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THE IMPACT OF CUSTOMISED AND PERSONALISED APPAREL ONLINE

by

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DECLARATION

I, Madelynn Chantell Gordon, declare that the contents of this dissertation represent my own unaided work, and that the thesis/dissertation has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

14 June 2024

Signed   **Date**

ABSTRACT

The global growth in digital technology, including online shopping and 3D mobile body scanning, signifies a compelling transformation in the competitive landscape. Consequently, the digital and apparel industries are inevitably becoming closely interconnected. Furthermore, the demand for customisation and personalisation apparel is increasing. This research study focuses on the impact of customised and personalised apparel online. A positivist approach was adopted. A quantitative method and a descriptive technique were employed to describe the study. An online questionnaire was used to collect the data from 27 respondents.

The study revealed a demand for customised and personalised apparel online. The findings also indicate that customers are willing to use 3D mobile body scanning and participate in co-creating apparel online. Moreover, based on the findings, an entrepreneurial opportunity can be developed. A computer and mobile application can be invented. Customers can purchase customised and personalised apparel online using 3D mobile scanning and co-create the design and e-hailing services to deliver the product.

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DEDICATION

To my nieces, Scarlett and Shiloh.

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CHAPTER 1   INTRODUCTION AND BACKGROUND

1.1   Introduction and Background

This research study investigated the need to purchase customised and personalised apparel online in South Africa against the backdrop of evolving disruptive technologies driving a growing global economy and marketplace. This has dramatically influenced the textile and fashion industry to integrate with the digital world. Gazzola et al. (2020) state that digital platforms are becoming more prevalent and pervasive in the apparel sector. E-commerce has allowed many new brands to emerge by enabling businesses to interact with customers online. Ng and Mok (2023) state that many start-ups and fashion firms adopt digital customisation. This trend allows customers to purchase fully individualised fashion apparel online and engage in customised apparel. This shift caters to the growing consumer demand for customised fashion and enhances their shopping experience. Gazzola et al. (2020) predict a significant growth in the demand for customised and personalised fashion, underlining the potential of this trend.

Baran and Galka (2016) and Moore (2020) argue that customisation is a manufacturing method designed to deliver personalised, individually bespoke, and high-end apparel to consumers. Personalised apparel could be created to order, tailored, mass customised, produced at home or independently, or created by oneself. According to Armstrong et al. (2015), Ballie (2013), Black (2008), Black et al. (2009), Busch (2013) and Busch (2014), the process entails the individual's participation in the design and manufacture on demand. Furthermore, personalised products enable customers to express individuality (Ladhari et al., 2019; Zhang & Zheng, 2020).

Traditionally, customers purchase customised and personalised apparel from dressmakers or tailors. An online platform can be developed whereby customers select fabric and style and add measurements to participate in the personalised apparel design (Zhu et al., 2018). The customer can view the product in real-time to enhance their experience. Through the advancement of technology, a 3D online application can assist customers to view the fit of the product.

This research study focused on the impact of customised and personalised apparel in Cape Town, South Africa, to establish if there is a need to purchase customised and personalised apparel online.

1.2 Problem Statement

The absence of a digital platform that facilitates customised and personalised, accurately fitted apparel has created a vacuum for those looking for tailored apparel as a form of individualism that mirrors their perceived personality, attitudes, and behaviour (Johnson & Downing, 1979; Zimbardo, 1969). The challenge is attaining the perfect fit for individuals based on the extensive variation in body shapes and the disparate body types within a specific size (Loker et al., 2005). Consequently, according to Dunn (2016), Gupta (2014), and Ola-Afolayan (2019), anthropometric body measurements are commonly employed in creating garment sizing systems that allow for the mass production of clothing (Balach et al., 2020). Furthermore, standard size intervals do not correspond with a population's natural size and shape combinations. Apeagyei (2010) and Kroemer et al. (1997) state that these variations are contingent on ethnicity, age, and gender and are not always reflected in the present methods of apparel sizing systems (Kolose et al., 2021).

Balach et al. (2020) said the conventional method of measuring considers only a few body dimensions, which is insufficient to depict the entire shape of the body accurately. According to Idrees et al. (2020), Kassah et al. (2020) and Ijaz (2020), the consequence is that most retailers face online returns due to ill-fitting garments. Fit is a significant factor when selecting garments, and an accurately fitted garment available in the market is difficult to find. Anikweze (2013) and Dove (2016) describe apparel fit as the external appearance of an item on a body. An accurately fitted garment makes a customer feel at ease and confident. Anikweze (2023) further states that comfortable apparel should fit well and look good on the wearer despite their movement level.

Furthermore, most consumers in the current apparel market want to personalise the fit of their garments (Jin et al.,2023; Yang et al., 2007). The recent trend is that customers want to have customised and personalised apparel suited to their personality and uniqueness rather than something mass-produced (Ladhari et al., 2019; Zhang & Zheng, 2020; Yan & Kuzmichev, 2020; Gill et al., 2023). According to Johnson and Downing (1979) and Zimbardo (1969), apparel is a means of self-expression that reveals our personality and influences how others view our attitude and behaviour and how we view ourselves. Therefore, at an event, there may be more than one guest wearing the same outfit purchased from a fashion retailer, which may prevent an individual from expressing their style.

1.2 Rationale and Significance of the Study

Traditionally, customers have customised and personalised apparel made by dressmakers or tailors. Customers must have their measurements taken, purchase fabric, and attend many fitting sessions to achieve the desired garment. According to Gazzola et al. (2020), the demand for customisation and personalisation is expected to grow along with constantly evolving technology and online shopping (Hasan, 2019).

The study is essential due to key reasons such as how customised and personalised apparel impact cultural and creative context, understanding motivations for purchasing customised and personalised apparel, market demand and consumer preferences to boost local economic growth, and customisation and personalisation of clothing as an individual expression within a unique social context. The outcome will enable customers to partake in online design and add their body measurements to purchase apparel tailored to their specific needs.

Furthermore, the study aims to broaden knowledge within the academic domains of Information Technology, Clothing and Textile Technology, Fashion Design and Business and Management Science.

1.3 Research Aim

The study aimed to investigate consumers' need to purchase customised and personalised apparel online.

1.4 Research Objectives

a) Investigate the demand for customised and personalised apparel online;
b) Investigate the trends of purchasing customised and personalised apparel;
c) Determine the factors influencing customers purchasing customised and personalised apparel;
d) Proposed general guidelines to create access to buy customised and personalised apparel online.

1.5 Research Questions

a) Who are the customers interested in purchasing customised and personalised apparel online?

b) Where are customers currently purchasing customised and personalised apparel?

c) What drives the customers to purchase customised and personalised apparel online?

1.6 Research Paradigm, Methods, and Methodologies

According to Irny and Rose (2005), research methodology is the systematic, empirical analysis that entails a methodical examination of procedures and concepts employed in a field of study. Drawing from Patel and Patel (2019), this study used a systematic method for the analysis that follows a logical sequence of stages. This section describes the methodology and steps to achieve the research questions and objectives.

1.6.1 Research Paradigm

Drawing from Kuhn (1962), we adopted a paradigm that demonstrates the theoretical beliefs and principles as the philosophical thinking underpinning how this study views the world. Thus, it enabled us to ascertain a suitable research methodology, which led to discussing for conducting and analysing the data (Khatri, 2020).

The phenomenon under investigation was considered ontologically objective, and an interpretive paradigm would not assist in the scientific enquiry underpinning the study. Saunders et al. (2012) state that a positivist research paradigm is, therefore, suitable and adopted as a scientific investigation to explore the need for customers to purchase customised and personalised apparel online. A credible assessment was conducted to obtain the research aim and objectives by answering the research questions.

1.6.2 Research Method

Research methods can be broadly classified into mixed-method, qualitative, and quantitative, characterised by how the data is collected (Andrew et al., 2020). Given the ontological position adopted for the scientific enquiry of the phenomenon, the quantitative research method was considered appropriate, as it enabled the study to obtain empirical data systematically using prearranged tools (Creswell, 2003).

Qualitative research lends itself to the ontologically subjective scientific enquiry based on reality, focusing on understanding the context of the study instead of presenting numerical data, which is not the study's intention (Ahmad et al., 2019; Mkandawire, 2019). Mixed-method research might be appropriate but based on the aim and objectives of the study, applying both

qualitative and quantitative methods would unnecessarily introduce another dimension to the study (Andrew et al., 2020:19).

An online questionnaire was used to obtain numerical data to explore the need of customers to purchase customised and personalised apparel online. The research was evidence-based and objective (Ahmad et al., 2019). Therefore, a quantitative research method was suitable for the research.

1.6.3 Research Design

A descriptive research design was used to collect and analyse quantitative data to explore the study's phenomenon and characteristics (Sekaran, 2003). The quantitative data collected was analysed to describe the impact of customised and personalised apparel in Cape Town. As mentioned above, the data was obtained from an online Google Forms questionnaire to answer the research questions and attain the research objectives. The data was coded in Excel and converted into graphs to demonstrate the findings.

1.6.4 Demarcation/delimitations of the study

The research was restricted to and took place in the Business and Management Sciences Faculty at a selected Cape Town, South Africa university.

1.6.5 Research Methodologies

1.6.5.1 Population

Students, lecturing, and administration staff in the Business and Management Sciences Faculty at the selected Cape Town University were chosen to participate in the study. Four age groups were created from the population: 18–24, 25–65, 36–45, and 46 and older. The survey aimed for 100 participants; however, only 27 responses were received.

1.6.5.2 Sampling Method

Probability sampling was used using stratified sampling. Etikan and Babatope (2019) state that stratified sampling divides the population into subgroups based on a specific category or strata. Each stratum represents a distinct or homogeneous group classification and is a separate subset of the entire population. Consequently, there is an equal chance of selection for every element in the stratum. The researcher divided the population into age categories, as

mentioned above. Stratified sampling minimises human bias, allows for generalisation and increases the accuracy of results (Bhardwaj, 2019; Etikan & Babatope, 2019). Twenty-seven (27) participants answered the questionnaire. The sample size selected for each age category is not proportionate to the population of each stratum (Bhardwaj, 2019). Each participant's data described the need for customised and personalised apparel in Cape Town.

1.6.5.3 Data-collection instruments

Structured and semi-structured questions from an online survey were used to gather and assess the data. The questionnaire was designed on Google Forms. The semi-structured questions obtained demographic information from the participants. The closed-ended questions comprised the 5-type Lickert scale and yes/no/maybe questions.

The questions were derived from the research questions and objectives and the literature. The structured questions attained answers from the participants and were converted into numerical data to be statistically analysed. Drawing from Ahmad et al. (2019) and Mkandawire (2019), close-ended questions give your survey respondents clarity, providing consistent data that is easy to analyse.

1.6.5.4 Data collection

The researcher administered the online questionnaire to the Business and Management Sciences Faculty at the selected university in Cape Town. The head of the department distributed an online survey to students, lecturing, and administrative staff in the faculty. The contact details were added to the cover page if the participant required clarification of any specific question.

1.6.5.5 Data analysis

The data was captured using a descriptive analysis technique in Microsoft Excel. According to Torchim (2020), descriptive analysis summarises the data's characteristics. Furthermore, descriptive analysis is consistent with the research design that gathers quantitative data to characterise the study's phenomena (Sekaran, 2003). Using Excel, the questionnaire questions were coded by becoming the variables. Each variable was named, for example, age. Once the data was entered into the system, it was converted into graphs for descriptive analysis.

1.7 Ethical Considerations

Ethics is an integral part of research. It demonstrates the integrity of the knowledge produced by the study and clarifies the researcher's duty to safeguard study participants. Ethics are vital and are put in place to protect the researcher and the selected university from legal implications (O'Leary, 2009: 72).

The following guidelines served as a framework for the study's ethical conduct:

- The work of other authors was not plagiarised by acknowledging all sources cited using the Harvard Referencing System. Simultaneously, paraphrasing was used to transfer the thoughts and ideas of other authors into the researcher's own words. Turnitin was used with the assistance of the Business and Management Faculty to conduct an originality report.
- The study obtained permission from the selected university in the Business Faculty, where the research was conducted through an informed consent request.
- Ethical clearance was attained from the Cape Peninsula University of Technology's Ethics Committee (HDC).

A cover letter accompanied the questionnaire and included the following:

- A request for informed consent from the participants to partake in the questionnaire voluntarily.
- The primary objective for the participants is to understand how the data was used.
- The participants were made aware that they may choose to no longer participate in the research at any given time.
- Participants were informed they could omit questions they did not wish to answer.
- Participants were informed that their identity is protected as their personal information was not disclosed when the data was published.

1.8 Outline of the Dissertation

The five chapters in the dissertation are:

Chapter 1: Introduction and Background

Chapter 1 introduces an overview and a general description of the study. It contains an overview of previous research, including the research problem statement, aim, objectives, questions, and significance.

Chapter 2: Literature Review

Chapter 2 provides background information on key concepts based on the research title, using previous studies to substantiate the problem statement, research aim, objectives, and questions.

Chapter 3: Research Design and Methodology

The research design, methodology, and techniques for gathering research data are covered in Chapter 3. The steps involved in conducting the research are described.

Chapter 4: Results and Findings

Chapter 4 presents an analysis of the data collected from the questionnaire and explains the study.

Chapter 5: Conclusion and Recommendations

Chapter 5 offers recommendations and a summary of the study's findings. It discusses the study's limitations and suggests possible further research considering its conclusions.

1.9 Research Limitations

The study is limited to students and staff in the Business and Management Sciences Faculty of a selected university in Cape Town. It does not adequately represent the opinions of the entire population in the broader Cape Town area.

1.10 Summary

The background of the research study was introduced in this chapter. The research problem statement and the study's significance are also stated. A brief discussion of the research design and methodology was also included. After that, the dissertation outline, ethical issues, and research limitations were covered. The literature examined to identify the study objectives and questions and to support the problem statement is presented in the next chapter.

CHAPTER 2   LITERATURE REVIEW

2.1   Introduction

The preceding chapter covered the study's background and methodology and addressed the research questions to achieve the objectives. This chapter critically evaluates theoretical studies to establish the study's significance. It used selective but substantial previous literature to present what is known and find the gaps to position this study to achieve this aim.

2.2   Current Global Trend of Fashion and Apparel Purchases

In recent decades, fashion adoption has been a prominent subject in fashion literature mainly 2003; Rahman et al., 2014). The global fashion business is valued at US $1.3 trillion (BOF & McKinsey, 2019). Keller et al. (2014) state that emerging markets currently supply about 40% of women's clothing and that percentage is predicted to surpass 50% by 2025. Negrin (2008) states that consumers invest significantly in fashion for their image. Customers today are deeply engaged in a highly focused culture on fashion, amplified by user-generated web content on the internet, where ideas about trends and fashion are exchanged (Paintsil & Kim, 2021). This creates a desire for new fashion apparel, which the market may manipulate.

2.3   Traditional versus online shopping

According to Sameeha and Milhana (2021), purchasing a product in-store is known as traditional shopping. Conversely, using a web browser, consumers can directly buy goods or services online (Reddy et al., 2014). Wang et al. (2022) found that 84% of sales take place in brick-and-mortar retailers, and 46% of customers shop in person and deal with merchants face-to-face (Marian, 2021). This tendency is described by the demand for immediacy and authenticity, such as seeing, feeling, and interacting with physical things, based on social interaction and connection that are absent from purchasing online (Raydiant, 2021).

A different study claims that 65% of shoppers purchase in-store items to avoid paying for shipping costs (Chad, 2021). Furthermore, compared to shopping online, retailers in China allow contactless payments (Daxue, 2021) and manage to meet customer expectations for brand values, quality, and delivery. Thus, physical stores in China now provide customers with an authentic and fulfilling shopping experience, making it difficult for e-commerce to compete with conventional retail's recovery and strategy.

However, Setwaiwan et al. (2021) argue that the world of e-commerce is expanding more quickly than conventional retail shopping. Several studies suggest that 51% of consumers choose online shopping, while 49% shop in physical stores.

Traditional behaviour will gradually disappear as society becomes more immersed in the internet, discoveries, and advancements. Tandon et al. (2016) found that website convenience influences customers' propensity to make online purchases. In another study, Raman (2019) found that the ease of transactions plays a significant role in shaping consumers' favourable opinions and determining their propensity to make online purchases. According to Sembada and Koay (2019), convenience significantly enhances consumers' perceived value of the intended outcome.

According to Setwaiwan et al. (2021) and Sameeha and Milhana (2021), online shopping is becoming increasingly popular among consumers due to its many advantages. Customers can benefit from this trend by purchasing products at reasonable, transparent prices. Many products and services are accessible online, making purchasing more convenient for customers than the traditional method of going to the store and dealing with problems like long lines at the pay point, scarce parking spots, and overcrowded stores during the sales.

The disadvantages of online shopping are a greater likelihood of fraud, complex websites, delivery, and security issues (Sameeha & Milhana, 2021). Setwaiwan et al. (2021) state that online customers can sometimes be deceived by a post, assuming that the purchased item is more significant than the received item. Although certain websites are free, delivery costs negatively affect consumers. In some instances, exchanges are prohibited, regardless of whether the retailer agrees to a return after being persuaded by the customer's justification, since the customer is typically responsible for paying return postage (Alabdullah & Ahmed, 2018).

Prior research has indicated that customers are more prone to abandon their shopping carts when purchasing online becomes challenging (for example, long registration forms, complicated discount instructions, and technological problems) because of the cumbersome purchasing procedure (Rajamma et al., 2009). According to Sameeha and Milhana (2021, the benefits of traditional shopping are that customers can touch the product, return it quickly, do not require an internet connection, can see the product up close, have better security, and try on clothes. Additionally, some clients would rather interact directly with staff members for treatment and service (Setwaiwan et al., 2021). However, it can also take longer, not allow

price comparisons, and give customers a short window to choose the product and where to buy it (Sameeha & Milhana, 2021).

Customers' opinions vary regarding which type of shopping, traditional or online, is preferable (Sameeha & Milhana, 2021). Customers will always act in a way that makes them feel more at ease and satisfied, whether shopping in person or online. A satisfied consumer is likelier to make another online purchase or visit the store (Rajest & Suresh, 2018).

Customers between the ages of 17 and 40, regardless of gender, were accustomed to shopping in physical stores but transitioned to shopping online. They are more aware of trends and have access to social media. Due to their unfamiliarity with the internet, most persons in their 50s and older are likelier to purchase from the store (Setwaiwan et al., 2021).

2.4   Current Global Trends of Customised Apparel Purchases

Lee and Sundar (2014) define customisation as the capacity to alter appearance, reorganise content, and add or delete widgets or data through an interface between producers and consumers. Individualisation, fit, and design are the three ideas of customisation that apply to the fashion business (Yeung et al., 2010).

Deloitte (2022) states that over 50% of customers indicated they would be interested in buying customised goods or services in the following categories: holidays, apparel, furniture, home goods and do-it-yourself, fashion accessories, jewellery, and footwear. Customisation has put fast fashion to the test in the fashion industry as it tries to draw in more customers (Seock, 2007). As living standards increase, self-realization and the inclination to individualise customers become more significant.

According to Seo and Lang (2019), consumers have become more sophisticated and intangible in their demands over the past ten years; they want a more significant experience integrated with products or services to create lifelong memories. Customers are also prepared to pay more and wait longer for customised products over standard ones (Franke et al., 2009). Lee and Sundar (2014) state that, because customised items are built to order and evoke unique elements of the customer, they may be more likely to be purchased and seen as an extension of the customer than standardised products.

According to Gazzola et al. (2020), spending on fashion products is decreasing due to rising political and economic uncertainty. However, the desire for more affordable, individualised,

and customised clothing is predicted to increase in the coming years. Over the past few years, consumers have become more particular and demanding. They constantly have high standards for high-quality goods, personalised experiences, and quick service at reasonable costs. Customers select apparel based on their values and personal style (Rath, 2015).

2.5   Customisation and co-creation

According to Seo and Lang (2019), co-design initiatives are one example of the products and services that industries work to enhance the customer experience (Fiore et al., 2004). For example, Zazzle's website attracts 24 million views monthly and offers a wide range of customisable products, including business cards, T-shirts, blankets, and skateboards. Spreadshirt also provides a 'creating custom products' environment by allowing customers to personalise a range of goods, including aprons, T-shirts, and baby clothes. Customers can choose specific decorative aspects throughout the customisation process from a predetermined set of options, such as colours, fits, and styles (Vivek et al., 2012).

A product made to order with the customer's active involvement may give them memorable moments and experiences, deepening their connection with their purchase (Mugge et al., 2009). These emotionally laden purchases are rarely thrown away, regardless of whether they break or are not aesthetically appealing. Govers and Mugge's (2004) theory is that customers give these distinctive products a sense of identity by treating them meticulously and retaining them for extended periods. Customers who participate in the design process can produce one-of-a-kind products and well-fitting clothing. According to Mugge et al. (2009) and Yeung et al. (2010), these consumer-driven creative processes can provide distinctive fashion items and joyful experiences.

Pech and Vrchota (2022) state that innovative customisation and mass personification production have recently emerged as new trends in Industry 4.0 manufacturing. Through digital technologies and e-commerce, mass personification considers each customer's unique needs and enables them to customise the product (Wang et al., 2017). Innovative customisation plays a pivotal role in making consumer products customisable. It involves providing astute co-design toolkits to consumers (Ernest-Jones, 2013). Product customisation, a process that tailors' goods to each customer's preferences, can be seamlessly integrated into products using advanced co-design user toolkits and computer platforms or components (Blecker & Friedrich, 2007; Benade, 2018).

2.6 African and South African Trends in Fashion and Apparel Purchases

Venter and Chuchu (2016) determined that certain personality qualities affected fashion adoption by Johannesburg youth. The study revealed a positive relationship between the desire for distinctiveness and fashion consciousness. The likelihood that a person will embrace a new fashion style increases with their level of fashion consciousness. Similarly, the more an individual needs uniqueness, the higher the probability they may contemplate embracing a novel fashion style.

According to earlier studies by McAlister and Pessemier (1982) and Tian et al. (2001), those who aspire to social status are generally more receptive to new fashions. Furthermore, the research showed a negative correlation between new fashion trends and masculinity. Consequently, it follows that those more focused on femininity are more likely to embrace the latest fashion trends.

Additionally, according to Kotler et al. (2016), South Africa is among the nations with the most significant cultural diversity globally, and each unique culture has its distinctive fashion sense. The purchasing habits of clothes store clients are also influenced by culture (Apeagyei, 2011). In a survey conducted by Apeagyei (2011), about 70% of participants said that their clothes reflect their lives, which are connected to their culture. According to a study by Donthu and Yoo (1998), customers' expectations regarding their purchasing are influenced by their cultural orientation, suggesting that their culture impacts their purchasing behaviour. A Nigerian study found that cultural variables significantly affect consumers' purchasing decisions (Lawan & Zanna, 2013).

Furthermore, a study by Kruger and Rootman (2017) concluded a robust positive correlation between buying behaviour and cultural attire in the South African retail apparel industry. Consequently, the degree to which the apparel in retail establishments aligns with the cultural preferences of their clientele influences their purchasing decisions. This suggests that respondents are drawn to purchasing apparel associated with and representative of their culture.

2.6.1 The impact of Covid-19 on African and South African trends of fashion and apparel purchases

According to Kempen and Tobias-Mamina (2022), the Covid-19 pandemic that struck South Africa in March 2020 forced the closure of numerous clothing stores and altered the purchasing

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habits of its citizens. The retail sector's importance to the economy of a developing nation like South Africa depends on its ability to adjust to changing customer demands brought on by the pandemic while maintaining its financial viability. Customers switched to online purchasing during Covid-19, which led to a rise in online fashion sales across Africa (Vogue Business, 2020). Of South Africans, 56% made more online fashion purchases (The Engagement Bureau, 2020). Moreover, with Covid-19 in 2020, South Africa's top online shopping category was fashion (Deloitte, 2021).

2.6.2 Trends of customised apparel purchases in Africa and South Africa

Customised clothing production continues to exist in South Africa, mostly in the form of bespoke clothing, and many South Africans are still commissioning custom-made clothing for special social or cultural events from small and medium-sized enterprises in the clothing industry (Mhlanga, 2022). The need left by formal players in the market is filled by tailors, particularly when creating custom-fit traditional clothing. The distinctive body types of African women are frequently not accommodated by ready-to-wear items, which supports the significant market presence of tailors specialising in bespoke apparel (Euromonitor, 2024).

Lupini (2022) wrote a Business Live article stating that a full-service market research firm, KLA, recently surveyed more than 250 consumers about the factors impacting their purchasing decisions and how digitisation has changed their expectations of shopping. Consumers are searching for ways to customise and personalise their purchases, be a part of the brand, and engage in-store experiences as they consider the future and how to stand out in the sector.
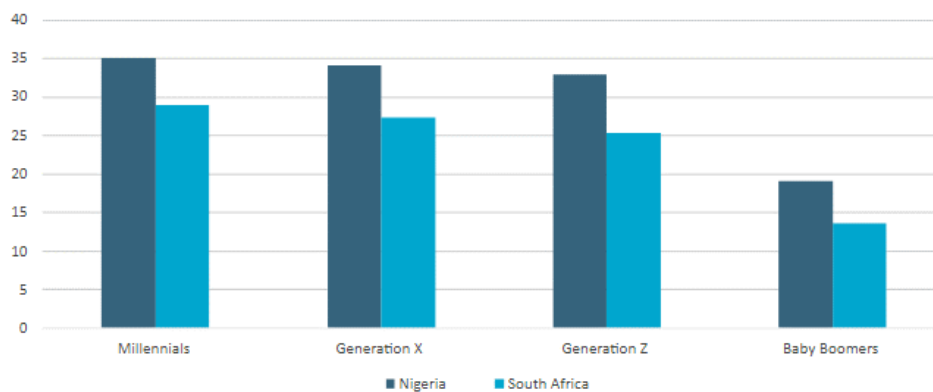
Figure 2-1 Personalised and tailored shopping experiences in 2023: Nigeria and South Africa (Euromonitor, 2024)

Custom tailoring is still considered the primary source of clothing manufacturing in Ghana, and Ghanaians prefer custom tailoring to ready-to-wear clothing based on its affordability. Most roadside dressmakers in Ghana still have a meagre market value and dominate the fashion industry (Honu et al., 2020). According to these authors, 40% of respondents thought their custom-tailored clothes were excellent, 35% thought they were good, and 25% thought they were reasonable. It is an excellent indication of the calibre of made-to-order clothing.

Honu et al. (2020) found that most (95%) respondents were satisfied with the custom-tailored products they purchased. Furthermore, 55% of the respondents preferred custom-tailored apparel due to its high quality.

These findings indicate that, in Ghana, the primary reason for the preference for custom-tailored clothing is superior quality, which leads to high customer satisfaction. The lack of availability of custom-tailored apparel suggests they have yet to be produced in large quantities. One of the biggest problems with custom-tailored clothing is delayed delivery. However, because ready-to-wear is more readily available than custom-made apparel, customers prefer it.

2.7 Digitisation in the Fashion Industry

The increase in digitisation represents a critical transition in the competitive landscape (Kotler et al., 2017; Mulhern, 2009). Consequently, the digital and apparel industries are becoming closely interconnected. Digital platforms and marketing strategies are becoming more prevalent in the fashion industry. E-commerce development has given rise to many new companies and allowed businesses to engage with clients through virtual reality.

According to Sheth (2020), the rise in online purchasing could be related to the immediate aftermath of Covid-19, when the 'store comes home' phenomenon surfaced, altering the custom of visiting physical stores in favour of at-home delivery (Youn et al., 2021). Customers who had previously shopped both online and offline entirely shifted to shopping online during the pandemic, and those who had never done so before started to do so (Youn et al., 2021). Nonetheless, most customers crossed-shopped between offline and online channels during Covid-19, according to Bauerová and Bracíníková (2021), suggesting that physical businesses will continue to operate.

According to research from McKinsey and the BOF Fashion Survey of 2018 and 2019, mobile data traffic has surpassed desktop traffic, and half of the millennials spend more than three

hours on their smartphones (Elishar-Malka et al., 2015; Meen & Shen, 2016). This trend inspired several fashion firms to create mobile applications, allowing consumers to view websites tailored for small screens while purchasing directly from their smartphones. Mobile payments are expanding yearly as more customers understand the convenience of phone purchases.

2.7.1   3D mobile scanning

According to Idrees et al. (2023), consumers now have greater access to mobile scanning through smartphones and other smart devices. Mobile scanning technology combines deep learning and computer vision with proprietary statistical modelling, machine learning, artificial intelligence (AI) and 3D matching (3DLook, 2022; 3DMeasureUp, 2020; Krafft et al., 2020). Computer vision and deep learning algorithms evaluate the smart device's photographs, allowing identification of the human body against any background.

Statistical modelling generates data to produce a 3D human avatar and extract measurements. This modelling tends to be proprietary. Mobile scan programmes can detect body cues and measurement data, including length, girth, height, width, surface area, body fat percentage, and circumference. While some mobile scanners scan every part of the body, others only scan specific body sections (3DLook, 2022; TechMed3D, 2020). Gill (2015) states that users digitally measure themselves at home by taking 3D images of their bodies with mobile phones. Unspun, a custom denim brand, is a well-known industrial example that uses 360-degree mobile scanning technology to create tailored jeans (Pei, 2022). According to Strunevich et al. (2020), mobile applications that use 3D body scanning and body data collecting and reconstruction are designed to address the issue of sizing when purchasing online.

According to the research, mobile body measuring technology is not just a component but a transformative tool for improving and simplifying the customised fashion process. It was regarded as significant to very important by 75% of the respondents. Merely 9% of the participants disagreed with this technology regarding personalised fashion. The results of earlier research, in which participants agreed that digital fitting technology is practical and increases trust in the online purchasing experience by guaranteeing better-fitting clothing, are consistent (Hwangbo et al., 2020). The respondents' favourable opinion of mobile body measuring technology indicates that they know its potential to deliver individualised measurements, enhance the overall customer experience, and reduce the rate of returns due to ill-fitting garments (Ng & Mok, 2023).

Furthermore, Drees et al. (2020a) studied Pakistan's unstitched clothing market to advance bespoke fashion. Using 3D body scanning smartphone applications for online custom shopping received excellent feedback from the respondents. The participants expressed their satisfaction with the home scanning process, finding it comfortable and convenient to wear their custom outfits using digital body measurements. However, they stressed the importance of simple and user-friendly technology (Idrees et al., 2020a). Likewise, the experiences of Saudi Arabian women customers with 3D body scanning technology and the acceptance of fashion e-commerce applications have been explored (Idrees et al., 2023).

Additionally, customers' favourable opinion of mobile body measuring technology suggests they are aware of its potential to offer customised measures and enhance the precision of apparel fit. This technology allows retailers to provide customers with a more personalised and bespoke shopping experience, increasing customer happiness and decreasing returns and exchanges (Ng & Mok, 2023). This technology will also benefit small businesses and custom-made clothing manufacturers to grow their clientele by offering virtual body measuring (Lim & Jafari, 2021).

On the other hand, the risk of body information security poses a significant challenge for 3D body scanning companies regarding methods for maintaining the security and privacy of all personal information (Bindahman et al., 2012; Kim & Labat, 2013). The term 'body information security risk' describes individuals' fears about being unable to manage how their personal data is collected and used within the information system (Bindahman et al., 2012).

2.7.2   The benefits of 3D mobile scanning

According to Strunevich et al. (2020), technology that employs mobile applications to measure and scan the body is entirely practical, quick to use, and particularly relevant in various potential applications, including fitness, medicine, made-to-measure clothing, virtual try-ons for customised outfits, and personalised clothing.

Customers may select their perfect size and style with mobile 3D body scanning technology, lowering return rates (Jain et al., 2018; Apeagyei, 2010). According to Bye and colleagues (2006), a smartphone scanner is a valuable device that increases consumers' accessibility and convenience during purchasing. Customers can use their personalised avatars to digitally choose and try various things from the comfort of their own homes (Idrees et al., 2023). It is

no longer necessary to try items in-store to see how they will appear on the wearer due to 3D body scanning technology.

Standard sizing charts for ready-to-wear clothing increased fabric waste and left customers unhappy with fit and size (McKinney et al., 2017). Reducing fabric waste and creating a system that meets each customer's demands are two ways to accomplish sustainability (Nayak & Padhye, 2016). Developing a customised, sustainable system that guarantees equal treatment for people of various sizes and shapes is possible with the help of body scanning technology (Idrees et al., 2023). All body shapes and sizes could benefit equally from 3D body scanning technologies. As a result, low return rates and more targeted customer size selection or product creation are anticipated (Gill et al., 2023).

2.8   Fit Concerns when Purchasing Clothing in South Africa

According to Kahn (2008) and Gribbin (2014), South African clothing manufacturers and retailers are unaware of the evolving body shapes and sizes of South African women and continue to produce clothing for the hourglass figure type using data adapted from the 1940s (John, 2007; Khan, 2008; Milliam, 2017). According to Mbandazayo et al. (2014), Muthambi (2012), Ola-Afolayan and Mastamet-Mason (2013), Pandarum and Yu (2015), Sokhetye (2016), and Strydom (2006), apparel produced for South African women was based on European and American sizing methods. Consequently, the apparel may not adequately fit South African female customers.

Muthambi (2012) developed an experimental size chart ranging from 30 to 38 for 60 young African women aged 18 – 25 with triangular body types. According to the findings, South African women with triangle shapes typically had slightly shorter vertical measurements. Moreover, a study by Bailey (2020) to assess the opinions and trust regarding women's apparel found that petite women were not sufficiently catered for in terms of well-fitting clothing and were dissatisfied with the off-the-shelf petite female apparel offered by retailers.

In a 2013 tape measure study, Ola-Afolayan and Mastamet-Mason presented a tailored size chart (ranging from 16 to 24) for 50 plus-sized, pear-shaped South African females aged 25 to 55. Makhanya et al. (2014) noted that these distinctive pear-shaped features were present in almost 60% of the country's university students at the University of Pretoria. The results showed that South African women's tailored size measurements and the body measurements shown in size charts used to manufacture their clothing differ significantly, indicating the need

for a size chart for the pear-shaped female. Women with this body type often have trouble finding clothes that fit; when buying coordinated styles or wardrobe suits, they are frequently required to purchase two sizes for the upper and lower torso.

Manufacturers use standardised body measurements and common garment size categories to cater to the average female consumer (Bye et al., 2006). However, female consumers with body shapes that differ from the standard measurements of mass-produced apparel encounter problems fitting into clothing sold in retail stores, as there is limited room for variability in body types within these general categories of idealised body types (Park et al., 2009; Adamski et al.,2015; Ola-Afolayan & Mastamet-Mason, 2013; Ola-Afolayan & Zwane, 2019).

2.9 Gaps in the Literature

- The literature advises that various size charts should be developed to accommodate multiple body shapes. However, as South Africa and the Western Cape have a diverse population, as stated in the literature, it would be challenging to produce a size chart suited for the entire population.
- There is a significant gap in the South African market. Despite the availability of 3D mobile body scan technology, no literature indicating the existence of a platform that allows customers to purchase customised and personalised apparel online could be found.

2.10 Summary

The fashion and apparel landscape are changing rapidly due to all these trends and technological advancements. As revealed in the literature, as customers' standard of living increases, self-realisation and the inclination to individualise become more significant. The objective of this chapter was to identify the gaps in the literature by offering a thorough analysis of the body of knowledge related to this research study. The next chapter outlines the research methodologies used to achieve the research objectives.

CHAPTER 3   RESEARCH METHODOLOGY

3.1 Introduction

The relevant and most recent literature on the phenomenon was discussed in Chapter 2. The gaps in the identified literature were emphasised and further examined in the following subsections concerning the study questions and objectives. The research design and methodology used in this study are covered in this chapter. With a quantitative research approach and a descriptive research design, as supported in Chapter 1, the study adopts a positivist paradigm. This chapter also covers the research design, including population, sampling frame, sample size and method, data collection tools, and data analysis. Furthermore, the pilot testing, the reliability, validity, and ethical considerations of this study conclude this chapter.

The study's key objective in this chapter is to determine the impact customised and personalised apparel has on online consumers.

3.2 Research Philosophy

Given the ontological perspective of the phenomena as a reality existing apart from all perceptions and interpretations inside and outside the investigation, this study took a positivist approach. The underlying presumption is that the phenomena is a singular, objective reality amenable to scientific measurement and understanding. Thus, drawing from Park et al. (2020) and Al-Ababneh (2020), the objective reality involves a measurable phenomenon that can be quantified and analysed statistically, such as the online customisation and personalisation of apparel for consumers looking for outfits to reflect their personality and unique taste.

3.3 Research Design

This study's research design is an organised framework created to strategically investigate and gather relevant and precise responses to the research questions efficiently and effectively. The plan is deliberately and precisely constructed and executed (Kerlinger, 1986; Kothari, 2004; Goundar, 2013; Creswell, 2014). Thus, drawing from Sekaran (2003) and Asenahabi (2019), this descriptive research design is conducive to the study as it can describe the phenomenon by analysing numerical data to make sense.

3.3.1 The inappropriateness of an exploratory research design for this study

Sekaran (2003) states that exploratory studies are conducted when no information is available, or little is known about how comparable research has been conducted in the past. An exploratory study contributes to a deeper understanding of the topic's nature because it is one of the few studies conducted on the same subject. Stebbins (2001) states that it is the initial stage of adopting a new perspective and frequently entails purposefully immersing oneself in the situation to obtain a basic understanding. This study's flexible design (Robson, 2002) aids in clarifying and comprehending an undefined problem. According to Saunders and colleagues (2009), there are three primary methods by which it can be carried out: searching the literature, speaking with experts, and holding focus group interviews. Therefore, an exploratory design is not appropriate for this study, as it aligns differently with the questions and objectives it seeks to address.

3.3.2 The inappropriateness of an explanatory research design for this study

Robson (2002) defines explanatory research as explaining a situation or issue under investigation without necessarily establishing an association between the two. It also explains patterns associated with the phenomenon under study. This research could have a fixed or flexible design. An explanatory investigation examines the relationship between the variables of a phenomenon to establish a causal connection between variables (Robson, 2002; Saunders et al., 2009). Other writers refer to explanatory research as hypothesis testing. Testing hypotheses is commonly used to clarify the nature of specific interactions, demonstrate distinctions between independent variable groups, account for dependent variable variance, or predict outcomes (Sekaran, 2003).

3.3.3 The appropriateness of a descriptive research design for this study.

Aityan (2022) and William (2007) explain that descriptive or statistical research involves gathering factual data (statistics) to describe real-world objects, persons, situations, behaviour, relationships, events, and phenomena. The data is usually collected from a relatively small sample to draw implications about a population (Aityan, 2022). Descriptive statistics data is summarised visually using box plots and histograms or quantitatively using simple metrics like means or percentages. (Kulkarni & Kaliyadan, 2019).

A descriptive research style was chosen for this study because it aims to generate findings in a predicted manner to comprehend various characteristics or undetected behaviour (Bairagi & Munot, 2019).

3.4 Research Method

According to Crotty (1998), methods or strategies for collecting and evaluating data relevant to a particular research question or hypothesis constitute the fundamental components of research methodologies. The research method covers the phases of commonly held assumptions, including data gathering, analysis, and interpretation methods. The features of the phenomenon being studied and the underlying philosophical presuppositions impact the research methodology selection. Three approaches to data collection are available for research methods: mixed-method, quantitative, and qualitative (Saunders et al., 2009).

3.4.1 The inappropriateness of a qualitative research approach for this study

Ahmed et al. (2019) describe qualitative research as an exploratory method of enquiry that uses observation and interpretation to ascertain people's thoughts and feelings to build knowledge of human behaviour, experience, attitudes, intentions, and motives. It is an *ad hoc* approach to studying extremely complicated phenomena. Case studies, grounded theories, ethnographies, historical studies, and phenomenology are examples of qualitative research. In-depth interviews, group discussions, participation, and observations are a few examples of the non-structured procedures employed in the research (Ahmed et al., 2019; Asenahabi, B, 2019).

Qualitative research finds and explores concepts used in ongoing activities using inductive reasoning and a subjective approach. With an open-ended aim to create significance or reality from participants' perspectives and experiences, a qualitative research design generates non-quantifiable data (Merriam, 2009). Qualitative research is, therefore, not appropriate for this study.

3.4.2 The inappropriateness of a mixed-method research approach for this study

According to Crocker and Heigham (2009), the mixed-method approach combines quantitative and qualitative research techniques based on the research questions and objectives.

Depending on the integration procedure selected, the focus could be placed equally on both techniques or only on one. One may argue that mixed-method research might be appropriate, but given the study's aim and objectives, applying both qualitative and quantitative methods would unnecessarily introduce another dimension to the study, which needed to be structured (Andrew et al., 2020).

3.4.3 The appropriateness of a quantitative research approach for this study

According to Ahmed et al. (2019), quantitative research applies methods from the natural sciences to produce factual evidence and numerical data. It illustrates the causal relationship between two variables by using statistical methods.

Empirical research, which can be measured carefully and precisely, is another name for it. Several units of measurement can be used to rank, classify, or measure the data the researcher collected. Building raw data graphs and tables with the aid of quantitative research can make it easier for the researcher to analyse the results.

As outlined in Chapter 1, the ontological position adopted for the scientific enquiry of the phenomenon deems the quantitative research method as the most suitable. This method enables the study to systematically obtain empirical data using prearranged tools (Creswell, 2003). The research at hand, being evidence-based and employing an objective approach, further underscores the suitability of a quantitative research method to describe the influence of customised and personalised apparel online (Ahmed et al., 2019).

3.5 Research Sampling Design

The research sampling design consists of the following steps: identifying the intended population, determining the sample frame and sampling technique, ascertaining the sample size, and executing the sampling procedure by gathering and analysing data (Etkan & Babtope, 2019). This section describes the research sampling design to answer the study's questions and achieve the objectives.

3.5.1 Population

Deshpande and Girme (2019) define the target population as the initial step in the research design. The population is the total number of participants a researcher examines before experimenting.

It is a segment of the entire universe (Bairagi & Munot, 2019). When the researcher employs a descriptive research design by analysing quantitative data, the population suitable for and appropriate for the research project must be considered.

The study was conducted on students, lecturing and administrative staff in the Business and Management Sciences Faculty at the selected university in Cape Town. The population targeted was divided into four age categories: - 18 to 24, 25 to 35, 36 to 45, and 46 and above. The total population specified by the department is 13409: 12936 students, 348 academic staff, and 125 administrative staff.

3.5.2   Sampling frame

Bairagi and Munot (2019) state that the sampling frame identifies a list of people from a selected sample of the intended population. This precise, comprehensive representation of the population is essential to preparing it.

The sample frame for this study was all who qualified for the research and fell into the relevant age categories in the Business and Management Sciences Faculty at a selected university in Cape Town, South Africa.

3.5.3   Sampling method

According to Bhardwaj (2019), sampling is a collection of techniques used to choose a portion of the target population to create a statistical overview of the population of interest, answer the study's questions and accomplish the objectives. When assessing the complete population is not feasible, researchers turn to sampling. Thomas (2021) states, "Sampling enables us to draw generalisations based on careful observations". Even though it is a subset, its affordability, accessibility, and ease of use make it a suitable sample for the research (Bhardwaj, 2019). The two sampling technique categories are non-probability, non-random sampling, and probability or random sampling (Thomas, 2021).

Non-probability sampling method

Each participant in the research population has no known chance of being selected for the sample when non-probability sampling is used (Bhardwaj, 2019). There are competitors whose chances of being chosen are either infinitesimal or incalculable. Convenience, purposive, quota, snowball and consecutive sampling are examples of non-probability techniques.

(Thomas, 2021; Bhardwaj, 2019). Non-probability sampling techniques are typically employed in qualitative research (Thomas, 2021). Therefore, it will not be used for the study as it requires its participants to be known.

Probability and stratified random sampling methods

According to Bhardwaj (2019), **probability sampling**, sometimes called random sampling, is used when a population is a standardised group, every participant in the group is the target respondent in the research, and the probability of each participant being selected is high. The probability sampling methods are simple random, stratified random, systematic, cluster and multistage sampling. (Bhardwaj, 2019; Bairagi, & Munot, 2019). The research investigation in this study used probability sampling, as the participants in each group were known and used for the research analysis. Each participant's data describes the need for customisation and personalisation in Cape Town.

Bhardwaj (2019) and Thomas (2021) state that the **stratified random sampling method** divides the population into strata, which are subgroups defined by similarities or a specific category. The participants are randomly selected in each stratum. The sampling technique is used when the population is heterogeneous (Bairagi & Munot, 2019; Thomas, 2021). Bhardwaj (2019) further states that the advantage of this technique is that it increases the accuracy of results, and smaller sample sizes can also give good results using strata. Furthermore, stratified random sampling is best suited for this study, as it is challenging to access the sample population.

The study implemented a stratified random sampling method, dividing the population into age categories. Each age category represents a stratum in the research.

Sample size

According to Singh and Masuku (2014) and Mweshi and Sakyi (2020), determining the sample size involves selecting how many participants to include. A crucial research study component is to conclude the population from a sample. It must be appropriately computed to ensure adequate sample size for obtaining precise and broadly applicable results. Specific knowledge regarding the population being studied research is required to select an acceptable sample size. In quantitative research, more significant sample sizes are preferred. Generally, a sample that includes at least 100 members of a given population is preferable. Statistically, a sample under 30 is considered small (Mweshi & Sakyi, 2020).

This study used a sample size of 100 participants. However, only 27 responses were received. The sample size selected for each age category is not proportionate to the population of each stratum (Bhardwaj, 2019). However, it has approximately the same number of participants in each age category, as the research requires an equal representation of each age category.

3.5.4   Data-collection instrument

A vital part of the entire research process is data collection. Data are measured facts that serve as a foundation for inference, computation, or decision-making. The objective is to conclude the data (Thomas, 2021). Primary and secondary categories are used to separate the data. Secondary data is information from earlier sources, such as theses, project and census reports, journals, published books, and similar sources. Observation and surveys are the two primary methods of data collection used by researchers as they offer first-hand knowledge (Thomas, 2021).

A self-administered online survey was employed to attain the data because it was inexpensive and efficient. This method allows the possibility of obtaining highly accurate data and analysing the results by quickly entering the received data into the software. Furthermore, it enables a more objective analysis (Taherdoost, 2021).

Design of the survey questions

Thomas (2021) states, "survey methods are used widely in social sciences and management to assess prevalence, attitudes, and opinions on different subjects, especially in non-experimental studies such as cross-sectional". The structured questionnaire included one open-ended question for the participant's name and was not used to keep all participants confidential. The balance was close-ended questions, pre-coded to implement the work quickly and enable the participant to choose from two or more fixed options (Olsen, 2012). Three survey questions were dichotomous, offering two alternatives: yes/no (Thomas, 2021). The balance of closed-ended questions used the 5-point Likert scale. According to Taherdoost (2019), the Likert scale identifies the extent of agreement and disagreement with different claims regarding a particular attitude, item, person, or event. It is straightforward to understand and complete, easy to design, and likely to yield a very dependable scale.

The questionnaire comprised 16 questions. The cover letter presented the study and requested informed consent. The respondents' demographic data was collected in the first section, followed by questions based on the study questions, objectives, and literature.

Pilot testing

According to Aithal and Aithal (2020), pilot testing comprises administering the online questionnaire, which allows many of the intended respondents to receive the completed questionnaire in an actual context. Conducting a pilot test enables the researcher to detect any challenges participants may have and amend the questionnaire to improve the data-collection tool. At this point, the questionnaire can be further improved to reduce statistical mistakes based on the planned statistical tests and validation of the pilot samples (Aithal & Aithal, 2020).

The supervisor examined the questions before the pilot test.

Ten trusted individuals conducted a small pilot test. The test results indicated that the Likert scale was unsuitable for all questions. Therefore, based on the recommendation that the researcher implement dichotomous questions, offering two alternatives, yes/no, should be used for specific questions (Appendix). The questionnaire was administered live once the format of the questions was finalised and approval from the supervisor was obtained.

The pilot test was designed with specific objectives. It aimed to evaluate the performance of the collection instrument in an actual setting, ascertain whether respondents tended to provide consistent answers to questions, identify questions that needed further explanation, and determine the flow of the questions. These objectives were instrumental in ensuring the effectiveness of the research methodology.

3.5.5   Data collection

The online survey was launched on 21 February 2024 and ended on 9 April 2024. An online survey application called Google Forms was employed. The researcher's supervisor received the link to the questionnaire. The supervisor then emailed the link to the students, lecturers, and academic staff in the Business and Administration faculty. The sample size aimed to achieve 100 responses for this study. However, the researcher had to accept only 27 responses to analyse the data due to time constraints.

3.5.6   Data analysis

Once the survey was closed, the data was transferred from Google Forms into Microsoft Excel, a spreadsheet application in the Microsoft Office suite that provides helpful features for gathering and analysing data (Thomas, 2021). The data was then coded in Excel, which

organises and manipulates data using a group of cells arranged into rows and columns, using the same fundamental characteristics as other spreadsheet programmes. Basic maths operations and statistical analysis were required (Thomas, 2021).

Given the research questions and objectives, the study employed a descriptive technique to explain and contrast characteristics using statistical data (Kulkarni & Kaliyadan, 2019). The gathered data was shown using graphs, tables, charts, and histograms, as displayed in Chapter 4. These visuals depict the link between the variables, allow generalisation where appropriate, and were used to report on the research findings.

3.6   Data Reliability and Validity

3.6.1   Reliability

Aithal and Aithal (2020) and Heale and Twycross (2015) state that determining a questionnaire's reliability confirms the results' consistency. Mellinger and Hanson (2020) **explain that determining reliability can distinguish genuine variations attributed to the** underlying construct from variability resulting from measurement error. Similar multiple measurements reduce measuring tool error and enhance the power and interpretation of later statistical analysis.

Mellinger and Hanson (2020) further state that reliability also enables one to compare survey instrument results across research projects more confidently, promoting theory development through replication. Many methods are used to determine the reliability of the scales used in empirical studies (Sürücü & Maslakçl, 2020). Test-retest reliability, alternate forms, and internal consistency testing are the methods most typically used.

The reliability of the measuring instrument's expressions is correlated with internal consistency. Along with evaluating the consistency of the items it contains, the evaluation tool examines how accurate it is in analysing a particular behaviour or attribute. The measuring tool's internal consistency is determined by the correlation between each of its constituent parts.

The most popular methods for achieving internal consistency are split-half, item-total correlations, and Cronbach's alpha value, with Cronbach's alpha being the most preferred (Sürücü & Maslakçi, 2020).

Aithal and Aithal (2020) state that test-retest reliability is achieved by repeating the study and giving the questionnaire to the same respondents at different times. The dependability of the results is then determined by comparison for similarities. However, memory effects are a shortcoming of this kind of reliability test. Sürücü and Maslakçi (2020) explain that the alternate forms approach uses two distinct measurement instruments to measure identical behaviour or quality. Apart from quantifying, instruments sharing the same content area must have equal items and comparable functionality.

Ten participants conducted a pilot test of the survey questionnaire to determine whether the questions were correctly phrased, were easy for responders to understand, and sparked their attention. Considering the comments received from the pilot test, two questions were amended from the Likert scale to dichotomous questions, offering two alternatives, ' yes/no', to improve the clarity of the questions and the reliability of the questionnaire.

3.6.2 Validity

Validity quantifies how well a measuring tool fulfils its intended purpose and whether it evaluates the behaviour or quality it is intended to measure (Anastasi & Urbina, 1997). According to Sürücü and Maslakçi (2020), the validity of the data is established by the significance and precision of the application of the data obtained from the measuring device as a result of the analyses. Whiston (2012) described validity as collecting data suitable for the measuring instruments' intended purpose.

Aithal and Aithal (2020) claim that questionnaire validity is assessing survey questions to determine their dependability. The extent to which the data encompass the study field is known as validity (Ghauri & Gronhaug, 2005). Furthermore, validation determines whether the deductions and conclusions from the questionnaire's answers are valid (Aithal & Aithal, 2020).

According to Heale and Twycross (2015), validity comes in three primary forms:

- Content validity refers to how well a research instrument measures a construct on all dimensions.
- Construct validity also refers to an instrument's ability to accurately measure the intended construct (Sürücü & Maslakçi, 2020).
- Criterion validity refers to how well a research tool aligns with other tools assessing the same characteristics.

The researcher guaranteed construct and content validity by analysing and evaluating the questionnaire with the supervisor as a research expert. The researcher pilot-tested the questions with ten people to determine whether they were relevant, made logical sense, and highlighted any discrepancies. The survey questionnaire's pilot further examined the respondents' ability to answer the researcher's questions.

3.7 Ethical Considerations

The research conformed with the ethical guidelines of the Cape Peninsula University of Technology:

- Acquiring a consent letter from the university to conduct the research.
- Obtaining ethical clearance from the university before collecting data.
- A consent form sent to the participants along with the online survey.
- A cover letter accompanying the online survey explaining the research study.

The respondents' personal information, such as their name and email address, was not used to protect their privacy. Therefore, all respondents are unidentified. Chapter 1 presents an extensive overview of the ethical considerations.

3.8 Summary

An extensive summary of the research design and methodology is provided in this chapter. The research design used in the study was descriptive, and the methodology was quantitative.

The research employed a probability-stratified random sampling method. Students, lecturers, and academic staff from the Business and Administration faculty participated in the survey. Google Forms was used as the online questionnaire tool. The supervisor distributed the survey link via email to the relevant participants, and the survey was conducted from 21 February 2024 to 09 April 2024. This chapter covered the research methodology used to carry out the study and achieve the research objectives. The next chapter presents and discusses the investigation's findings.

CHAPTER 4   FINDINGS AND INTERPRETATIONS

4.1   Introduction

The research approach and methodology used for the study were discussed in the previous chapter. The purpose of this chapter is to present, describe and discuss the research findings. The study's findings are presented using descriptive data in graphs to answer the research questions. The chapter concludes by discussing the research objectives and offers recommendations for the following chapter. As discussed in Chapter 3, the online survey was emailed to the selected Cape Town University, South Africa participants. A total of 100 participants were chosen to partake in the survey. However, only 27 responses were obtained. A descriptive technique was used to analyse the collected quantitative data using Microsoft Excel.

4.2   Demographics of the Respondents

The demographic information of the respondents was captured in the first four questions of the online questionnaire. Although the first question requested the participant's name, it was stated that it would not be used in the survey to keep all participants anonymous. The three demographic questions that followed were the age category, race, and gender. All demographic questions were required to be answered, except the names of the respondents.

4.2.1   Respondents' age

Figure 4.1 illustrates the percentage of each age category. The question was asked to determine which age group had the highest impact on customised and personalised apparel online. The largest group (37%) was 25-35, followed by 46 and above (33.3%) and 36-45 (25.9%). Only 3.8% of the population was between 18 and 24. According to Setwaiwan et al. (2021), people between 17 and 40, regardless of their gender, shifted from previously visiting the store to shopping online as they have access to social media and are more updated on current trends. Most people in their 50s and above are likelier to purchase from the store since they are unfamiliar with the online world (Setwaiwan et al., 2021).
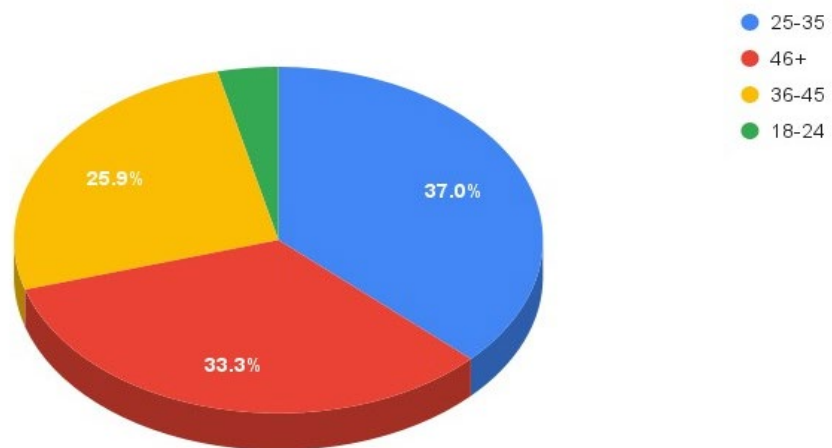
Figure 4-1 Age of respondents

4.2.2 Respondents' race

The pie chart in Figure 4.2 shows the most significant race group of the population as black (70.4%), followed by coloured respondents (14.8%), other (11.1%) and 3.7% as white.
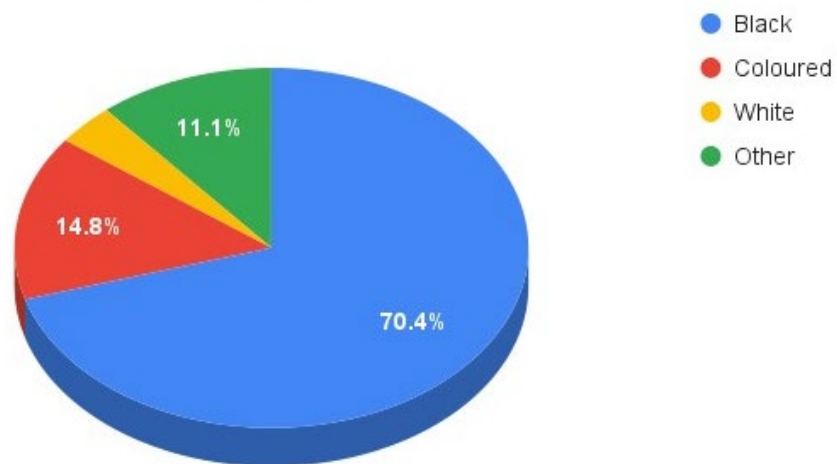
Figure 4-2 Race of respondents

4.2.3 Gender of respondents

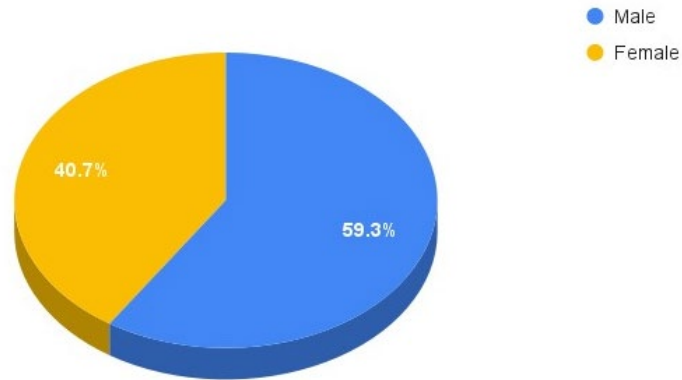Of the entire population, 59.3% of the respondents were male, and 40.7% were female (Figure 4.3).

Figure 4-3 Gender of respondents

4.3 Purchases of Customised and Personalised Apparel from a Dressmaker/Tailor

Figure 4.4 shows that 56% of respondents do not purchase customised and personalised apparel from a dressmaker/ tailor, and only 44% do. The results do not correspond with the literature indicating that customised apparel production continues to exist in South Africa, mainly in bespoke clothing (Mhlanga, 2022).
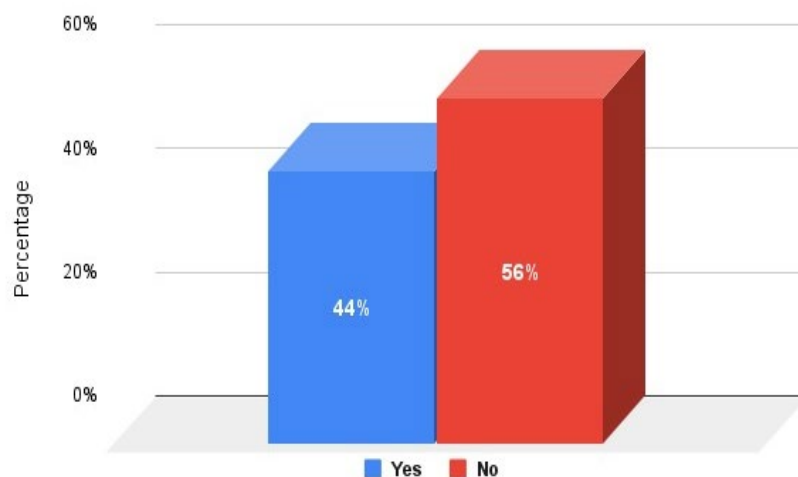

Figure 4-4 Customised, personalised apparel purchased from a dressmaker/tailor

4.4 Finding a Dressmaker/Tailor nearby.

Figure 4 illustrates that most of the population (48%) can find a dressmaker/ tailor nearby. However, 33% of the population still cannot find a dressmaker/ tailor nearby, substantiated by Honu et al. (2020), who found a lack of availability of customised apparel because ready-to-wear is more readily available and customers prefer it. The 19% of respondents who did not answer the question were those who did not purchase customised and personalised apparel from a dressmaker/ tailor.
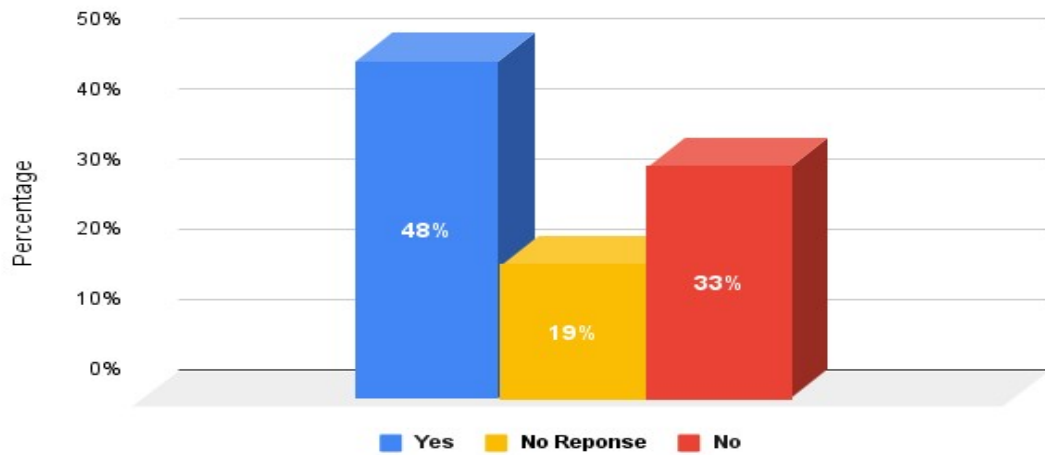

Figure 4-5 Finding a dressmaker/tailor nearby

4.5 The Convenience of Purchasing Clothing from a Dressmaker/Tailor

An equal divide of the population believes purchasing customised and personalised apparel is convenient and inconvenient (Figure 4.6). The one respondent who omitted to answer the question does not purchase customised and personalised apparel from a dressmaker/tailor. As most of the population, 48%, can find a dressmaker/tailor nearby, as mentioned above, it could be considered convenient, but it is inconvenient due to the lack of availability. Further research must be conducted to understand why or not respondents find purchasing customised apparel convenient.
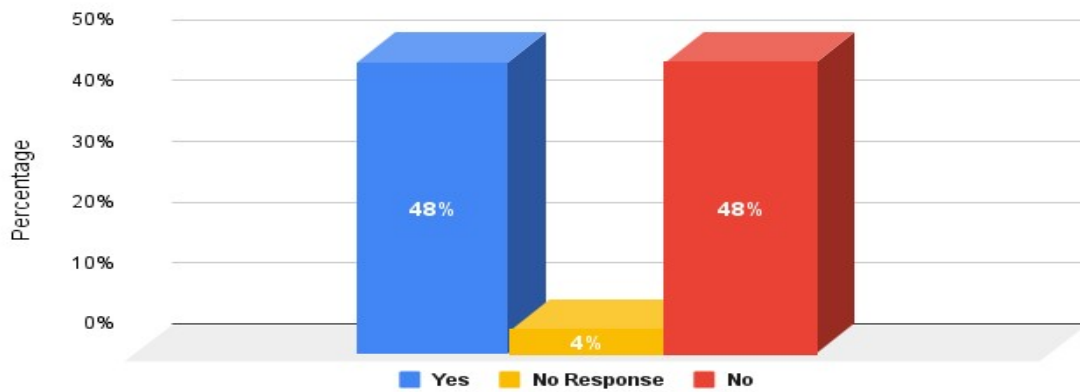
Figure 4-6 The convenience of purchasing customised and personalised apparel at a dressmaker/tailor

4.6 Customised and Personalised Apparel Made by a Dressmaker is Time-consuming

Figure 4.7 shows that 62.96% of respondents feel that purchasing customised and personalised clothing at a dressmaker is time-consuming, while 29.63% do not believe it is, making it convenient. As described in the literature by Honu and colleagues (2020), one of the biggest problems with custom-tailored clothing is delayed delivery.
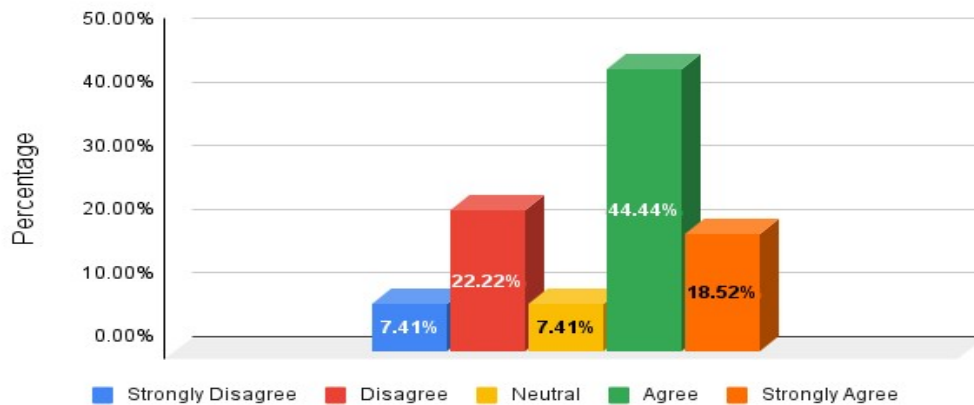
Figure 4-7 Customised and personalised apparel made by a dressmaker/tailor is time-consuming

4.7 Purchasing Customised and Personalised Apparel for Special Events

Of the population, 48.14% of respondents purchase customised, personalised apparel for special events, 33.34% do not, and 18.52% are neutral. The feedback aligns with the literature stating that "many South Africans are still commissioning custom-made clothing for special social or cultural events from small and medium-sized enterprises in the clothing industry" (Mhlanga, 2022). However, those who do not could find purchasing customised and personalised apparel for special events inconvenient and time-consuming and do not have access to a dressmaker/ tailor nearby.
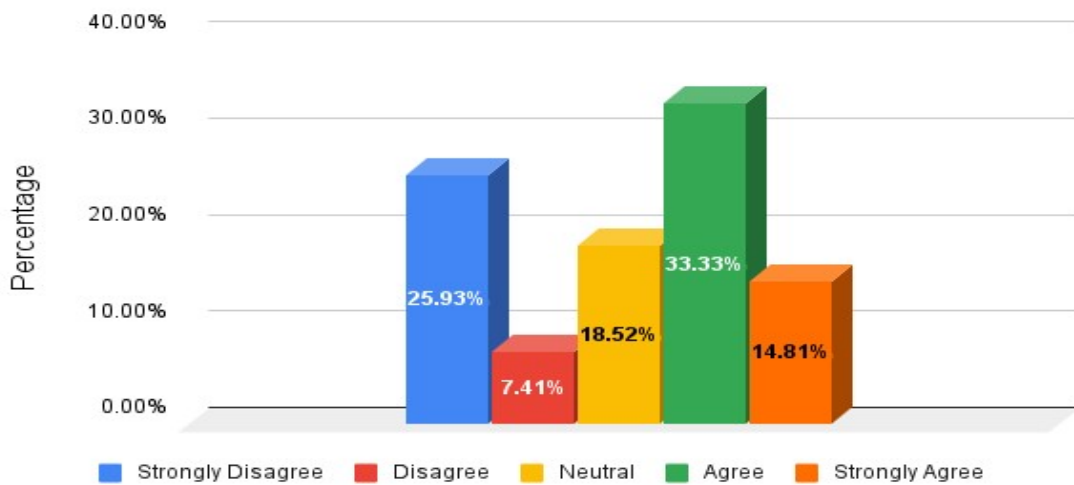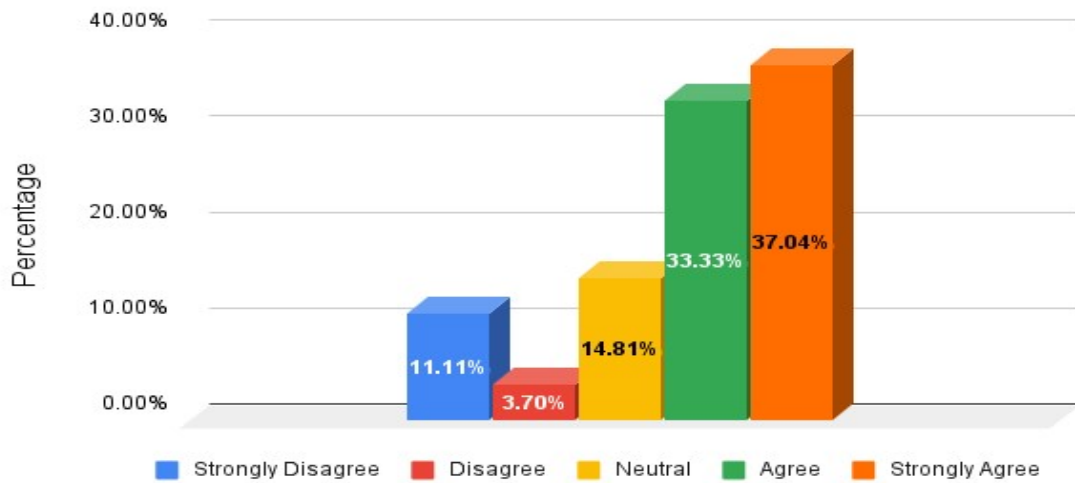

Figure 4-8 Purchase customised, personalised apparel for special events

4.8 Purchase Apparel at Retail Stores

Figure 4.9 shows that 70.37% of the respondents purchase apparel at retail stores, 14.81% do not, and 14.81% are neutral. Therefore, the feedback corresponds with the literature that indicates that 84% of sales take place in retail stores (Wang et al., 2022). The feedback is also in line with the statement made by Setwaiwan et al. (2021) that most people in their 50s and above are likelier to purchase from the store since they do not know the online world, as 87.5% (7 out of 8) respondents in the age category 46 and above purchase apparel in retail stores.

Figure 4-9 Purchase customised, personalised apparel for special events

Figure 4.9: Purchase apparel at retail stores.

Source: Survey data (2024).

4.9 Purchase Apparel Online

There was an equal divide (44.44%) between the respondents who purchased apparel online and those who did not. This is more or less in line with Setwaiwan et al. (2021), who mentioned that, according to several studies, 51% of consumers prefer to shop online, while 49% prefer to visit physical stores.
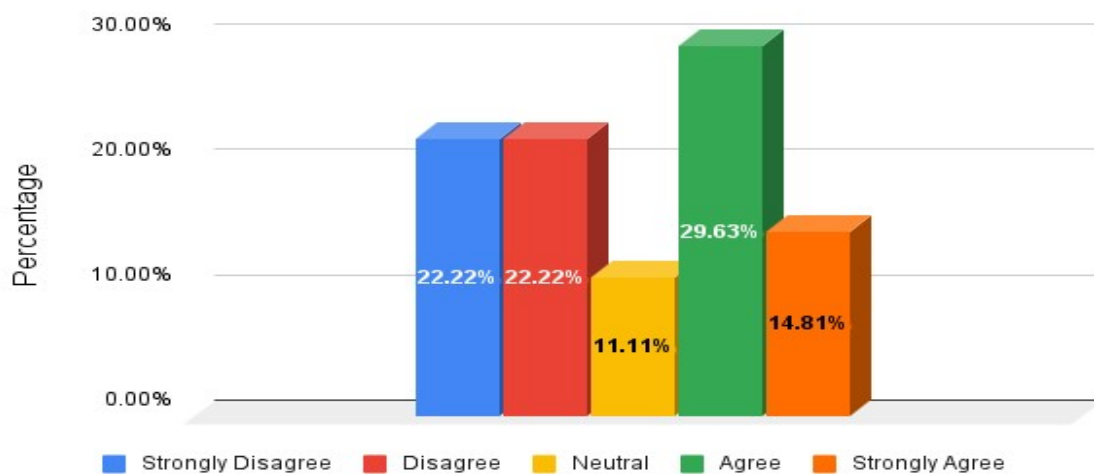
Figure 4-10 Purchase customised, personalised apparel for special events

4.10 Using the Size Chart or Indicator when Purchasing Online

Figure 1 illustrates that 55.55% of the respondents use the size chart/ size indicator when purchasing online, and 33.33% do not. However, the data reflects that 75% of the respondents who do not use the size chart/size indicator do not purchase apparel online. No previous or current literature quantifies how many consumers use the size chart/size indicator. Therefore, this is a gap in the literature.
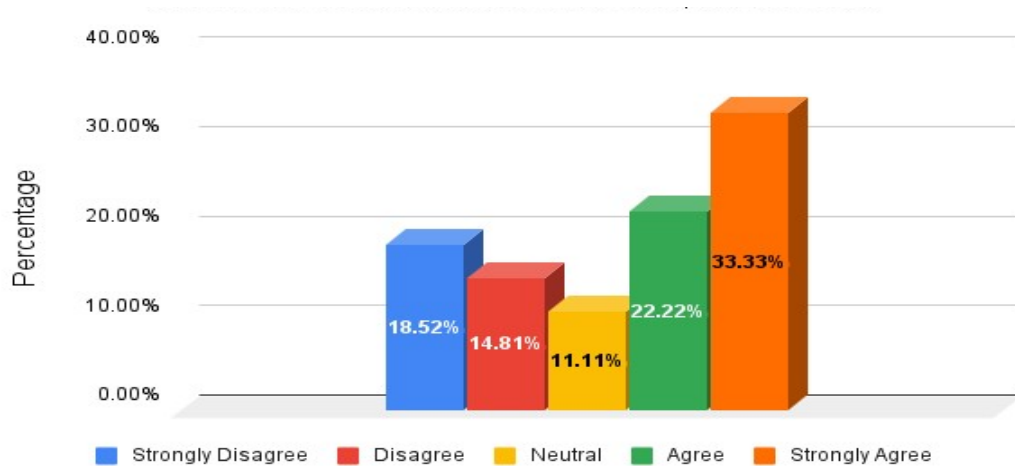
Figure 4-11 Using the size chart or size indicator when purchasing online

4.11 Acquiring Apparel Suited for Body Shape in Retail Stores

Most respondents, 62.96% can find apparel appropriate for their body shape in stores. However, 29.63% cannot, leaving a gap in the marketplace. Based on the literature, the distinctive body types of African women are frequently not accommodated by ready-to-wear items, which supports the significant market presence of tailors specialising in bespoke apparel (Euromonitor, 2024). Ola-Afolayan and Mastamet-Mason (2013) state that pear-shaped women often have trouble finding clothes that fit, meaning they are often required to buy two sizes, one for the upper and one for the lower torso.
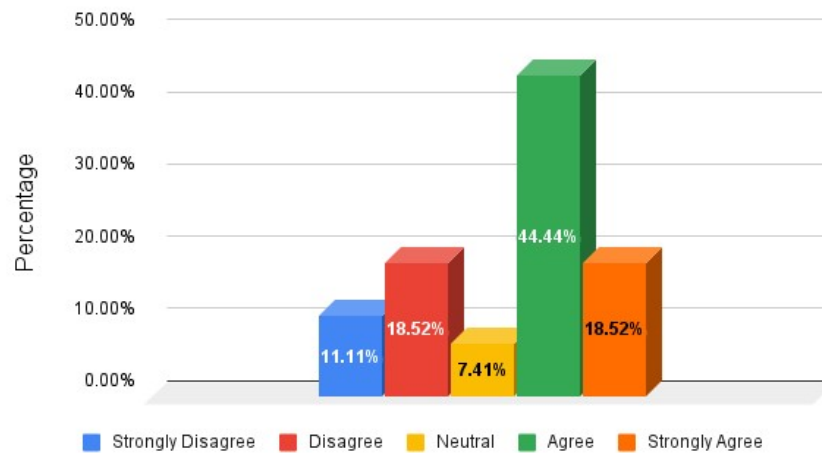
Figure 4-12 Acquiring apparel in retail stores suited for body shape

4.12 Purchase Customised and Personalised Apparel with 3D Mobile Body Scanning

Figure 4.13 illustrates that 59.26% of respondents would purchase customised, personalised apparel if a mobile device (app)/ online system could scan body measurements. This finding confirms the argument by Idrees et al. (2020a) that, in Pakistan and Saudi Arabia, where customers are pleased with 3D mobile scanning, they find purchasing their custom outfits using digital body measurements comfortable and convenient. However, 22.22% would not partake in 3D mobile body scanning, and 18.52% of the respondents were neutral. This 22.22% could be explained by the complexity of websites, security issues and lack of trust due to the likelihood of fraud or based on the lack of social interaction and connection concerning purchasing from a dressmaker/ tailor (Sameeha & Milhana, 2021; Raydiant, 2021). According to Bindahman et al. (2012) and Kim and Labat (2013), body information security risk poses a significant challenge for 3D body scanning companies regarding methods for maintaining the security and privacy of all personal bodily information.
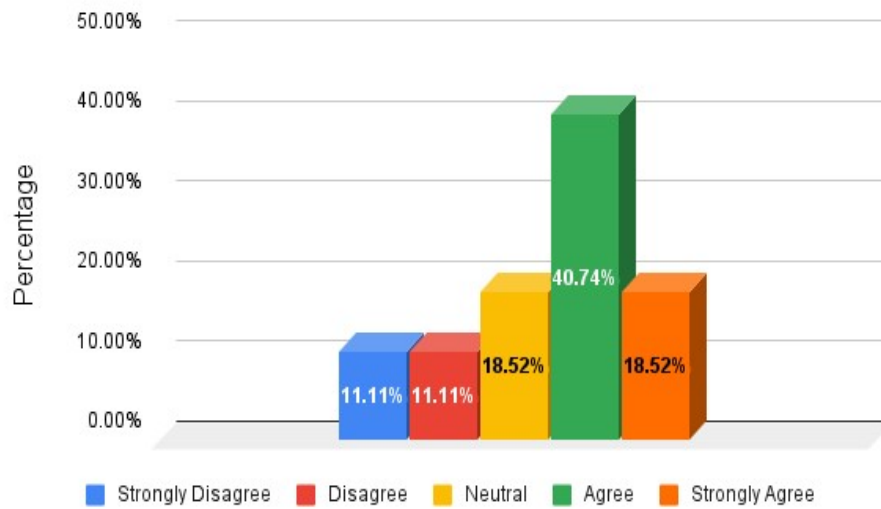
Figure 4-13 Purchase customised and personalised apparel with 3D mobile body scanning

4.13 Purchase More Customised and Personalised Apparel if More Accessible

Most (81.48%) of the respondents will purchase customised and personalised apparel if it is more accessible, 14.82% will not, and 3.70% are neutral. The above results confirm what Lupini (2022) states. KLA in South Africa recently surveyed more than 250 consumers regarding the factors that impact their purchasing decisions and how digitisation has changed their expectations for shopping. Consumers are searching for ways to customise and personalise their purchases. The literature also indicated that self-realisation and the inclination to individualise customers become more significant as living standards increase.
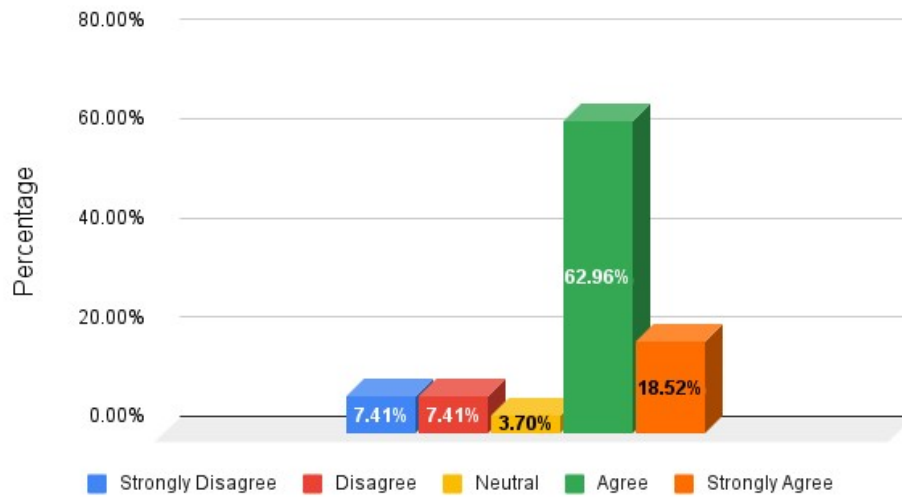
Figure 4-14 Purchase more customised and personalised apparel if more accessible

4.14 Co-Creation of Customised and Personalised Apparel Online

Figure 4.15 illustrates that 66.66% of respondents are willing to participate in designing customised and personalised apparel online, 18.52% of respondents are not willing to co-create, and 14.81% are neutral to the idea. According to Mugge et al. (2009) and Yeung et al. (2010), customers who participate in the design process can produce one-of-a-kind products and well-fitting clothing. These consumer-driven creative processes can provide distinctive fashion items, values, experiences, and joyful memories.
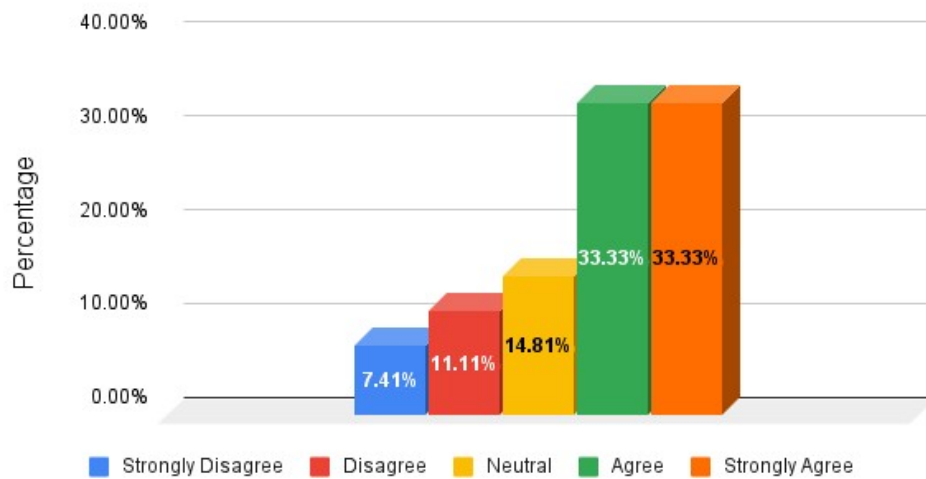
Figure 4-15 Co-creation of customised and personalised apparel online

4.15 Summary

The study findings were presented. This chapter described and discussed the results and conclusions of the research based on 27 responses to an online questionnaire. The main objective of the study was to determine if there is a need for customised and personalised apparel online. The following chapter concludes the research study and provides recommendations based on the findings.

CHAPTER 5   CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The previous chapter discussed the research findings obtained from an online survey. These findings were described comprehensively using a descriptive technique to analyse the data quantitatively. This chapter concludes the research study. It discusses the summary of the previous chapters, revisits the research objectives in detail based on the research questions and provides an overview of the study's limitations. The study's recommendations and future research are explained.

5.2 Summary of the Chapters

Chapter 1 contained an introduction and background to the research problem, followed by a statement of the research problem and the rationale for and significance of the study. The research aims, questions, objectives, paradigm, method, and design were discussed. The research methodology was also addressed, and the ethical considerations and an outline of each dissertation chapter concluded the chapter.

Chapter 2 entailed a comprehensive literature review of current global trends in fashion and apparel, including traditional versus online shopping, global trends of customised apparel purchases, and customisation and co-creation. The literature review also outlined theoretical studies of African and South African trends of fashion and clothing purchases, the impact of Covid-19 on African and South African trends of fashion and clothing purchases and trends of customised purchases. Digitisation in the fashion industry includes 3D mobile scanning, the benefits thereof, and concerns about fit when purchasing apparel in South Africa, which concludes the chapter.

Chapter 3 elucidated the research philosophy, method and design selected for the study. A positivist approach was applied, employing a descriptive research method and a quantitative research design. The research sampling design process, which included the population, sampling frame, sampling method, sample size and data collection instrument, was also outlined.

The participants, students, academic and administrative staff, were selected from the Business and Management Sciences Faculty at a university in Cape Town, emphasising their integral role in the research. A probability sampling method was used, employing a random stratified

sampling technique. The initial sample size was 100 participants. However, only 27 responses were received.

A self-administered online survey was used to collect the data, which included one open-ended question and a balance of close-ended questions using yes/no and a 5-point Likert scale. The data was analysed using Microsoft Excel. The chapter concluded by discussing pilot testing, data collection and analysis, reliability as validity, and the ethical considerations of the research study.

Chapter 4 discusses the research study's findings and interpretation. The findings of the data collected were presented statistically in the form of graphs. The chapter presented the study's results by elaborating on the respondents' demographics and then analysing the questions to interpret the study's findings. The chapter also presented a general framework of the impact of customised and personalised apparel in Cape Town, South Africa.

Chapter 5 concludes the research study, demonstrating the thoroughness of the approach. It meticulously analysed the research objectives, discussed the limitations, and provided well-considered recommendations. It also advises on possible future research, all based on the robust findings of the study.

5.3   The Findings of the Research Objectives

The research objectives, as outlined in Chapter 1, served as a crucial link between the existing literature and the significant findings of this study, underscoring the importance of our research.

5.3.1   The demand for customised and personalised apparel online

The demand for customised, personalised apparel online has been investigated by analysing who purchases it from a dressmaker. The results, while indicating that less than half of the respondents purchase customised, personalised apparel, also highlight a significantly high percentage that does, substantiating the potential of this market. Furthermore, the findings reveal a strong willingness among respondents to use 3D mobile scanning, purchase more if it is more accessible, and participate in the design process online.

5.3.2   The trends of purchasing customised and personalised apparel.

Based on the data collected that coincides with the literature, approximately half of the respondents purchase customised, personalised apparel for special events. The findings also

revealed that most respondents find purchasing customised, personalised clothing from a dressmaker/tailor time-consuming.

5.3.3 The factors influencing customers to purchase customised, personalised apparel.

Although the findings do not clearly state the factors, half of the respondents find purchasing customised, personalised apparel convenient and purchase it for special events.

5.3.4 Proposed general guidelines to create access to purchase customised and personalised apparel online.

Based on the findings, a mobile and computer application can be developed to enable access to purchase customised and personalised clothing online and include:

- The application will connect the customer with a dressmaker/tailor nearby.
- We will have a built-in drawing application allowing the customer to illustrate the design to the dressmaker/tailor. The dressmaker/tailor will also be able to illustrate the same design and use video calls on the app.
- The customer will send a deposit on the app for the fabric to be purchased.
- Once the fabric is selected on the application, an e-hailing service will purchase it from the fabric shop and deliver it to the dressmaker/tailor.
- 3D mobile body scanning on the application to take the customers' measurements.
- The application creates an avatar of the customer and, alternatively, creates a virtual mirror of the customer's body to assess the fit of the garment.
- Once the customer is happy with the garment, it will be delivered to the customer via e-hailing services.

5.4 Recommendations

The research findings proposed general guidelines, and the technology platform to provide customers access to customised, personalised clothing online can be developed in the Incubation Centre of the Cape Peninsula University of Technology. A pilot test can then be conducted to test the platform once built to determine the viability of the business opportunity.

5.5   Limitations of the Study

Following a detailed evaluation of the research, it should be mentioned that some limitations were present. The study was limited to 27 respondents out of 100 participants. Moreover, it was limited to students, lecturing, and administrative staff in the Business and Management Sciences Faculty. Therefore, the number of responses may not be significant enough to represent the entire population of the selected university in Cape Town. A wider population will have to be reached to confidently state that the proposed general guideline and recommendation would be practical.

5.6   Significance of the Research

The research was conducted to determine the entrepreneurial opportunity for creating an online platform for purchasing customised and personalised apparel.

5.7   Suggestions for Future Research

- Future studies could be conducted on a larger sample size of the population as per the initial sample size or even higher, or on a broader scale geographically, and each age category to have the exact number of respondents within the age category to assess the target market of the online platform creating for purchasing customised and personalised apparel.
- An online survey to obtain an exact divide between males and females to assess where the greater demand in terms of gender for purchasing customised, personalised apparel online could be beneficial for future research.
- The results of the findings suggest obtaining the customer's body shape to understand if it has a direct correlation to a customer not being able to find well-fitting garments, which, in turn, drives the customer to purchase customised, personalised apparel.

5.8   Conclusion

This chapter concludes the research study, presenting a unique business opportunity. A summary of the chapters was given, followed by a discussion of the research objectives. A novel guideline to access customised and personalised apparel online was highlighted and proposed as a business opportunity. The chapter concluded with the limitations of the study and further possible research.

This research study was on the impact of customised and personalised apparel online. The study followed a quantitative approach to research in the form of an online questionnaire. The literature and the study's findings indicate a demand for customised and personalised apparel online. Customers are willing to purchase customised, personalised clothing if it is more accessible, to be scanned using 3D mobile scanning and to co-create their designs online.

The study's outcomes enable a possible business opportunity to be created by designing an application that allows customers to purchase customised, personalised apparel online. As mentioned above, the application can be designed in the Cape Peninsula University of Technology Incubation Centre. The online survey should be conducted by a broader range of the population at the selected university in Cape Town and cover a wider geographical location to assess the demand provincially or nationally.

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APPENDICES

APPENDIX A: Ethical Clearance Certificate

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Office of the Chairperson Research Ethics Committee	FACULTY: BUSINESS AND MANAGEMENT SCIENCES

The Faculty's Research Ethics Committee (FREC) on **25 August 2020**, ethics **Approval** was granted to **Madelynn Gordon (210236655)** for a research activity for **M Tech: Business Administration** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	**The impact of personalised and customised apparel in Cape Town** Lead Supervisor (s): Dr M Twum-Darko

Comments:

Decision: Approved

	1 September 2020
Signed: Chairperson: Research Ethics Committee	Date

APPENDIX B: Permission To Collect Research Data

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1 June 2020

Permission to collect research data

I grant Ms Madelynn Gordon (Student No.: 210236655) permission to collect data from staff and students at the Cape Peninsula University of Technology (CPUT). Ms Gordon is a registered student for the MTech: Business Administration. The thesis is titled **"The impact of personalised and customised apparel in Cape Town, South Africa".** The supervisor is Dr Michael Twum-Darko.

This consent in no way commits any individual staff member to participate in the research, and it is expected that the student will get explicit consent from participants. I reserve the right to withdraw this permission at any point in the future.

In addition, the company's name may or may not be used as indicated below.
(Tick as appropriate):

	Thesis	Conference paper	Journal article	Research poster
Yes				
No	✓	✓	✓	✓

Yours sincerely

Prof R. Rampersad
Assistant Dean, Research and Innovation

APPENDIX B: Participant Informed Consent Letter

Faculty of Business and Management Sciences
Ethics Informed Consent Form

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Category of Participants (tick as appropriate):

Staff/Workers	x	Teachers		Parents		Lecturers	x	Students	x
Other (specify)									

You are kindly invited to participate in a research study being conducted by Madelynn Gordon from the Cape Peninsula University of Technology. The findings of this study will contribute towards (tick as appropriate):

An undergraduate project		A conference paper	
An Honours project		A published journal article	x
A Masters/doctoral thesis	x	A published report	

Selection criteria
You were selected as a possible participant in this study because you are:

(a) _____

(b) _____

(c) etc

The information below gives details about the study to help you decide whether you would want to participate.

Title of the research:

The impact of personalised and customised apparel in Cape Town
_____

A brief explanation of what the research involves:

The aim of the study is to describe the need for personalised and customised apparel of consumers in Cape Town. A questionnaire will be administered in the Business and Management Faculty at a selected university in Cape Town. The participants comprising students, academic staff and administrative staff will be divided into four age categories to describe the need for personalised and customised apparel in Cape Town.

Procedures (*Interview or Self-administer questionnaire otherwise create your own***)**
If you volunteer to participate in this study the following will be done:
1. Describe the main research procedures to you in advance, so that you are informed about what to expect;
2. Treat all interviewees with respect by arriving on time for all the interview schedules and well prepared;
3. Conduct an introduction with the interviewee in order to break ice;
4. All the interviewees will be asked for permission to record the interviews and also take some note where applicable;
5. In a case where there is no clarity, the interviewees will be allowed to ask for confirmation or clarity of words/sentences/phrases to ensure accuracy of the data collected;
6. Participants will be told that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs;
7. Participants will be given the option of omitting questions they do not want to answer or feel uncomfortable with;
8. Participants will be told that questions do not pose any realistic risk of distress or discomfort, either physically or psychologically, to them;
9. At the end of each interview all the interviewees will be thanked for their time and information provided for this study;
10. Participants will be debriefed at the end of their participation (i.e. give them a brief explanation of the study).

You are invited to contact the researchers should you have any questions about the research before or during the study. You will be free to withdraw your participation at any time without having to give a reason.

Kindly complete the table below before participating in the research.

Tick the appropriate column		
Statement	Yes	No
1. I understand the purpose of the research.		
2. I understand what the research requires of me.		
3. I volunteer to take part in the research.		
4. I know that I can withdraw at any time.		
5. I understand that there will not be any form of discrimination against me as a result of my participation or non-participation.		
6. Comment:		

Please sign the consent form. You will be given a copy of this form on request.

Signature of participant	Date

APPENDIX C: Data Collection Instrument

Participant's Name and Surname (Confidential - will not be used in study):

Short-answer text

Age:
- ○ 18-24
- ○ 25-35
- ○ 36-45
- ○ 46+

Race:
- ○ Black
- ○ Coloured
- ○ White
- ○ Other

Gender:
- ○ Male
- ○ Female
- ○ Intersex

I purchase customised and personalised apparel from a dressmaker/ tailor
- ○ Yes
- ○ No

If yes, are you able to find a dressmaker/tailor in close proximity
- ○ Yes
- ○ No

Purchasing customised and personalise apparel at a dressmaker is convenient

○ Yes

○ No

Customised ad personalised apparel made at a dressmaker/ tailor is time consuming

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

I purchase customised and personalised apparel for special events, i.e. weddings, graduations, traditional events, galas, year end events, etc.

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

I purchase apparel at retail stores

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

I purchase apparel on online platforms

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly Agree

I use the size chart/ or size indicator when I purchase online

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly Agree

It is easy to find apparel in retail stores that fit my body shape

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly Agree

I would purchase customised and personalised apparel online if a mobile device (app) or online system is able to scan my body measurements

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

I would purchase more customised and personalised apparel if more accessible

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

I would love to participate in the design process of my customised and personalised apparel purchased online

○ Strongly disagree

○ Disagree

○ Neutral

○ Agree

○ Strongly agree

THE IMPACT OF CUSTOMISED AND PERSONALISED APPAREL ONLINE

ORIGINALITY REPORT

7%	5%	2%	2%
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APPENDIX E: Editing Certificate

DR PATRICIA HARPUR

**B.Sc Information Systems Software Engineering, B.Sc Information Systems (Hons)
M.Sc Information Systems, D.Technology Information Technology**

Editing Certificate

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Vredelust
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To Whom It May Concern

This document certifies I have copy-edited the following thesis by Madelynn Gordon:

THE IMPACT OF CUSTOMISED AND PERSONALISED APPAREL ONLINE

Please note this does not cover any content, conceptual organisation, or textual changes made after the editing process.

Best regards

Dr Patricia Harpur

14 June 2024

APPENDIX F: Editing Certificate

Attention: Madelynn Gordon
Cape Peninsular University of Technology

12 Jun 2024

To whom it may concern

Confirmation of document editing

This letter is to confirm that we have edited the document titled:

The title was not included in the document edited by The Research Faculty
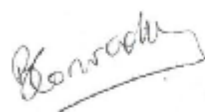
The document was the work of Madelynn Gordon.

We may have involved the contributions of one or more subcontractor.

We have edited the document for errors of grammar, punctuation, and style. We also provided the author with a list of aspects needing further correction or attention.

Excluded from the editing work were, if applicable, the annexures, mathematical or statistical formulae, the spelling of authors' names and other proper nouns, fact-checking, foreign-language text, the content of Microsoft Word field codes, the accuracy of cross references or hyperlinks, the order of works within citations, acronym use, the joining or splitting of paragraphs, citation verbs' tense and number, and the use of first-person pronouns.

The service excluded checking that the reference list (if applicable) conforms to a specified style guide.

Yours faithfully

Bruce Conradie
Research Support Specialist
The Research Faculty