explained 3.76% of the variance. The Cronbach's alpha of 0.86 indicated internal consistency in responses to the items; hence the factor was deemed reliable. The mean of 4.41 was the highest among the factors, indicating a strong association in participants' agreement that participating in collaborative clothing consumption is motivated by their environmental concerns. For this factor, a standard deviation of 0.69 was achieved, which also indicated a moderate variation in the data.

Factor 5: Economic benefits

In order to measure *economic benefits*, scale items were derived from both Hamari *et al.* (2016) and Dall *et al.* (2017) and accordingly adapted and rephrased to measure the economic benefits involved in collaborative clothing consumption practices. This factor retained all four items (Q6_5, Q6_6, Q6_7, Q6_8) and statements included: It saves me money; it benefits me financially; I can reduce my clothing expenses, and lastly, it is cheaper than other ways of buying clothes. According to Bardhi and Eckhardt (2012), *economic benefits* are a significant driver for participating in collaborative clothing consumption as sharing/renting/swapping products might be cheaper than buying them. The eigenvalue was 1.97 and explained 3.62% of the variance in participants' behaviour towards *economic benefits*. This factor had a Cronbach's alpha of 0.84, again indicating that the factor was reliable. The mean for this factor was 4.12, which also indicated a strong association in terms of participants' agreement with the statements regarding the *economic benefits* of collaborative clothing consumption. In this case, 0.73 was the standard deviation, which also indicated moderate variation in the data.

Factor 6: Hygiene issues

To measure *hygiene issues* as a potential barrier amongst consumers, scales were self-developed by the researchers in Clothing and Textiles. Four items were retained under this factor (Q7_1, Q7_2, Q7_3, Q7_4) namely: Second-hand clothes might not always be as hygienic as new clothes; I worry that if I acquire second-hand clothing; It will be unhygienic; Hygiene in terms of second-hand clothing is important to me; I have concerns that second-hand clothes are not hygienic. Hygiene is a factor listed as a crucial potential barrier that influences a consumer's desire to participate in collaborative clothing consumption (Cherry & Pidgeon, 2018). Therefore, consumers who participate in collaborative clothing consumption often require a high level of trust in the service provider and a high tolerance for risk before they engage (Santana & Parigi, 2015). The eigenvalue was 1.48 and explained 2.42% of the variance in participants' behaviour regarding collaborative clothing consumption. This factor had a Cronbach's alpha of 0.84, which indicated a very good internal consistency. The mean of 3.76 indicates that participants felt relatively strongly about the hygiene aspects of collaborative clothing consumption. In summary, it can be deduced that the participants do have concerns about hygiene when participating in collaborative clothing consumption practices and that it is important to them. *Hygiene issues* achieved a standard deviation of 0.95, which also indicated moderate variation in the data.

Factor 7: Unfamiliarity with the concept

To measure *unfamiliarity with the concept*, scale items derived from Möhlmann (2015) were rephrased. All four items (Q7_5, Q7_6, Q7_7, Q7_8) were retained, and statements included: I am not familiar with the concept of sharing economy services; I have little experience when it comes to these practices (e.g., renting / swapping / second-hand buying); Overall, I do not know much about collaborative clothing consumption; I do not know how/where I can take part in such practices (e.g., renting / swapping / second-hand buying). Some consumers may be hesitant to engage in collaborative clothing consumption for the first time because they do not have any prior experience with it and are not familiar with this form of consumption, according to Moeller and Wittkowski (2010). Because this practice is relatively new, it is expected that much uncertainty exists amongst consumers and may deter them from participating in collaborative clothing consumption (Fota *et al.*, 2019). This factor aimed to tap into those concerns, and results indicated an eigenvalue of 1.34, with variance, explained of 2.11%. This factor had a Cronbach's alpha of 0.79, indicating a good internal consistency and reliability. The mean for this factor was 3.16, which indicated a moderate association in terms of participants' agreement with the statements. From the afore-mentioned, it can be assumed that the participants were mostly undecided as to whether they are familiar with the concept of collaborative clothing consumption practices or not. The standard deviation was 1.02, which was the highest among the factors. This indicates that participants did not agree with each other as there was inconsistency in the way these items were

answered. This could be due to the fact that some participants may be familiar with the concept of collaborative clothing consumption, and others may not be familiar with it.

Factor 8: Materialism

The items for the *materialism* factors were derived from Lang and Armstrong (2018), and all four items (Q7_9, Q7_10, Q7_11, Q7_12) were retained. The statements to measure *materialism* included: It is important to me to own a lot of new clothes; Some of the most important achievements in life include buying new clothes; My new clothes indicate how well I am doing in life and lastly, I like to own fashionable clothes that will impress the people around me. According to Mont and Power (2010), people are predisposed to the idea that the more possessions an individual has, the more successful in life he must be. Therefore, this factor tapped into *materialism* as an essential aspect of understanding consumer barriers in collaborative clothing consumption. The assumption is that making money and owning things lead to success and happiness in life (Goldsmith *et al.*, 2012). The eigenvalue for this factor was 1.30, with a 2.00% variance explained. The Cronbach's alpha measured 0.76, which indicated good internal consistency. The mean for *materialism* was 2.70, which was the lowest amongst the applicable constructs, and leans more towards the disagreement of the statement regarding *materialism*. Based on this, one could assume that *materialism* might not be an obvious barrier of collaborative clothing consumption practices and needs to be investigated in more detail. The standard deviation of 0.99 indicated moderate variation in the data.

Factor 9: Hedonic dimensions

Scale items derived from Hwang and Griffiths (2017) and Hamari *et al.* (2016) were adapted to measure *hedonic dimensions*. Items measured consumers' innate need for excitement and fun as a driver to participate in collaborative clothing consumption (Saad & Metawie, 2015). All four items (Q6_9, Q6_10, Q6_11, Q6_12) were retained, and the statements from the questionnaire probed the following: It is fun to participate in these practices (e.g., renting/ swapping/second-hand buying); It is exciting to take part in these practices; It is something I enjoy doing, and It makes me feel good. This factor scored the lowest eigenvalue (1.00) amongst the constructs, but this was still deemed acceptable and explained only explained 1.35% of the variance. The Cronbach's alpha (0.88) indicated good internal consistency and that the factor was reliable. The mean for *hedonic dimensions* was 3.87, which indicated that the participants who took part in this study feel relatively strongly about the fun factor involved in participating in collaborative clothing consumption. The standard deviation was 0.88, which indicated moderate variation in the data.

4.3.2 Confirmatory factor analysis

Confirmatory factor analysis (CFA) is applied to confirm or reject the researcher's preconceived theories concerning the structure underlying a set of variables (Pallant, 2011; Hair *et al.*, 2014). The researcher can then confirm reliability by assessing how well the scale measured the actual concept (Hair *et al.*, 2014; Brown & Moore, 2012). The difference between EFA and CFA is that the factors are derived from statistical results with the former, whereas the latter is based on existing theory and the theoretical framework presented in chapter two (Hair *et al.*, 2014; Mazzocchi, 2008). In this study, the underlying items and variables retained from the EFA were composed as a nine-factor confirmatory factor model using IBM SPSS Amos 27. These factor loadings are often used to assess construct validity (Brown & Moore, 2012). Hair *et al.* (2014) recommends that loadings should be at least 0.5 but preferably higher than 0.7 to indicate that the items are strongly related to the associated constructs. In this specific study, with a sample size of 766, the factor loadings were all above this acceptable threshold as they ranged from 0.58 – 0.90. **Table 4.5** indicates the standardised factor loadings from the CFA.

TABLE 4.5: STANDARDISED FACTOR LOADINGS/REGRESSION WEIGHTS OF ITEMS

ITEM LABEL	Q#	LATENT VARIABLE LABEL	FACTOR LOADINGS
DRIVER25_Com4	Q6_25	Collaborative lifestyle	0.603
DRIVER24_Com3	Q6_24	Collaborative lifestyle	0.729
DRIVER22_Com1	Q6_22	Collaborative lifestyle	0.746
DRIVER20_Con3	Q6_20	Collaborative lifestyle	0.568
DRIVER17_Uni5	Q6_17	<i>Need for uniqueness</i>	0.645
DRIVER16_Uni4	Q6_16	<i>Need for uniqueness</i>	0.762
DRIVER15_Uni3	Q6_15	<i>Need for uniqueness</i>	0.678
DRIVER14_Uni2	Q6_14	<i>Need for uniqueness</i>	0.746
DRIVER13_Uni1	Q6_13	<i>Need for uniqueness</i>	0.741
BARRIER_Online_trust6	Q7_6	<i>Online trust issues</i>	0.608
BARRIER_Online_trust5	Q7_5	<i>Online trust issues</i>	0.640
BARRIER_Online_trust4	Q7_4	<i>Online trust issues</i>	0.743
BARRIER_Online_trust3	Q7_3	<i>Online trust issues</i>	0.598
BARRIER_Online_trust2	Q7_2	<i>Online trust issues</i>	0.763
BARRIER_Online_trust1	Q7_1	<i>Online trust issues</i>	0.723
DRIVER4_Env4	Q6_4	Environmental benefits	0.754
DRIVER3_Env3	Q6_3	Environmental benefits	0.816
DRIVER2_Env2	Q6_2	Environmental benefits	0.832
DRIVER1_Env1	Q6_1	Environmental benefits	0.712
DRIVER8_Eco4	Q6_8	<i>Economic benefits</i>	0.744
DRIVER7_Eco3	Q6_7	<i>Economic benefits</i>	0.717
DRIVER6_Eco2	Q6_6	<i>Economic benefits</i>	0.793
DRIVER5_Eco1	Q6_5	<i>Economic benefits</i>	0.750
BARRIER4_Hyg4	Q7_4	<i>Hygiene issues</i>	0.896
BARRIER2_Hyg2	Q7_2	<i>Hygiene issues</i>	0.875
BARRIER1_Hyg1	Q7_1	<i>Hygiene issues</i>	0.727
DRIVER12_Hed4	Q6_12	<i>Hygiene issues</i>	0.797
DRIVER11_Hed3	Q6_11	<i>Hedonic dimensions</i>	0.808
DRIVER10_Hed2	Q6_10	<i>Hedonic dimensions</i>	0.785
DRIVER9_Hed1	Q6_9	<i>Hedonic dimensions</i>	0.830
BARRIER11_Mat3	Q7_11	<i>Materialism</i>	0.709
BARRIER10_Mat2	Q7_10	<i>Materialism</i>	0.732

ITEM LABEL	Q#	LATENT VARIABLE LABEL	FACTOR LOADINGS
BARRIER9_Mat1	Q7_9	<i>Materialism</i>	0.672
BARRIER8_Unfam4	Q7_8	Unfamiliarity with concept	0.669
BARRIER7_Unfam3	Q7_7	Unfamiliarity with concept	0.770
BARRIER6_Unfam2	Q7_6	Unfamiliarity with concept	0.766
BARRIER5_Unfam1	Q7_5	Unfamiliarity with concept	0.580

Based on the factor loadings presented in **Table 4.5**, the fit indices are as follows: CMIN = 1194.175, DF = 593, $P < 0.05$, CMIN/DF = 2.014, GFI = 0.920, AGFI = 0.905, RMSEA = 0.036, NFI = 0.912 and CFI = 0.954.

Some of the significant factors to determine whether a good fit exists are considering the goodness of different indices regarding different samples sizes, types of data, and ranges of acceptable scores (Hu & Bentler, 1999; Shadfar & Malekmohammadi, 2013). Numerous goodness-of-fit indicators to assess a model fit exist in research practices, the most common fit indices being the Normed Fit Index (NFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) (Shadfar & Malekmohammadi, 2013). The CMIN/DF, also called normal chi-square, normed chi-square, or simply chi-square to df ratio is the chi-square fit index divided by degrees of freedom and is a test of statistical significance that measures the 'badness of fit' (Hooper, Coughlan & Mullen, 2008; Shadfar & Malekmohammadi, 2013). However, it is dependent on and sensitive to sample size and hence not always considered useful (Hooper *et al.*, 2008; Shadfar & Malekmohammadi, 2013). The larger the sample size, the greater the chances of obtaining a statistically significant chi-square (Hu & Bentler, 1999). There is also no clear consensus on the acceptable CMIN/DF thresholds, but according to Hooper *et al.* (2008), an acceptable range varying as high as 5 to as low as 2 has been recommended. For this specific model, the CMIN/DF ratio for this measurement model is 2.014, which falls within the acceptable range. The goodness-of-fit index (GFI) is an alternative to the chi-square test, where a cut-off point of 0.9 has been recommended, although this model is also sensitive to sample size (Hooper *et al.*, 2008). This study had a GFI of 0.920 and hence indicated a good fit. The root mean square error of approximation (RMSEA) is considered a fit index less affected by sample size and, as suggested by Hu and Bentler (1999), RMSEA of less than or equal to $\leq .06$ as the cut-off indicates a good model fit. The study had an acceptable RMSEA of 0.036, thus indicating that the model fits the population's covariance matrix well.

Regarding the normed fit index (NFI) and the comparative fit index (CFI), the values are recommended to fall between 0 and 1. However, values closer to 1 indicate a better fit (Hooper *et al.*, 2008, Shadfar & Malekmohammadi, 2013). For this research study, the NFI was calculated as 0.912, and the CFI was 0.954, which is close to 1 and hence acceptable. In summary, all fit indices reached the acceptable thresholds and thus indicated a good fit. Furthermore, no items

were eliminated for the CFA, and the means, standard deviations and Cronbach's α remained the same as discussed during the EFA. **Table 4.6** provides a summary of the results of the CFA.

TABLE 4.6 SUMMARY OF MODEL FIT INDICES

Name	Abbreviation	Indices	Thresholds
Chi-square			
Significance	P	0.000	$p < 0.05$ (significant) *
Normed chi-square (X2)	CMIN (X2)/DF	2,014	$2 < \text{CMIN/DF} < 5$ (acceptable) */** $\text{CMIN/DF} < 2$ (very good) *
Absolute Fit Measures			
Goodness-of-fit index	GFI	0,920	$\text{GFI} > 0.9$ (acceptable) $\text{GFI} \geq 0.95$ (excellent) **
Root mean square error of approximation	RMSEA	0,036	$\text{RMSEA} < 0.08$ (acceptable) ** $\text{RMSEA} \leq 0.07$ (good) ** $\text{RMSEA} \leq 0.03$ (excellent) **
Incremental Fit Indices			
Normed fit index	NFI	0,912	$\text{NFI} > 0.9$ (acceptable) ** $\text{NFI} \geq 0.95$ (excellent) **
Comparative fit index	CFI	0,954	$\text{CFI} > 0.9$ (acceptable) */** $\text{CFI} \geq 0.95$ (excellent)**

* Hair *et al.* (2014); ** Hooper *et al.* (2008)

4.4 INFLUENCE OF MOTIVATIONAL DRIVERS AND BARRIERS ON ONLINE COLLABORATIVE CLOTHING CONSUMPTION PRACTICES

To explore and describe the influence of motivational drivers (i.e., *environmental benefits, economic benefits, hedonic dimensions, need for uniqueness, convenience and social identity (community)*) and specific barriers (i.e., *hygiene issues, unfamiliarity with the concept, materialism, online trust*) on consumers' online collaborative clothing consumption practices in the South African market, multiple regression analysis was employed.

4.4.1 Multiple regression analysis

Multiple regression analysis is a statistical technique used to explain the relationship between one continuous dependent variable and two or more independent variables (Hair *et al.*, 2014; Frost, 2016). The variable the researchers want to predict is the dependent variable, and the variables used to predict the dependent variable are the independent variables (Uyanık & Güler, 2013; Frost, 2016). The aim of applying this type of analysis is to explore and describe the significance of the impact of each of the independent variables on the dependent variable (Rubinfeld, 2000; Uyanık & Güler, 2013). Every variable is weighted by the regression analysis procedure, known as regression coefficients, representing the amount of change in the dependent variable for a one-unit change in the independent variable (Hair *et al.*, 2014). In terms of this research study, a multiple regression analysis was conducted where all the independent variables: motivational drivers (i.e., *environmental benefits, economic benefits, hedonic dimensions, need for*

uniqueness, and *collaborative lifestyle*) and barriers (i.e. *hygiene issues*, *unfamiliarity with the concept*, *materialism*, and *online trust*) were entered into the equation simultaneously to measure their independent impact on the dependent variables (i.e., renting, swapping and buying second-hand clothes) respectively. Theoretically, all the independent variables are assumed to act as drivers or barriers in influencing a consumer's online collaborative clothing consumption practices. However, not all of the independent variables were of significant importance, as discussed below regarding the three dependent variables, namely renting, swapping and buying second-hand clothes.

Firstly, to determine the overall significance of the regression model and if the model fits the data, the *F* test was performed (Mazzocchi, 2008). The primary purpose is to understand whether there is an interaction between independent and dependent variables (Rubinfeld, 2000). A significant *F* value indicates that the independent variables predict the dependent variable. Secondly, a model summary was conducted with a specific focus on the coefficient of determination (R^2). The R^2 value indicates how much of the total variation in the dependent variable can be explained by the combination of independent variables; hence measuring the strength of the relationship on a 0% to 100% scale, where 100% represents a model that explains all of the variation (Rubinfeld, 2000). Therefore, in theory, the higher the value of R^2 , the larger the explanatory power of the regression model becomes (Hair *et al.*, 2014). Thirdly, the significance of every model construct is explained by interpreting the standardised coefficients and *p*-values. Coefficients in regression analysis at a significant *p*-value explain which relationships in the model are statistically significant and the nature of those relationships between the independent and dependent variables (Mazzocchi, 2008:179; Hair *et al.*, 2014:153; Frost, 2016). The *p*-values for the coefficients indicate whether these relationships are statistically significant and whether the relationships observed in the sample can also be applied to the larger population (Rubinfeld, 2000; Frost, 2016;). Therefore, if the *p*-value for a variable is less than the significance level, the null hypothesis for the entire population can be rejected (Rubinfeld, 2000; Frost, 2016). Three multiple regression analyses were performed for this study, using the following dependent variables: second-hand buying, swapping, and renting. The independent variables were the motivational drivers (i.e., *environmental benefits*, *economic benefits*, *hedonic dimensions*, *need for uniqueness*, *collaborative lifestyle*) and barriers (i.e., *hygiene issues*, *unfamiliarity with the concept*, *materialism* and *online trust*) that influence consumers' online collaborative clothing consumption practices. The results of each model are presented in **Tables 4.7 - 4.12** and will be discussed in the next section.

4.4.2 Regression model for renting

The ANOVA regression model results for renting are stipulated in **Table 4.7** below.

TABLE 4.7: ANOVA REGRESSION MODEL FOR RENTING

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.383	9	1.709	7.708	0.000 ^p
	Residual	167.635	756	0.222		
	Total	183.018	765			

a. Dependent Variable: Renting

b. Predictors: (Constant), *Materialism*, *Need for uniqueness*, *Online trust*, *Economic benefits*, *Unfamiliarity with the concept*, *Environment concerns*, *Hygiene issues*, *Collaborative lifestyle*, *Hedonic dimensions*.

The renting ANOVA regression model results showed an *F* value of 7.708, with an accompanying *p*-value of $p < 0.001$, which is less than the significance level of 0.05. The *F* value and *p*-value can be considered significant, implying a relationship between the dependent and independent variables. Renting had a very low R^2 value of 0.084. The low R^2 value implied that the independent variables explained only 8.40% of the variability in the dependent variable. The adjusted R^2 value was also very low at 7.30%. These low R^2 values and adjusted R^2 values indicated that the explanatory power of the regression model was low. In a case such as this, there is no clear-cut conclusion that the model is satisfactory since the magnitude of R^2 depends on the characteristics of the data series being studied. Typically, an R^2 is low in cross-sectional studies as these individual differences are caused by many (Rubinfeld, 2000; Frost, 2017b).

TABLE 4.8: REGRESSION ANALYSIS FOR RENTING

Dependent variable	Model	Unstandardised coefficients		Standardised coefficients	T-value	P-value
		B	Std. Error	β -values		
Renting	Need for uniqueness	-0.006	0.027	-0.009	-0.207	0.836
	Environmental benefits	0.005	0.031	0.006	0.147	0.883
	Economic benefits	0.002	0.028	0.003	0.062	0.950
	Hedonic dimensions	0.041	0.031	0.074	1.300	0.194
	Online trust issues	0.008	0.025	0.013	0.318	0.751
	Unfamiliarity with concept	-0.023	0.021	-0.048	-1.120	0.263
	Collaborative lifestyle	0.116	0.030	0.194	3.885	0.000***
	Hygiene issues	-0.022	0.020	-0.049	-1.103	0.270
	Materialism	0.002	0.018	0.005	0.135	0.893

a. Dependent Variable: Renting; ****p*-value < 0.001; ***p*-value < 0.01; **p*-value < 0.05

Based on the results in **Table 4.8**, it can be summarised that only *collaborative lifestyle* ($\beta = 0.194$; $t = 3.885$, $p < 0.001$) is statistically a significant predictor of online renting, indicating that this business model saves the participant time, is considered convenient and allows them to feel part of the community. The other eight factors were not significant.

4.4.3 Regression model for swapping

The ANOVA regression model results for swapping are stipulated in **Table 4.9** below.

TABLE 4.9: ANOVA REGRESSION MODEL FOR SWAPPING

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	103.525	9	11.503	27.723	0.000 ^b
	Residual	313.678	756	0.415		
	Total	417.203	765			

a. Dependent Variable: Swapping

b. Predictors: (Constant), *Materialism*, *Need for uniqueness*, *Online trust*, *Economic benefits*, *Unfamiliarity with the concept*, *Environment concerns*, *Hygiene issues*, *Collaborative lifestyle*, *Hedonic dimensions*.

For the dependent variable swapping, an F value of 27.723 was scored, and the associated p -value of the F test was significant at 0.001. The results indicated that the F value and p -value could be considered significant, implying a relationship between the dependent and independent variables. The R^2 scored 0.248, which meant that only 24.8% of the variability in the dependent variable (swapping) was explained by the independent variables. The adjusted explanatory value, adjusted R^2 was also moderately low at 23.9%. Usually, the larger the R^2 , the better the regression model fits the data; however, in this case, the field of study is still relatively new. These results will inherently have a more significant amount of unexplainable variation; hence, the R^2 values are bound to be lower (Rubinfeld, 2000; Frost, 2017b). Most studies that aim to explain human behaviour generally tend to have R^2 values of less than 50% as human subjects are more complex to predict than physical processes (Rubinfeld, 2000; Frost, 2017b). One can, therefore, not conclude that the model is satisfactory or not in a case such as this, as the data series depends on the characteristics of the data, which could vary over time and across individuals (Rubinfeld, 2000). These individual differences are caused by many factors which cannot always be explained or measured (Rubinfeld, 2000).

TABLE 4.10: REGRESSION ANALYSIS FOR SWAPPING

Dependent variable	Model	Unstandardised Coefficients		Standardised Coefficients	t-value	p-value
		B	Std. Error	β -values		
Swapping	Need for uniqueness	-0.044	0.037	-0.047	-1.172	0.242
	Environmental benefits	0.031	0.043	0.029	0.728	0.467
	Economic benefits	0.081	0.038	0.079	2.136	0.033*
	Hedonic dimensions	0.156	0.043	0.186	3.622	0.000***
	Online trust issues	0.053	0.034	0.058	1.588	0.113
	Unfamiliarity with concept	-0.064	0.028	-0.088	-2.238	0.026*
	Collaborative lifestyle	0.176	0.041	0.195	4.303	0.000***
	Hygiene issues	-0.082	0.027	-0.122	-3.016	0.003**
	Materialism	-0.058	0.025	-0.083	-2.334	0.020*

a. Dependent Variable: Swapping; *** p -value < 0.001; ** p -value < 0.01; * p -value < 0.05

With regards to swapping, the results in **Table 4.10** indicate the most significant predictors for swapping are the hedonic dimension ($\beta = 0.186$; $t = 3.622$, $p < 0.001$) and collaborative lifestyle factors ($\beta = 0.195$; $t = 4.303$, $p < 0.001$), both of which are drivers. This indicated that swapping is a fun activity, where interacting with others are part of the enjoyment. Swapping usually involves

a social interaction with like-minded individuals, therefore, it makes sense that *hedonic dimensions* and *collaborative lifestyle* are predictors of swapping. The other factors that could be considered statistically significant with a p -value ≤ 0.05 are *economic benefits* ($\beta = 0.079$; $t = 2.136$, $p = 0.033$), *hygiene issues* ($\beta = -0.122$; $t = -3.016$; $p = 0.003$), *unfamiliarity with the concept* ($\beta = -0.088$; $t = -2.238$; $p = 0.026$) and *materialism* ($\beta = -0.083$; $t = -2.334$, $p = 0.020$). *Online trust*, *environmental benefits* and *need for uniqueness* factors were not significant in predicting swapping.

4.4.4 Regression model for second-hand buying

The ANOVA regression model results for second-hand buying are presented in **Table 4.7** below.

TABLE 4.11: ANOVA REGRESSION MODEL FOR SECOND-HAND BUYING

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	424.262	9	47.140	98.119	0.000 ^b
	Residual	363.211	756	0.480		
	Total	787.473	765			

a. Dependent Variable: Second-hand buying

b. Predictors: (Constant), *Materialism*, *Need for uniqueness*, *Online trust*, *Economic benefits*, *Unfamiliarity with the concept*, *Environment concerns*, *Hygiene issues*, *Collaborative lifestyle*, *Hedonic dimensions*.

Table 4.11 indicates that the F -value (98.119) is significant at $p < 0.001$, which is less than the significance level of 0.05. A p -value of 0.000 indicates that a non-zero decimal number comes at a later digit, and it also indicates that the null hypothesis is rejected at the 99% confidence level (Mazzocchi, 2008:184). Therefore, the overall model is statistically significant, implying a relationship does exist between the dependent variable second-hand clothing and the independent variables.

The R^2 for second-hand buying is 0.539, which means that 53.9% of the variability in the dependent variable (second-hand buying) is explained by the independent variables (*environmental benefits*, *economic benefits*, *hedonic dimensions*, *need for uniqueness*, *collaborative lifestyle*, *hygiene issues*, *unfamiliarity with the concept*, *materialism* and *online trust*). The adjusted explanatory value, adjusted R^2 sits at 53.3%, which indicates that the explanatory power of the regression model is significant as an acceptable model should explain at least 40% of the original variability (Mazzocchi, 2008). Hence, this model can be deemed acceptable in explaining the strength of the relationship between the dependent and independent variables.

TABLE 4.12: ANOVA REGRESSION MODEL FOR SECOND-HAND BUYING

Dependent variable	Model	Unstandardised Coefficients		Standardised Coefficients	t-value	p-value
		B	Std. Error	β -values		
Second-hand buying	Need for uniqueness	0.049	0.040	0.038	1.221	0.223
	Environmental benefits	0.099	0.046	0.067	2.143	0.032*
	Economic benefits	0.100	0.041	0.072	2.471	0.014*
	Hedonic dimensions	0.306	0.046	0.266	6.608	0.000***
	Online trust issues	-0.156	0.036	-0.124	-4.314	0.000***
	Unfamiliarity with concept	-0.186	0.031	-0.187	-6.089	0.000***
	Collaborative lifestyle	0.045	0.044	0.037	1.032	0.303
	Hygiene issues	-0.189	0.029	-0.206	-6.493	0.000***
	Materialism	-0.107	0.027	-0.111	-3.998	0.000***

a. Dependent Variable: Second-hand buying; *** p -value < 0.001; ** p -value < 0.01; * p -value < 0.05*

The regression coefficients stipulate information concerning the strength of the relationship between the independent and dependent variables and show the relationship type (Mazzocchi, 2008:156). From the results in **Table 4.12**, it can be summarised that the *hedonic dimensions* ($\beta = 0.266$; $t = 6.608$, $p < 0.001$), *online trust issues* ($\beta = -0.124$; $t = -4.314$, $p < 0.001$), *unfamiliarity with the concept* ($\beta = -0.187$; $t = -6.089$, $p < 0.001$), *hygiene issues* ($\beta = -0.206$; $t = -6.493$, $p < 0.001$) and *materialism* ($\beta = -0.111$; $t = -3.998$, $p < 0.001$) factors were statistically the most significant predictors for second-hand buying. Only the *hedonic dimensions* factor was a driver; the other factors were all barriers. A p -value ≤ 0.05 can also be considered statistically significant; therefore, the two drivers, *environmental benefits* ($\beta = 0.067$; $t = 2.143$; $p = 0.032$) and *economic benefits* ($\beta = 0.072$; $t = 2.471$; $p = 0.014$) are also predictors for second-hand buying. The *need for uniqueness* and *collaborative lifestyle* factors (both drivers) were insignificant in predicting buying second-hand clothing online. Therefore, it is clear that the factors identified as barriers play a bigger role than the drivers in second-hand buying, which will be discussed in-depth in **Chapter 5**.

4.5 CONCLUSION

This chapter presented the study's results, including descriptive and inferential data analysis to meet the objectives set out in Chapter 1. The results also provided insights into the current collaborative clothing consumption practices of the sample. Hence, the motivational drivers and barriers that are influential in the three collaborative clothing consumption models (i.e., renting, swapping and buying second-hand clothing) were discussed to meet objectives 2 and 3. In the next chapter, the conclusions drawn from the results are discussed in more depth and the implications for businesses/individuals who want to jump on the bandwagon of this potentially profitable business concept. Furthermore, it could assist businesses/marketers in formulating strategies and promotional frameworks to gain wider access to their target markets and increase

their reach amongst all age groups. Finally, the limitations of the study, as well as future-orientated recommendations for research, are also presented.

CHAPTER 5: DISCUSSION AND CONCLUSION

This chapter provides a brief overview of the study, followed by a discussion and interpretation of the findings according to the research objectives. Final conclusions regarding each objective are presented along with the implications and recommendations for retailers and marketers. The chapter concludes with the limitations of the study and recommendations for future research.

5.1 REFLECTION OF THE STUDY

The overall objective of this study was to explore and describe the drivers and barriers influencing consumers' online collaborative clothing consumption practices in the South African market. Three specific collaborative clothing consumption models were discussed, namely renting, swapping and second-hand buying.

An overview of the study is of utmost importance to reflect on whether the objectives set out at the beginning of the study were achieved. First off, an in-depth literature review on the topic collaborative consumption was presented to identify, clarify and conceptualise the relevant concepts as well as structure the existing literature on the topic. The collated information, in turn, enabled the structuring of the conceptual framework and the questionnaire. This chapter was subsequently followed by an overview of the research methodology and a summary of the results.

Collaborative consumption is no longer a new term or concept (Becker-Leifhold & Iran, 2018). However, research on collaborative consumption is still in its infancy, especially in the case of the clothing industry. Labelled as 'collaborative clothing consumption' (Becker-Leifhold & Iran, 2018), these practices rely on the Internet. Hence, this study was focused on South African consumers who currently participate in online shopping. In South Africa, the transition to online retail is faced with many challenges associated with emerging economies, such as unequal economic and infrastructure distribution (Alexander & Mason, 2017). However, with access to information technology and the development of smartphone applications, the adoption rate of these business models has accelerated not only across the globe but also in South Africa (Mara, 2020). Therefore, in a complex and diverse market like South Africa, research on collaborative clothing consumption, in particular online collaborative clothing consumption, is long overdue.

The following research objectives provide the structure for the discussions in the chapter:

Objective 1: To explore and describe consumers' **participation** in online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market.

Objective 1.1: To explore and describe which online collaborative clothing consumption model is **most frequently used** by consumers in the South African market.

Objective 1.2: To explore and describe consumers' **preferred** online collaborative clothing consumption model in the South African market.

Objective 2: To explore and describe the influence of **motivational drivers** (i.e., *environmental benefits, economic benefits, hedonic purposes, need for uniqueness, convenience and social identity (community)*) on consumers' online collaborative clothing consumption practices within the South African market.

Objective 2.1: To explore and describe which drivers (as mentioned above) influence **online renting** in the South African market.

Objective 2.2: To explore and describe which drivers (as mentioned above) influence **online swapping** in the South African market.

Objective 2.3: To explore and describe which drivers (as mentioned above) influence **online second-hand buying** in the South African market.

Objective 3: To explore and describe the influence of specific **barriers** (i.e., *hygiene issues, unfamiliarity with the concept, materialism, online trust*) on consumers' online collaborative clothing consumption practices within the South African market.

Objective 3.1: To explore and describe which barriers (as mentioned above) influence **online renting** in the South African market.

Objective 3.2: To explore and describe which barriers (as mentioned above) influence **online swapping** in the South African market.

Objective 3.3: To explore and describe which barriers (as mentioned above) influence **online second-hand buying** in the South African market.

The study followed a survey research design and quantitative approach, and was exploratory-descriptive in nature. Data were collected through an online self-administered questionnaire developed on Qualtrics from existing scales and designed in accordance with the specific research objectives of the study. A cover letter, which included the consent form, was also included in the questionnaire to ensure that participants willingly agreed to partake in the study. This letter included the nature and purpose of the study, the research procedure, confidentiality statement, withdrawal clause and the potential benefits of the study. In addition, a screening question was asked before participants commenced the questionnaire to confirm that they were

old enough to partake in the questionnaire. Prior to data collection the online questionnaire was pre-tested to clarify the statements and eliminate any errors.

Data collection commenced only after ethics approval was sought from the Ethics Committee of the Faculty of Natural and Agricultural Science at the University of Pretoria. The online self-administered questionnaire was shared with participants via email, WhatsApp, and other social media platforms (e.g., Facebook, Instagram, Twitter and LinkedIn) between the data collection period of June and July 2019. Due to time and financial constraints, convenience sampling, followed by snowball sampling, was implemented. Statistical procedures included descriptive and inferential statistics (i.e., exploratory- and confirmatory factor analyses, and multiple regression analysis).

Primary data were collected from a sample of consumers (n= 766) over the age of 18, living in South Africa, who indicated that they participated in online shopping. Scale items measuring the motivational drivers and barriers were derived from previous studies and adapted for an agreement scale. A five-point Likert-type scale with response options ranging from 1 = Strongly disagree to 5 = Strongly agree was used. Although existing scales were used for this study, they have to date not been used to establish the relevance of constructs related to a South African consumer's behaviour. Therefore, an exploratory factor analysis (EFA) was performed to isolate relevant constructs and concepts in the dataset and validate the measures' internal consistency. Nine factors were retained, namely: *collaborative lifestyle*, *need for uniqueness*, *online trust issues*, *environmental benefits*, *economic benefits*, *hygiene issues*, *unfamiliarity with the concept*, *materialism* and *hedonic dimensions*. Subsequently, a confirmatory factor analysis (CFA) was performed to confirm the relationships and factorial validity of the model obtained from the EFA. Finally, the measurement model was accepted as the goodness-of-fit statistics indicated mostly satisfactory fit indices.

In the following section, the findings of the study will be presented. It must be noted that throughout the study, care was taken to maintain reliability and validity; hence the researcher is satisfied that the overall aim and objectives were satisfactorily addressed.

5.2 SUMMARY OF KEY FINDINGS

5.2.1 Conclusive remarks in terms of the sample

The demographic results indicated that the sample consisted of South African male and female respondents mostly residing in Gauteng. Majority of the respondents were between 18-24 years

(Generation Z). South Africa is a country characterised by a diverse population. A clear limitation of this study was the lack of respondents from different population groups who participated in this study. Despite an effort to achieve a sample representative of all population groups living in South Africa across gender, age groups, different levels of education and income groups, the sample was skewed toward primarily white, female urbanites currently enrolled in tertiary education. The findings can therefore not be generalised to a larger population.

Amongst all six age groups included for analysis, Generation Z consumers (18-24 years) made up the vast majority (70%; n = 536). This generation is emerging as the driving force for global economic growth (McCoy, Wang & Chi, 2021). They are a pioneering generation, open to experimenting with new business models such as collaborative clothing consumption (McCoy *et al.*, 2021). Understanding Generation Z consumer behaviour and decision-making towards collaborative clothing consumption provides valuable insights and opportunities for the marketers and retailers in the collaborative clothing consumption space. The fact that this generation is well-educated, well-informed and surrounded by technological devices that aid in their consumption choices (Naidu, 2018) make them a perfect target to pursue. Literature also confirms that specifically Generation Z females are highly conscious of fashion trends and spend much time constructing their identities around their fashion choices (McCoy *et al.*, 2021). They also tend to foster a positive relationship between the economic and hedonic benefits garnered from participating in collaborative clothing consumption, but less so for societal sustainability (Hwang & Griffiths, 2017). Generation Y made up the second biggest majority of the sample. They too have an inclination toward technological inventions and everyday usage of the Internet and mobile applications, hence should also be targeted by retailers and marketers (Činjarević *et al.*, 2019). They have grown up in the era of social media; therefore, collaborative clothing consumption presents a natural fit that is in line with their values regarding their consumption choices and the impact these choices have on social, communal and environmental issues (Hwang & Griffiths, 2017).

The older age groups, Generation X and Baby Boomers, were not well represented within the sample. These mature, career- and family-oriented groups tend to be more traditional in their decision making and want to be well informed about a product and its features before buying it, which indicates a high level of risk avoidance (Lissitsa & Kol, 2016). For this specific study, conclusions cannot be drawn regarding the behaviour of these older generations regarding their collaborative clothing consumption due to the small representation in the sample. However, literature advises that Generation X is not to be ignored as a segment of interest regarding collaborative clothing consumption, as these generations typically have more spending power than any other generation (Lissitsa & Kol, 2016). A healthy market potential therefore exists for

marketers and retailers to explore, but as per Hernández *et al.*, (2011) a lot of focus should be placed on risk avoidance and the initial lack of experience these age segments tend to exhibit.

5.3 CONCLUSIONS AND IMPLICATIONS PER OBJECTIVE

5.3.1 Objective 1: Participation in collaborative clothing consumption models: most frequently used and preferred

Objective 1 aimed to explore and describe consumers' participation in the different online collaborative clothing consumption models (i.e., renting, swapping, second-hand buying) in the South African market. The results were indicated in **Table 4.2** in Chapter 4.

Objective 1.1 specifically explored and described the most frequently used online collaborative clothing consumption models in the South African market. From the data, it was clear that renting, at this stage, does not have a strong foothold in the South African market. Almost 80% of the participants have never rented clothing which indicates that renting is still very novel amongst the participants. When asked if they agree that renting clothes is better than owning clothes, 92% disagreed ('never' and 'sometimes' combined). Currently, only 1% of participants rent more clothes than what they buy, and only 2.48% prefer renting than buying. The above results were not surprising, as the subscription renting of 'everyday clothes' in South Africa is not a common occurrence at this stage. In the USA, companies like Rent-the-runway who pioneered these business models are big market players today, none of which currently exist to that scale in the South African retail space (Fernandes, Lucas, Madeira, Cruchinho & Honório, 2018). Therefore, it is currently not possible for consumers to rent more clothes than what they buy, primarily when referring to non-occasion wear. Whether the rental economy will take off in South Africa on a mass commercial scale remains to be seen but based on these results, this model will face several challenges to find a foothold in the consumer's mind at this stage. Retailers who are considering entering the rental market should focus on leveraging the key drivers and addressing the key barriers as highlighted by not only several studies abroad, but also the results in this study, to entice consumers to participate in these practices (Lang, 2018; Fota *et al.*, 2019).

Concerning the swapping business model, a third of the participants (33.55%) have never swapped clothing before, but about half (50.26%) have swapped 'sometimes', which indicates a higher acceptance than renting. Only 3% of participants currently swap more clothes than they buy, but 32% agree that swapping is a better alternative to buying. Swapping is a common practice between friends and family for utilitarian reasons, and swapping events are also becoming more popular (Armstrong *et al.*, 2016). These in-person events are often informal, but

in some cases, a fee is charged, and specific rules apply (Lang & Zhang, 2018). In South Africa, online swapping platforms are not common, and most swapping occurs in person (Cupido, 2019). Therefore, online swapping is still in its infancy in this country, and very few apps/websites currently facilitate this method of collaborative clothing consumption seamlessly and effortlessly. Hence, as indicated by the participants, the above behaviour would most probably have referred to in-person swapping and not necessarily online swapping. The results, which are more favourable than the renting model, indicate the potential for this model to gain a broader foothold in South Africa. Armstrong *et al.* (2016) stipulate that if ease of use, financial benefits and hedonic aspects are highlighted, the perception of these digital-based collaborative consumption practices could motivate more people to participate. Therefore, business opportunities for retailers lie in developing online swapping mobile applications that make swapping easier, more accessible and more mainstream. It is currently an extremely niche collaborative consumption practice, hence, with some clever and creative marketing, swapping may become increasingly attractive (Henninger, 2021). Therefore, for consumers who want to dispose of their clothing items in a more sustainable method, a lot of potential exists to enhance the uptake of swapping in South Africa.

The buying of second-hand clothing had a far better uptake amongst the participants, with almost 50% currently buying second-hand clothes. 41% of the participants believe it is a good alternative to buying, but only 10% buy more second-hand clothes than new clothes. A quarter of the participants (25%) agree that buying second hand is better than buying new, which is lower than expected. Research trends confirm that Generation Z, who made up most of this sample, shop more for second-hand clothing than any other generation (Williams, 2021). The stigma around buying second-hand is dissolving, as more and more middle to upper-class consumers are 'thrifting' for the thrill of finding unique items. The moral accolades of participating in a consumption practice deemed more ethical and environmentally beneficial also contributes to high participation levels (Williams, 2021). The second-hand market is expected to surpass the fast fashion market by twice its size in 2029 (ThredUp, 2021). According to ThredUP, older generations are more likely to buy from environmentally-conscious brands. However, because eco-fashion is often out of Generation Z's budget, thrifting is a viable alternative (Ronobir *et al.*, 2020). This escalating trend brings about another obstacle, which will be discussed further in this chapter: the more popular second-hand buying becomes, the more expensive the items become (Baron, 2021). In South Africa, this would hold particular implications, as second-hand shopping has historically offered an opportunity for lower-income consumers to save on clothing items. This rising trend will make it harder for people with limited income to find suitable items (Baron, 2021). Lower-income consumers, for whom it is necessary to buy second-hand, will be affected by well-off consumers who are thrifting for, amongst other reasons, social media recognition and environmental kudos (Ronobir *et al.*, 2020).

Objective 1.2 aimed to explore and describe consumers' **preferred** online collaborative clothing consumption model in the South African market. Respondents could only select one model, and as per above, the results confirmed that buying second-hand clothing was most preferred (67%; n= 509). This was followed by swapping clothing (26%; n = 201) and, lastly, renting (7%; n = 56). Therefore, as a retailer or marketer who is considering establishing a collaborative clothing consumption business in South Africa, the second-hand market may provide the fastest uptake; a good example of this model being Yaga.co.za. Businesses who, however, want to be amongst the first-to-market to implement online swapping or renting at a competitive scale, will have a far harder task to enhance the uptake of these models in South Africa.

5.3.2 Objective 2 and 3: motivational drivers and barriers that influence consumers' online collaborative clothing consumption practices in the South African market

To shed light on Objectives 2 and 3, which were to explore and describe the influence of motivational drivers and barriers on consumers' online collaborative clothing consumption practices within the South African market, an EFA was conducted. This process grouped certain constructs together which led to nine significant factors being uncovered and retained. As presented in **Table 4.4**, the factor loadings ranged from 0.47 to 0.77, and were labelled as collaborative lifestyle, *need for uniqueness*, *online trust* issues, environmental benefits, *economic benefits*, *hygiene issues*, *unfamiliarity with the concept*, *materialism* and *hedonic dimensions*. After that, confirmatory factor analysis (CFA) was performed to confirm the relationships as specified in the conceptual framework for this study. This study had a GFI of 0.920 and all other fit indices reached acceptable thresholds, thus indicating a good fit. Furthermore, no items were eliminated for the CFA, and the means, standard deviations and Cronbach's α remained the same as discussed during the EFA

A multiple regression analysis was then conducted where all the independent variables: motivational drivers (i.e., *environmental benefits*, *economic benefits*, *hedonic dimensions*, *need for uniqueness*, and collaborative lifestyle) and barriers (i.e. *hygiene issues*, *unfamiliarity with the concept*, *materialism*, and *online trust*) were entered into the equation simultaneously to measure their independent impact on the dependent variables (i.e., renting, swapping and buying second-hand clothes) respectively. The results of the multiple regression will be discussed below, in line with objectives 2 and 3, as well as the sub-objectives laid out in Chapter 2.

5.3.2.1 Renting

In South Africa, there is already an established market for renting suits, tuxedos, and wedding dresses (Geach 2020; Hartzenberg, 2020). Therefore, the idea of renting clothing is not a vastly

new concept, but the inclusion of other clothing types, such as 'everyday' wear, gives this model a novel context (McCoy *et al.*, 2021). The only factor that was a statistically significant predictor of online renting was the driver *collaborative lifestyle*. The low R^2 (8.40%) and adjusted R^2 value (7.30%) indicated that the independent variables explained only 7.30% of the variability in the dependent variable. Therefore, the explanatory power of the regression model was low. Usually, the larger the R^2 , the better the regression model fits the data; however, because the field of study is relatively new, the results will inherently have a more significant amount of unexplainable variation; hence, the R^2 values are bound to be lower (Rubinfeld, 2000; Frost, 2017b). This was not an unexpected result as a significant paradigm shift is required to view renting as an alternative form of consumption for everyday wear, not just occasion wear (Lang & Armstrong, 2018).

As Chapter 4 highlighted, the EFA grouped four items from the social identity and community construct and three items from the *convenience* construct into *collaborative lifestyle*. Collaborative clothing consumption often takes place on online social networks, making it a community-based activity where participants can share resources and engage with each other (Dall Pizzol *et al.*, 2017). As the only significant driver of renting, this factor indicated that this business model saves the participant time, is considered convenient and allows them to feel part of a community. The word 'online community' has become the in-term used for any group of people who make use of the Internet to communicate with each other, in turn fostering feelings of camaraderie and support in the online space (Preece & Maloney-Krichmar, 2005).

Nevertheless, it is increasingly accepted that online communities rarely exist only online; physical offline components are also at play (Preece & Maloney-Krichmar, 2005). This observation, therefore, makes sense that *collaborative lifestyle* is significant to renting in the South African context, as most clothing rental currently relates to special occasions like weddings and other formal gatherings within the community. The benefit of renting clothing for these events is the convenience of renting and the cost-saving element, instead of buying something a consumer would only wear once or twice. A few examples include Style Rotate and Shared Collective (Geach 2020; Hartzenberg, 2020).

Even though *materialism* was not a significant predictor, special mention should be made here as literature has confirmed that this is a prevalent barrier in the consumer's mind (Lang & Armstrong, 2018). Renting is a transaction where one party offers another access to a clothing item for a fixed amount of time; hence there is no transfer of ownership, only temporary access (Moeller & Wittkowski, 2010; Lang & Armstrong, 2018; Kim & Jin, 2020). *Materialism* is of specific significance in South Africa, as low to middle-class families living in townships value ownership as an essential vehicle to portray social status in their communities (Dondolo & Madinga, 2017).

Therefore, consumption not based on ownership (renting) could clash with these consumers' cultural norms and practices. Horne and Maddrell (2002) insist that consumption behaviour should be considered through a cultural lens to fully grasp how different factors impact participation in collaborative clothing consumption. This study did not refer to cultural differences among the diverse populations and cultures across South Africa, so addressing specific cultural differences holds potential for future research.

It is also important to highlight that *environmental benefits* were also not a significant driver in this case. Prior research conducted in this field has offered much information about how renting can slow down the speed of fashion and how environmentally inclined consumers can use this model to curb their consumption habits (Zamani *et al.*, 2017; Lee *et al.*, 2021). These conclusions could not be drawn from the results of this study. In emerging economies like South Africa, sustainable behaviour is still a challenge, which could be due to a lack of effective communication about sustainability, especially in the more rural populations (Shahzalal & Hassan, 2019). This low significance indicates that the *environmental benefits* driver was not top of mind when considering renting as an alternative consumption model.

Therefore, to answer **Objective 2.1**, *collaborative lifestyle* is the only factor influencing consumers' online renting practices in the South African market. To address **Objective 3.1**, which was to explore and describe which **barriers** influence consumers' online rental consumption practices in the South African market, none of the above barriers was considered statistically significant to draw any conclusions.

5.3.2.2 Swapping

The most significant predictors for swapping were *hedonic dimensions* and *collaborative lifestyle*, both of which are classified as drivers of collaborative clothing consumption. These drivers were significant at $p < 0.001$, and both drivers were also positive in terms of their beta coefficients ($\beta = 0.186$ and $\beta = 0.195$ respectively), which strengthens the assumption that these factors have a positive influence on swapping. The R^2 and adjusted R^2 were moderately low at 24.8% and 23.9%, respectively, indicating that the independent variables explained only 23.9% of the variability in the dependent variable. But because the field of study is considered to be relatively new in South Africa the lower R^2 values made sense (Rubinfeld, 2000; Frost, 2017b).

These two drivers, *hedonic dimensions* and *collaborative lifestyle*, in the context of swapping, complement one another. Swapping, when not online, takes place between friends and family or at clothing exchange events. Therefore, despite utilitarian reasons, the community and hedonic aspects (like socialising, eating and drinking) motivate consumers to participate in swapping

(Armstrong *et al.*, 2016). Furthermore, it is enjoyable for people to get together and have fun trying on and swapping clothing. Hence, this sense of community positively impacts engagement in swapping, and it is a fun activity to boot (Matthews, Moore & Gopalakrishnan, 2019). It is increasingly accepted that these communities rarely exist only online or offline; but rather in conjunction with each other (Preece & Maloney-Krichmar, 2005). The findings correspond with Lang and Armstrong (2018) whose research highlighted this emerging business model is driven by lifestyle as it often includes a social event with music and food, where meeting liked-minded people exchanging ideas is crossed with acquiring clothing items. It therefore makes sense that these two drivers were the most significant in this study.

The barrier surrounding *hygiene issues* had a p -value of 0.003 significant at $p \leq 0.05$ and is also statistically significant. As per Baek and Oh (2021), there is a definite link between *hygiene issues* and *hedonic dimensions*. If fear of contamination/contagion evokes feelings of repulsion amongst consumers, it will diminish the enjoyment and excitement associated with swapping (Baek & Oh, 2021). Therefore, it is clear that consumers who are sensitive to *hygiene issues* require a high level of trust that the other parties involved in the swap abided by the hygiene requirements (Lang & Armstrong, 2018).

The barrier *unfamiliarity with the concept* had a p -value of 0.026 significant at $p \leq 0.05$ which is also considered significant. The concept of online swapping is still vague and not as effortless as the other two online models (renting and buying second-hand). The process requires many steps that a participant has to go through to swap goods online (Mun, 2013). These steps include cleaning and prepping the items, taking pictures, posting pictures on the website, responding to potential recipients' questions and arranging the postage (Mun, 2013; Perlacia *et al.*, 2017). As mentioned, swapping in South Africa occurs mainly in person at swap events like the Fashion Exchange, where participants bring clothing items to trade. This practice is not yet facilitated online through effortless mobile apps and websites; hence this factor would act as a barrier to swap.

The barrier *materialism* achieved a p -value of 0.020 significant at $p \leq 0.05$, which is also considered significant. This significant result is slightly contradictory, as it implies transfer of ownership and not the foregoing of ownership as renting does (Armstrong *et al.*, 2016; Möhlmann, 2015). The participants involved in swapping give up ownership of their own products but gain ownership of other products. However, the fact that a participant is not buying something new from the store could be where *materialism* as a barrier comes into play. Typically, materialistic individuals value ownership above all, so to even consider swapping would mean that at some point, they will be required to relinquish their personal items (McCarty & Shrum, 2001; Tilikidou & Delistavrou, 2004). Materialistic consumers also do not place value on consumption activities like

swapping, as it does not offer the same pleasure to them as their current consumption behaviour, which they consider a natural and acceptable way of consuming (Belk 1988; McCarty & Shrum, 2001; Tilikidou & Delistavrou, 2004).

All three barriers mentioned above were also negative in terms of their beta coefficients, which only strengthens the assumption that these factors have a negative influence on swapping. *Hygiene issues* ($\beta = -0.122$) was the most significant barrier, followed by *unfamiliarity with the concept* ($\beta = -0.088$), and then *materialism* ($\beta = -0.083$).

Economic benefits had a p -value of 0.033 significant at $p \leq 0.05$, which is not surprising. Prior research has consistently indicated that economic drivers significantly impact participating in collaborative clothing consumption models such as swapping (Bardhi and Eckhardt, 2012). Furthermore, many students, who made up the majority of this sample, have limited budgets to buy the items they want at full price, therefore swapping, due to financial constraints and sensitivity to prices, offers a great alternative (Yan *et al.*, 2015). The findings of this study correspond with these studies.

It is of importance to note that *environmental benefits* did not register as significant. This result is in line with prior literature that indicates that environmental concerns are often *not* the main driver for participating in collaborative clothing consumption practices such as swapping (Hamari *et al.*, 2016; Lang & Armstrong, 2018). This behaviour speaks to the attitude-behaviour gap that acknowledges that the environment concerns the consumer, but it is not a decisive factor in people's participation in collaborative clothing consumption (Niinimäki, 2010; Hamari *et al.*, 2016). According to Moisander's research (2007), most consumers are only driven to act sustainably when another incentive is an economic one at play.

Therefore, to answer **Objective 2.2**, the drivers influencing consumers' **online swapping** consumption practices in the South African market were *hedonic dimensions*, *collaborative lifestyle* and *economic benefits*. Conversely, to answer **Objective 3.2**, the barriers that influence consumers' **online swapping** consumption practices in the South African market were *hygiene issues*, *unfamiliarity with the concept*, and *materialism*.

The barrier, *online trust*, and the two drivers *need for uniqueness*, and *environmental benefits* were not significant in predicting swapping.

5.3.2.3 Second-hand buying

The R^2 for second-hand buying was 53.9%, and the adjusted R^2 was at 53.3%, which indicates that the explanatory power of the second-hand buying regression model is significant in explaining the strength of the relationship between the dependent and independent variables. The variables that measured as statistically significant were *hedonic dimensions*, *online trust issues*, *unfamiliarity with the concept*, *hygiene issues* and *materialism*. In addition, *environmental benefits* and *economic benefits* are also somewhat significant. The findings will be discussed below.

The driver, *hedonic dimensions*, was statistically significant in terms of predicting second-hand buying, with $p < 0.001$. This driver also had the strongest, positive standardised beta coefficient of all the factors namely $\beta = 0.266$. The result is consistent with previous research regarding this consumption model (Hamari *et al.*, 2016; Kim & Jin, 2020). The results suggest that participants enjoy participating in this collaborative consumption model and are mainly driven by their own personal interests. Ironically enough, the fact that *hedonic dimensions* are such a strong driver could lead consumers to actually buy more than what is necessary, which could, in turn, lead to hyper-consumption (another form of *materialism*). For shoppers who love 'thrifting', the thrill of the hunt and the possibility of finding the unexpected are all part of the *hedonic dimensions* of second-hand shopping (Ferraro, Sands & Brace-Govan, 2016).

It was expected that *online trust* ($p < 0.001$) would significantly influence participation of this collaborative consumption model amongst the participants. South Africans, in general, tend to practice cautious behaviour when transacting online, mainly due to online security concerns (Makhitha *et al.*, 2019). Users are wary of cyber-crime, spam, viruses and illegal content (Joubert & Van Belle, 2013). Therefore, safety, security and privacy of personal information must be in place for consumers to shop online with peace of mind (Padmavathy, Swapana & Paul, 2019). In actual stores, consumers can not only develop trust with the salespeople, but they can also see and feel the product (Padmavathy *et al.*, 2019). Therefore, alongside online security concerns, another barrier found to influence online shopping is the lack of physical interaction with the product. As a result, consumers cannot assess whether the product will meet their expectations and quality standards (Goldstuck, 2014). With second-hand products, a consumer requires a lot of trust from the seller regarding the item's condition; therefore, good quality photographs and the possibility to zoom into the product could help reduce some of these concerns (Gopalakrishnan, 2018). Some websites also have a scale to indicate the amount of wear and tear on the product, enabling the potential buyer to assess the item's condition. Websites also have a rating system to allow buyers to rate sellers to indicate to other buyers whether he/she can be trusted. These checkpoints in the system could all contribute to reducing the impact of *online trust* issues with regard to participating in online second-hand shopping (Padmavathy *et al.*, 2019).

Unfamiliarity with the concept ($p < 0.001$) was also a statistically significant barrier. For many consumers, the practice of collaborative clothing consumption is a relatively new experience. This lack of knowledge creates perceived risk amongst users, deterring them from participating in these practices (Bhatti *et al.*, 2018; Fota *et al.*, 2019). Collaborative clothing consumption models, like online second-hand websites, are still reasonably new, so consumers naturally have questions and concerns about the concept. Questions such as return policies, postage fees and *hygiene issues* often come up as concerns in recent studies (Fota *et al.*, 2019). Therefore, it is understandable that consumers may be hesitant to participate in online second-hand buying for the first time due to a lack of experience and prior knowledge (Moeller & Wittkowski, 2010). Therefore, it is highly recommended that online websites that sell second-hand items must focus on web page design that is easy to use. Consumers do not want to spend extra time trying to understand and figure out the process – it must be clear and create a feeling of trust with the consumer (Gumussoy, Kaya, Unal, & 2019). South African websites such as Yaga.co.za enable users to open their own e-shop and sell their fashion goods online (Yaga.co.za). The process does require some explanation, so the website has clear guidelines for potential buyers and sellers. They also ensure that buyers can pay safely online, and after Yaga takes a 9% commission fee from each transaction, the seller gets paid their commission directly into their account. Yaga has 62k followers on Instagram (Yaga.co.za). Growing steadily, it also speaks to their marketing strategy of using influencers and celebrities to advocate for this business model on their social media pages to help lessen the barrier of unfamiliarity.

The barrier *hygiene issues* had a p -value of < 0.001 . Much like the swapping model, hygiene is also an essential factor to consider. This study indicates a definite link between *hygiene issues* and buying second-hand items online, which corroborates with prior research (Armstrong *et al.*, 2016; Edbring *et al.*, 2016; Becker-Leifhold & Iran 2018; Cherry & Pidgeon, 2018). This fear of contamination/contagion is a problematic association to address in the consumer's mind, which requires a high level of trust in the service provider or seller of second-hand goods before engaging (Lang & Armstrong, 2018). Currently, in South Africa, platforms selling second-hand clothing online are becoming more popular, but they are still relatively novel. This fear and uncertainty regarding whether items are hygienic links back to *unfamiliarity with the concept*: consumers should be able to overcome their fears the more they engage in these online models, providing they have positive experiences each time they engage. Businesses should therefore clearly highlight their hygiene protocols on their websites. Rent-the-Runway has recently updated their website in the wake of the COVID-19 pandemic to ease concerns, and also have an 'frequently asked questions' section which aims to address further unease with this business model.

The barrier, *materialism*, was statistically significant to second-hand buying with a p -value of < 0.001 . Individuals often define themselves in terms of their possessions, believing that what they own holds significant standing in society (Wallendorf & Arnould, 1988, O'Cass, 2004). Clothing is often used for portraying and managing status, success and prestige (O'Cass, 2004). Therefore, it is not surprising why a consumer, who is considered materialistic, may be hesitant to participate in second-hand clothing consumption. This behaviour could be because materialistic consumers tend to influence the image that others might have of them through their possessions, and second-hand items may not contribute positively to the identity they would like to convey (Ronobir *et al.*, 2020). Having the money to spend on new clothing signifies wealth in social interactions because it is a prominent visual cue, especially in South Africa (Dondolo & Madinga, 2017). Buying second-hand clothing, which is traditionally seen as a shopping outlet for lower-income consumers, contradicts the goal to 'show-off' wealth and, in so doing, gain social prestige amongst their peers (Catulli *et al.*, 2013; Yan *et al.*, 2015).

All four barriers discussed above were also negative in terms of their beta coefficients, which further asserts the assumption that these factors have a negative influence on second-hand buying among consumers. *Hygiene issues* was most significant ($\beta = -0.206$), followed by *unfamiliarity with the concept* ($\beta = -0.187$), *online trust issues* ($\beta = -0.124$) and lastly, *materialism* ($\beta = -0.111$).

The *environmental benefits* and *economic benefits* will be discussed together. There is a link between whether consumers are buying second-hand clothing to save money or buying second-hand clothing to save the environment. The two motivational drivers achieved p -values of 0.032 and 0.014 significant at $p \leq 0.05$, respectively, which is still considered statistically significant. The *environmental benefits* factor was not significant for renting or swapping and not a top signifier for second-hand buying either. This study has made ample reference to how shopping second-hand has the potential to reduce textile waste and offer consumers a more sustainable way to shop. However, in line with previous research, the environmental aspect is not a decisive factor in people's participation in second-hand buying. In fact, new research is emerging that critically questions thrifting in the name of the environment in the first place (Ronobir *et al.*, 2020). Environmental activist Megan McSherry (2019) highlights the concept of 'white environmentalism', which refers to when typically privileged, white, well-off consumers partake in second-hand shopping as a hobby, not due to financial necessity or environmental concern (Ronobir *et al.*, 2020). Often, second-hand clothing consumption is done under the banner of sustainability and eco-friendly behaviour, when in fact, it disregards communities of different races and low-income populations (McSherry, 2019). Buying second-hand clothing is, in most cases, cheaper than buying new and has historically been the primary shopping outlet for lower-income consumers (Roux & Guiot, 2008; Yan *et al.*, 2015). Therefore, when higher-income consumers

view second-hand shopping as a commodity rather than a necessity, it opens up an opportunity to recognise a much more complex issue at play, as they are not really driven by the *economic benefits* (McSherry, 2019). This concern is an opportunity for further research and will be discussed further in this chapter. However, it is essential to note that as 'thrifting' becomes more mainstream and 'cool' among consumers, two questions deserve further study: namely, is second-hand shopping really contributing to sustainability in the clothing sector (if consumers are still buying new at the same rate), and secondly, as second-hand popularity grows, will it still be an economically viable option for lower-income consumers who are driven by economic benefit? Retailers who are entering this space, should give these concerns some serious thought when strategising which market segment they will service, i.e.: low-income or high-income consumers, as these two segments have very different requirements and price sensitivities (Ronobir *et al.*, 2020).

Therefore, to answer **Objective 2.3**, which was to explore and describe which drivers influence consumers' online second-hand buying practices in the South African market, the study can conclude that *hedonic dimensions*, *environmental benefits*, and *economic benefits* were statistically significant. On the other hand, the drivers, namely *collaborative lifestyle* and *need for uniqueness* did not register as significant for this model. Finally, concerning **Objective 3.3**, which was to explore and describe which barriers influence consumers' online second-hand buying practices in the South African market, the study can conclude that *online trust issues*, *unfamiliarity with the concept*, *hygiene issues* and *materialism* were statistically significant.

5.4 RECOMMENDATIONS FOR RETAILERS AND MARKETERS

Based on the results of this study, it would be beneficial for retailers and marketers who would like to implement collaborative clothing consumption models to take the drivers and barriers highlighted in this study into account when formulating their business strategies. There are several aspects that e-retailers who wish to encourage consumers to participate in any of the three models have to consider. One of these considerations should address the *hygiene issues* that customers may have, especially in a post-pandemic market. Retailers have to guarantee that the items being sold are clean and hygienic and offer clear information on ensuring cleanliness on their respective websites. Businesses should also ensure that participation in these models is an enjoyable experience, seeing that *hedonic dimensions* were significant in swapping and second-hand buying. Part of the *hedonic dimensions* is the online experience which includes the webpage design. Visual presentation such as the look of the site and the functional aspects such as browsing capabilities, network speed, payment options and comparison tools should be strongly considered to increase enjoyability (Edbring *et al.*, 2016; Gopalakrishnan, 2018). Retailers should

also communicate that online integrity and credibility have been prioritised to ensure that trust and security concerns will not hinder participating in these models (Gopalakrishnan, 2018). Generation Z particularly likes to create product reviews and leave recommendations; hence facilitating this feature online would also be beneficial (Padmavathy *et al.*, 2019). Consumers also like to view the products online with different viewing and zooming features, which could assist in easing concerns regarding the product quality, seeing that the tactile element of in-store shopping does not apply to online sales (Gopalakrishnan, 2018). For new goods e-retailers, the opportunity beckons to offer a segment on their webpage for selling second-hand clothing. By doing so, new goods e-retailers can attract new customers and retain their existing customers through their exciting and new extended offerings (Padmavathy *et al.*, 2019).

It will be important for marketers to offer strategies that cultivate positive consumer attitudes toward collaborative clothing consumption. These strategies should specifically address the specific drivers and barriers that were significant in determining consumer behaviour with regard to the three models discussed above. In addition, it is recommended to specifically target Generation Z and Millennials as they made up the most significant percentage of the sample. Targeting these cohorts is consistent with the literature, primarily when focusing on social media websites and other popular applications among these generations.

It is also essential that the marketing strategy behind collaborative clothing consumption should advertise and promote the *environmental benefits* associated with these business models. These cohorts generally have high regard for the environment, or at least in theory. Forbes (2021) called out 'conscious consumerism' in their 2021 trend report, stating that consumers will seek out retailers who align with their values and *environmental benefits* (Thomas, 2021). Therefore, companies must play an active role in helping and guiding consumers to make better choices. If a marketer can encourage consumers to view collaborative clothing consumption services positively because they contribute to environmental protection, consumers will feel morally good about themselves. However, as this study also indicated, sustainable consumption takes a backseat to economic gains and *materialism*. Therefore, it is also critical to address these drivers in their marketing strategies (McNeill & Venter, 2019).

In South Africa, marketers and retailers should also assess what Travica (2002) refers to as the 'hidden layers of culture'. This observation relates to the readiness consumers may or may not have to adopt novel practices such as collaborative clothing consumption based on their historical association with similar business models (Mthembu, 2016). Companies, therefore, have to conduct crucial research to understand the local customs and the particularities of local markets before launching a collaborative clothing consumption business (Mthembu, 2016).

Finally, there are many unknowns regarding the way forward for the sharing economy and its subsidiaries in a post-pandemic economy. The sharing economy finds itself in a precarious situation as the pandemic outbreak has raised concerns about its continued existence. Understanding the impact of the pandemic on the sharing economy and collaborative clothing consumption businesses will be a crucial topic of research in the years to come (Hossain, 2021).

In conclusion, it is important to mention that if the values of collaborative clothing consumption do not align with the values of a business, then perhaps the business should not incorporate these practices at all (Heyman, 2017). If they are unable to rethink their purpose by incorporating some of these critical values, such as offering economic benefit (redistributing wealth) and true environmental concern, then pursuing this business model is not recommended. If, however, a business is keen to explore some of these potential value-adding opportunities to their current offering, or are just starting to establish their business model, this study may be a useful starting point.

5.5 CONTRIBUTION TO THE THEORY

This study theoretically and practically contributes to the limited body of knowledge on collaborative clothing consumption in South Africa, an emerging economy. Collaborative clothing consumption in emerging economies is relatively new in comparison to developed countries. It, therefore, implies that a research gap exists and that there is room to address the lack of empirical research on this topic. The objective was to ascertain consumers' actual behaviour concerning collaborative clothing consumption. This study, therefore, contributes to the literature by establishing an initial empirical understanding of consumer drivers and barriers directly in the context of the different business models (i.e., renting, swapping and second-hand buying). The results could assist in capitalising on opportunities and challenges that are unique within the South African context. This understanding could allow leaders and policymakers to make recommendations and to develop outcomes that deal specifically with the unique challenges in South Africa. Furthermore, this understanding will assist in developing strategies to position collaborative clothing consumption models in the marketplace for prospective and current users. Identifying and understanding these factors can be used for potential retailers and marketers looking into diversifying and revolutionising their businesses (Molobi, Kabiraj & Siddik, 2020).

5.6 LIMITATIONS AND POSSIBILITIES FOR FUTURE RESEARCH

Despite the measures taken to ensure the study's reliability, validity, and ethicality, the results of this study should be viewed cautiously since limitations were recognised in the data collection process and interpretation of the results.

The study's findings could not be generalised to the whole South African population as non-probability sampling, specifically a convenience sampling technique was used to collect data. Although quota sampling was employed to ensure a representative sample of the South African population, the sample was still skewed towards the white population, with the majority being women. This limitation of the study could be because fieldworkers who distributed the questionnaire were white and female, and shared the questionnaire with friends and acquaintances who have similar demographic backgrounds. In future, it is recommended to ensure that the questionnaire is shared with a more representative sample of the South African population. The quota sampling criteria should be enforced and adhered to, and data collection should be continued until a more demographically representative sample is achieved. Therefore, future research should be conducted to understand the motivational drivers and barriers for participation in collaborative clothing consumption among more diverse populations. Horne and Maddrell (2002) reiterate that consumption behaviour through both an economic and a cultural lens should be investigated to fully grasp how these factors impact participation in collaborative clothing consumption. This study did not focus on cultural differences among the diverse South African population, so addressing specific cultural differences hold potential for future research.

Furthermore, the study focused only on online collaborative clothing consumption. However, an opportunity exists to also look at the drivers and barriers concerning offline collaborative practices, such as in-person swapping events, fashion libraries, and second-hand brick-and-mortar shops within the South African context. This quantitative study was also conducted from the consumer's viewpoint. Future research could assess the viewpoint from actual retailers/marketers/service providers currently offering collaborative clothing consumption services in South Africa.

As alluded to earlier, with the rising popularity of second-hand clothing, prices are starting to rise, making it harder for lower-income consumers to afford them. Therefore, it would be of value to address the positive and the negative economic and environmental impact of this rising popularity in future. According to environmental activist Megan McSherry (2019), the gentrification of buying second-hand items means that low-income communities who rely on second-hand shops are at risk of being excluded from these practices. South Africa would, therefore, need a holistic and targeted strategy to make inclusion a reality across all races and income levels. These business models should not be inaccessible to those already excluded economically (Schor, 2016).

Currently, most people who participate in collaborative clothing consumption models are white, highly educated, urban dwellers who are participating in these practices with good intentions but are at risk of being perceived as exploitative. This phenomenon deserves further insight (Ronobir *et al.*, 2020). This observation also touches a nerve in South Africa, where there is a history of discrimination that has led to several inequality gaps in the past, so despite all the promises to share prosperity, this sector has much work to do in order to prevent the deepening of exclusion amongst low-income communities and communities of colour (Schor, 2016; Ronobir *et al.*, 2020). Touching on the issue of race, recent studies abroad indicate a tendency towards discriminatory behaviour concerning collaborative consumption practices (Edelman, Luca & Svirsky, 2017). These underlying discrimination problems were not addressed at all in this study, and could be viewed as a limitation. It is recommended that further research to assess this phenomenon within South Africa is addressed and proposals provided to retailers, marketers and consumers to prevent facilitating discrimination going forward on these platforms. There is also an opportunity to critically investigate whether these collaborative clothing consumption models, in the name of the environment, really make a difference to lower the impact of overconsumption, or is it just a thin veneer to propel the "feel good" rhetoric (Frenken & Schor, 2019; Ronobir *et al.*, 2020).

Lastly, this research was conducted just before the COVID-19 pandemic outbreak. The pandemic will undoubtedly open up a myriad of potential future research opportunities concerning collaborative consumption practices. *Hygiene issues*, for example, will possibly impact participation more now than ever due to the virus, which means the renting, swapping, and buying of second-hand clothing will no doubt be impacted. The outbreak has also had a negative economic impact on consumers which affects their consumption behaviour. With income losses and increasing debt, consumers may re-assess how they spend their money on clothing. Interestingly enough, the economic impact can either be beneficial or detrimental to these business models, hence indicating room for further exploration of the after-effects of the pandemic (McCoy *et al.*, 2021). The pandemic also impacts socialising with others, so perhaps the demand for renting outfits will decrease as fewer special occasions occur. More people may also start to work from home; how will that affect their consumption behaviour going forward? (McCoy *et al.*, 2021). Therefore, it is clear that there are more questions than answers at this stage regarding the pandemic, which paves the way for exciting research opportunities in the near future.

5.7 FINAL CONCLUSION

As collaborative clothing consumption is a relatively new concept, this study aimed to empirically research this field of study. The research focused specifically on consumers' **actual behaviour** that influences participation in three collaborative clothing consumption models: renting,

swapping, and buying second-hand clothing. It was also considered essential to conduct this research in a South African context as most research on this topic thus far has been conducted in developed markets.

At the beginning of this study, this new and exciting business model was described as one that would continuously disrupt and curb the impact of current consumption patterns across the world. It would bring about a global paradigm shift in consumer consumption habits that will radically shift consumer attitudes towards ownership. It was to hail in a new era of responsible and mature consumerism. However, the researcher is not convinced that this business model lived up to all of these expectations. The above, in principle, still rings true, but the shiny veneer has been chipped away slightly by the study's results. Firstly, the findings were sobering concerning environmental concerns amongst participants. These consumption models are widely revered for being a sustainable and environmentally beneficial solution to society's overconsumption problems. This rhetoric did not align with this study, which is in line with what several other papers on the topic also revealed. Consumers attach too much value to *materialism* (ownership), economic gains and having fun (hedonism), and far less value on actually changing their consumption practices to aid the environment. The act of sharing is as old as humankind (Belk, 2014b), but as the sharing economy became formalised and monetised, sharing, it seems, is simply no longer caring.

Furthermore, it is also concerning that these consumption models seem to benefit the 'haves' far more than the 'have-nots': low-income consumers are often excluded from these practices altogether. Therefore, to brand these business models as a way to share the wealth also requires more introspection. The fact that most participants in collaborative clothing consumption are primarily white and highly educated indicate that the models are inaccessible to those already excluded economically (Schor, 2016). This inaccessibility might be due to the digital divide in South Africa or merely the fact that lower-income consumers simply do not possess the feasible items to participate in for example swapping, and can also not afford the risk (and luxury) of renting 'everyday' clothes. As alluded to, even second-hand clothing shopping is at risk of becoming inaccessible due to the 'thrifting' trend that higher-income consumers are relentlessly pursuing.

In conclusion, The Vision Team at WGSN's aptly named report "Fix The Future" (2018) argued that consumers would be buying less in a mature market and instead invest in systems that shift product lifecycles from disposable to renewable. The hope is that consumers will want what they buy, and ultimately, ask the question: what is the actual cost of ownership? Therefore, in conclusion, there is ample opportunity for these business models to gain popularity in South

Africa, but whether South Africans are, firstly, able to part with ownership, and secondly, whether they care enough about the environment to do so, remains to be seen.

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ADDENDUM A: ETHICS SUBMISSION: APPROVAL LETTER



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Natural and Agricultural Sciences
Ethics Committee

E-mail: ethics.nas@up.ac.za

26 March 2020

ETHICS SUBMISSION: LETTER OF APPROVAL

Miss H Taljaard
Department of Consumer and Food Sciences
Faculty of Natural and Agricultural Science
University of Pretoria

Reference number: NAS066/2020
Project title: Factors influencing consumers' collaborative clothing consumption practices in the South African context

Dear Miss H Taljaard,

We are pleased to inform you that your submission conforms to the requirements of the Faculty of Natural and Agricultural Sciences Research Ethics committee.

Please note the following about your ethics approval:

- Please use your reference number (NAS066/2020) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.
- Please note that ethical approval is granted for the duration of the research (e.g. Honours studies: 1 year, Masters studies: two years, and PhD studies: three years) and should be extended when the approval period lapses.
- The digital archiving of data is a requirement of the University of Pretoria. The data should be accessible in the event of an enquiry or further analysis of the data.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.
- **Applications using Animals:** NAS ethics recommendation does not imply that AEC approval is granted. The application has been pre-screened and recommended for review by the AEC. Research may not proceed until AEC approval is granted.

Post approval submissions including application for ethics extension and amendments to the approved application should be submitted online via the Ethics work centre.

We wish you the best with your research.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'S. J. ...', on a light blue background.

Chairperson: NAS Ethics Committee

ADDENDUM B: QUESTIONNAIRE



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Natural and Agricultural Sciences
Department of Consumer and Food Sciences
March 2020

Dear Participant,

This research project forms part of the requirements for the completion of the 2020 final year B Consumer Science Clothing Retail Management degree as well as two Masters in Consumer Science Clothing Management dissertations. The purpose of this research project is to explore the **motivational drivers and barriers of collaborative clothing consumption within the South African market.**

Collaborative clothing consumption (CCC) can be described as the sharing, lending, buying, renting, and/or swapping of second-hand clothing items. It is a business model where either renting, swapping and/or re-selling of clothing products involves a monetary fee or some form of financial benefit for the parties involved.

RESEARCH PROCEDURE

No prior preparation is needed to complete the questionnaire. Participation is completely voluntary with no penalty or loss of benefit if you decide not to take part. The completion of the questionnaire takes approximately **10 minutes**. The procedure is completed by a word of appreciation for your time and effort.

PRIVACY AND CONFIDENTIALITY

Participants' responses are strictly confidential, and only members of the research team will have access to the information. Your response will be bulked with those obtained from other participants and appropriate statistical analysis will be performed on the bulked data. At no time will personal opinions be linked to specific individuals. Data will also be safely and securely stored and will not be accessible from the public domain. The privacy and anonymity of your participation are therefore ensured.

WITHDRAWAL CLAUSE AND RIGHTS OF ACCESS TO DATA

Participants may withdraw at any stage of the research without having to explain why. By no means will your withdrawal be held against you. As a participant, you also have the right of access to your data.

POTENTIAL BENEFITS AND FORESEEABLE RISKS OF THE STUDY

Findings from this research project could shed light on consumers' motivational drivers and barriers regarding their collaborative clothing consumption (CCC) in South Africa. The findings could also assist clothing entrepreneurs in developing effective strategies to better promote and encourage CCC in South Africa. The risks associated with this research project is extremely low to none.

ADDITIONAL INFORMATION Dr Bertha Jacobs and Dr Hanri Taljaard can be contacted at bertha.jacobs@up.ac.za and hanri.taljaard@up.ac.za or at (012) 420 2615 / 4310 for further information about the research project.

CONSENT

I have read the above information relating to the research project and declare that I understand it. I have been afforded the opportunity to contact and discuss relevant aspects of the project with the project leaders and hereby declare that I voluntarily agree to participate in the project.

I indemnify the university and any employee or student of the university against any liability that I may incur during the course of the project.

I agree to the terms and conditions as stated above.

- Yes, I agree (1)
- No, I do not agree (2)

Skip To: End of Survey If I agree to the terms and conditions as stated above: = No

Page Break

QUESTIONNAIRE

SECTION A – SCREENING QUESTION

Q1 Before we continue, we just want to ensure that you are who we are looking for:

Are you older than 18?

Yes (1)

No (2)

Skip To: End of Survey If Before we continue, we just want to ensure that you are who we are looking for: Are you older t... = No

Page Break

SECTION B – FIELD WORKER

Q2 Please select the person that distributed the questionnaire to you:

▼ Monique Barnett (1) ... Other (27)

* Note: The names listed above are the 2020 final year B Consumer Science Clothing Retail Management students, two Masters in Consumer Science Clothing Management students and the two project leaders, who are all part of this research project.

Page Break

SECTION C - CCC

Collaborative clothing consumption (CCC) is the sharing, lending, buying, renting, and/or swapping of second-hand clothing items for a monetary fee or some sort of financial benefit.

Q3 Please indicate the level of frequency regarding **your own Collaborative Clothing Consumption practices:**

	Never (1)	Sometimes (2)	About half the time (3)	Most of the time (4)	Always (5)
I rent clothes for a fee. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renting clothes is better than owning clothes. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rent more clothes than I buy clothes. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer renting to buying clothes. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I swap clothing with other people. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swapping clothes with other people is a good alternative to buying. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I swap more clothes than what I buy. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer swapping my clothes rather than buying it. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I buy second-hand clothes. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I buy more second-hand clothes than new clothes. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer buying second-hand clothes to buying new clothes. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buying second-hand clothes is better than buying new clothes. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

SECTION D – CCC CHOICES

Q4 Which one of the following do you take part in most often?

- renting clothes (1)
 - swapping clothes (for money or financial benefit) (2)
 - buying second-hand clothes (3)
-

Page Break

SECTION E – PLATFORM OPTIONS

Q5 I prefer [\\${Q23/ChoiceGroup/SelectedChoices}](#):

- In-store (1)
 - Online (2)
 - Both (3)
-

Page Break

SECTION F – MOTIVATIONAL DRIVERS OF CCC

Q6 Please indicate your level of agreement when [\\${Q23/ChoiceGroup/SelectedChoices}](#):

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
It helps to save the earth's natural resources. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is an environmentally-friendly way of consuming clothing. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is better for the environment. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is an environmentally sustainable way of living. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It saves me money. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It benefits me financially. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can reduce my clothing expenses. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is cheaper than other ways of buying clothes. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is fun to participate in these practices (e.g. renting / swapping / second-hand buying). (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is exciting to take part in these practices (e.g. renting / swapping / second-hand buying). (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is something I enjoy doing. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It makes me feel good. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It allows me to get one-of-a-kind products to create my own unique style. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me to find something that communicates my uniqueness. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I combine clothes in such a way to create a personal image that cannot be duplicated. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I try to find a more interesting version of ordinary clothes because I enjoy being original. (16)	<input type="radio"/>				
I am often on the lookout for new clothes that add to my personal uniqueness. (17)	<input type="radio"/>				
These practices (e.g. renting / swapping / second-hand buying) save me time. (18)	<input type="radio"/>				
It is convenient to be able to choose from a variety of options to satisfy my needs. (19)	<input type="radio"/>				
The convenience of using shared clothes fits my lifestyle. (20)	<input type="radio"/>				
It is more convenient to take part in these practices (e.g. renting / swapping / second-hand buying) than to buy new clothes. (21)	<input type="radio"/>				
I feel part of a community when I participate in these practices (e.g. renting / swapping / second-hand buying). (22)	<input type="radio"/>				
Taking part in shared practices improves my image in the community. (23)	<input type="radio"/>				
These practices (e.g. renting / swapping / second-hand buying) allow me to be part of a group of people with similar interests. (24)	<input type="radio"/>				
Belonging to a group that is participating in shared practices is important to me. (25)	<input type="radio"/>				

Page Break

SECTION G – BARRIERS OF CCC

Q7 Please indicate your level of agreement when $\$(Q23/ChoiceGroup/SelectedChoices)$:

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Second-hand clothes might not always be as hygienic as new clothes. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry that if I acquire second-hand clothing, it will be unhygienic. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hygiene in terms of second-hand clothing is important to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have concerns that second-hand clothes are not hygienic. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not familiar with the concept of sharing economy services. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have little experience when it comes to these practices (e.g. renting / swapping / second-hand buying). (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I do not know much about collaborative clothing consumption. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not know how / where I can take part in such practices (e.g. renting / swapping / second-hand buying). (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me to own a lot of new clothes. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Some of the most important achievements in life include buying new clothes. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My new clothes indicate how well I am doing in life. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to own fashionable clothes that will impress the people around me. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

SECTION H – BARRIER OF CCC (ONLINE TRUST)

Display This Question:

If I prefer $\{q://QID49/ChoiceGroup/SelectedChoices\}$: = Online
Or I prefer $\{q://QID49/ChoiceGroup/SelectedChoices\}$: = Both

Q8 Please indicate your level of agreement when $\{Q23/ChoiceGroup/SelectedChoices\}$ **ONLINE**.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I am not sure that the clothes on the website are presented accurately. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't know if I will receive the right products. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncertain whether the products will fit me correctly. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am unsure if they offer secure payment facilities. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online websites selling second-hand clothing are not safe in terms of cyber security. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am unsure if they have fair return/exchange policies. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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SECTION I - STORE IMAGE

Display This Question:
 If I prefer $\{q://QID49/ChoiceGroup/SelectedChoices\}$: = In-store
 Or I prefer $\{q://QID49/ChoiceGroup/SelectedChoices\}$: = Both

Q9 Please indicate your level of agreement when $\{Q23/ChoiceGroup/SelectedChoices\}$ **IN-STORE.**

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
The store is not always clean. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The clothing is not presented nicely on mannequins or hangers. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The store layout is confusing. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The store is usually untidy. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions in the store are bad (paint peeling, cracks in the walls, old fixtures). (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The shop tends to be cluttered. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is not easy to find what I am looking for in the store. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I shop I can't see all the clothing items. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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SECTION J - DEMOGRAPHICS

Q10 Please indicate your gender.

- Male (1)
 - Female (2)
 - I prefer not to say (3)
-

Q11 In which age category do you belong?

- 19 - 24 (1)
 - 25 - 34 (2)
 - 35 - 44 (3)
 - 45 - 54 (4)
 - 55 - 64 (5)
 - 65 and older (6)
-

Q12 What is your highest level of education?

- Lower than Grade 12 (1)
 - Grade 12 (2)
 - Tertiary degree/diploma (3)
 - Postgraduate (4)
-

Q13 What is your approximate individual income per month (after tax deductions)?

- Less than R 5 000 (1)
 - Between R 5 001 and R 15 000 (2)
 - Between R 15 001 and R 25 000 (3)
 - Between 25 001 and R 35 000 (4)
 - Between R 35 001 and R 45 000 (5)
 - More than R 45 000 (6)
-

Q14 According to the Employment Equity Act - how would you classify yourself?

- Black (1)
 - Coloured (2)
 - Indian / Asian (3)
 - White (4)
 - I prefer not to say (5)
-

Q15 Please select the province you currently reside in.

▼ Eastern Cape (1) ... Western Cape (9)

- Eastern Cape (1)
 - Free State (2)
 - Gauteng (3)
 - Kwazulu Natal (4)
 - Limpopo (5)
 - Mpumalanga (6)
 - North West (7)
 - Northern Cape (8)
 - Western Cape (9)
-

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We thank you for your time spent taking this survey.
Your response has been recorded.

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