

# **Are consumer preferences for sustainability in the textile industry in alignment with best practice approaches to sustainable supply chain management?**

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### **ABSTRACT**

Nowadays, many companies develop adopted strategies to comply with increasing globalization and complex global supply networks. We are gradually moving toward a more integrated world. This process brings about clashes both in and between cultures and values which often lead to misunderstandings and do harm to business. This paper compares how the notion of ethical consumerism is understood in Germany. The goal of the paper is to reveal consumer awareness of, and attitudes toward, sustainability and their influence on purchasing decisions. The focus of the present research is sustainability of clothes. The research is grounded in an application of Hofstede's Dimensions to sustainability theory, more specifically ethical consumerism. The novelty of the paper is that it applies the cultural dimensions by analysing values to explain the differences in customer perception of ethical consumption. To gather data, a survey based on a self-developed questionnaire was conducted in Germany and clusters of consumer types were revealed. The results of the paper prove that cultural dimensions do have an effect on customers' perceptions on sustainable consumption of clothes. We find compelling evidence that the priority of sustainability in buying decisions for clothes are based on cultural believes and norms. More specifically we found that due to the cultural norms in Germany, the majority of consumers are willing to pay more for a more sustainable product. At the end of the paper an agenda for further research is presented, through which the framework could be further developed and systematically applied to a broader set of cases.

**KEY WORDS:** ethical consumerism, sustainable consumption, textiles, Germany

### **INTRODUCTION**

Consumer awareness of both social and environmental criteria when buying clothes is an essential factor to increase the overall sustainability of the sector. Thus, raising customer awareness of corresponding product qualities seems to be an important challenge for sustainability driven politicians, educators and companies alike. Furthermore, if implemented successfully along the supply chain, corporate sustainability initiatives make good business sense, if they succeed in nurturing a culture of sustainable production and consumption around the company. This paper therefore seeks to understand consumer awareness and what influences this, for the increasing importance of sustainability within the clothing sector. Scientific analysis essentially threatens this superficial creed. Instead, previous studies have shown that the perception of sustainability varies significantly among different consumer

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groups<sup>1</sup>; the distinct core sustainability values of the clearly identifiable focus groups have not yet been profoundly analysed. Furthermore, previous studies found that there is a lack of understanding of how individual consumer behaviour affects the environment. How consumers dispose of fashion products and the means through which sustainable consumption of textiles could be increased have been analysed<sup>2</sup>. However, it has been found that, despite the fact that consumer awareness for sustainability has increased, this is not necessarily reflected in the buying decisions of consumers<sup>3</sup>. Three justification strategies for not acting according to the increased awareness for sustainability emerged from previous leading research, these were: economical rationalization, institutional dependency, and developmental realism<sup>4</sup>. This paper seeks to analyse what drives consumer awareness and priority of sustainability aspects in actual buying decisions for clothes. More specifically, we shed light on how culture influences consumer preferences for sustainability. We evaluate how norms and values influence ethical consumerism through survey data from Germany.

For the analysis, we draw on a consumer survey conducted in Germany. In order to analyze the impact of ethical virtue, we analyze the consumer clusters derived from the data in accordance with the cultural dimensions of Hofstede<sup>5</sup>. As such, knowledge concerning sustainability and its priority in the actual buying decisions determining consumer clusters is linked to Hofstede's four original dimensions of culture applied to Germany.

The present article is structured as follows: first, a literature review on consumer awareness of sustainability and consumption ethics is provided, followed by a description of the status quo of consumer societies in Germany; the Hofstede model is then briefly outlined, with Germany benchmarked according to Hofstede's scores. The methodology chapter includes a description of the cluster analysis and quantitative results of the study; finally, discussion and conclusions are presented.

### **LITERATURE REVIEW**

#### **Consumer Awareness**

Previous research has found that, when defining sustainability, consumers emphasized both durable products that are long lasting, and the preservation of resources<sup>6</sup>, but also demonstrated an absence of knowledge or concern<sup>7</sup>. Conversely, other authors have found contrasting results suggesting that consumers *are* knowledgeable about the impacts on the environment caused by clothing manufacturing, especially regarding the processes of dyeing and finishing, but, however, lack knowledge regarding energy consumption in the manufacturing of natural and synthetic fibres<sup>8</sup>. Moreover, it has been found that consumers are more concerned about the impact on human beings, rather than on the environment, highlighting manufacturing of clothes to be the most important phase of production since it is undertaken in developing countries with unfair labour practices<sup>9</sup>. This finding is supported by the fact that participants do not have detailed knowledge about environmental effects associated with different fibres in order to compare the ecological footprint and select environmentally preferable options<sup>10</sup>. It was furthermore identified that among specific consumer groups, animal abuse and welfare incte more caring support than an unethical working environment in the clothing industry<sup>11</sup>. Additionally, the wellbeing of animals, in

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<sup>1</sup> Tanner et al, 2003

<sup>2</sup> Birtwistle and Moore, 2007

<sup>3</sup> Carrigan and Attala, 2001

<sup>4</sup> Eckhardt et al, 2010

<sup>5</sup> Hofstede, 1980, 2001

<sup>6</sup> Hill and Lee, 2011

<sup>7</sup> Harris, 2015

<sup>8</sup> Kozar and Connell 2011

<sup>9</sup> Bhaduri and Ha-Brookshire, 2011

<sup>10</sup> Connell, 2010

<sup>11</sup> Joergens, 2006

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particular dolphins, being killed or maimed mattered more to consumers than issues related to the rainforest and working conditions of workers<sup>12</sup>. In terms of the degree and nature of public understanding of sustainability in relation to clothing, research has found that the impact of the level of awareness of sustainability issues surrounding clothing production among consumers is low, and there is doubt about whether they would change their behaviour if they were better informed<sup>13</sup>. Students' perceptions of sustainability focused on environmental issues such as alternative/clean energy, green, biodiversity and environmental/ecofriendly endeavours<sup>14</sup>. In a 2011 sociological survey "Sustainable Efforts and Environmental Concerns Around the World", questioning 25 thousand consumers online, Nielsen found that over 83% of consumers say it is important for them to know that companies introduce measures to make their products more environmentally-friendly, and about 22% of consumers are ready to pay more for ecologically purer products or services<sup>15</sup>. Another survey conducted by Cornell University during the last economic crisis revealed that, despite the recession, people do not forget about ecological problems and are ready to pay more for "green" products or services: over 90% of respondents said they are ready to pay more to eat at an eco-restaurant<sup>16</sup>.

### **Consumer Awareness for Sustainability in Germany**

In the Western world, market assessment of the degree to which consumers will consider wider societal wellbeing versus solely their personal satisfaction to act as a consumer-citizen arose in the 1970s<sup>17</sup>. Since then it has been found that consumer consciousness has increased tremendously, in the sense that people have an increasing interest in the ethical and applied social and environmental standards of the companies from which they buy products. Conscious consumption can be defined as "[...] a movement of people who seek out ways to make positive decisions about what to buy and look for a solution to the negative impact consumerism is having in our world"<sup>18</sup>.

The Flash Eurobarometer, conducted in 2009, examined Europeans' attitudes towards sustainable consumption and production. In the context of this study, roughly 4 in 10 (41%) EU citizens stated that they were generally aware of the most significant impacts of products on the environment<sup>19</sup>. Respondents aged between 15-24 years old, those still in education or with lower levels of education, manual workers, non-working respondents and rural residents were those most likely to state that they know little or nothing about the environmental impact of the products they buy. Conversely, older respondents with higher levels of education showed a general awareness of the effect on the environment of the products they buy.

Furthermore, in Germany and the UK, personal needs are the primary motivations for clothes purchasing decisions and take precedence over ethical issues<sup>20</sup>. While German consumers showed higher awareness of ethical problems in the fashion industry than English consumers, respondents from both countries reported that the behaviour of companies generally is not perceived to be unethical since, economically, western firms offer jobs for people in the developing world, which is considered as socially responsible behaviour by consumers<sup>21</sup>. Some participants said that child labour is one of the biggest ethical problems, while others mentioned that it is occasionally better for children to have an underpaid job and work the whole day rather than spending that time on the street.

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<sup>12</sup> Carrigan and Atalla, 2001

<sup>13</sup> Defra, 2008

<sup>14</sup> Kagawa, 2007

<sup>15</sup> Sustainable Efforts and Environmental Concerns Around the World, 2011

<sup>16</sup> Andrianova, 2015

<sup>17</sup> Kelley, 1971

<sup>18</sup> Baker, 2015, p. 23

<sup>19</sup> Eurobarometer, F. 2009, p. 256

<sup>20</sup> Joergens, 2006

<sup>21</sup> Joergens 2006

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German consumers reported fewer ethical consumption activities than US consumers, and female subjects did not consume more ethically than males<sup>22</sup>. In comparison to British consumers, who emphasize individual choice and taste, German Fairtrade consumers tend more to follow what they perceive as an authoritative discourse. And, while British respondents saw the relationship between Fairtrade organizations and producers as a business relationship, German respondents conceptualized it more as a paternalistic employment relationship.

### **Culture: the Hofstede model**

In order to compare eastern versus western consumer attitudes towards sustainability, we draw on Hofstede's original 4 dimensions to compare cultures, which are: power (equality versus inequality), collectivism (versus individualism), uncertainty avoidance (versus uncertainty tolerance), and masculinity (versus femininity)<sup>23</sup>.

a) *Power distance index (PDI)* doesn't measure how the power is distributed in society, but rather characterizes how people feel about it. Low PDI means that the members of society perceive each other to be equal and are democratic. High PDI means that the members of society accept that there is hierarchical order and people are unequal by definition.

b) *Collectivism* means that in the given culture, it is more important to gain value for the group and for the community than for oneself. Conversely, in *individualistic* cultures, a person's individual goals and values are more important.

c) *Uncertainty avoidance index* is about how cultures can deal with unexpected events and the extent of their laws and regulations. A high index indicates that the culture has a lot of regulations and does not react well to change. A low index is the opposite: those cultures have better tolerance to change and uncertainty and, as a result, are less regulated.

d) *Masculinity vs femininity* indicates how gender roles and inequality between genders manifest in society. In masculine cultures, the gender gap is usually bigger than in feminine cultures. Also, the values are different; in masculine cultures, stereotypical values such as power, ambition and competitiveness are important. In feminine cultures, the genders are more equal.

### **Applying Hofstede's dimensions to Germany**

#### *a) Power Distance*

Scores of countries analyzed in the Power Distance Index (PDI) are quite varied. Germany's score of 35 for power distance means that Germany's level of acceptance of unequal power distribution is low. This score reflects a powerful and sizeable middle class as well as strong decentralization. Germans prefer direct communication, superiors must back their authority with expertise, and control is generally disliked<sup>24</sup>. h 58.4 and 58% correspondingly<sup>25</sup>.

**Hypothesis 1:** Based on their individual opinions, willingness will be high for German consumers to pay for sustainable clothes.

#### *b) Uncertainty Avoidance*

Germany's uncertainty avoidance is scored at 65, portraying a slight to medium preference. Germans like to have things organized and planned with attention to detail, which helps to obtain certainty.

**Hypothesis 2:** German consumers will tend to trust certificates and sustainable brands.

#### *c) Collectivism*

The following Individualism Index places Germany into the individualistic group. Germans are not concerned with the wellbeing of big groups and care only about those people closest to them, generally having loose social networks, especially among fellow workers

**Hypothesis 3:** German consumers will demonstrate greater affinity about sustainability regarding their individual belongings.

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<sup>22</sup> Witkowski and Reddy, 2010

<sup>23</sup> Hofstede, 1980, 2001

<sup>24</sup> Hofstede, 2017b

<sup>25</sup> Global Wealth Report, 2016

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### d) Masculinity

During comparison of the results of Masculinity Index groups, Germany scored a high medium result of 66, meaning that masculinity is dominant.

**Hypothesis 4:** As a high masculinity score demonstrates the desire to be the best, and to reach higher performance, German consumers are likely to have a high motivation to consume sustainably, as this would demonstrate they are advanced consumers and are aware more of modern issues in the economy and in life generally.

### METHODOLOGY

In this paper, the data used were collected in an online survey dealing with sustainability certifications in the clothing industry. This survey targeted German participants and was conducted between March and April 2017. After the elimination of the unanswered responses, only 295 surveys were useful for the data analysis. The questionnaire was created in German language using online survey tool Lime Survey, and included 31 questions. Most questions took the form of a 5-point Likert scale, in which 1 stands for “strongly agree” or “very important” and 5 stands for “strongly disagree” or “unimportant”. The questionnaire covered several topics, such as knowledge about sustainability, sustainability certification, trust in the credibility of certifications, product specific characteristics and willingness to buy certified clothing. Respondents were first asked to answer some questions regarding sustainability, and then about certifications. At the beginning of the survey, the respondents were to answer questions openly, e.g. to define the term “sustainability” in their own words. At the end of the questionnaire, the participants were asked to provide sociodemographic information, such as gender, age, nationality, household size, income, education and occupation (see selected data in Table 1).

Table 1: The demographics of the surveyed customers in Germany

Characteristic	Germany
Gender: male	42.7%
female	57.3%
Age: 18-29 years	76.3%
30-39 years	13.2%
40-49 years	5.9%
50-64 years	3.9%
65+ years	0.7%
Education: No schooling completed	0.0 %
Nursery school to 8th grade	1.1 %
Some high school graduate diploma or equivalent	2.3 %
Bachelor's degree	32.0 %
Master's degree	39.3 %
Professional degree	21.9 %
Doctorate degree (PhD)	3.4%

In Table 2a and 2b, the answers of German customers to open question F11 - “Please describe in a few words how you understand the term sustainability/ sustainable development” - asked at the beginning of the questionnaire, are grouped into categories.

Table 2. Categories of answers to the question “Please describe how you understand sustainability/sustainable development”, Germany.

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	Examples	%
1. Resource efficient/ resource-conserving production	low co2 emission, no use of chemicals, only use the amount of resources that is sustainable, efficient use of resources	29%
2. Sustainable production and recycling	re-use raw material, recycle product, re-use product	7.6%
3. Ecologically sustainable production	low pollution, protecting the environment, ecological production,	13.7%
4. Socially and ecologically sustainable production	production without harming the environment or humans, taking the needs of workers and the environment into account	14%
5. Socially acceptable production	fair production, fair wages, no child labour, pay attention to the needs of workers	10.2%
6. High quality product	Product that can be used for a long time	8.6%
7. No category	marketing instrument, price will define the demand, economical	16.9%

The overall majority of people surveyed in Germany (Table 2) demonstrated that they know exactly what sustainability and sustainable development are (lines 1-5), and emphasized various aspects of sustainability. In sum, they compose 74.5% of the sample. 25.5% of the surveyed probably do not know much about the concept of sustainability.

The quantitative data is analyzed by means of two cluster analyses to grasp different consumer groups present in Germany. Thus, the cultural implications of knowledge concerning sustainability, certification and ethical consumerism can be appointed to different diverse clusters. In order to differentiate consumers into different groups regarding their certification preferences, a group of factors (variables) was used which enabled us to separate or discriminate between consumers. One of the most popular approaches is the application of a cluster analysis to determine the similarities and dissimilarities between consumers and group them accordingly<sup>26</sup>. Based on the theory of reasoned behavior proposed by Ajzen (1985) the study at hand integrates the respective factors into behaviour models of values, norms, attitudes and, finally, decision making. Within this context, given

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<sup>26</sup> Backhaus et al., 2011

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the interdisciplinary nature of behavioural research, the concept of sustainability theory is applied to consumers reasoned behaviour when buying clothes.

The cluster analysis was performed in two steps. First, to reduce the dimensions of the input variables, principal component analysis (PCA) was performed to identify the main factors. In a second step, a cluster analysis using the factors identified before was used. The PCA allows us to reduce the number of variables used in the cluster analysis and condenses the information into major factor variables. The two-step approach facilitates the creation of clusters which are homogenous within the group and heterogeneous across groups<sup>27</sup>. In addition, the approach has been found to result in a clearer delineation of clusters compared to performing only a cluster analysis<sup>28</sup>.

In the first step, 22 variables representing consumers' perceptions, knowledge, and willingness to pay for certified clothing were included in the PCS. Since many questions ask about similar issues, e.g. consumers were asked give their opinion on a number of statements related to the effectiveness of certified products, PCAs were performed within those groups of questions (see Figure 1 below). Based on the Kaiser criterion (Ford et al., 1986), all factors with eigenvalues greater than one were extracted. The standardized version of the variables was used in order to compare different scales used in the questionnaire. Table 3: Factor variables

Table 3: Factor variables

Factor/ Variable name	Associated question
Last contact to certified product	F48: When was the last time you recognized a sustainability certification?
Perceived consumer effectiveness	F51: Questions on consumption effectiveness F61: Factor analysis – trust in certification in general
Trust certification	F61: Factor analysis – trust in certification from independent organization
Trust independent certification (only Germany)	F92: Willingness to Pay
Willingness to pay	F12: Does the individual inform him/herself?
Willingness to inform oneself	F41: Factor analysis – knowledge about fair trade label / fair and eco labels F41: Factor analysis – knowledge about fair for life and fair wear / IMO label

In the second step, factors determined by the PCA and additional variables were used as input to an agglomerative hierarchical cluster analysis. First, a single-linkage method to identify outliers was applied<sup>29</sup>. Secondly, to determine the optimal number of clusters, a Ward-linkage cluster analysis was used employing the Euclidian distance measure. The Duda/Hart index and the Dendrogram<sup>30</sup> was implemented as a stopping rule to determine the optimal number of clusters. From the 223 German individuals who answered the questionnaire, 21 had to be excluded due to missing values and 7 were identified as outliers from the single-linkage analysis.

### RESULTS AND DISCUSSION

#### **Description of the German consumer groups**

For Germany we identify four different groups of consumers: (1), (2), (3),(4).

<sup>27</sup> Backhaus et al. 2011

<sup>28</sup> Jansen et al., 2006; Soltani et al., 2012

<sup>29</sup> Backhaus et al., 2011

<sup>30</sup> Garson, 2012

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Table 4: Consumer clusters Germany

Cluster	No. of individuals	In Percent	Main characteristics
Cluster 1	26	13%	No contact with certified products, low trust, medium willingness to pay
Cluster 2	59	30%	No contact and no willingness to pay
Cluster 3	24	12%	No contact and no trust, low willingness to pay
Cluster 4	86	44%	High contact, medium willingness to pay
Total	195	100%	

The differences among the consumer clusters in relation to the cluster variables are summarized in Appendix 1. The results of the Kruskal-Wallis and  $X^2$  test reveal that at least two clusters are significantly different from each other. The Wilcoxon rank sum test shows that not all clusters are significantly different from each other for all variables. The trust of individuals in cluster 2 in certification in general is not statistically different from the other clusters combined. Similarly, the trust in independent certification of individuals in clusters 2 and 4 is not significantly different. However, individuals in cluster 1 have more trust in independent certification, and individuals in cluster 3 have significantly less trust. The willingness to pay for certified products is statistically significantly different for clusters 1, 2 and 4. Knowledge and information are statistically significant for those three clusters. In Figure 1, the means of the four variables (contact with certification, trust in certification, willingness to pay “wtp”, and knowledge of fair trade labels) are shown in order to make it easier to compare the clusters.

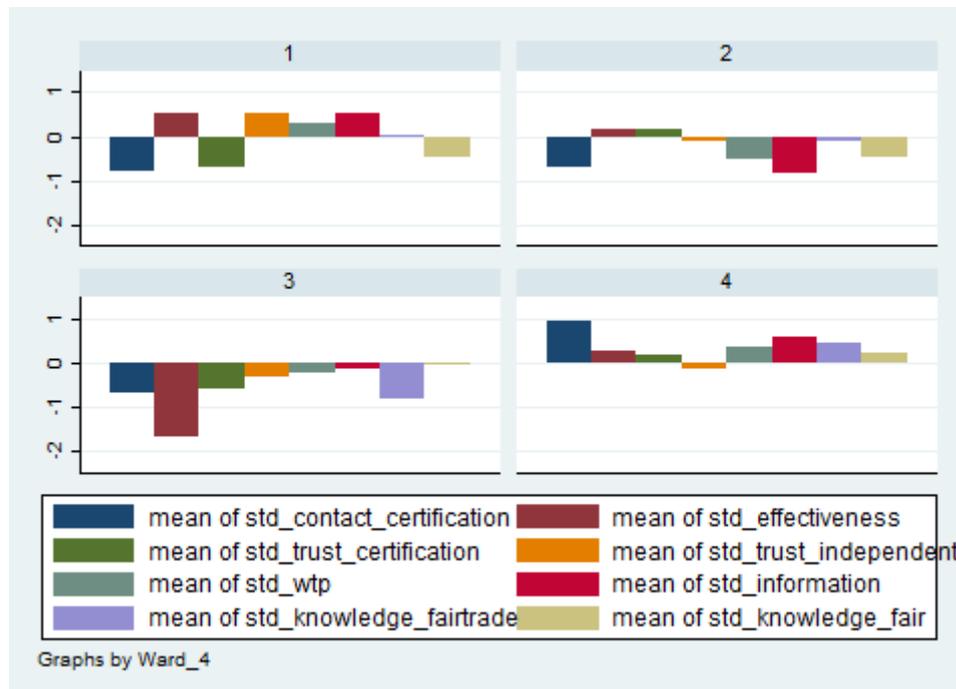


Figure 1: Means of the four standardised variables for the 4 clusters: contact with certification, trust in certification, willingness to pay “wtp”, and knowledge of fair trade labels

### Ethical Consumerism in Germany

For Germany, four different consumer groups were identified. Due to respective percentages of 30 % and 44 %, two clusters are predominant (see Figure 3). Thus, the majority of

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German consumers participating in the survey were allocated to the fourth cluster and were therefore frequently in contact with sustainable clothing and also display a medium degree of willingness to pay more for a more sustainable product. Conversely, the second largest cluster portrays a consumer group having no contact with sustainable clothing and no willingness to pay more for a more sustainable product.

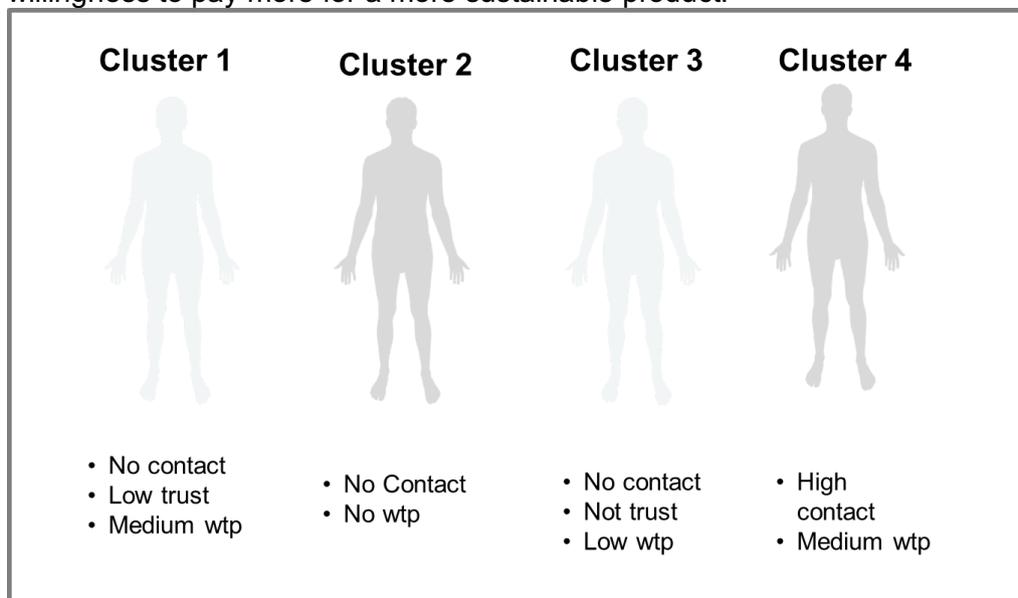


Figure 3: descriptions of clusters (Germany). Darker figures identify dominating clusters (No.2 and No.4).

We can therefore derive that culture has a significant impact on ethical consumerism. Subsequently, we therefore apply the findings of the cluster analysis to Hofstede's cultural dimensions to the western culture of Germany.

### Power Distance

Germany, consumers perceive themselves as equal and part of a democratic society because the power distance is low. Thus, consumers have no willingness to pay more for a more sustainable product if they are not interested in it. However if they are interested, they have a medium willingness to pay a price premium to receive a more ethical product. This can be traced to the belief that freedom of opinion and speech is the core of our democratic system. Therefore, **hypothesis 1** is confirmed.

### Collectivism

Only being willing to pay for sustainable attributes and policies in clothes if personally interested in the matter, and not if there is limited knowledge and consumer awareness, reflects the fact that Germany is an individualistic country wherein individual goals and values are at the core of consumers' attention. This proves **hypothesis 2**.

### Uncertainty Avoidance

In Germany, the highest cluster represents the quite high uncertainty avoidance since it represents a consumer group which has had little contact with certified products in the recent past, but one which nevertheless still believes in the effectiveness of sustainable production. They have low trust in general certification, but high trust if certification is supervised by independent bodies. This indicates perceived liability of regulatory bodies present in countries with high uncertainty avoidance. However, conversely, the second largest cluster represents consumers who have little contact with certification, have no knowledge or information and do not trust certification – even if it is done by independent organizations. The willingness to pay for certified goods is also extremely low. Therefore, the second largest

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consumer cluster is not aligned with how Hofstede allocated the uncertainty avoidance score of Germany. Therefore **hypothesis 3** is not proven.

### **Masculinity**

The majority of German consumers have low contact with sustainable clothing (clusters 1-3 make up 55% of the sample). The largest cluster of 44 % a high affinity for sustainability but only a medium willingness to pay the price premium. Therefore, the masculine attribute “competitiveness” outweighs the interest in ethically produced clothes, which is aligned with Hofstede and **hypothesis 4**.

### **CONCLUSION**

The overall research question of this study was: what impact does culture have on the priority placed on sustainability in buying decisions for clothes? The aim of this research was to investigate the influence of Hofstede’s cultural dimensions on how German consumers perceive the meaning of ‘ethical consumerism’. Furthermore, we investigated how customers prioritize sustainability in the consumption of clothes. This focus was chosen for the study because a large gap in the literature for this sphere was revealed. Few articles discuss the distinct customers’ perceptions of sustainable consumption for clothes and apply that to the distinct cultural values and norms in Germany. Our research makes a good start towards closing this gap. When discussing sustainability, the cultural component is often ignored. In the current research, Hofstede’s 4 cultural dimensions were superimposed onto the consumer clusters identified for Germany (power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity). The basic assumption underlying our framework is that national cultural values influence customers’ perceptions of ethical consumption.

As an initial test of this framework 4 consumer clusters for German were extracted and the behaviour of the actors analyzed. The identified clusters and characteristics of individuals belonging to these clusters demonstrated that the power distance has a strong effect on perceptions of sustainability. German customers would be willing to pay more for more sustainable clothes if they are personally interested in the product (this is also about individualist behaviour) and when they know about the product and certificates. In German clusters, uncertainty avoidance had little impact on consumers’ views on sustainability of clothes. As for masculinity/femininity, our results show the majority of German consumers have low contact with sustainable clothing. However, the largest cluster shows a high affinity for sustainability but only a medium willingness to pay the price premium. Therefore, the masculine attribute “competitiveness” outweighs the interest in ethically produced clothes.

Thus, we can conclude that Hofstede’s cultural dimensions do indeed, at least to some extent, seem to provide an explanation for the behaviour of participants of each cluster. However, the explanations provided herein are quite tentative and require further research is required on both the cultural dimensions of the framework and the relationship between customer demographic characteristics before reliable conclusions can be drawn. First of all, the sample needs to be expanded to a larger consumer sample. Furthermore, the cultural framework itself needs to be expanded, more dimensions need to be added to study the interactions between customer demographics, perception of sustainable consumption and willingness to pay for sustainable products. Then, this expanded framework should be systematically applied to a broader set of data in order to empirically validate the influence of culture on readiness for ‘ethical consumerism’.

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**Are consumer preferences for sustainability in the textile industry in alignment with best practice approaches to sustainable supply chain management?**

*Appendix 1: Characteristics of the consumer groups (Germany)*

Variable	Whole sample	Cluster				X <sup>2</sup>
		1	2	3	4	
std_contact_certification	0.02 (1.01)	-0.76*** (0.33)	-0.67*** (0.37)	-0.68*** (0.48)	0.93*** (0.78)	112.613***
std_effectiveness	0.04 (1.01)	0.53*** (0.64)	0.18*** (0.66)	-1.68*** (0.80)	0.27** (0.87)	57.288***
std_trust_certification	-0.03 (0.98)	-0.70*** (1.02)	0.17 (0.86)	-0.58*** (1.15)	0.19*** (0.85)	22.658***
std_trust_independent	-0.06 (0.94)	0.50*** (1.14)	-0.09 (0.89)	-0.32** (0.94)	-0.13 (0.85)	9.868**
std_wtp	0.02 (0.96)	0.31* (0.96)	-0.52*** (0.58)	-0.23 (0.65)	0.37*** (1.06)	30.147***
std_information	0.05 (1.01)	0.53** (0.77)	-0.82*** (0.25)	-0.14 (0.92)	0.56*** (1.01)	60.124***
std_knowledge_fairtrade	0.06 (0.88)	-0.04 (0.49)	-0.12*** (0.48)	-0.80*** (1.56)	0.45*** (0.71)	38.477***
std_knowledge_fair	-0.11 (0.80)	-0.48*** (0.36)	-0.46*** (0.29)	-0.04 (0.83)	0.22*** (0.97)	46.925***