

Technische Hochschule Ingolstadt

THI Business School

Retail and Consumer Management (M. A.)

Master's thesis

Subject: Sustainable Consumer Behavior in Germany: a Study on Clothing Purchase, Use and Disposal

Name and Surname: Sahan Shachith Kumar De Silva Geemuni

Issued on: 25.10.2023

Submitted on: 22.04.2024

First examiner: Professor Dr. rer. pol. Marc Knoppe

Second examiner: Professor Dr. rer. pol. Martin Petroll

Preface

The concept of responsibility in consumption, which is a timely phenomenon, is the focus of this thesis. This phenomenon, which is focused on the interactions of products, resources, and the environment with ethics, will be explored. In the pursuit of our lives faced by the challenges of the modern ways of consumption, may this piece of work be a compass that directs us towards more conscientious and sustainable ways in order to benefit the present and future generations alike.

This thesis would not have been possible without the guidance and proper planning of the THI Business School, especially the involvement of Professor Dr. rer. pol. Marc Knoppe in executing this module in a successful way. The material and academic guidance from the university was an immense contribution. Of all, my heartfelt gratitude goes to my thesis supervisor Professor Dr. rer. pol. Martin Petroll who was involved in my dissertation from day 01 and even more interested in making this a success than my own self. Without his proper guidance, valuable feedback and suggestions, doing this thesis and bringing useful insights would not happen.

Hence, I take this an opportunity to thank Professor Dr. rer. pol. Martin Petroll, Professor Dr. rer. pol. Marc Knoppe, the THI Business School, my colleagues at THI Business School, all my close friends, and especially my family for always supporting me in my academic agendas. And I would be wrong if I do not thank the respectful respondents of this research. Without your genuine contribution and your time to participate in the surveys, would I be able to do this thesis at all. Therefore, I thank each and every one of you again from the depth of my heart.

Thank You!

Sahan Shachith Kumar De Silva, Geemuni

22.04.2024

Abstract

In a world that suffers with waste and pollution and clothing industry being one of the most polluting industries given the short lifespan of fast fashion, the need for sustainable consumption is an appraising study area. This study ascertains the need to identify what are the factor that affects sustainability of clothing consumption in Germany. For the purpose, the researcher has utilized a quantitative, deductive approach by a survey method, where 402 surveys were filled via the online platforms namely Limesurvey, Microsoft survey, and Google forms in which a German consumer sample was recruited through a convenience sampling considering the ease and time effectiveness in data collection. This research continues to explain the understanding of motivating factors, ability, incentives triggers, and social motivation as the independent variables of the study and see how it impact on sustainable consumption. Effects of keys results show that the motivating interest (0.561; 0.000), ability (0.523; 0.000); incentives for triggers (0.401; 0.000), and social motivation (0.409; 0.000) is explaining 43.7% amount of variance found in sustainable consumption. As per the Pearson Correlation all predictor variables had a moderate impact on the dependent variable. ANOVA reveals the model is statistically significant (ANOVA $p=0.000$) which means that it explains the data pattern sufficiently. Practical implications in conjunction point at the usefulness of Fogg Behavior Model and Theory of Planned Behavior in disclosing the explanation behind sustainable consumption behaviors. The strategic considerations emphasize the relevance of awareness campaigns, improving availability of green alternatives, using incentives as a trigger leverage, and using social favorable as a mediator of the sustainable practices. In general, this research narrows down the practice of green consumption and also helps business firms, policymakers and marketing personnel to promote eco- friendly behavior according to the situation.

Keywords: Sustainable Consumption, Germany, Clothing Consumption, Purchasing, Usage, Disposal

Table of Contents

Preface	II
Abstract	III
List of Tables	VI
List of Figures	VII
01. INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Identification	2
1.3 Research Problem	3
1.4 Research Questions	4
1.5 Research Objectives	6
1.5 Significance of the Study	6
1.6 Study Structure	7
02. LITERATURE REVIEW	9
2.1 Environmental Impact of Fashion/ Clothing Consumption	9
2.2 Sustainability in Textile	10
2.3 Circular Economy	12
2.4 Sustainable Consumption	13
2.5 Theoretical Model: Theory of Planned Behaviors	16
2.6 Conceptualization and Hypotheses Development: The Fogg Behavior Model	17

03. METHODOLOGY	24
3.1 Research Design	24
3.1.1 Research Philosophy	24
3.1.2 Research Approach	25
3.1.3 Research Strategies	26
3.1.4 Time Horizon	26
3.2 Sampling and Data Collection Procedure	27
3.3 Data Instrument	28
3.4 Rigor of the Study	28
3.5 Data Analysis	29
3.6 Summary of the Research Design	29
04. RESULTS	31
4.1 Data Preparation	31
4.2 Demographic Data Analysis	31
4.3 Descriptive Statistics	36
4.4 Reliability Analysis	37
4.5 Validity Analysis	38
4.5.1 Uni-Dimensionality Test	38
4.5.2 Convergent Validity	40
4.5.3 Discriminant Validity	41
4.6 Hypotheses Analysis	42

4.7 Regression Analysis.....	44
4.8 Discussion	46
05. CONCLUSION & IMPLICATIONS	49
5.1 Research Overview.....	49
5.2 Implications of the Findings	49
5.3 Limitations & Recommendations for Future Research.....	50
5.4 Conclusion	52
References	54
Appendices.....	62
Appendix 1: Questionnaire.....	62
Appendix 2: Krejcie & Morgan Sample Determiner.....	72
Appendix 3: Extracts from SPSS and Dataset.....	73
Declaration	0

List of Tables

Table 1: Descriptive Statistics.....	37
Table 2: Cronbach's Alpha for Reliability	38
Table 3: Component Matrix.....	39
Table 4: Convergent Validity	40
Table 5: Discriminant Validity through Correlations	41

Table 6: Correlations and Hypothese Decisions	42
Table 7: Model Summary	44
Table 8: ANOVA.....	45
Table 9: Coefficients	45

List of Figures

Figure 1: Linear vs. Circular Economy	13
Figure 2: Ideas related to "Sustainable Consumption"	15
Figure 3: The Fogg Behavior Model	17
Figure 4: Conceptual Framework	22
Figure 5: Age	32
Figure 6: State living in	32
Figure 7: Gender	33
Figure 8: Education	34
Figure 9: Employment	35
Figure 10: Monthly Income	36

01. INTRODUCTION

1.1 Background of the Study

According to Milne, et al. (2020) consumption that is both environmentally and socially responsible is a multifaceted idea. Sustainable consumption, as applied to the clothing and fashion industry, is making wise decisions about what to buy, wear, and eventually throw away (Vesterinen & Syrjälä, 2022). The importance of reducing one's impact on the environment via one's clothes purchases and consumption is rising in Germany as well as worldwide. More and more shoppers are seeking eco-friendly options as they learn about the fashion industry's negative effects on the planet and society (Mandarić, et al., 2022).

The fashion industry across the globe is a major source of environmental degradation, where according to European Parliament (2023), textile consumption for a person average require 400 m² of land, 391 Kg of raw materials, and 9m³ of water resources. Thus, clothing consumption generates a lot of waste materials and in general contributes a lot to global warming (Mandarić, et al., 2022). Almost 73 percent of fibre used in the clothing manufacturing sector are dumped into landfills or incinerators of which only around 12 percent actually gets recycled (Chen, et al., 2021). In addition this sector also use up 4% of the world's freshwater supply (Jain, 2023), and is responsible to around 20% of all wastewater produced (Earth.Org, 2023).

Germany has a large clothes market, where they are the second largest clothing importers with a value of US\$ 38.43 billion just in 2022, while 80% of their luxury market consists of clothing, while they spend in average €640 per person on clothing (Wunderlabel, 2022). This is far higher than the worldwide norm yet comparatively less than countries like Italy whose average spending on clothing by a person is around €834 and the UK is around €1,133 (Russ, 2021). According to Venghaus, et al. (2022) there is a growing consciousness among German consumers about the industry's negative effects on society and the environment, since 69% of German customers place high or medium importance on buying clothes and shoes that don't harm the environment or society (GFK, 2022).

These trends are similarly visible in the global context. According to a KPMG survey from 2020, 60% of consumers were going out of the way to either recycle or purchase sustainable fashion products, while 67% consider the sustainability of the materials when purchasing fashion products (Granskog, et al., 2020). However, there is still a gap between knowledge and behaviour towards sustainable consumption because perhaps or probably what was answered in the survey may not come true when the consumer is buying a product in real-life (Ray & Nayak, 2023).

1.2 Problem Identification

Various studies have been conducted throughout the past years on the context of sustainable clothing across various countries and regions. German consumers have demonstrated a noteworthy transition towards sustainable leisure activities during the COVID-19 pandemic (Hüppauff et al., 2022). This shift reflects an increasing interest in sustainability, suggesting that these behavioral changes are likely to persist into the future. While this is promising, a significant challenge lies in translating these positive intentions into consistent sustainable behaviors.

Sustainability has become a focal point for German consumers, with 88% indicating a shift towards more sustainable consumption behavior in recent years (European Supermarket Magazine, 2021). However, it is noteworthy that Baby boomers (born between 1946 and 1964) and Generation X (born between 1965 and 1975) seem to actively embrace sustainable alternatives (33% each), while millennials (born in the early 1980s to late 1990s) are less likely to do so (28%). This generational difference highlights a potential disconnect between age groups regarding sustainable consumption.

Despite the growing interest in sustainability, it is secondary for 58% of Germans, since factors such as price and quality continue to heavily influence consumer choices (European Supermarket Magazine, 2021). The reluctance to spend more on sustainable products, even when there are higher expectations regarding sustainability, such as the desire for more eco-friendly and ethically produced products, underscores the persistent challenge of balancing sustainability with

affordability (Brückel & Schneider, 2019). However, contrastingly, a study by Spindler, et al. (2023) show German runners are willing to pay more for sustainable sports apparel, and they view environmental and social sustainability as important factors when making purchase decisions

Moreover, the environmental impact of clothing consumption in Germany is substantial, with female consumers responsible for greenhouse gas emissions ranging from 239, -10 kg CO₂ to 529, -98 kg CO₂ according to Piontek, et al. (2019) who's research was focused on female clothing consumption in Germany. The values provided indicate a range, with the higher end of the range (529.98 kg CO₂ eq.) suggesting a potentially higher level of emissions for certain cases or behaviors within female clothing consumption. This highlights the pressing need for sustainable behavior improvement, given the significant environmental implications of clothing consumption. However, a discernible gap exists between their positive attitudes towards sustainable fashion and their purchasing behavior (Bocti et al., 2021).

1.3 Research Problem

The authors previously mentioned found that the consumer behavior in Germany, particularly in the context of clothing and fashion consumption, is undergoing a significant shift towards sustainability. German consumers are increasingly aware of the negative environmental and social impacts of the fashion industry and express a growing interest in making more sustainable choices (Mandarić et al., 2022; Venghaus et al., 2022). This shift is also observed globally, where consumers are showing a preference for eco-friendly fashion products (Granskog et al., 2020). However, despite this growing awareness and intention to adopt sustainable practices, a substantial gap exists between knowledge and behavior (Ray & Nayak, 2023).

The literature reveals several critical issues and gaps in the sustainable consumer behavior within the clothing sector in Germany. Firstly, there is a generational divide in the adoption of sustainable practices, with younger consumers, particularly millennials, being less inclined to prioritize sustainability

in their purchasing decisions compared to older generations (European Supermarket Magazine, 2021). This generational gap signifies the need for tailored strategies to engage and educate different age groups effectively. Secondly, the research highlights the persisting influence of traditional purchase criteria, such as price and quality, over sustainability, emphasizing the challenge of making sustainable options affordable and appealing to a broader consumer base (Brückel & Schneider, 2019). On the other hand, the willingness of German runners to pay more for sustainable sports apparel demonstrates that there are niches of consumers who value sustainability and are willing to invest in eco-friendly products (Spindler et al., 2023).

Moreover, the negative perception of eco-clothing, rooted in stereotypes from past decades, and the lack of transparency and comparability in sustainability labeling pose significant obstacles to widespread adoption of sustainable fashion (Eifler & Diekamp, 2013). Despite the growing interest in sustainable consumer behavior in Germany's clothing and fashion industry, a gap persists between consumers' intentions and the behavioral practices, especially among younger generations. Therefore, the challenge lies in bridging this gap and developing effective strategies to encourage and enable sustainable choices among diverse consumer groups, considering both environmental and social aspects. Hence, the present study aims to bridge a portion of this gap discovered trying to answer the following questions.

1.4 Research Questions

Main Research Question:

- What are the factors impacting on the sustainable consumption of clothing in Germany?

Sub Research Questions:

- What is the impact of motivating interest on the sustainable clothing consumption [purchasing, using and disposing] in Germany?

- What is the impact of ability on the sustainable clothing consumption [purchasing, using and disposing] in Germany?
- What is the impact of incentives for trigger on the sustainable clothing consumption [purchasing, using and disposing] in Germany?
- What is the impact of social motivation on the sustainable clothing consumption [purchasing, using and disposing] in Germany?

1.5 Research Objectives

To identify the factors impacting on the sustainable consumption of clothing in Germany.

- Identifying the impact of motivating interest on the sustainable clothing consumption [purchasing, using and disposing] in Germany.
- Identifying the impact of ability on the sustainable clothing consumption [purchasing, using and disposing] in Germany.
- Identifying the impact of incentives for trigger on the sustainable clothing consumption [purchasing, using and disposing] in Germany.
- Identifying the impact of social motivation on the sustainable clothing consumption [purchasing, using and disposing] in Germany.

1.5 Significance of the Study

The significance of this study lies in addressing a critical gap between the growing awareness and positive intentions of German consumers regarding sustainable clothing consumption and the changes needed to mitigate the environmental and social impacts of the fashion industry. As the second-largest clothing importer globally, Germany's consumption patterns have substantial repercussions on resource usage, waste generation, and carbon emissions. Understanding the factors influencing sustainable clothing consumption in Germany is crucial for developing targeted interventions that can bridge the existing gap between intention and action.

This study's focus on motivating interest, ability, incentives, and social motivation as factors impacting sustainable clothing consumption provides a comprehensive framework for analysis. Studying these dimensions and its impact on the consumption behaviors on Germans will also bring insights to offer actionable insights for policymakers, businesses, and environmental advocates.

Moreover, the study contributes to the global discourse on sustainable fashion by providing context-specific insights. The findings can inform strategies not only in Germany but also serve as a reference for other nations grappling with similar

challenges in promoting sustainable consumer behavior. Ultimately, the research strives to guide the development of effective strategies that align with consumer values, thereby fostering a more sustainable and responsible approach to clothing consumption in Germany and beyond.

1.6 Study Structure

1. Introduction: The first chapter introduces the dissertation on sustainable clothing consumption in Germany. It highlights the study's importance and urgency in the context of rapid fashion and environmental issues. The chapter includes research questions and goals, setting the context for the inquiry.

2. Literature Review: This chapter critically evaluates material on the environmental implications of rapid fashion. It addresses circular economy and German textile sustainability projects. Sustainable consumption ideas like the Theory of Planned Behavior and Fogg Behavior Model are examined. Motivating variables for sustainable clothing consumption are conceptualized, stressing literature gaps and the need for empirical study in Germany.

3. Method: The third chapter describes the research design which is a quantitative, one and justifies it. Explaining the sample strategy, participant selection criteria, data collecting techniques (surveys), and measuring tools. Ethics and limits are considered to protect the research.

4. Results: This chapter includes empirical findings on sustainable clothing consumption motivators. Using statistical analytical approaches, graphic representations clarify the results. Key results and their implications for sustainable clothing consumption in Germany are discussed.

5. Conclusion and Implications: The last chapter summarizes major discoveries, links them to literature, and highlights field contributions. Policymakers, corporations, and environmentalists consider the practical ramifications. After suggesting further study, the dissertation summarizes its contributions to understanding sustainable clothing consumption behavior in Germany.

02. LITERATURE REVIEW

The purpose of the literature review chapter is to provide a thorough comprehension of the ecological consequences of clothing consumption, sustainability in the textile sector, and the determinants that influence sustainable consumption in the realm of clothes and fashion in Germany. The chapter starts by underscoring the profound environmental repercussions of quick fashion, emphasizing the need for a fundamental change towards sustainable and circular fashion methodologies. This text examines the intricacies of sustainable consumption, investigating many models such as the Theory of Planned Behavior and the Fogg Behavior Model. Theoretical frameworks provide guidance for the conception and elaboration of hypotheses, with a specific emphasis on the influential variables of sustainable clothing consumption.

2.1 Environmental Impact of Fashion/ Clothing Consumption

The environmental impact of clothing consumption is staggering, with the fast fashion industry standing out as a major contributor to pollution, resource depletion, and climate change. The exponential growth in clothing production and consumption over the past two decades has intensified these impacts, with global textile manufacturing and consumption nearly doubling (Geneva Environment Network, 2023). The crux of the issue lies in the fast fashion business model, characterized by rapid trend turnovers, disposability, and constant changes in offered products (Centobelli, et al., 2022). This model leads to a cycle of rapid production, purchase, use, and disposal, generating an alarming amount of waste and necessitating substantial resource inputs.

The production phase of clothing is a significant driver of environmental degradation, contributing to 10% of humanity's carbon emissions, substantial water consumption, and the release of pollutants into rivers and streams (Geneva Environment Network, 2023). Synthetic textiles, such as polyester and nylon, which constitute approximately 60% of all materials used in the fashion industry, are particularly detrimental. The production of synthetic fibers is associated with substantial greenhouse gas emissions, contributing to the climate crisis (Geneva

Environment Network, 2023). Additionally, the plastic-based nature of these textiles leads to plastic pollution, with between 200,000 and 500,000 ton of microplastics from textiles entering the marine environment each year (Geneva Environment Network, 2023).

Moreover, the use phase of clothing, encompassing activities like washing and drying, significantly contributes to energy consumption and greenhouse gas emissions (Sohn, et al., 2021). Frequent laundering, coupled with energy-intensive processes, exacerbates the environmental footprint of clothing. The fast fashion industry's reliance on low-cost labor in developing nations adds a social dimension to its environmental impact, with workers often facing derisory wages and poor working conditions (Geneva Environment Network, 2023).

Addressing the environmental impact of clothing consumption requires a paradigm shift towards sustainable and circular fashion practices. Initiatives such as the EU Strategy for Sustainable and Circular Textiles aim to promote circularity by encouraging natural and recycled textiles, design for reuse and recycling, and second-hand retail, among other critical measures (Centobelli, et al., 2022). As consumers become more conscious of these environmental concerns, there is a growing need for comprehensive and collaborative efforts across industries and regulatory bodies to mitigate the severe consequences of current clothing consumption patterns (Abbate, et al., 2023).

2.2 Sustainability in Textile

The apparel and textile business are under increasing scrutiny due to its substantial environmental effect and the rising awareness among consumers. As a result, sustainability has become a crucial issue in this sector. Chen et al. (2021) highlighted the need of tackling the negative impacts of the fashion sector by using circular economy strategies, which prioritize efficient resource utilization and waste reduction. Soyer and Dittrich (2021) discuss sustainable consumer behavior, emphasizing the R-imperatives—refuse, reduce, resell/reuse, repair, refurbish, remanufacture/refurbish, repurpose, recycle, recover, and remining—as practices to follow while buying, wearing, and disposing of clothing in a

sustainable manner. The research highlights the significance of adopting a circular economy in order to mitigate environmental consequences. Moreover, Stanton's (2018) study highlights the inefficiency of the textile and apparel sector, specifically driven by the harmful consequences of fast fashion. This results in quick garment replacement and a substantial accumulation of textile waste. The clothing industry's environmental impact has been magnified by the widespread use of clothes on a worldwide level, as shown by Jia et al. (2020) and Shirvanimoghaddam et al. (2020). Projections indicate that the fashion sector might consume as much as 25% of the world's carbon budget by 2050 (Pandey, 2018).

The studies conducted by Gwilt (2019) and Morlet et al. (2017) explore the complexities of sustainable use practices, including repairing, refurbishing, and repurposing. I examines sustainable methods across the several stages of garment use, with a particular emphasis on consumer behavior. Other researchers analyze the elements that influence customers' choices throughout the process of acquiring, using, and disposing of products. The purchasing behavior of the Dutch, as described by Gwilt (2019), demonstrates a want for more consciousness and comprehension, as seen by the significant proportion of new apparel acquisitions and little inclination towards second-hand alternatives. These studies highlight the need of a complete transition towards sustainable methods in both industrial operations and customer behavior, since the sector faces environmental issues.

Germany has taken significant strides in promoting sustainability within its fashion industry through a comprehensive and innovative approach. The country recognizes the global challenges associated with the textile and garment industry, where over 75 million people, primarily in developing countries, work under conditions that often fall short of international standards (OECD, 2022). In response, Germany's Federal Ministry for Economic Cooperation and Development (BMZ) has implemented a three-pronged strategy. Firstly, the Partnership for Sustainable Textiles, established in 2014, fosters collaboration among businesses, government, civil society, and standard-setting organizations

to enhance social and environmental conditions in the textile supply chain. Secondly, the Siegelklarheit label directory informs consumers about the credibility of environmental and social labels in the industry (OECD, 2022). Lastly, the government-awarded Green Button label, launched in 2019, certifies products meeting stringent social and environmental standards. This approach combines voluntary and mandatory measures, ensuring a level playing field for companies and aligning with the UN Guiding Principles of Business and Human Rights. The success of the Green Button label, recognized by over 40% of German consumers, signifies growing awareness and engagement, highlighting Germany's leadership in fostering sustainability within its fashion brands (OECD, 2022).

2.3 Circular Economy

The notion of a circular economy has become prominent as a sustainable alternative to the conventional linear economic paradigm. In the textile business, which has a significant environmental effect, the circular economy presents a revolutionary solution (Mamun, et al., 2023). According to Kirchherr, et al. (2023), the circular economy differs from the linear model by advocating for the concepts of reduce, reuse, and recycle, instead of the "take, make, dispose" approach. Within the realm of textiles, this entails creating goods with an emphasis on durability, enabling the efficient utilization of resources, and advocating for recycling procedures (Manshoven, et al., 2019).

In a circular economy for textiles, producers aim to provide items that possess longevity and are readily repairable or upgradable, hence minimizing the need for frequent replacements. The increasing emphasis on lifespan reduces the need for fresh raw materials, hence easing the burden on ecosystems (Schumacher & Forster, 2022). In addition, Papamichael et al. (2023) highlighted the need of designing textiles with recyclability as a key consideration, enabling the retrieval of important elements at the conclusion of a product's life cycle. This is especially relevant in an industry known for its significant utilization of water, energy, and chemicals (Papamichael, et al., 2023).

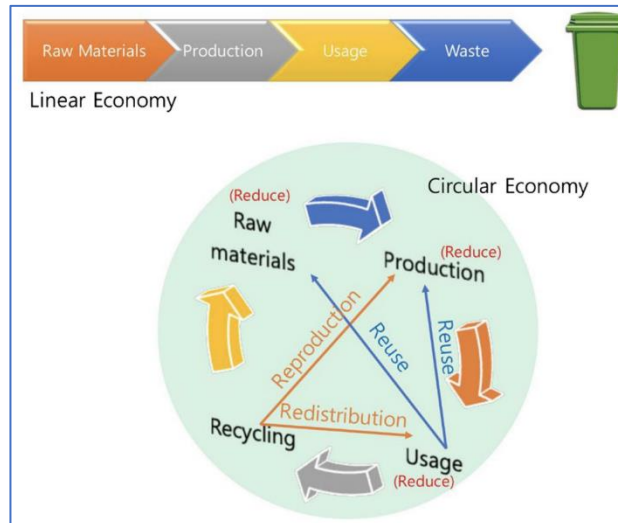


Figure 1: Linear vs. Circular Economy
 Source: (Chen, et al., 2021)

The textile sector also embraces novel business models as part of its implementation of circular economy techniques. Strategies such as leasing, sharing, and take-back programmes facilitate a perpetual cycle of product use and reclamation (Schumacher & Forster, 2022). Moreover, technical progress plays a crucial role by facilitating the creation of novel fibres derived from recycled materials and enhancing the effectiveness of recycling procedures (Baloyi, et al., 2023).

There are several advantages to incorporating a circular economy model into the textile sector. In addition to minimizing environmental problems, it also facilitates resource conservation, minimizes waste, and strengthens economic resilience (Chen, et al., 2021). Adopting circular concepts in the textile industry signifies a fundamental change towards a more environmentally sustainable and responsible approach, where economic interests are in line with the protection and conservation of the environment. The increasing worldwide recognition of environmental concerns necessitates the implementation of circular economy principles in the textile sector. This is not only a strategic decision but also an essential measure towards achieving a more sustainable future (Papagiannaki, et al., 2021).

2.4 Sustainable Consumption

The concept of sustainable consumer behavior is a complex phenomenon that is closely connected to the environmental consequences of the apparel industry. Reike et al. (2016) provide a thorough explanation, highlighting the utilization of products and services that improve the standard of living while minimizing detrimental consequences on resources, waste emissions, and the total environmental footprint across the whole lifespan of a product.

The comprehensive strategy is in accordance with the pressing need to shift towards a circular economy, as elucidated by Soyer and Dittrich (2021) via the utilization of the R-imperatives, which include a spectrum of actions from refusing to remine. German consumers have a substantial influence on this worldwide conversation, exhibiting noteworthy differences in their buying patterns. Gwilt (2019) found that German consumers had an average of 4.4 wash loads per week, indicating variations in consumption patterns compared to Dutch customers who uses it 6 wash loads per week. In addition, Soyer and Dittrich (2021) emphasize the significance of clothing's environmental effect, particularly in relation to issues such as the composition of fibers used in clothing, which in turn affects customers' maintenance habits. Specifically, the research highlights that cotton necessitates washing at elevated temperatures, while synthetic fibers have a propensity to accumulate dirt more readily. The environmental ramifications of consumption are significant, as shown by a comprehensive life cycle evaluation that uncovers diverse effects on human health, biological variety, and resource availability (Soyer & Dittrich, 2021). However, Morlet et al. (2017) highlight that the short duration of clothing's use is still a major obstacle, as garments are often thrown away after just 7-8 uses, so adding to the problem of textile waste.



Figure 2: Ideas related to "Sustainable Consumption"
 Source: (Vargas-Merino , et al., 2023)

Consumer behavior during the purchase phase is impacted by several variables, such as product availability, pricing, and sustainability concerns. Stanton (2018) highlights the excessive and inefficient practices of the textile and clothing business, which are further intensified by the fast fashion trend. This trend promotes frequent replacement of clothing items and significantly adds to the amount of textile waste generated. In Germany, as in other European nations, consumer decisions play a crucial role in determining the direction of the sector. Gwilt (2019) in their research also uncovers geographical variations in the use of washing machines, underscoring the need for customized strategies towards sustainable consumption that take into account regional discrepancies. Moreover, the inclination of customers to spend a higher price for sustainable apparel (Soyer & Dittrich, 2021) suggests a possible change in views, as more consumers are placing greater importance on environmentally conscious items.

To comprehend sustainable consumption behavior, it is essential to examine models that facilitate behavior modification. The Theory of Planned Behavior (Ajzen, 1991) is often used to study behavior change, focusing on the influence

of intention, which is influenced by attitudes, subjective standards, and perceived behavioral control. Nevertheless, Fogg's (2009) behavior model provides a balanced viewpoint by emphasizing motivation, ability, and triggers. Gwilt (2019) examines the German setting and reveals the range of consumer attitudes, including those who see fashion as a means of personal expression, those who prioritize their social image, and those who want to minimize their environmental impact. This highlights the intricate nature of influencing sustainable purchasing behavior, necessitating focused initiatives that align with various consumer motives.

2.5 Theoretical Model: Theory of Planned Behaviors

The Theory of Planned Behavior (TPB) is a widely used model in understanding behavior change, and its application to sustainable consumption, especially in the context of clothing behavior, is evident in the literature provided. According to Ajzen (1991 as cited in Soyer & Dittrich, 2021), TPB posits that behavior change is mediated by the intention to change, influenced by a person's attitude, subjective norms, and perceived behavioral control. In the context of sustainable clothing consumption, these elements play a crucial role.

The attitude component of TPB is reflected in the emphasis on consumers' evaluations of sustainable practices when purchasing, using, and disposing of clothes (De Pelsmacker, et al., 2005). Consumers are more likely to engage in sustainable practices if they have a positive attitude toward environmentally friendly brands, recycled materials, and other attributes aligned with sustainability (Nekmahmud, et al., 2022). Moreover, the subjective norms dimension, emphasizing the perception of societal endorsement, aligns with the findings that consumers who wish to protect the environment are willing to pay more for sustainable clothing items, indicating a social influence on their behavior (Ciasullo, et al., 2017).

Perceived behavioral control in the TPB is manifested in the factors influencing sustainable consumption behavior. For instance, the availability and price of sustainable products influence consumers' purchase intentions (Chang &

Watchravesringkan, 2018). Additionally, the impact of use on the environment, such as the frequency of washing and maintenance activities, reflects perceived behavioral control (Soyer & Dittrich, 2021). The TPB is relevant in understanding how consumers navigate the complexities of sustainable consumption in the clothing industry, where factors like product availability, price, and maintenance practices impact their decisions. However, Younger consumers, who are more influenced by social factors and less aware of sustainable practices, may not align with the traditional TPB model (Park & Lin, 2020).

2.6 Conceptualization and Hypotheses Development: The Fogg Behavior Model

The Fogg Behavior Model as illustrated through Figure 3 below, developed by Stanford professor Dr. BJ Fogg, serves as a valuable theoretical framework when exploring factors influencing human behavior, particularly in the domain of sustainable consumption, which includes clothing behaviors (Prathibhani & Lakshika, 2023). When applied to sustainable behaviors in clothing consumption, the model becomes a valuable tool.

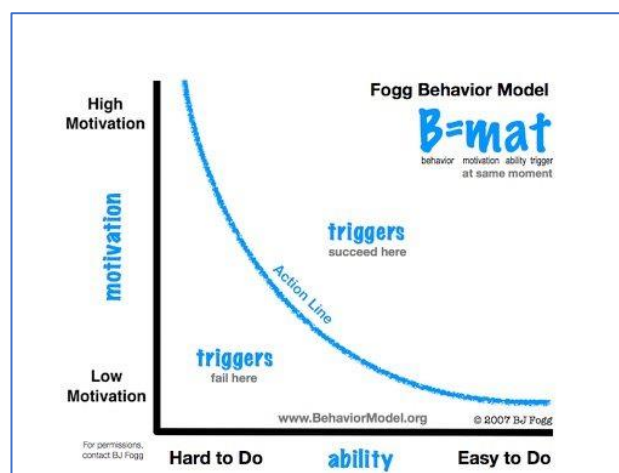


Figure 3: The Fogg Behavior Model

Motivation, as considered in the model, involves cultivating consumers' desire for sustainable fashion, emphasizing ethical production, and environmental responsibility (Davies, 2015). Ability addresses the ease of adopting eco-friendly choices, urging brands to provide accessible and affordable sustainable options

(Prathibhani & Lakshika, 2023). Triggers or incentives as discussed in this Fogg model play a role in prompting sustainable behaviors, including educational campaigns, influencers advocating for ethical fashion, and social norms embracing sustainable choices (Fogg, 2009). By aligning motivation, ability, and triggers, the Fogg Behavior Model offers insights into fostering a shift towards sustainable clothing consumption, guiding businesses and policymakers in creating an environment where eco-conscious choices become the norm (Sutanto, et al., 2021; Fogg, 2009).

In the context of clothing consumption, motivation plays a crucial role in driving sustainable choices. Soyer & Dittrich (2021) highlight that consumers with a wish to protect the environment are willing to pay more for sustainable clothing items. Therefore, motivating individuals through awareness campaigns and education on the positive impact of eco-friendly clothing choices can significantly influence behavior. Additionally, Gwilt's (2019) findings reveal that knowledge about climate change may not always result in behavioral change, emphasizing the need to address motivational aspects beyond environmental awareness, particularly in the fashion domain where personal expression often takes precedence.

Motivating interest, as a crucial factor, is highlighted in the literature. Soyer and Dittrich (2021) emphasize the significance of motivating interest in sustainable consumption, indicating that consumers with a wish to protect the environment are willing to pay more for sustainable clothing items. This insight leads to the formulation of the first hypothesis. Drawing from this, the **hypothesis 01** suggests that:

- ***H1: Motivating interest significantly influences sustainable purchasing, using, and disposing of clothing in Germany, proposing a positive correlation between motivating interest and sustainable behaviors.***

Ability, as outlined in the Fogg Behavior Model, is essential for sustainable consumption, especially in the realm of clothing. Soyer and Dittrich (2021) emphasize the importance of ability factors such as time, money, and effort in

sustainable clothing practices. Making sustainable options accessible, affordable, and convenient is critical. This aligns with Stanton's (2018) insights into purchase decisions in which product availability and reasonable alternatives influence consumer choices. Therefore, businesses and policymakers need to focus on enhancing the ability of individuals to engage in sustainable clothing behaviors by providing eco-friendly alternatives and improving infrastructure for recycling, aligning with the Fogg model's emphasis on ease of behavior.

The second hypothesis is grounded in the exploration of the role of ability in sustainable consumption. According to Soyer and Dittrich (2021), the ability to engage in sustainable behaviors is crucial, and this involves factors such as time, money, and effort. The study argues that enhancing ability is essential for encouraging sustainable consumption practices. Therefore, the **hypothesis 02** posits that:

- ***H2: The ability significantly influences sustainable purchasing, using, and disposing of clothing in Germany, suggesting that individuals' higher ability factors has a positive correlation on sustainable behaviors.***

Triggers, both external and internal, serve as cues that prompt sustainable clothing behaviors. External triggers, such as marketing campaigns, can be instrumental in influencing consumer choices. Stanton (2018) highlights the impact of product availability and marketing on purchase decisions. Internal triggers, like personal reflections on environmental impact, align with the findings of McNeil and Moore (2015), who distinguish between consumers prioritizing fashion as personal expression and those focusing on reducing their ecological footprint. Creating effective triggers involves strategic communication, emphasizing the immediate benefits of sustainable clothing choices, and leveraging social norms, as explored by Soyer and Dittrich (2021) in the context of sustainable purchasing.

Incentives, acting as triggers for sustainable behavior, are discussed in the context of the Fogg Behavior Model (Fogg, 2009). The model suggests that

triggers prompt a behavior to occur, and in the case of sustainable consumption, effective triggers can positively influence individuals to adopt eco-friendly practices. Soyer and Dittrich (2021) also touch upon the role of incentives, stating that triggers can elicit sustainable target behavior for purchasing and disposal decisions. This insight forms the basis for the **hypothesis 3**, asserting that:

- ***H3: Incentives that trigger significantly impact sustainable purchasing, using, and disposing of clothing in Germany, highlighting the importance of effective triggers in positively correlating on sustainable practices.***

Social motivation, the focus of the fourth hypothesis, is discussed in the literature as a key determinant of sustainable behavior. Soyer and Dittrich (2021) reveal that for purchasing and disposal decisions, social evaluation predicts sustainable practices best. This indicates that individuals are influenced by real or imagined responses of others to visible consumer behavior. Thus, the hypothesis 4 suggests that:

- ***H4: Social motivation significantly influences sustainable purchasing, using, and disposing of clothing in Germany, emphasizing the role of social factors in positively correlating on sustainable behaviors.***

The existing literature has extensively addressed the environmental impact of clothing consumption, particularly within the context of the fast fashion industry, and has underscored the urgent need for sustainable practices (Centobelli et al., 2022; Geneva Environment Network, 2023). Studies have highlighted the detrimental effects of fast fashion, including substantial carbon emissions, water consumption, and the release of pollutants during the production phase (Geneva Environment Network, 2023). Additionally, the use phase, encompassing activities such as washing and drying, has been identified as a significant contributor to energy consumption and greenhouse gas emissions (Sohn et al., 2021). While research has delved into the environmental aspects of clothing

consumption, there is a notable gap in understanding the behavioral dimensions and factors influencing sustainable clothing consumption in Germany specifically.

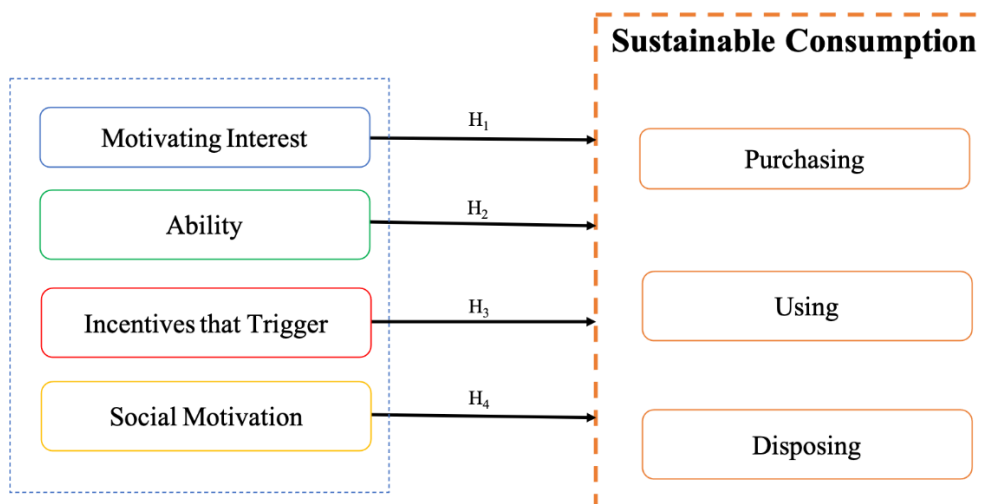
The literature has acknowledged the generational divide in adopting sustainable practices, with younger consumers, particularly millennials, exhibiting a lower inclination toward prioritizing sustainability in their purchasing decisions compared to older generations (European Supermarket Magazine, 2021). Furthermore, the reluctance of German consumers to prioritize sustainability over factors like price and quality, despite a growing interest in environmentally conscious choices, has been identified as a persistent challenge (Brückel & Schneider, 2019). However, the willingness of certain consumer segments, such as runners, to pay more for sustainable sports apparel suggests a nuanced landscape where specific niches value sustainability (Spindler et al., 2023). Despite this wealth of information, a comprehensive understanding of the motivational, ability-related, incentive-driven, and socially motivated factors shaping sustainable clothing consumption in Germany is lacking.

The literature review also introduces theoretical models, such as the Theory of Planned Behavior (Ajzen, 1991) and the Fogg Behavior Model (Fogg, 2009), as potential frameworks for understanding sustainable consumer behavior. While these models offer valuable insights, there is a need for empirical research that applies and validates these theories in the specific context of sustainable clothing consumption in Germany in order to drive better sustainable consumption behaviors within the country. Additionally, the role of triggers and incentives in influencing sustainable behavior, as highlighted by the Fogg Behavior Model, requires further exploration within the realm of clothing consumption.

Therefore, this study aims to bridge the identified literature gap by providing a detailed investigation into the factors impacting sustainable clothing consumption in Germany, focusing on motivating interest, ability, incentives, and social motivation. The integration of theoretical frameworks and empirical analysis will contribute to a more nuanced understanding of consumer behavior in the context of sustainable clothing consumption, offering practical implications for policymakers, businesses, and environmental advocates. For an instance in this

research of sustainable clothing behaviors in Germany, the TPB and the Fogg Behavior Model can complement each other. Fogg's approach to the behavior changes and the complements the aspects of TPB that include attitudes, subjective norms as well as perceived behavioral control. For example, an analysis of Germans' perceptions towards sustainable clothing, social pressures (TPB), and control can be improved by adding Fogg's knowledge on designing interventions that are simple enough to adopt as well as the relevant triggers. This integrated approach provides a coherent framework for researching and fostering sustainable clothing behaviors in Germany.

In conclusion, the literature review illuminates the critical environmental impacts of clothing consumption, emphasizing the urgency of sustainable practices. It reveals a gap in understanding the behavioral factors influencing sustainable clothing consumption in Germany. The identified theoretical models, such as the Theory of Planned Behavior and the Fogg Behavior Model, lay the groundwork for a comprehensive investigation into motivating interest, ability, incentives, and social motivation. Thus, the current study applies the Fogg Behavior Model to sustainable consumption, specifically in clothing behaviors, provides actionable insights for developing interventions that promote environmentally friendly practices.



*Figure 4: Conceptual Framework
Adopted from: (Soyer & Dittrich, 2021)*

This study's conceptual framework as in Figure 4 draws from the Fogg Behavior Model, incorporating four independent variables: motivating interests, ability, incentives, and social motivation. The study aims at shedding light on these components of sustainable consumption since when the clothing is acquired, used, and finally discarded. It is by considering these elements that the study aims at providing novel insights into all those factors which impact on people's decision-making on sustainable clothes.

03. METHODOLOGY

The Methodology chapter presents a comprehensive framework for the research, drawing on established models like the Fogg Behavior Model. The chapter reflects a systematic and rigorous approach the author uses in unraveling the complexities of sustainable clothing consumption in Germany.

3.1 Research Design

3.1.1 Research Philosophy

The philosophy of this study's research is positivistic, believing that the social realities, including sustainable consumption in the clothing industry are analyzable and measurable through empirical observation (Majeed, 2019). The positivist approach fits in very well with the quantitative explanatory design adopted to determine and also estimate the effects of particular determinants on sustainable clothing consumption in Germany. With these philosophical principles in mind, the study aims at identifying causal relationships and also generalizable findings that will provide a deeper understanding of the subject (Bryman, 2016).

This study is appropriate to positivism because it emphasizes the objective, and precisely reported replicable research in accordance with individual objectives establish the impact of motivating interests on ability incentives and social motivation on sustainable clothing consumption. The positivistic principles include a structured survey approach, statistical analyses, and as the variables to be measured (Majeed, 2019). Therefore, all the components contribute towards the rigor and reliability in the research process itself.

Positivistic approach has also gained popularity in the many studies on sustainable consumption and behavior (Geels, et al., 2015). For example, Bhuian, et al. (2018) studies investigating the antecedents of pro-environmental behaviors in a consumer setting use quantitative methods to gauge the variables and establish causality. Positivistic studies in the fields related to sustainability provide a significant empirical data on which the researchers used to identify correlations, patterns and factors that influence (Park & Lin, 2020; Joshi &

Rahman, 2019). The harmony between positivism and quantitative methodologies have helped it to become a very popular philosophy in the deterministic study of complicated social entities like sustainable consumption practices (Majeed, 2019).

3.1.2 Research Approach

For this research, the approach is deductive; it involves developing specific hypotheses from the existing theories and then testing these hypotheses through empirical observations followed by data analysis (Casula, et al., 2020). In terms of sustainable clothing consumption in Germany, a deductive approach is very appropriate because it corresponds with the structured character of the study aims and also variables-motivating interests, ability, incentives and social motivation. The deductive approach concerns testing pre-existing theories developed after the Fogg Behavior Model, and the Theory of Planned Behavior as per empirical evidence collected through a survey data.

Due to the fact that deduction reasoning allows for the analysis of how identified factors influence sustainable clothing consumption, this method is found suitable for this study. The study begins by proposing a set of theories and hypotheses that are already based on the pre-existing literature, which will be used to either validate or reject the proposed hypothesis. The deductive process helps to achieve clarity and accuracy in the determining of relationships between variables, thus ensuring the validity of research (Bryman, 2016).

Related studies that deductively approach sustainable consumption are conducted in the field of consumer behavior and also environmental sustainability (Jia, et al., 2023; Soyer & Dittrich, 2021). For example, research that seeks to understand the influence of different factors on pro-environmental behaviors tends to use deductive reasoning by formulating hypotheses guided by the established theories before testing these in quantitative studies (Bhuian, et al., 2018). Such an approach has been found to be very productive for the discovery of many patterns and relationships within intricate social models; sustainability research often uses it (Cooper, 2018).

3.1.3 Research Strategies

The research strategy for this study is a survey-based approach. Surveys are suitable for the research as they allow for the systematic collection of quantitative data from a large and diverse sample of German consumers. This approach is consistent with the study's quantitative, deductive methodology, allowing for the evaluation of variables pertaining to motivating interests, ability, incentives, and social motivation, as well as how these factors affect sustainable clothing consumption. As an organized method of collecting replies, surveys guarantee reliability of data and make it possible to put a numerical value on people's thoughts and actions (Bryman, 2016).

The survey methodology is especially well-suited for obtaining a comprehensive picture of sustainable clothing consumption habits, including purchase, use, and disposal behaviors. Effectively testing the ideas that have been developed and concurrently exploring several dimensions are both made possible by this. The use of Likert scales, which are compatible with this survey style, further helps to quantify the opinions and views expressed by respondents (Cooper, 2018; Bryman, 2016).

Similar studies in the field that have utilized surveys to examine sustainable consumption behaviors (Lin & Chen, 2022; Joshi & Rahman, 2019). This approach has been valuable in generating large-scale quantitative data, offering insights into the factors influencing sustainable consumption practices (Park & Lee, 2021).

3.1.4 Time Horizon

Gathering data at a single instant in time is what makes this study's time horizon cross-sectional. Given that this research aims to capture sustainable apparel consumption and the variables that influence it among German consumers, a cross-sectional approach is the most appropriate method to use. When it comes to studying the direct effects of intrinsic, extrinsic, and social motivation on eco-friendly apparel production, this layout is second to none. Insights into the present

situation may be derived rapidly and efficiently from the data gathered within that time span (Bryman, 2016).

Research on consumer attitudes and behaviors towards eco-friendly items also makes use of a cross-sectional time horizon, similar to studies conducted in the field of sustainable consumption (Bhuiyan, et al., 2018; Joshi & Rahman, 2019; Soyer & Dittrich, 2021). For a more complete picture of the topic during a certain period, cross-sectional studies in sustainability research often aim to capture a fleeting viewpoint on customer behaviors, preferences, and motives.

3.2 Sampling and Data Collection Procedure

For the German study on Sustainable Consumer Behavior, a carefully selected sample size of 400 respondents of those consumers who are living in Germany currently as permanent or temporary residents. This sample size was determined using the Krejcie Morgan Table (Refer Appendix 2), where the decision to opt for a sample size of 400 is grounded in the appropriateness of 384 for populations exceeding one million (Bukhari, 2021). In selecting the sample at the convenience of the researcher, consumers within Germany of ages above 18 were recruited disregarding their gender, occupation, or economic background.

The respondents will be selected using a convenience sampling technique, which involves distributing the survey voluntarily through the online platforms namely Limesurvey, Microsoft survey, and a Google Form. These digital surveys were distributed to the respondents via various platforms including WhatsApp, Facebook Messenger, and also E-mails. The online approach offers convenience, enabling participants to contribute at their own pace and from various locations. The use of these online surveys ensures data accuracy and eliminates the possibility of measurement errors. Despite the non-random nature of self-selection, the carefully crafted questionnaire and the items used from previous literature shall enhance the study's reliability and generalizability (Nayak & Narayan, 2019). The supervision and guidance of the research team maintain the integrity of the data collection process. This approach aligns with current

trends in data collection and allows for a comprehensive exploration of sustainable consumer behavior in the German context.

3.3 Data Instrument

In this research instance, the tool is a structured questionnaire with all closed questions meant to get into detail about Sustainable Consumer Behavior in Germany regarding clothing purchase-use and disposal. The questionnaire has a total of 51 questions, carefully organized into the various sections. The section devoted to demographics has 6 questions that collect background information followed by sections related to motivation (7 questions), ability (7 questions), incentives to trigger (7 questions), and social factors (4 questions). The core of the questionnaire is 20 items that are devoted to measuring sustainable consumption. These measurements were systematically taken from a range of literature to ensure their reliability (Soyer & Dittrich, 2021; Fogg, 2009; Joshi & Rahman, 2019; Young, et al., 2010). All the measuring items used a five-point Likert scale that offered the respondents a very wide range of options to formulate their opinions and attitudes. This systematic method guarantees stability and clarity in the data gathering, leading to an in-depth analysis of the determinants of environmentally sustainable consumer behavior (Bryman, 2016).

3.4 Rigor of the Study

The study ensures rigor through meticulous attention to reliability and validity (Bryman, 2016). Cronbach's Alpha, a widely accepted measure of internal consistency, is employed to assess the reliability of the survey instrument, particularly for sections derived from literature (Soyer & Dittrich, 2021; Fogg, 2009; Joshi & Rahman, 2019). This statistical analysis verifies that the items within each construct consistently measure the same underlying concept. The study upholds content validity by drawing extensively from existing literature, ensuring that measurement items align with established theories on sustainable consumer behavior (Quoquab, et al., 2019). The adoption of well-established items from the literature enhances the face and content validity of the questionnaire (Ibiyemi, et al., 2019). Additionally, the careful supervision and

training of assistant researchers minimize potential measurement errors during data collection. The systematic approach to sampling, the clear categorization of variables, and the use of robust statistical techniques collectively contribute to the study's methodological rigor, bolstering the credibility and generalizability of the findings (Cooper, 2018).

3.5 Data Analysis

For this study on Sustainable Consumer Behavior in Germany, the data analysis is done using the Statistical Package for Social Sciences (SPSS). To begin with, the demographic characteristics of the respondents will be summarized using descriptive statistics to give a good summary overview about sample structure. Descriptive statistics including the mean, standard deviation and also frequency will help us to understand the profile of demographic traits among the respondents (Bryman, 2016).

For the purpose of examining the relationships between independent variables (such as motivating interests, ability, incentives and social motivation), correlation coefficients will be applied. Correlation analysis will show if the relationships between variables are positive or negative and also how strong they are. Furthermore, multiple regression analysis will be used to determine the joint effect of these independent variables on the sustainable clothing intake. This statistical method is selected as it permits a close analysis of the intricate mechanisms developed in this particular model (Cooper, 2018; Bryman, 2016). The choice of the analytical tool is SPSS based on its being user-friendly and also popular in social science research. This multidimensional nature of this study is in accord with its ability to cope effectively with the complex statistical analyses (Cooper, 2018; Bryman, 2016). Using these statistical approaches, this research is designed to provide a holistic understanding of the driving forces for sustainable consumer behavior in the German context which would be contributive both theoretically and practically.

3.6 Summary of the Research Design

This quantitative explanatory study employs a structured research design to fulfill its objectives of identifying factors influencing sustainable clothing consumption in Germany. An in-depth examination of the correlations between variables is made possible by the study design's explanatory character. To get a good cross-section of German customers' opinions, the study used a survey approach. In order to achieve these goals, the study used closed-ended survey questions (Cooper, 2018). The influence of participants' motivating interests, ability, incentives, social motives, as well as purchase, use, and disposal on sustainable clothing consumption was assessed using Likert scales. To statistically evaluate the strength and direction of the found associations, statistical procedures like regression analysis are used (Cooper, 2018). Consistency in data collection is ensured by the organized nature of the design, which makes it easy to compare variables across the defined goals. By adopting a quantitative approach, the study aims to provide empirical evidence and statistical insights into the specific factors driving sustainable clothing consumption in Germany, contributing valuable data for both academia and practical policy considerations.

04. RESULTS

This study chapter will present the results gained by conducting the statistical analysis in the order of demographic frequencies, descriptive, rigor of the study, hypotheses testing and regression analysis.

4.1 Data Preparation

The researcher intended gather 384 as shown in section 3.2, however, the researcher was able to gather 402 responses in total. The collection was done using the Limesurvey, Microsoft survey, and a Google Form, where the complete survey responses included 182, 9, and 211 fully completed responses from the named online surveys respectively. Previously, there were 405 and 11 responses in both Limesurvey and Microsoft survey forms, however 223 from Limesurvey and 2 from Microsoft survey were partially filled, hence the responses with missing data were entirely removed, and altogether 402 aid responses were used for the analysis.

4.2 Demographic Data Analysis

The study's respondents mostly belonged to the younger age group as in Figure 5, with them being 77.4% [N=311] from the age group of 20-29. Also, 12.7% [N=51] of the participants were between ages of 18 and 19. The smaller percentages represented from age ranges 30-39(8.7%) with minimal representation in 40-49 [0.5%, N=2] and 60 [0.7%, N=3]. This bias towards very young age groups implies that these study participants are mostly young adults who are very likely either the students or those in the early career phase.

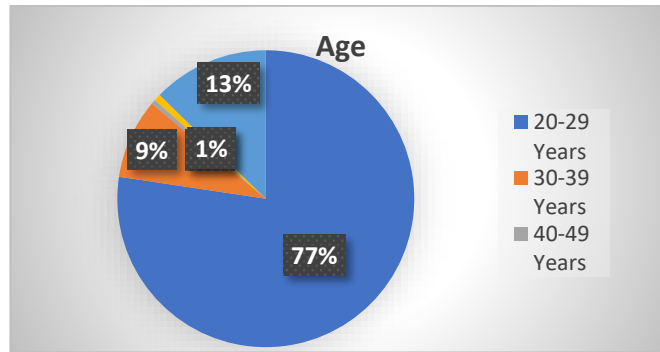


Figure 5: Age

The following Figure 6 exhibits the states of the survey participants in the study. In general, Bavaria has the highest market share which is 77.1% [N=310] followed by Ingolstadt and North Rhine-Westphalia with 6.5% [N=26] and 4.5% [N=18] respectively. Among the most notable regions are Eichstätt and Neuburg a.d. Donau which are included too. Little or no other states are represented in this area. This would shed light on a massive response coming from the state of Bavaria possibly suggesting a limited distribution of respondents unintended during the convenience sampling.

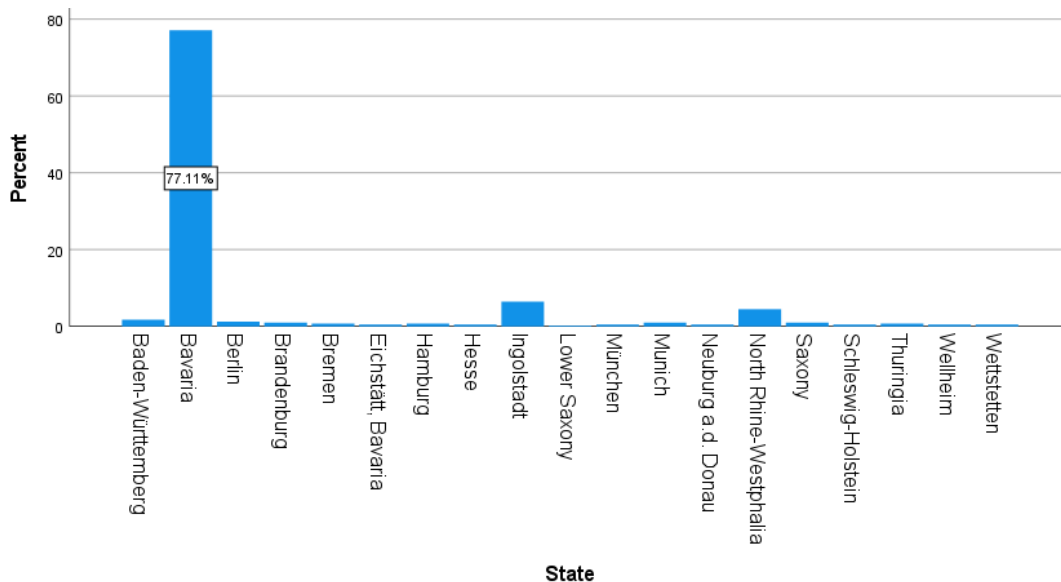


Figure 6: State living in

The distribution of genders among respondents display women represented 46.3% [N=186] and a majority of men were 52.2% [N=210]. Non-binary

individuals and whom chose not to identify which gender constitute only smaller number which count to 0.5% [N=2] and 1.0% [N=4] respectively. This mean a fairly good balance between the genders, but with a slight imbalance towards the males. The fact that non-binary and non-disclosing respondents are included indicates a commendable attempt at including as many views and perspectives as possible in the data collection and having a representative sample.

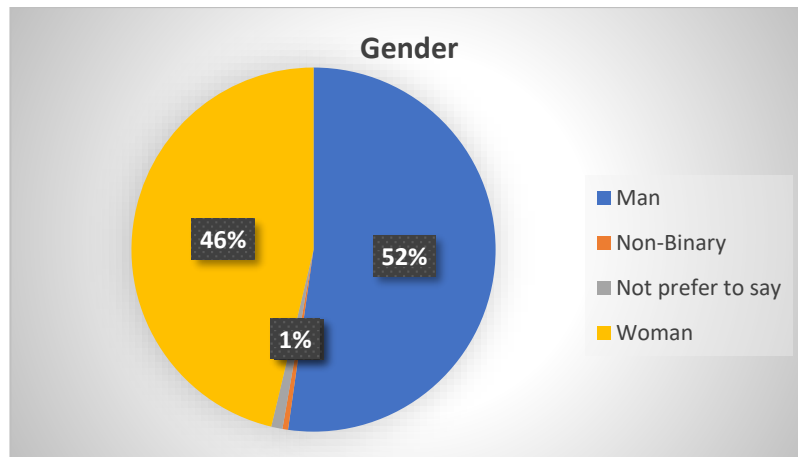


Figure 7: Gender

The results of educational background data shows mixed distribution among the respondents. The greatest number belongs to the category of those with school certificates and diploma (39.3%, N=158), followed by those in tertiary and higher levels (20.1%, N=81) and those in school (20.6%, N=83). About one-third of these students have also completed graduate degrees (13.4%, N=54), and advanced level diploma (4.5%, N=18). A low number are in Post-Graduate Degrees (1.5%, N=6), while a small number are in 'Other' category, just as few people as 0.5% [N=2]. This illustrates the fact that the respondents are well educated, differentiated basing on their academic achievements from undergraduate to postgraduate levels.

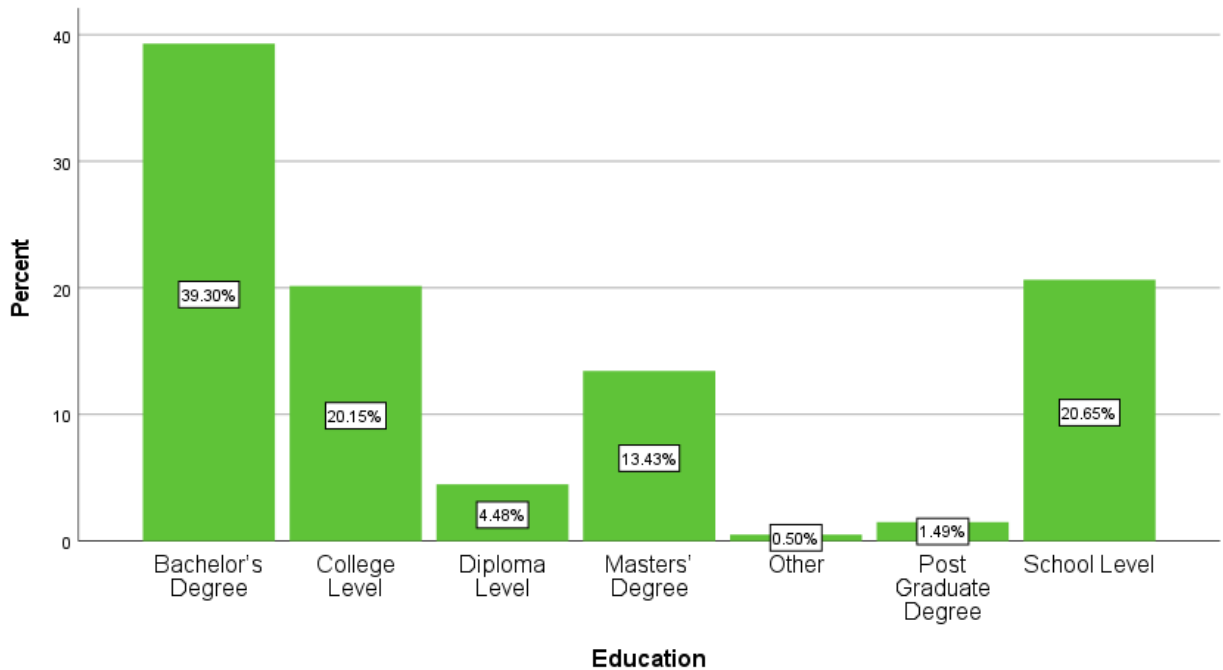


Figure 8: Education

The current employment status of the respondents showed a range of different occupations. The largest group is that of working students, which accounts for 50.5 % of the total responses. The ones without employment are 21.4% [N=86] while part-time employees account for 14.2% [N=57]. Also, full-time employment were shown by 7% [N=28] of respondents, followed by less percentage for categories such as Self-employed (1%, N=14), non-working students (4.7%, N=19), and 0.5% [N=2] of other. This shows that there is very less representation of entrepreneurship and retirement, while the highest represented were university students and those employed on either a full or part-time basis.

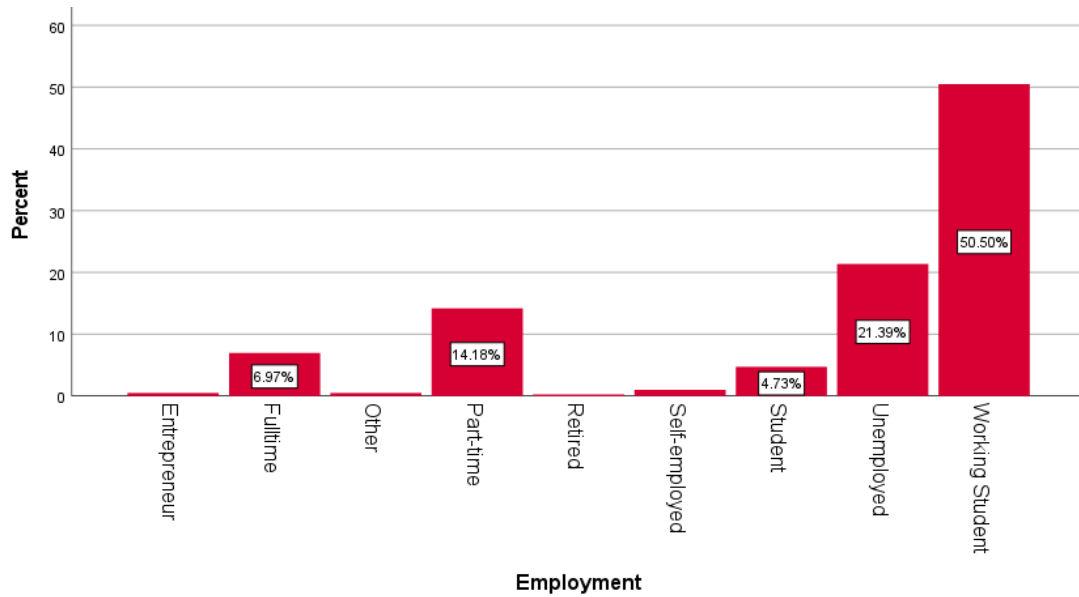


Figure 9: Employment

The study reveals that the income per month of the respondents varies. The most represented were from the income range of €450 - €999, which is 46.3% [N=186] of the surveyed people. The individuals who are earning €1000 - €1499 and less than €450 were 18.9% [N=76] and 21.1% [N=85] respectively. The respondents earning €1500 - €1999 and over €2000 account for a small proportion, at 7.0% [N=28] and 6.7% [N=27] respectively. This implies that there is a mix of economic classes amongst the respondents, with the prevalence of moderate to low-income earners.



Figure 10: Monthly Income

4.3 Descriptive Statistics

The descriptive data reveal different insights on the variables of sustainable consumption behavior. The mean scores for motivating interest (3.97), abilities (3.55), incentives triggers (3.56), sustainable purchase (3.43), sustainable use (3.57), sustainable disposal (3.49) and sustainable consumption (3.53) show that the respondents view these factors positively, as the scores are close to the upper boundaries of the scale (with a range from 1 to 5).

The standard deviations related to the constructs of the study are between 0.82 and 1.07, which means that there is notable variability in the responses from different dimensions of sustainable consumption. The negative skewness values (-0.046 to -0.833) denote a slight shift of scores of respondents towards higher opinions, with most of them being favorable attitudes.

To further analyze the normality of the distributions, positive Kurtosis coefficients were recorded to range from 0.522 to 0.714, indicating the lack of extreme outliers. In general, the descriptive statistics have showed a moderately positive view and framing of sustainable consumption practices among the participants in

the study, and there is some degree of variation on attitudes and behaviors across different dimensions.

Table 1: Descriptive Statistics

	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
Motivating Interest	1.00	5.00	3.9726	.91360	-.833	.122	.399	.243
Ability	1.00	5.00	3.5473	.88996	-.538	.122	.345	.243
Incentives Trigger	1.00	5.00	3.5572	1.0297 1	-.437	.122	-.295	.243
Social Motivation	1.00	5.00	2.7836	.89495	-.046	.122	-.351	.243
Sustainable Purchasing	1.00	5.00	3.4279	.85757	-.418	.122	.580	.243
Sustainable Usage	1.00	5.00	3.5721	.90635	-.514	.122	.290	.243
Sustainable Disposal	1.00	5.00	3.4913	1.0736 2	-.415	.122	-.522	.243
Sustainable Consumption	1.00	5.00	3.5348	.81677	-.551	.122	.714	.243
Valid N (listwise)	402							

4.4 Reliability Analysis

The reliability of a measurement tool represents the level of consistency and stability of its results. It determines the extent to which the introduced tool generates comparable outcomes when intermittent or for alternate cases, implying how accurately the measurements are made (Taber, 2017).

The reliability of the study, as represented by Cronbach's Alpha, might be taken to mean the internal consistency or reliability of the scales generated to enable the assessment of various dimensions. All factors including Motivational Interest,

Ability, Incentives, Social Motivation and Sustainable Consumption all demonstrate reliability with the Cronbach's alpha values distributed from .703 to .887. Hence, all constructs are lying within an acceptable range of reliability.

Table 2: Cronbach's Alpha for Reliability

Construct	Cronbach's Alpha	N of Items
Motivating Interest	.832	7
Ability	.743	7
Incentives Trigger	.763	7
Social Motivation	.703	4
Sustainable Consumption	.887	20

However, the majority of constructs in the study are of the satisfactory or better consistency level. This implies that the factors contained in each construct are responsibly assessing the appropriate indicators of sustainable behavior. However, researcher may consider adding an improvement into both of the Social Motivation and Sustainable Disposal scales to get rid of their weakness of internal consistency if it's necessary.

4.5 Validity Analysis

4.5.1 Uni-Dimensionality Test

Uni-dimensionality testing calibrates as per Table 3, the extent of agreement between items of the tool or the instrument with the latent or general concept. In the current study, the component matrix analysis was used as a measure of the reliability and the association of observed scores with tested components. Results demonstrated that the Motivating Interest, Ability, Incentives Trigger, Social Motivation, and Sustainable Consumption components of the construct were able to load onto the respective column and portray a one-dimensional framework. It means that the instrument is successful in its aim to depict such constructs as it was supposed to do.

Table 3: Component Matrix

	Component 1	Component 2	Component 3	Component 4	Component 5
MOT1	.616				
MOT2	.610				
MOT3	.682				
MOT4	.774				
MOT5	.799				
MOT6	.725				
MOT7	.764				
AB1		.395			
AB2		.480			
AB3		.312			
AB4		.748			
AB5		.811			
AB6		.754			
AB7		.785			
INC1			.548		
INC2			.568		
INC3			.704		
INC4			.728		
INC5			.778		
INC6			.702		
INC7			.488		
SOC1				.571	
SOC2				.784	
SOC3				.762	
SOC4				.403	
PUR1					.619
PUR2					.618
PUR3					.629
PUR4					.607
PUR5					.665
PUR6					.639
PUR7					.633
PUR8					.340
PUR9					.536

PUR1	.558
0	
US1	.601
US2	.565
US3	.596
US4	.520
US5	.559
US6	.615
DIS1	.486
DIS2	.473
DIS3	.517
DIS4	.556

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

4.5.2 Convergent Validity

The assessment of the convergent validity was carried out for Motivating Interest, Ability, Incentives Trigger, Social Motivation, and Sustainable Consumption as shown in Table 4. All types showed a KMO measure of more than 0.5 that was interpreted satisfactory for factor analysis. Besides that, all the independent variables presented with significant statistics, and the p-values below 0.05, indicating their reliability. The chi-square value was yet another support for the confirmatory factor analysis seen in each construct. What is worth noting is stringent criteria for composite reliability (CR) above 0.7 were met by all constructs, which allow to conclude that internal consistency was high. Nevertheless, scales Motivating Interest and Sustainable Consumption exceed 0.5 for AVE threshold, signifying convergent validity. From these studies, however, it seems that both Motivating Interest and Sustainable Consumption show strong convergence, and further work is needed for the other constructs so that their convergent validity becomes enhanced.

Table 4: Convergent Validity

	KMO >0.5	BTS		
--	--------------------	------------	--	--

Constructs		Sig <0.05	Chi- square	CR >0.7	AVE >0.5
Motivating Interest	.859	.000	941.628	0.877	0.509
Ability	.720	.000	859.059	0.816	0.412
Incentives Trigger	.718	.000	930.412	0.835	0.426
Social Motivation	.617	.000	128.932	0.732	0.420
Sustainable Consumption	.864	.000	3099.492	0.894	0.286

4.5.3 Discriminant Validity

In examining discriminant validity, researchers strive to achieve high measures to provide true evidence of attributes not related to one another. This is even more proved when the squared coefficient of correlation between two variables is less than those Variable's Average Variance Extracted (AVE), thus meaning that each construct explains larger variance than shared between them. As per the Table 5, the **squared correlation** among particular constructs (the yellow highlighted) are significantly lower than AVE values of both variables respectively. The test did, accordingly, prove that the explanatory power of each construct was greater than their shared variance. As a result, the study reveals that all the constructs showed strong evidence for discriminant validity which is indication for these to represent the different and separate ideas.

Table 5: Discriminant Validity through Correlations

		Motivating Interest	Ability	Incentives Trigger	Social Motivation	Sustainable Consumption
Motivating Interest	Pearson Correlation	AVE= .509				
	Sig. (2-tailed)					
	N	402				
Ability	Pearson Correlation	.232**	AVE= .412			
	Sig. (2-tailed)	.000				

	N	402	402			
Incentives Trigger	Pearson Correlation	.358**	.192**	AVE= .426		
	Sig. (2-tailed)	.000	.000			
	N	402	402	402		
Social Motivation	Pearson Correlation	.401**	.277**	.031**	AVE= .420	
	Sig. (2-tailed)	.000	.000	.000		
	N	402	402	402	402	
Sustainable Consumption	Pearson Correlation	.561**	.523**	.401**	.167**	AVE= .286
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	402	402	402	402	402

** . Correlation is significant at the 0.01 level (2-tailed).

4.6 Hypotheses Analysis

Based on the Pearson's correlation coefficients (Refer Appendix 3) and their significance levels as stated in the Table 6 below, the hypotheses decisions were made as to whether or not the hypotheses was accepted or rejected.

Table 6: Correlations and Hypotheses Decisions

Hypotheses Statements	Pearson Correlation	Sig.	Decision
<p>Null Hypothesis (H0): There is no significant impact of motivating interest on sustainable purchasing, using, and disposing of clothing in Germany.</p> <p>Alternative Hypothesis 1 (H1): There is a significant impact of motivating interest on sustainable purchasing, using, and disposing of clothing in Germany.</p>	0.561	.000	H1 Accepted
<p>Null Hypothesis (H0): There is no significant impact of ability on sustainable purchasing, using, and disposing of clothing in Germany.</p>	0.523	.000	H2 Accepted

Alternative Hypothesis 2 (H2): There is a significant impact of ability on sustainable purchasing, using, and disposing of clothing in Germany.			
Null Hypothesis (H0): There is no significant impact of incentives that trigger on sustainable purchasing, using, and disposing of clothing in Germany. Alternative Hypothesis 3 (H3): There is a significant impact of incentives that trigger on sustainable purchasing, using, and disposing of clothing in Germany.	0.401	.000	H3 Accepted
Null Hypothesis (H0): There is no significant impact of social motivation on sustainable purchasing, using, and disposing of clothing in Germany. Alternative Hypothesis 4 (H4): There is a significant impact of social motivation on sustainable purchasing, using, and disposing of clothing in Germany.	0.409	.000	H4 Accepted

The independent variable Motivating Interests showed an association of 0.561 ($p=0.00$) level which implies that the association between motivating interest and sustainable consumption is positive and significant. Therefore, alternative hypothesis H1 about the motivating interest impact on sustainable purchase, usage, and disposal of clothing among Germans is supported, implying a moderate influence in Germany.

The correlation coefficient of ability and sustainable consumption is 0.523 and it is significant. That moderately positive correlation again establishes that alternative hypothesis H2 is validated which indicates the impact of the ability in adopting the eco-friendly way of buying, using and disposing clothing.

The Pearson Correlation that is equal to 0.401 and the significance of 0.000 shows moderate positive correlations between incentives to trigger and sustainable consumption. Thereby, the alternative hypothesis H3 which was posited to be significant is validated, thus showing that the various triggers like a broad selection of second-hand clothes, inexpensiveness, easy maintenance, cost-effectiveness etc. has a substantial effect on consumers to be eco-conscious consumers.

Shown by the Pearson Correlation of 0.409 and the significance of 0.000 which is statistically significant, it is moderate that there is a positive connection among social motivation and sustainable consumption. Thus, alternative hypothesis H4 is to be seen as being accepted, implying a relevant influence of social motivation with factors like opinions of friends, imposing of fines etc. on whether consumers purchase, use as well as dispose waste of clothing items in Germany.

4.7 Regression Analysis

The adjusted R square value of 0.437 (Refer Table 7) indicates that approximately 43.7% of the variance in sustainable consumption can be explained by the independent variables: Motivating Interest, Ability, Incentives Trigger, and Social Motivation. The ANOVA (Refer Table 8) show a significance level of 0.000 which implies the regression model is statistically significant. It means at least one of the independent variables is the cause of the dependent variable. Hence, the model aggregating these independent variables together is able to explain the variation in sustainable consumption behavior. Nevertheless, it must be aware that other variables which are external to the model may have an impact on sustainable consumption.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.666 ^a	.443	.437	.61267

a. Predictors: (Constant), Social_Motivation, Incentives_Trigger, Ability, Motivating_Interest

b. Dependent Variable: Sustainable_Consumption

Table 8: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.491	4	29.623	78.917	.000 ^b
	Residual	149.021	397	.375		
	Total	267.512	401			

a. Dependent Variable: Sustainable_Consumption

b. Predictors: (Constant), Social_Motivation, Incentives_Trigger, Ability, Motivating_Interest

The unstandardized coefficients (refer Table 9) display the amount of influence the individual variables have on the dependent variable. In this regression model to predict the sustainable consumption, all the independent variables—Motivating Interest, Ability, Incentives Trigger and Social Motivation—have the statistically significant coefficient with p-value smaller than 0.05. It shows that every predictor making a major contribution to the explanation of the Sustainable Consumption variation. In more details, every increase of a unit of the Motivating Interest increases Sustainable Consumption by 0.277, with all other variables being constant. As of the other variables such as Ability, Incentives, and Social Motivation as will increase sustainable consumption by 0.237, 0.113, and 0.171 units for every unit increase when other factors kept constant.

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.713	.162		4.391	.000
	Motivating Interest	.277	.041	.310	6.775	.000
	Ability	.237	.042	.258	5.690	.000
	Incentives Trigger	.113	.034	.143	3.371	.001

Social Motivation	.171	.038	.187	4.548	.000
-------------------	------	------	------	-------	------

a. Dependent Variable: Sustainable Consumption

Therefore, the regression equation can be written as:

- ***Sustainable Consumption = 0.713 + (0.277 * Motivating Interest) + (0.237 * Ability) + (0.113 * Incentives Trigger) + (0.171 * Social Motivation)***

4.8 Discussion

In response to the research question of how motivating interest influences sustainable consumption of clothing in Germany, this research is in line with existing findings while is also original in other aspects. In this case, integrating the Fogg Behavior Model, a model that emphasizes the role of motivation in sustainability behavior, the research focused on the role of generating interest as it influences consumers' decisions for eco-friendly clothing (Prathibhani and Lakshika 2023). Coming in line with prevailing research (Soyer & Dittrich, 2021), the results revealed a strong correlation between motivating interests and sustainable consumption, suggesting that those who are passionate towards environmental protection are most likely to choose sustainable fashion. However, the findings pointed out the complex nature of the motivators, signifying that environmental awareness is absolutely essential, while such factors as individual expression and ethical considerations are equally elevated there (Gwilt, 2019). Thus, this research supported the fact that motivation of interests became significant; nevertheless, it also emphasized the importance of multi-dimensional approach in pursuing lasting fashion consumption in Germany.

Through this research the substantial significance of ability factors in the presentation of earlier studies was also confirmed. According to the Fogg Behavior Model's key aspect of ease, which underlines the ability to change one's way to make eco-friendly choices, the research focused on the factors such as time, money, and effort that are facilitating the sustainable consumption behaviors

(Prathibhani & Lakshika, 2023; Soyer & Dittrich, 2021). The results in this study is similar to other researchers (Stanton, 2018) and evidence that mobility in the concept of sustainable clothing options is what encourage customers' adoption of sustainable culture.

In regard to the effect of triggers on sustainable garment consumption in Germany, this study confirms earlier findings and offers some new perspective. The research reflects the principle of Fogg Behavior Model- external and internal triggers impact consumers' eco-friendly clothing preference (Prathibhani & Lakshika, 2023; Fogg 2009). The study outcomes were supported by existing research (Stanton 2018, McNeil & Moore 2015) that highlighted the necessity of efficacious communication and marketing campaigns that resulted in sustainable choices. Besides, the personal reflections on the environmental impact were significant. Furthermore, the study highlighted these factors including second-hand clothing choices, affordability, and ease of maintenance which served as very strong stimulants for ecologically positive decision-making.

Seeking in order to address the influence of social motivation on sustainable clothing consumption in Germany, this study refers to previous scientific work while offering new aspects. Reflecting on the Theory of Planned Behavior (TPB) and the Fogg Behavior Model which increased emphasis on the role of social motivational factors in eco behavioral change and sustainable practices, the study specifically examined social motivation as a key driving factor for eco-conscious clothing behaviors (Prathibhani & Lakshika, 2023; Soyer & Dittrich, 2021). As other literature (De Pelsmacker et al. 2005; Nekmahmud et al. 2022) has also demonstrated, these study results emphasize the impact of consumers' attitudes, subjective norms, and perceived behavior control on their sustainable consumption behaviors. On the other hand, the research shed a light on the unique social determinants like the opinions of friends and the fines for improper consumptions etc., which influence these consumers to buy, use and discard their clothes in a specific manner. This subsequently helps to highlight the significance of social influence and adds new insights on the social behavior that fuel sustainable clothing consumption in Germany.

Though the findings of the study greatly coincide with what already existed in the literature, it still has some discrepancies. However, as previous research also states (Soyer & Dittrich, 2021), consumers can actually be ready to spend more on sustainable apparel, but the present study does not exactly investigate the financial side of sustainable consumption. Furthermore, the study also revealed a higher influence of social motivation as compared to the social factors that already have been reported in this literature, which is more pronounced among the younger consumers the who are highly affected and motivated by the advocates of social movements in online space. Such differences underline that the phenomenon of sustainable consumption behavior is continually evolving hence the need for continued research to capture its further nuances within a wider scope.

05. CONCLUSION & IMPLICATIONS

This chapter entails the final presentation of this study which will give a concluding idea on the study and its purpose, while providing a recap of the study. The researcher also discusses the implications theoretically and practically; limitations of the study; recommendations to overcome them; and a final conclusion.

5.1 Research Overview

This study investigated the factors influencing sustainable clothing consumption in Germany. For the purpose 04 research objectives were answered through statistical data analysis from those gathered from 402 survey responses. The findings revealed significant positive associations between motivating interest, ability, incentives triggers, social motivation, and sustainable consumption behaviors. Motivating interest, ability, incentives triggers, and social motivation collectively explained approximately 43.7% of the variance in sustainable consumption. Specifically, motivating interest and ability exhibited a moderate positive influence on sustainable consumption, highlighting the importance of cultivating consumer desire and enhancing accessibility to eco-friendly options.

Moreover, incentives triggers, such as second-hand clothing availability and affordability, significantly impacted eco-conscious consumer choices. Social motivation, encompassing factors like peer opinions and societal norms, also played a crucial role in driving sustainable clothing behaviors. In addition, the satisfaction one receives in sustainable clothing, also concerns on animal sufferings and pollution, and the sense of responsibility were those highlighted under motivating factors; whereas, ability to access, buy, swap etc. was also shown here. Overall, the study underscored the multifaceted nature of sustainable consumption and emphasized the need for comprehensive strategies integrating such factors to promote eco-conscious behaviors in the clothing industry.

5.2 Implications of the Findings

The theoretical contribution of the research is that both the Fogg Behavior Model and the Theory of Planned Behavior can be validated and applied to the understanding of the attitudes and behaviors related to sustainable consumption, especially in clothing industry. Through a practical approach, explanatory data analysis confirm the role of motivating interest, ability, incentives for triggers, and social motivation, thus, making sure theoretical frameworks as those proposed by Fogg (2009) and Ajzen (1991) are relevant to understand such complex consumer behaviors (Soyer & Dittrich, 2021). Apart from this, the findings also add to the evolving discourse on sustainable consumption as the study presents concrete evidence that the interplay of individual motivations, external cues, and group influence in determining eco-friendly activities.

The study has implications for businesses and entrepreneurs who are aiming to foster sustainable practices, as well as to those policymakers who want to tackle environmental issues, and marketers who intend to raise awareness of such practices. To begin with, it indicates the value of having an awareness campaign and educational activities that focus on why sustainable clothing is favorable ecologically and socially (Davies, 2015) as the study show that these are necessary to create motivating interests to the consumer behavior. Also the improving of accessibility, affordability, and convenience of eco-friendly clothing options is significant to empower consumers towards acting sustainably (Soyer & Dittrich, 2021). Moreover, the study highlights the efficacy of such incentives triggers as promote wearing second-hand clothing or provide cheap and better alternatives in nudging consumers towards a greener choice (Stanton, 2018). Last but not the least, recognizing the effect of social motives, organizations can take advantages of social norms and networks of peers to create the culture that would favor sustainable consumption among the public (Ciasullo et al., 2017). Generally speaking these practical implications are providing with realistic strategies to undertake for the representatives of the industry in regards to sustainability and will contribute to the global tasks related to environmental preservation and sustainable responsibility.

5.3 Limitations & Recommendations for Future Research

The current research is substantial and very well produced but it has limitations that may infer its credibility. Firstly, the use of a convenient sampling method may have introduced a bias in the sample. This implies that a particular segment of the population or a particular type of consumer behavior would be over-represented, hence reducing the conceptualization of research findings that could apply to the entire sample of consumers living in Germany. Besides, it can be observed that most of the respondents are from Bavaria which raises doubts about the geographical homogeneity of the sample, questioning of the sample representativeness in other German regions.

Another drawback is that it uses a cross-sectional design, which gives only a single picture of how is sustainable clothing and consumed at a given time. This method, however, may be insufficient to considering the fluctuations in time and that it may fail to identify the long-term changes or the shifts in the consumer attitudes and behavior. As such, respondents could also face the issue of either response bias or social desirability bias as they might provide socially acceptable answers in place of their true behavior.

Moreover, the study centers on quantitative data analysis thus qualitative aspects of environmentally-conscious behavior like attitudinal values, and cultural factors influencing consumers' decisions may be undermined. In the pursuit of richer results, consider combining the qualitative methods like interviews and focus groups with quantitative findings.

To this end, the proposed recommendations are aimed at mitigating these drawbacks, as well as improving the overall quality of the future work on this topic. Initially, the researchers should be using more systematic sampling methods, like a stratified random sampling, that assures the target population is more comprehensively the whole representative. Meanwhile, the longitudinal studies could be conducted to trace the key changes in sustainable consumer behaviors over time where dynamic trends could be captured.

Furthermore, future researchers should pay attention to applying mixed-methods approach which combines the results obtained through quantitative survey

information and through qualitative interview or observations for a comprehensive knowledge. That way, an emphasis could be put on what drives consumers to make or not make eco-conscious purchases, on their overall attitude towards the aforementioned theme and on what external factors affect their decision-making. While, also forthcoming studies should attempt to involve diverse and mannerly represented groups of consumers such as those from different socio-economic classes, age groups and locations, with the aim of ensuring that studies have inclusivity and increased population coverage.

Whereas, future research can be done with regards to comparative studies on clothing behaviors of Germany to another country, or even do the study with respect to a certain demographic category such as the generational consumers like Gen Z or millennial. Moreover, as the current study's scope looks into sustainable consumption in general which comprises of all purchasing, usage, and disposal, future research can specifically look into one of those actions from purchasing, usage, or disposal.

5.4 Conclusion

This study finally explores the dynamics of environmental and socially conscious clothing consumption in Germany to bridge the gap between consumer awareness and positive attitudes towards fashion industry and the environmental and social impact that impacts the behavioral changes. Germany, being the second most significant clothing importer worldwide also stresses the need to comprehend and solve the problems with consumers' purchasing behavior in order to reduce the resource consumption, waste generation and polluting emissions.

Applying a rigorous research design by quantitative methods this study explores the question of how can motivating interest, ability, incentives and social motivation influence on sustainable clothing consumption behaviors of German consumers. Identifying and analyzing these factors has guided the study in developing in view of those who want to develop appropriate measures and strategies to promote sustainability in the fashion industry. The results of this

research are valuable for Germany not only in terms of sustainable consumer behavior but also to the global debate on sustainable clothing. Over the course of the study, it provides relevant insights, such as consumer motivation, and guidance that fit the behaviors of Germans which were gathered through the surveys. As a result, it empowers the strategy to be more sustainable and responsible, not only in Germany but also in other countries where the same problems exist.

In the context of correcting the gaps discovered through the literature review, this research aims at providing the path towards more equitable, transparent and ecological behavior in the clothing industry as a whole. This study, being a catalyst, drives the actions of consumers in the right direction, which in turn contributes to a more sustainable future both for the people and the planet.

References

Abbate, S. et al., 2023. Sustainability trends and gaps in the textile, apparel and fashion industries. *Environment, Development and Sustainability*.

Baloyi, R. B., Gbadeyan, O. J. & Chunilall, V., 2023. Recent advances in recycling technologies for waste textile fabrics: a review. *Textile Research Journal*.

Bhuan, S. N., Sharma, S. K., Butt, I. & Ahmed, Z. U., 2018. Antecedents and pro-environmental consumer behavior (PECB): the moderating role of religiosity. *Journal of Consumer Marketing*, 35(3).

Bocti, M., El Zein, S. A. & Giannini, R., 2021. Exploring Antecedents to the Attitude-Behavior Gap for Sustainable Fashion Consumption in Germany. *Journal of Sustainable Marketing*, 2(2).

Brückel, S. & Schneider, S., 2019. Factors Influencing Consumer Behavior to Purchase Sustainable Cosmetic Products in a German Context. *Regional and Business Studies*, 11(2).

Bryman, A., 2016. *Social Research Methods*. 5th ed. London: Oxford University Press.

Bukhari, S. A. R., 2021. *Sample Size Determination Using Krejcie and Morgan Table*, s.l.: Research Gate.

Casula, M., Rangarajan, N. & Shields, P., 2020. The potential of working hypotheses for deductive exploratory research. *Quality & Quantity*, Volume 55.

Centobelli, P., Abbate, S. & Peter, S., 2022. Slowing the fast fashion industry: An all-round perspective. *Current Opinion in Green and Sustainable Chemistry*, Volume 38.

Chang, H. J. & Watchravesringkan, K., 2018. Who are sustainably minded apparel shoppers? An investigation to the influencing factors of sustainable

apparel consumption. *International Journal of Retail & Distribution Management*, Volume 46, p. 148–162.

Chen, X. et al., 2021. Circular Economy and Sustainability of the Clothing and Textile Industry. *Materials Circular Economy*, Volume 12.

Ciasullo, M. V., Maione, G., Torre, C. & Troisi, O., 2017. What about sustainability? An empirical analysis of consumers' purchasing behavior in fashion context. *Sustainability*, Volume 9.

Cooper, D. R., 2018. *Business Research: A Guide to Planning, Conducting, and Reporting Your Study*. 1st ed. s.l.:SAGE Publications, Inc.

Davies, I., 2015. The values and motivations behind sustainable fashion consumption. *Journal of Consumer Behaviour*, 15(2).

De Pelsmacker, P., Driesen, L. & Rayp, G., 2005. Do consumers care about ethics? Willingness to pay for fair-trade coffee. *Journal of Consumer Affairs*, Volume 39, p. 363–385.

Earth.Org, 2023. *10 Concerning Fast Fashion Waste Statistics*. [Online] Available at: <https://earth.org/statistics-about-fast-fashion-waste/> [Accessed 15 October 2023].

Eifler, C. & Diekamp, K., 2013. Consumer Acceptance of Sustainable Fashion in Germany. *Research Journal of Textile and Apparel*, 17(1).

European Parliament, 2023. *The impact of textile production and waste on the environment*. [Online]

Available at:

<https://www.europarl.europa.eu/news/en/headlines/society/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographics>

[Accessed 15 October 2023].

European Supermarket Magazine, 2021. *German Consumers Willing To Spend More On Sustainable Products, Study Finds*. [Online]

Available at: <https://www.esmmagazine.com/retail/german-consumers-willing-to-spend-more-on-sustainable-products-study-finds-151825>

[Accessed 23 October 2023].

Fogg, B. J., 2009. A Behavior Model for Persuasive Design. *Proceedings of the 4th International Conference on Persuasive Technology*, p. 1–7.

Geels, F. W., McMeekin, A., Mylan, J. & Southerton, D., 2015. A critical appraisal of Sustainable Consumption and Production research: The reformist, revolutionary and reconfiguration positions. *Global Environmental Change*, Volume 34, pp. 1-12.

Geneva Environment Network, 2023. *Environmental Sustainability in the Fashion Industry*. [Online]

Available at:

<https://www.genevaenvironmentnetwork.org/resources/updates/sustainable-fashion/>

[Accessed 30 November 2023].

GfK, 2022. *Sustainability megatrend – German consumers' expectations of the fashion industry*. [Online]

Available at: [https://www.gfk.com/press/sustainability-megatrend-german-consumers-expectations-fashion-](https://www.gfk.com/press/sustainability-megatrend-german-consumers-expectations-fashion-industry#:~:text=This%20also%20has%20a%20huge,accordingly%20to%20this%20increasing%20demand.)

[industry#:~:text=This%20also%20has%20a%20huge,accordingly%20to%20this%20increasing%20demand.](https://www.gfk.com/press/sustainability-megatrend-german-consumers-expectations-fashion-industry#:~:text=This%20also%20has%20a%20huge,accordingly%20to%20this%20increasing%20demand.)

[Accessed 29 October 2023].

Gossen, M. et al., 2022. Nudging Sustainable Consumption: A Large-Scale Data Analysis of Sustainability Labels for Fashion in German Online Retail. *Frontiers in Sustainability*, Volume 3.

Granskog, A., Lee, L., Magnus, K. & Sawers, C., 2020. *Survey: Consumer sentiment on sustainability in fashion*. [Online]

Available at: <https://www.mckinsey.com/industries/retail/our-insights/survey->

consumer-sentiment-on-sustainability-in-fashion

[Accessed 20 October 2023].

Hunstig, M., 2019. *Why Germany's fashion market is hard to crack*. [Online] Available at: <https://www.voguebusiness.com/consumers/germany-fashion-retail-market-gap-ganni#:~:text=less%20affluent%20neighbours.-,Germans%20will%20spend%20an%20estimated%20%E2%82%AC719%20on%20clothing%20per,to%20data%20compiled%20by%20Statista.>

[Accessed 17 October 2023].

Hüppauff, T., Richter, N. & Hunecke, M., 2022. Heavy crisis, new perspectives? Investigating the role of consumption, time wealth and meaning construction during countrywide Covid-19 lockdown in Germany. *PMC*, Volume 3.

Ibiyemi, A., Adnan, Y., Duad, M. & Olanrele, S., 2019. A content validity study of the test of valuers' support for capturing sustainability in the valuation process in Nigeria. *Pacific Rim Property Research Journal*, 25(1), pp. 1-17.

Jain, S. A., 2023. *Water Footprint in Textile and Fashion Industry*. [Online] Available at: <https://textilelearner.net/water-footprint-in-textile-and-fashion-industry/#:~:text=Water%20Usage%20in%20Textile%20and%20Fashion%20Industry%3A&text=Currently%2C%20the%20fashion%20sector%20is,of%20total%20freshwater%20extraction%20worldwide.>

[Accessed 17 October 2023].

Jia, T. et al., 2023. Promoting Responsible Sustainable Consumer Behavior through Sustainability Marketing: The Boundary Effects of Corporate Social Responsibility and Brand Image. *Sustainability*, 15(7).

Joshi, Y. & Rahman, Z., 2019. Consumers' Sustainable Purchase Behaviour: Modeling the Impact of Psychological Factors. *Ecological Economics*, Volume 159, p. 235–243.

Kirchherr, J. et al., 2023. Conceptualizing the Circular Economy (Revisited): An Analysis of 221 Definitions. *Resources, Conservation and Recycling*, Volume 194.

Kozar, J. M. & Connell, K. J., 2013. Socially and environmentally responsible apparel consumption: Knowledge, attitudes, and behaviors. *Social Responsibility Journal*, 9(2), pp. 315-324.

Lin, P. & Chen, W., 2022. Factors That Influence Consumers' Sustainable Apparel Purchase Intention: The Moderating Effect of Generational Cohorts. *Sustainability*, 14(14).

Majeed, I., 2019. Understanding Positivism in Social Research: A Research Paradigm of Inductive Logic of Inquiry. *International Journal of Research in Social Sciences*, 9(11).

Mamun, A., Torst, N. & Sabantina, L., 2023. Advancing towards a Circular Economy in the Textile Industry. *Engineering Proceedings*, 56(1).

Mandarić, D., Hunjet, A. & Vuković, D., 2022. The Impact of Fashion Brand Sustainability on Consumer Purchasing Decisions. *Journal of Risk and Financial Management*, 15(4).

Manshoven, S. et al., 2019. *Textiles and the environment in a circular economy*, s.l.: European Topic Centre Waste and Materials in a Green Economy.

Milne, G. R., Ordenes, F. V. & Kaplan, B., 2020. Mindful Consumption: Three Consumer Segment Views. *Australasian Marketing Journal*, 28(1).

Nayak, M. & Narayan, K., 2019. Strengths and Weakness of Online Surveys. *IOSR Journal of Humanities and Social Science*, 24(5), pp. 31-38.

Nekmahmud, M., Naz, F., Ramkissoon, H. & Fekete-Farkas, M., 2022. Transforming consumers' intention to purchase green products: Role of social media. *Technological Forecasting and Social Change*.

Niedermeier, A., Emberger-Klein, A. & Menrad, K., 2020. Which factors distinguish the different consumer segments of green fast-moving consumer goods in Germany?. *Business Strategy and the Environment*.

OECD, 2022. *Germany supports sustainable textile production*. [Online] Available at: <https://www.oecd.org/development-cooperation-learning/practices/germany-supports-sustainable-textile-production-89276a44/> [Accessed 29 November 2023].

Papagiannaki, E., Saha, K. & Dey, P. K., 2021. Implementing Circular Economy in the Textile and Clothing Industry. *Business Strategy and the Environment*, 30(5).

Papamichael, I., Voukkali, I., Economou, F. & Loizia, P., 2023. Mobilisation of textile waste to recover high added value products and energy for the transition to circular economy. *Environmental Research*, 242(2)(2).

Park, H. J. & Lin, L. M., 2020. Exploring attitude–behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *Journal of Business Research*, p. 623–628.

Park, S. & Lee, Y., 2021. Scale Development of Sustainable Consumption of Clothing Products. *Sustainability*, 13(115).

Piontek, F. M., Rapaport, M. & Müller, M., 2019. One year of Clothing Consumption of a German Female Consumer. *Procedia CIRP*, Volume 80, pp. 417-421.

Prathibhani, H. K. & Lakshika, V. G., 2023. Sustainable consumer behaviour in clothes disposal in the Sri Lankan context. *Asian Journal of Marketing Management*, 2(2), pp. 81-114.

Quoquab, F., Mohammad, J. & Sukari, N. N., 2019. A multiple-item scale for measuring “sustainable consumption behaviour” construct: Development and psychometric evaluation. *Asia Pacific Journal of Marketing and Logistics*, 31(2).

Ray, S. & Nayak, L., 2023. Marketing Sustainable Fashion: Trends and Future Directions. *Sustainability*, 15(7).

Russ, B., 2021. *A guide to the German fashion market*. [Online]
Available at: <https://fashionunited.uk/news/business/a-guide-to-the-german-fashion-market/2021090357490>
[Accessed 17 October 2023].

Schumacher, K. A. & Forster, A. L., 2022. Textiles in a circular economy: An assessment of the current landscape, challenges, and opportunities in the United States. *Frontiers in Sustainability*, Volume 3.

Sohn, J. et al., 2021. The environmental impacts of clothing: Evidence from United States and three European countries. *Sustainable Production and Consumption*, pp. 2153-2164.

Soyer, M. & Dittrich, K., 2021. Sustainable Consumer Behavior in Purchasing, Using and Disposing of Clothes. *Sustainability*, Volume 13.

Spindler, V., Schunk, H. & Könecke, T., 2023. Sustainable consumption in sports fashion – German runners' preference and willingness to pay for more sustainable sports apparel. *Sustainable Production and Consumption*.

Stahl, F. F., Emberger-Klein, A. & Menrad, K., 2021. Consumer Preferences in Germany for Bio-Based Apparel With Low and Moderate Prices, and the Influence of Specific Factors in Distinguishing Between These Groups. *Frontiers in Sustainability*, Volume 2.

Sutanto, J., Leidner, D. E. & Goutas, L., 2021. Influencing Sustainable Consumption Through Persuasive Agent Design. *Forty-Second International Conference on Information Systems*.

Vargas-Merino, J. A., Rios-Lama, C. A. & Panez-Bendezú, M. H., 2023. Sustainable Consumption: Conceptualization and Characterization of the Complexity of “Being” a Sustainable Consumer—A Systematic Review of the Scientific Literature. *Sustainability*, Volume 15.

Venghaus, S., Henseleit, M. & Belka, M., 2022. The impact of climate change awareness on behavioral changes in Germany: changing minds or changing behavior?. *Energy, Sustainability and Society*, Volume 12.

Vesterinen, E. & Syrjälä, H., 2022. Sustainable anti-consumption of clothing: A systematic literature review. *Cleaner and Responsible Consumption*, Volume 5.

Wiederhold, M. & Martinez, L. F., 2018. Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. *International Journal of Consumer Studies*, 42(4).

Wiegand, T. & Wynn, M., 2023. Sustainability, the Circular Economy and Digitalisation in the German Textile and Clothing Industry. *Sustainability*, 15(11).

Wu, C. & Thompson, M. E., 2020. *Sampling Theory and Practice*. s.l.:Springer.

Wunderlabel, 2022. *Fashion Statistics 2022/3*. [Online]
Available at: <https://wunderlabel.com/lab/fashion-statistics/>
[Accessed 30 November 2023].

Young, W., Hwang, K., McDonald, S. & Oates, C. J., 2010. Sustainable consumption: Green consumer behaviour when purchasing products. *Sustainable Development*, Volume 18, p. 20–31.

Appendices

Appendix 1: Questionnaire

Dear Respondent,

Greetings! My name is Sahan Sachith De Silva, a master's student at Technische Hochschule Ingolstadt, conducting research on Sustainable Consumer Behavior in Germany, specifically focusing on Clothing Purchase, Use, and Disposal. Your insights are crucial for the success of this academic endeavor. By participating in this questionnaire, you contribute to advancing our understanding of sustainable practices in the realm of clothing consumption. Your experiences and opinions are valuable in unraveling the factors that influence sustainable choices. Rest assured, your responses will be handled with utmost confidentiality and used exclusively for academic purposes. Your time and input are highly appreciated, and your involvement in this study significantly contributes to the broader discourse on sustainable consumer behavior. Thank you for your participation, and let's work together towards a more sustainable future.

Best regards,

Sahan Sachith De Silva

Technische Hochschule Ingolstadt

1. State you are living in?

Baden-Württemberg	
Bavaria	
Berlin	
Brandenburg	
Bremen	
Hamburg	
Hesse	
Mecklenburg-Vorpommern	
Lower Saxony	

North Rhine-Westphalia	
Rhineland-Palatinate	
Saarland	
Saxony-Anhalt	
Saxony	
Schleswig-Holstein	
Thuringia	
Other	

2. Gender:

Woman	
Man	
Non-Binary	
Not prefer to say	

3. Age:

Under 20	
20-29 Years	
30-39 Years	
40-49 Years	
50-59 Years	
60 or above	

4. Latest Educational Qualification:

School Level	
College Level	
Diploma Level	
Bachelor's Degree	
Post Graduate Degree	
Masters' Degree	
PHD/ Doctoral	

Other (Specify)	
None	

5. Employment status:

Fulltime	
Part-time	
Working Student	
Unemployed	
Self-employed	
Entrepreneur	
Retired	
Other (Specify)	

6. Your Monthly Income Range:

Less than €450	
€450 - €999	
€1000 - €1499	
€1500 - €1999	
€2000 or More	

Please select the most appropriate on the scale from Strongly Disagree to Strongly Agree for the following questions.

Q7 Motivating Interest		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
MOT1	Purchasing sustainable clothes brings a					

	sense of satisfaction.					
MOT2	I am averse to buying clothes associated with animal suffering.					
MOT3	I am troubled by the environmental pollution caused by clothing production.					
MOT4	I am convinced that buying sustainable clothes contributes positively to the planet.					
MOT5	I believe responsible care for clothes has a beneficial impact on the environment.					
MOT6	Recognizing the positive impact of proper disposal on the environment is crucial.					

MOT7	I hold the belief that swapping, selling, or donating clothes is environmentally preferable.					
------	--	--	--	--	--	--

Q8 Ability		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AB1	The cost of sustainable clothes is comparable to other options.					
AB2	Accessible stores make it easy for me to buy clothes.					
AB3	I can quickly determine if a garment follows sustainable practices.					
AB4	Easy ability to sell or swap my clothes matters to me.					
AB5	Knowing where I can sell or swap my clothes is important.					

AB6	Trustworthiness of swapping or selling platforms is crucial.					
AB7	Convenient selling or swapping processes for clothes are important.					

Q9	Incentives to Trigger	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
INC1	I opt for second-hand clothes when they are very affordable.					
INC2	A broad selection of second-hand clothes is essential for my choices.					
INC3	Inexpensive and easy repairs are a key consideration for me when deciding on clothes.					
INC4	Cost-effective maintenance,					

	avoiding processes like dry cleaning, is significant.					
INC5	Easy maintenance and caring for clothes holds importance for me.					
INC6	Cost-effective or having no expenses for clothing disposal is important.					
INC7	Receiving money or vouchers for returning clothes is an important consideration for me.					

Q10 Social Motivation		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SO C1	Buying new clothes at a very low price makes me feel ashamed.					
SO C2	Sustainability is a consideration for my					

	friends when making purchases.					
SO C3	People I admire engage in selling or swapping their clothes.					
SO C4	Imposing a fine for discarding unwanted clothes in a trash bin is important.					

Sustainable Consumption		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Sustainable Purchasing					
PUR1	I opt for clothing from environmentally friendly brands.					
PUR2	I always check the clothing label to verify the materials used.					
PUR3	Preference for clothing made of biological cotton, bamboo, flax, Lyocell, Tencel.					
PUR4	Choice for clothing with minimal processing for a natural look.					
PUR5	Purchase of clothes crafted from recycled materials.					

PUR6	Refusal to buy environmentally harmful clothing.					
PUR7	Avoidance of purchases if the garment workers endure unsafe conditions.					
PUR8	Preference for second-hand clothing.					
PUR9	Selection of timeless clothing over trendy fashion.					
PUR10	Priority given to quality clothes for their longevity.					
	Sustainable Usage					
US1	Continued use of garments with minor defects, imperfections, or size differences.					
US2	Continued use of out-of-fashion garments.					
US3	Careful washing practices to prolong garment lifespan, such as use of eco-friendly washing products.					
US4	Personal repair of minor garment defects.					
US5	Up cycling or seeking professional help to update old clothing and creative reuse of old garment parts for new creations.					
US6	Repurposing damaged garments for alternative uses.					

	Sustainable Disposal					
DIS1	Sharing or swapping clothes with friends and family or donating clothes to charitable causes or recycling.					
DIS2	Returning clothes to the store for vouchers or recycling.					
DIS3	Selling or swapping garments through second-hand stores, both online and offline.					
DIS4	Salvaging reusable items like labels, buttons, and zippers before discarding or repurposing old clothes as cleaning rags.					

Thank You for your valuable response!

Appendix 2: Krejcie & Morgan Sample Determiner

<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Appendix 3: Extracts from SPSS and Dataset

Pearson Correlation Table

These were the values referred to in deciding the hypotheses testing.

		Correlations					
		Motivating Interest	Ability	Incentives Trigger	Social Motivation	Sustainable Consumption	
Sustainable Consumption	Pearson Correlation	.561**	.523**	.401**	.409**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	402	402	402	402	402	

** . Correlation is significant at the 0.01 level (2-tailed).

Extracts of the Data Set

	Stateyouarelivingin	Gender	Age	LatestEducationalQualification	Employmentstatus	YourMonthlyIncomeRange	MOT1	MOT2	MOT3	MOT4	MOT5	MOT6	MOT7	AB1	AB2	AB3
1	Bavaria	Man	Under 20	College Level	Working Student	€1000 - €1499	4	5	5	3	4	4	5	4	4	2
2	Munich	Man	20-29 Years	Bachelor's Degree	Working Student	€1000 - €1499	2	3	3	3	2	3	2	2	3	3
3	Bavaria	Man	20-29 Years	Masters' Degree	Part-time	€450 - €999	3	4	3	4	4	5	5	3	4	2
4	Bavaria	Man	Under 20	College Level	Working Student	Less than €450	4	4	4	5	5	5	5	3	4	2
5	Thuringia	Man	Under 20	College Level	Working Student	€1000 - €1499	3	2	3	4	4	4	4	3	3	2
6	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	5	3	5	5	5	1	5	1	5	5
7	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	4	3	5	2	4	3	4	1	2	2
8	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€2000 or More	2	2	4	2	2	3	5	3	5	2
9	Bavaria	Woman	30-39 Years	Bachelor's Degree	Unemployed	€1000 - €1499	5	5	5	4	5	5	5	4	2	3
10	Bavaria	Woman	30-39 Years	Bachelor's Degree	Part-time	€1500 - €1999	4	3	4	4	5	5	4	3	2	2
11	Bavaria	Woman	30-39 Years	College Level	Working Student	€1000 - €1499	3	5	2	3	3	5	5	2	3	4
12	Bavaria	Woman	20-29 Years	College Level	Working Student	Less than €450	3	4	3	4	4	3	3	3	4	3
13	Bavaria	Woman	20-29 Years	Bachelor's Degree	Working Student	€1000 - €1499	3	5	5	2	5	5	5	2	3	5
14	Bavaria	Man	20-29 Years	Bachelor's Degree	Unemployed	Less than €450	5	2	1	5	5	5	5	5	5	1
15	Bavaria	Woman	20-29 Years	College Level	Working Student	€450 - €999	3	5	4	3	5	5	4	2	4	2
16	Ingolstadt	Man	20-29 Years	Bachelor's Degree	Fulltime	€450 - €999	5	5	5	5	5	5	5	3	4	2
17	Bavaria	Woman	20-29 Years	School Level	Working Student	€1500 - €1999	3	4	3	4	4	4	4	1	2	3
18	Bavaria	Woman	20-29 Years	Diploma Level	Working Student	€450 - €999	4	2	3	4	5	5	5	5	4	4
19	Eichstätt, Bavaria	Woman	20-29 Years	Bachelor's Degree	Part-time	€450 - €999	4	4	4	4	4	4	4	1	4	3
20	Bavaria	Man	20-29 Years	Masters' Degree	Fulltime	€2000 or More	4	4	3	5	5	5	5	2	2	3
21	Ingolstadt	Man	20-29 Years	Masters' Degree	Unemployed	Less than €450	5	4	5	5	5	5	5	3	4	2
22	Ingolstadt	Man	20-29 Years	Bachelor's Degree	Working Student	Less than €450	3	1	4	5	5	4	5	3	2	3

	Stateyouarelivingin	Gender	Age	LatestEducationQualification	Employmentstatus	YourMonthlyIncomeRange	MOT1	MOT2	MOT3	MOT4	MOT5	MOT6	MOT7	AB1	AB2	AB3
112	Bavaria	Woman	20-29 Years	Masters' Degree	Self-employed	€1000 - €1499	4	3	5	1	1	4	5	2	3	3
113	Bavaria	Man	20-29 Years	College Level	Working Student	€1000 - €1499	4	4	4	5	5	5	4	4	3	2
114	Bavaria	Woman	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	3	4	2	4	5	4	4	2	4	3
115	Bavaria	Woman	20-29 Years	Bachelor's Degree	Student	Less than €450	1	1	1	2	4	4	5	1	3	1
116	Bavaria	Woman	30-39 Years	Diploma Level	Part-time	€2000 or More	2	5	4	4	5	4	4	2	2	3
117	Bavaria	Man	20-29 Years	Masters' Degree	Fulltime	€2000 or More	3	4	4	2	5	3	4	3	4	3
118	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€1000 - €1499	5	5	4	5	5	4	5	4	4	5
119	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€1000 - €1499	4	2	1	1	1	2	2	3	4	3
120	Bavaria	Woman	20-29 Years	Bachelor's Degree	Working Student	€1500 - €1999	2	2	3	4	4	5	5	1	2	1
121	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	Less than €450	4	3	3	2	2	2	4	4	2	1
122	Bavaria	Woman	20-29 Years	School Level	Fulltime	€2000 or More	3	5	2	3	4	5	5	3	1	2
123	Bavaria	Man	20-29 Years	College Level	Fulltime	€2000 or More	2	2	3	5	5	5	5	3	2	2
124	Bavaria	Woman	20-29 Years	Bachelor's Degree	Working Student	€1500 - €1999	4	5	4	4	5	4	4	4	5	3
125	Bavaria	Woman	Under 20	School Level	Working Student	€450 - €999	4	4	4	5	4	5	5	2	4	2
126	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€1000 - €1499	5	5	5	5	5	5	5	2	4	2
127	Bavaria	Woman	20-29 Years	School Level	Working Student	€450 - €999	4	4	4	5	5	4	5	3	3	4
128	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€1500 - €1999	3	4	3	2	2	4	3	5	2	3
129	Bavaria	Woman	20-29 Years	College Level	Student	Less than €450	3	4	4	3	4	5	5	2	4	1
130	Bavaria	Woman	20-29 Years	Diploma Level	Working Student	€450 - €999	4	5	3	4	4	5	5	4	3	3
131	Bavaria	Man	20-29 Years	Bachelor's Degree	Part-time	Less than €450	3	3	3	4	4	3	4	3	4	3
132	Bavaria	Woman	20-29 Years	College Level	Working Student	€450 - €999	4	5	5	5	5	4	5	4	3	2
133	Bavaria	Woman	20-29 Years	Bachelor's Degree	Unemployed	€450 - €999	1	1	1	3	5	3	3	1	1	1

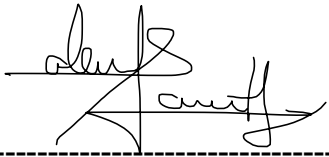
	Stateyouarelivingin	Gender	Age	LatestEducationQualification	Employmentstatus	YourMonthlyIncomeRange	MOT1	MOT2	MOT3	MOT4	MOT5	MOT6	MOT7	AB1	AB2	AB3
381	Bavaria	Man	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	2	4	3	4	4	4	4	4	4	3
382	Bavaria	Man	20-29 Years	College Level	Working Student	€450 - €999	3	4	4	4	5	4	5	3	2	4
383	Bavaria	Man	20-29 Years	College Level	Unemployed	€450 - €999	4	2	1	3	3	4	4	2	5	1
384	Bavaria	Man	20-29 Years	Diploma Level	Unemployed	€450 - €999	2	3	4	4	4	4	5	2	2	2
385	Bavaria	Man	20-29 Years	College Level	Unemployed	€450 - €999	4	3	5	5	5	4	5	2	4	2
386	Bavaria	Woman	20-29 Years	School Level	Working Student	€450 - €999	5	5	5	5	5	5	5	4	2	2
387	Bavaria	Man	20-29 Years	Diploma Level	Student	€450 - €999	4	2	4	4	5	4	5	4	4	1
388	Bavaria	Man	Under 20	College Level	Unemployed	€450 - €999	3	5	5	5	5	4	5	1	2	1
389	Bavaria	Woman	20-29 Years	School Level	Part-time	€450 - €999	4	5	4	4	5	5	5	3	5	2
390	Bavaria	Man	Under 20	College Level	Unemployed	€450 - €999	3	3	4	5	3	4	5	2	4	1
391	Bavaria	Man	20-29 Years	Bachelor's Degree	Unemployed	€450 - €999	4	5	3	4	4	4	5	2	3	2
392	Bavaria	Man	20-29 Years	College Level	Unemployed	€450 - €999	5	2	4	5	4	4	4	2	4	1
393	Bavaria	Man	Under 20	College Level	Unemployed	€450 - €999	4	3	5	5	4	4	5	2	2	4
394	North Rhine-West...	Man	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	5	5	5	5	5	5	5	2	5	1
395	Baden-Württemberg	Man	30-39 Years	Masters' Degree	Working Student	€450 - €999	2	2	1	1	2	3	2	1	2	1
396	North Rhine-West...	Man	20-29 Years	Bachelor's Degree	Working Student	€450 - €999	4	5	4	5	5	4	5	3	2	2
397	Bavaria	Woman	20-29 Years	Bachelor's Degree	Part-time	€450 - €999	4	2	4	5	4	4	4	4	4	3
398	Bavaria	Woman	30-39 Years	Bachelor's Degree	Part-time	€450 - €999	4	5	5	4	4	5	5	3	4	3
399	Bavaria	Man	20-29 Years	School Level	Part-time	€450 - €999	3	5	5	5	5	5	5	3	3	2
400	Baden-Württemberg	Woman	20-29 Years	Masters' Degree	Part-time	€450 - €999	4	5	5	5	5	5	5	3	4	2
401	North Rhine-West...	Woman	20-29 Years	Bachelor's Degree	Part-time	€450 - €999	4	3	3	4	4	4	4	4	4	4
402	Bavaria	Woman	20-29 Years	Masters' Degree	Working Student	€450 - €999	4	5	5	5	5	5	5	5	5	5

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	Stateyouare...	String	22	0	State	None	None	22	Left	Nominal	Input
2	Gender	String	17	0	Gender	None	None	17	Left	Nominal	Input
3	Age	String	11	0	Age	None	None	11	Left	Nominal	Input
4	LatestEduc...	String	20	0	Education	None	None	20	Left	Nominal	Input
5	Employment...	String	15	0	Employment	None	None	15	Left	Nominal	Input
6	YourMonthl...	String	17	0	Monthly Income	None	None	17	Left	Nominal	Input
7	MOT1	Numeric	2	0		None	None	12	Right	Scale	Input
8	MOT2	Numeric	2	0		None	None	12	Right	Scale	Input
9	MOT3	Numeric	2	0		None	None	12	Right	Scale	Input
10	MOT4	Numeric	2	0		None	None	12	Right	Scale	Input
11	MOT5	Numeric	2	0		None	None	12	Right	Scale	Input
12	MOT6	Numeric	2	0		None	None	12	Right	Scale	Input
13	MOT7	Numeric	2	0		None	None	12	Right	Scale	Input
14	AB1	Numeric	2	0		None	None	12	Right	Scale	Input
15	AB2	Numeric	2	0		None	None	12	Right	Scale	Input
16	AB3	Numeric	2	0		None	None	12	Right	Scale	Input
17	AB4	Numeric	2	0		None	None	12	Right	Scale	Input
18	AB5	Numeric	2	0		None	None	12	Right	Scale	Input
19	AB6	Numeric	2	0		None	None	12	Right	Scale	Input
20	AB7	Numeric	2	0		None	None	12	Right	Scale	Input
21	INC1	Numeric	2	0		None	None	12	Right	Scale	Input
22	INC2	Numeric	2	0		None	None	12	Right	Scale	Input
23	INC3	Numeric	2	0		None	None	12	Right	Scale	Input
24	INC4	Numeric	2	0		None	None	12	Right	Scale	Input

Declaration

I hereby declare that this thesis is my own work, that I have not presented it elsewhere for examination purposes and that I have not used any sources or aids other than those stated. I have marked verbatim and indirect quotations as such.

Ingolstadt, 22nd April 2024

A handwritten signature in black ink, appearing to read 'Sahan Shachith Kumar De Silva', is written over a horizontal dashed line.

(Signature)

Sahan Shachith Kumar De Silva, Geemuni