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## Consumers' Choice Behaviour Toward Green Clothing

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**Abstract:**

**Purpose:** The article aims to identify the factors influencing consumers' choice of green clothing products in the context of the theory of consumption values.

**Design/methodology/approach:** The research was conducted on 496 Polish consumers in December 2020 from who 212 had experience in purchasing green clothing products. Self-administered questionnaires were distributed and structural equation modelling was used for analysis.

**Findings:** The results show that emotional, conditional, and environmental values had significantly positive impact on consumers' choice behaviour toward green clothing products; however functional, social and epistemic values had no influence on it.

**Practical Implications:** The results are important for retailers and producers of green clothing products for building a marketing communication campaign for Polish market as well as labelling and creating eco-brands for those products.

**Originality/value:** The recognition of Polish consumers' incentives of buying green clothing through the lens of consumption values theory.

**Keywords:** Green products, green clothing, sustainability, green consumption, Polish consumers, environmental value.

**JEL Codes:** M31.

**Paper type:** Research paper.

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## 1. Introduction

Recently, we have observed that conscious consumers are more and more ecologically aware and they purchase green products. They are even willing to pay more when buying green products in comparison to alternative ones. Several studies discuss these issues relating to different industries and types of green products, for example to organic food, (Katt and Meixner, 2020; Ricci *et al.*, 2018), green energy, (Hartmann and Apaolaza-Ibañez, 2012; Sangroya and Nayak, 2017), green automotive (Chowdhury *et al.*, 2016; Jaderná and Příkrylová, 2018), green cosmetics (Liobikienė and Bernatoniene, 2017), green building (Alsulaili *et al.*, 2020; Zuo and Zhao, 2014) and others. There are also different studies about consumers' behaviours and attitudes towards green products in the textile and apparel industry referring to clothing made from eco-friendly fibre or recycled materials (Fletcher, 2012; Perry and Chung, 2016) and eco-fashion (Jin Gam, 2011; Niinimäki, 2010; Park, 2012).

Green clothing named also as sustainable (Su *et al.*, 2019), organic (Varshneya *et al.*, 2017), or eco-friendly clothing (Jin Gam, 2011) are textile products that incorporate social, environmental and fair trade practices (Goworek *et al.*, 2012) with sweatshop-free labour conditions while not harming the environment or workers (Chang and Watchravesringkan, 2018; Goworek *et al.*, 2012; Harris *et al.*, 2016; McNeill and Moore, 2015). Green apparel is considered sustainable as it employs natural processes and fibres and promotes the protection of natural resources (Chan and Wong, 2012). The purchase of green clothing leads to the reduction of resource consumption and pollution (Rahnama and Rajabpour, 2017).

Textile companies producing these kinds of products try to replace dangerous chemicals with environmentally friendly materials. It also helps to reduce amounts of waste and resource consumption through apparel recycling (Grębosz-Krawczyk and Siuda, 2019). That is why the purchase of green clothing, as well as all green products, is an expression of concern for global and local pollution levels, global warming, diminishing natural reserves, and overflowing of wastes (Srivastava, 2007). Consumers are more and more conscious that their buying behaviours have direct effects on environmental issues (Zhao *et al.*, 2014). However, a question appears if this consciousness leads to purchasing green clothing by them and what factors influence their buying decisions. Trying to answer this question, the purpose of this study is to identify the factors influencing consumers' choice of green clothing products in the context of the theory of consumption values. We used survey data gathered from 496 Polish consumers.

Poland is one of the top ten European Union countries recognized as clothing industry leaders (Euratex Annual Report 2018, 2018). Purchasing clothing in EU has increased by 40% per person in just a few decades-driven and clothing accounts for 2–10 % of the environmental impact of EU consumption (Koszevska, 2016). Polish consumers believe that fashion companies should take greater responsibility for

environmental protection (Rahman and Koszewska, 2020), however a study of consumer choice between sustainable and non-sustainable apparel cues in Poland indicated that many Polish consumers would not purchase a sustainable (green) product if it did not provide enough aesthetic, functional and financial benefits (Rahman and Koszewska, 2020). Therefore, the recognition of incentives of buying green clothing through the lens of consumption values theory appears as an interesting and valid research problem.

In the first part of the study, we explain specificity of the green clothing, theoretical basis of consumption values, and develop hypotheses. Then, we present the research methodology and the results of analyses. In the final part, we discuss and point out the main research limitations and, based on them, propose directions for further research.

## 2. Green Clothing Products' Characteristics

The textile and clothing industry contributes to various social and environmental problems (McNeill and Venter, 2019). It is responsible for the production of 10% of the world's carbon emissions, which makes it the second most pollution-releasing sector globally (Muthukumarana *et al.*, 2018). Therefore, the implementation of green clothing instead of conventional clothing becomes more and more popular and needed in a global scale.

Green clothing can be defined as one which is designed for lifetime use. It is produced in an ethical production system, perhaps even locally and it causes little or no environmental impact (Niinimäki, 2010). The apparel industries are searching for greener filaments made from renewable resources in order to fulfil the growing demand for green products. There is a wide range of renewable resources that are able to substitute the use of synthetic oil-based materials. According to Shen *et al.* (2016) wood-based cellulose is one of the biomaterials with big potential and has already been utilized in many textile filaments in the past decades. Another popular solution is recycled polyester which is made of PET, a material found in water bottles, giving them a reason not to end up in a landfill. Additionally, it also requires less energy to manufacture compared to typical polyester manufacturing. Other materials that can be recycled and used to make organic clothing are cotton, viscose, modal, bamboo, and jute (Khare and Varshneya, 2017).

The image of green apparel is associated not only with using "clean" materials (e.g., natural, recycled, organic fibres) but also with the whole environment-friendly process of production and distribution such as saving materials in production, treating waste, and green packaging. Green apparel employs fair trade practices based on ethical standards, avoids using toxic substances, and supports the conservation of water (Wiederhold and Martinez, 2018). To enable consumers to differentiate between sustainable and non-sustainable clothes many fashion brands have implemented the idea of "Eco Labelling" (Khare and Varshneya, 2017). All

the above-mentioned activities are aimed at reducing the negative impact that the textile industry has on the environment and additionally, firms producing green apparel have been trying to promote awareness about environmentally-friendly procedures (McNeill and Moore, 2015). Thus, the pro-ecological awareness of consumers buying green clothing should be greater and the products themselves should be perceived through the basic consumer values.

### **3. The Theory of Consumption Values (TCV) in Context on Consumption of Green Products**

The theory of consumption values (TCV) explains how consumers assess and choose specific products (Sheth *et al.*, 1991) by synthesising existing findings in economics, sociology, psychology, marketing, and consumer behaviour. It is appropriate to evaluate consumers' choices involving a full range of products, both tangible and intangible (Yeo *et al.*, 2016). According to Sheth *et al.* (1991) consumer choice decision making is influenced by multiple consumption values, the consumption values make differential contributions in any given choice situation, and the consumption values are independent. The TCV comprises of five dimensions, functional, social, emotional, epistemic and conditional, that current studies often treat as separate constructs when examining its antecedents and outcomes.

Functional value bases on economic utility theory and assumes economic rationalism. In case of the functional values, consumer's assessment is based on the real attributes of the consumable product (Sheth *et al.*, 1991) and depends on the level of fulfilment of the consumers' utilitarian needs. Consumers accept green products when their principal needs for performance, quality, convenience and affordability are met (Ottman, 1992). Several researchers confirmed that product attributes can positively influence purchase of green products (Chen and Chang, 2012; Young *et al.*, 2010; Gleim *et al.*, 2013; Gupta and Ogden, 2009) and that consumers preferred functional attributes of the product over its ethical characteristics (Chen and Lobo, 2012; Tsakiridou *et al.*, 2008). Mondelaers *et al.* (2009), Smith and Paladino (2010) and Tsakiridou *et al.* (2008) found also that product quality significantly influenced consumer green choice behaviour. Only one study reported that product attributes were not related to green purchase behaviour (Chan and Wong, 2012) and concerned the clothing sector.

However higher price can outweigh ethical considerations and increase a gap in case of purchase of green products (Connell, 2010; Gleim *et al.*, 2013; Padel and Foster, 2005; Vermeir and Verbeke, 2008). It is especially dangerous in case of high price sensitivity. Consequently, functional value should to be interpreted into two factors: quality-value and price-value. Quality-value is related with the product attributes and price-value refers to internal and external reference price that the customers evaluate when making a purchase decision (Yeo *et al.*, 2016).

Social value is derived from the symbolic importance of a product, often related with the common consumption (Sheth *et al.*, 1991). In several studies researchers confirmed a positive correlation between social values and consumers' purchase behaviour toward green products (Chen and Chang, 2012; Eze and Ndubisi, 2013; Wang *et al.*, 2014; Young *et al.*, 2010) and significant influence of peer opinions on consumers' green purchase decision-making process (Lee, 2010; Salazar *et al.*, 2013; Tsarenko *et al.*, 2013).

Emotional value influences consumer's choice behaviour bases on the emotions that are believed to accompany the use of a product (Sheth *et al.*, 1991). According to Yoo *et al.* (2013) emotional values have significant positive impact on the purchase intention of green products. Arvola *et al.* (2008) and Gleim *et al.* (2013) reported that moral and personal norms have a significant influence on purchase intentions of green products. It was found also that hedonistic emotional values positively affected purchase behaviour of green food products (Cerjak *et al.*, 2010; Padel and Foster, 2005).

Conditional value applies to products whose value is strongly tied to use in a specific context (Sheth *et al.*, 1991). Consequently, when the circumstances create a need, a temporary functional or social value can arise. According to Niemeyer (2010) and Gadenne *et al.* (2011) changes in consumers' situational variables may affect green product adoption. Connell (2010) and Chen and Chang (2012) found that favourable store related attributes can positively affect consumer green choice behaviour. While Lee (2010) reported that a consumer's local environmental involvement and consumer exposure to environmental messages through media influenced consumer behaviour. Epistemic value is typical for the consumers who are curious about something different, or want to try something new (Sheth *et al.*, 1991). Several researchers found positive correlation between epistemic value of green products and consumer choice behaviour (Gonçalves *et al.*, 2016; Lin and Huang, 2012; Mohd Suki and Mohd Suki, 2015; Yoo *et al.*, 2013). Consumers choose the green product out of curiosity or to learn about a new product.

Based on the theory of consumption values, green consumption values (GCVs) called also environmental values are often considered as additional values. In the literature, these environmental values are defined as consumer's tendency to express its environmental protection values in the field of purchase intention and choice behaviour (Haws *et al.*, 2014). According to de Groot and Steg (2008), individuals with environmental values, such as apathy for nature, personal inclination toward preserving the planet, and eco-centric philosophy, are more committed to demonstrating pro-environmental behaviours. Consumers accept green products when they believe that a green product can help solve environmental problems (Ottman, 1992). According to Yue *et al.* (2020) environmental responsibility has a positive impact on environmental concern and also has different positive effects on green consumption intention. These results confirmed also the finding of Kaiser and Scheutle (2003) who underlined a positive relationship between consumer

environmental responsibility and environmentally friendly behaviour among Swiss residents, as well as Attaran and Celik (2015). The positive impact of environmental concern on purchase behaviour was also confirmed by Thompson and Tong (2016) regarding the purchase intention of bamboo textile and apparel products. Consequently, based on the previous research results, the following hypothesis was formulated:

**H1a:** Functional quality-value has a positive impact on consumers' choice behaviour toward green clothing products.

**H1b:** Functional price-value has a negative impact on consumers' choice behaviour toward green clothing products.

**H2:** Social value has a positive impact on consumers' choice behaviour toward green clothing products.

**H3:** Emotional value has a positive impact on consumers' choice behaviour toward green clothing products.

**H4:** Conditional value has a positive impact on consumers' choice behaviour toward green clothing products.

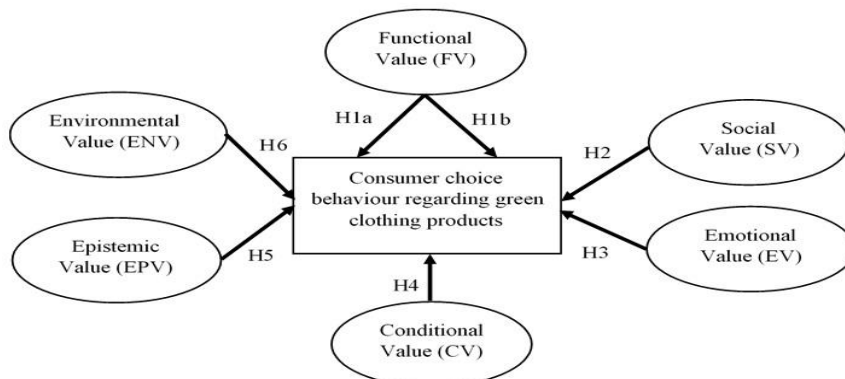
**H5:** Epistemic value has a positive impact on consumers' choice behaviour toward green clothing products.

**H6:** Environmental value has a positive impact on consumers' choice behaviour toward green clothing products.

#### 4. Research Methodology

The objective of this study was to identify the factors influencing consumers' choice of green clothing products. The TCV was used to explain the impact of consumption values (i.e. functional value, social value, emotional value, conditional value, epistemic value, and environmental value) on consumers' choice behaviour regarding green clothing products. The research model (Figure 1) was structured based on the TCV and six following hypotheses were formulated.

**Figure 1.** Research model



**Source:** Own study based on Sheth et al., 1991.

Self-administered questionnaires were distributed electronically to Polish consumers regularly used social media in December 2020. The questionnaire consisted of 37 questions. Three questions concerning demographic factors and two related to the choosing of green products were formulated. One question was related to the green clothing products' shopping frequency. The multiple choice responses scale was applied. Thirty questions were related to different consumption values and consumers environmental attitudes using a 5-point Likert-type scale. The Likert scale was selected because of the advantage in allowing questioning without systematic errors (Lee and Turban, 2001). The items for the evaluation of consumption values were adapted from previous relevant studies (Sweeney and Soutar, 2001; Yoo *et al.*, 2013; Arvola *et al.*, 2008; Dholakia, 2001; Hirschman, 1980; Tarrant and Cordell, 1997; Barr and Gilg, 2006).

We performed a confirmatory factor analysis (CFA) to assess the unidimensionality of each construct using a methodological rigor advocated by Gerbing and Anderson (1988) and Hair *et al.* (2010) to assess the validity and reliability of particular constructs. The convergent validity was assessed by standardized path loadings and the average variance extracted (AVE). Loadings above 0.5 and AVE above 0.7 indicate a high validity of the scale. Discriminant validity was calculated as the square roots of the AVE (Fornell and Larcker, 1981), and values greater than the off-diagonal correlations confirm good validity. The reliability analysis was conducted by calculating Cronbach's  $\alpha$  and composite reliability (CR) for each construct. The values above 0.7 (Fornell and Larcker, 1981), suggest good reliability. A pre-test was implemented using 10 graduate students and 10 academic teachers to review the design and content of the questionnaire for its validity and completeness. Minor corrections were made to the questionnaire to improve readability based on the respondents' feedback.

The questionnaire was completed by 496 respondents, among who 375 people adopted a green lifestyle and 212 were committed to buying green clothing products. Therefore, the 212 (42.7%) responses, constituting usable data for testing hypotheses, were utilized for further analysis. The analysed sample was comprised of females (76.4%) and males (23.6%) at the age of 18-24 (60.8%), 25-34 (10.8%), 35-44 (14.2%), 45-54 (9.9%), 55-64 (2.4%), and over 64 years (1.9%). The majority of respondents were with secondary (52.3%) and high education (47.2%). Demographic profile of respondents is presented in Table 1.

**Table 1.** Characteristics of respondents buying green products and green clothing

Demographic characteristics	Consumers of green products		Consumers of green clothing	
	N	%	N	%
Gender:				
• female	268	71.5	162	76.4
• male	107	28.5	50	23.6
Age:				

• 18-24	224	59.7	129	60.8
• 24-34	58	15.5	23	10.8
• 35-44	51	13.6	30	14.2
• 45-54	30	8.0	21	9.9
• 55-64	7	1.9	5	2.4
• 65+	5	1.3	4	1.9
Education:				
• primary	3	0.8	1	0.5
• secondary	192	51.2	111	52.4
• high	180	48.0	100	47.2

Source: Own study based on research results.

To test the hypotheses we used structural equation modeling (SEM) which is commonly used in testing the theory and conceptual models (Hair *et al.*, 2010). Model fit was evaluated by the comparative fit index (CFI), goodness of fit index (GFI), and Tucker-Lewis Index (TLI) which should all exceed 0.90 (Tseng and Hung, 2013). Besides,  $\chi^2$  index ( $\chi^2$  /df) which should be less than 3, and root-mean-square error of approximation (RMSEA) which should be less than 0.08 (Hair *et al.*, 2010) were used in the model fit evaluation. To conduct particular statistical tests and analyses, we employed two statistical packages, Statistica and Amos.

## 5. Results and Discussion

Firstly, we tested the scale validity and reliability. The variables with measurement items, factor loadings, convergent validity, and reliability assessment are presented in Table 2, and descriptive statistics, correlations, and discriminant validity in Table 3. The loadings, validity, and reliability of all variables present acceptable values that confirmed the scale of the questionnaire. We also conducted Harman’s one-factor test to check the presence of common method bias (Podsakoff *et al.*, 2012). We found five distinct factors with an eigenvalue greater than 1.0, rather than a single factor. All factors together accounted for 67,299% of the total variance; the first (largest) factor did not account for a majority of the variance (23,905%). Thus, no general factor is apparent and we were less concerned about potential problems associated with common method bias.

Table 2. Factor loadings, convergent validity, and reliability of variables

Variable / Items		Loading	Convergent validity	Reliability
<i>Functional quality-value (FQV)</i>				
FV1	The green clothing products have consistent quality	0.694	AVE = 0.714	$\alpha$ Cronbacha = 0.869 CR = 0.880
FV2	The green clothing products are well made	0.947		
FV3	The green clothing products have an acceptable quality standard	0.875		
<i>Functional price-value (FPV)</i>				
FV5	The green clothing products are reasonably priced	0.72	AVE =	$\alpha$



FV6	The green clothing products are worth the money	0.796	0.576	Cronbacha = 0.727 CR = 0.730
<i>Social Value (SV)</i>				
SV1	Buying green clothes would help me feel acceptable	0.644	AVE = 0.537	$\alpha$ Cronbacha = 0.873 CR = 0.872
SV2	Buying green clothing would improve the way I am perceived	0.58		
SV3	Buying green clothing would make a good impression on other people	0.796		
SV4	Buying green clothing would give its owner public approval	0.858		
SV5	The purchase of green clothes proves my knowledge and awareness	0.832		
SV6	Purchase of green clothing products express my caring and compassion	0.641		
<i>Emotional value (EV)</i>				
EV1	The green clothing products are one that I would like	0.804	AVE = 0.669	$\alpha$ Cronbacha = 0.919 CR = 0.923
EV2	The green clothing products would make me feel good	0.894		
EV3	The green clothing products would give me pleasure	0.837		
EV4	Buying the green clothing products instead of conventional products would feel like making a good personal contribution to something better	0.839		
EV5	Buying the green clothing products instead of conventional products would seem morally right	0.829		
EV6	Buying the green clothing products instead of conventional products would make me feel a better person	0.689		
<i>Conditional value (CV)</i>				
CV1	I buy the green clothing products instead of conventional products under worsening environmental conditions	0.787	AVE = 0.518	$\alpha$ Cronbacha = 0.723 CR = 0.762
CV2	I buy the green clothing products instead of conventional products when there are discount rates for green products or promotional activity	0.701		
CV3	I buy the green clothing products instead of conventional products when green products are available	0.665		
<i>Epistemic value (EPV)</i>				
EPV1	Before buying the green clothing products, I would obtain substantial information about the different makes of products	0.775	AVE = 0.509	$\alpha$ Cronbacha = 0.721 CR = 0.747
EPV2	Green clothing products arouse my curiosity for novelty	0.833		
EPV3	Green clothing products provide me a new experience	0.481		
<i>Environmental value (ENV)</i>				
ENV1	I make a special effort to buy clothing products that are made from recycled, biodegradable or bio-materials	0.929	AVE = 0.561	$\alpha$ Cronbacha = 0.897 CR = 0.893
ENV2	I have switched clothing brands for ecological reasons	0.952		

ENV3	When I have a choice between two equal clothing products, I purchase the one less harmful to other people and the environment	0.883		
ENV4	I have avoided buying some clothing products because it had potentially harmful environmental effects	0.497		
ENV5	I am willing to participate in preserving the environment	0.753		
ENV6	I believe personal responsibility for environmental problems is important	0.523		
ENV7	I believe the moral obligation to help the environment is important	0.537		

*Source:* Own study based on research results.

All correlations between variables were significant and positive ( $p < 0.05$ ). The highest was scored the emotional value with a mean value of 4.015, and the lowest was scored the social value with a mean value of 3.089. The highest coefficient is 0.749 and exists between environmental value and emotional value.

**Table 3.** Descriptive statistics, correlations between variables, and discriminant validity

No.	Variables	1	2	3	4	5	6	7
1	FQV	<b>0.845</b>						
2	FPV	0.602**	<b>0.759</b>					
3	SV	0.453**	0.354**	<b>0.733</b>				
4	EV	0.569**	0.367**	0.663**	<b>0.818</b>			
5	CV	0.402**	0.168*	0.540**	0.629**	<b>0.719</b>		
6	EPV	0.418**	0.260**	0.547**	0.652**	0.569**	<b>0.713</b>	
7	ENV	0.512**	0.347**	0.556**	0.749**	0.675**	0.662**	<b>0.749</b>
	Mean	3.775	3.150	3.089	4.015	3.503	3.484	3.858
	s.d.	0.868	0.981	0.922	0.849	0.897	0.951	0.833

*Note:*  $N=212$ ; s.d. – standard deviation; correlation is statistically significant at  $p < 0.01$  (\*\*) or  $p < 0.05$  (\*); the diagonal values (in bold) present the square roots of AVE

*Source:* Own study based on research results.

Considering the frequency of the green clothing products' shopping (FGCPS), most respondents buy these products 1–3 times a year (54.2%) and 4-5 times a year (28.3%). Others buy green clothing products 6-7 times a year (8.5%) or over 7 times a year (9%). This frequency expresses the consumers' choice behaviour toward green clothing products.

To test the hypotheses, we used SEM with maximum likelihood (ML) estimation and covariance matrix as data input. The ML estimation method is often indicated as well suited to theory testing and development (Gerbing and Anderson, 1988). The results of testing the hypotheses with SEM model and fit statistics are presented in Table 4 and Figure 2. Only three hypotheses were confirmed. The emotional value has a positive impact on consumers' choice behaviour toward green clothing products (hypothesis H3) as well as conditional value (hypothesis H4) and

environmental value (hypothesis H6). From these three values, the greatest impact on consumers' choice behaviour toward green clothing products had the environmental value ( $\beta=0.284$ ). Other values of consumers (i.e. functional value, social value, epistemic value) do not impact the frequency of the green clothing products' shopping. Thus, the hypotheses H1a, H1b, H2, and H5 were falsified. The model fit statistics were satisfactory (Figure 2).

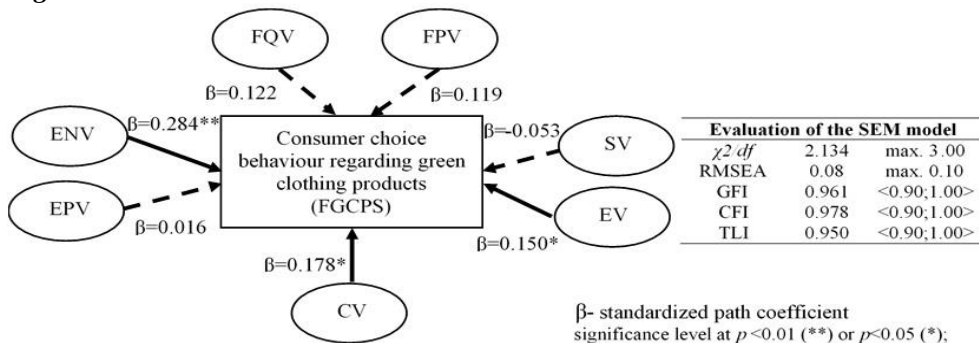
**Table 4.** Results of structural equation modeling

Independent variable		Dependent variable	<i>b</i>	SE	<i>t</i> value	<i>p</i> value	Results
FQV	→	FGCPS	0.165	0.090	1.838	0.066	H1a not confirmed
FPV	→		0.143	0.096	1.482	0.138	H1b not confirmed
SV	→		-0.072	0.093	-0.781	0.435	H2 not confirmed
EV	→		0.210	0.092	2.271	0.023*	H3 confirmed
CV	→		0.210	0.090	2.330	0.020*	H4 confirmed
EPV	→		0.015	0.070	0.219	0.827	H5 not confirmed
ENV	→		0.326	0.075	4.342	0.000**	H6 confirmed

*Note:* N=212; significance level at  $p < 0.01$  (\*\*) or  $p < 0.05$  (\*); *b* unstandardized path coefficient; SE - standard error

*Source:* Own study based on research results.

**Figure 2.** SEM model



*Source:* Own study based on research results.

Taking into account the control variables (gender, age, and education of respondents) some more dependencies appeared, such as:

- for women, an additional value influencing their choice behaviour toward green clothing products was the functional quality value ( $\beta = 0.143$ ;  $t = 2.040$ ;  $p < 0.05$ );
- for people with high education, an additional value influencing their choice behaviour toward green clothing products was the functional price value ( $\beta = 0.184$ ;  $t = 2.420$ ;  $p < 0.05$ );

- for young people (at age from 18 to 24), additional values influencing their choice behaviour toward green clothing products were functional quality value ( $\beta = 0.232$ ;  $t = 2.514$ ;  $p < 0.05$ ) and social value ( $\beta = 0.226$ ;  $t = 2.055$ ;  $p < 0.05$ ); while for older people (over 25 years), the value which had impact on their choice behaviour toward these products was the functional price value ( $\beta = 0.224$ ;  $t = 2.785$ ;  $p < 0.01$ ).

The results showed factors influencing the purchase of green clothing in the context of the theory of consumption values. The values which impact consumers' choice are emotional, conditional, and environmental, with environmental value having the greatest impact. This is consistent with the results of other scholars.

The importance of the environmental value was confirmed by Kaiser and Scheuthle (2003) who emphasised a positive correlation between consumer environmental responsibility and eco-friendly behaviour of Swiss consumers, and by Attaran and Celik (2015) who observed the favourable purchase of Americans with a high level of environmental responsibility. Similar conclusions were formulated also by Thompson and Tong (2016) and Yue *et al.* (2020). Consumers' ecological conscious, positive attitudes toward environment and engagement in planet preserving impact positively on the purchase of green clothing. Consequently, consumers with higher ecological sensitivity show more ecological purchasing attitudes.

The results showed the impact of conditional value on the green clothing consumption. This is consistent with the findings of Niemeyer (2010) and Gadenne *et al.* (2011) who stated that changes in consumers' situational variables may affect green product adoption. Today many retailers deliver information about eco-status of offered products and create the opportunity to choose the green clothing. This practise is especially popular in online shopping, where "eco-friendly" labels are presented. It confirms the findings of Connell (2010) as well as Chen and Chang (2012) who found that favourable store related attributes can positively affect consumer green choice behaviour.

It was stated that emotional value has also positive impact on the purchase intention of green clothing products. Similar conclusions were formulated by Yoo *et al.* (2013), Arvola *et al.* (2008), Gleim *et al.* (2013) and Lin and Huang (2012). The purchase of clothes is strongly related with emotional value, especially hedonistic values that positively affected green consumers attitudes. This is consistent also with the results of Cerjak *et al.* (2010), as well as Padel and Foster (2005).

The research results can explain the lack of the significant impact of epistemic value on green clothing purchase. Consumers do not choose the green clothing products out of curiosity but due to emotional and pro-environmental attitudes or situational variables.

The research results did not confirm the results of the study of some researchers (Eze and Ndubisi, 2013; Lee, 2010; Mohd Suki and Mohd Suki, 2015; Wang *et al.*, 2014) that emphasized the impact of social value on the purchase of green products by Asian consumers. These discrepancies may be due to cultural differences between consumers from Asian and Europe, as well as higher level of individualism of European consumers.

The research results did not show the impact of functional quality and functional price values on consumer choice behaviour regarding green clothing products. It was confirmed that for majority of respondents, product attributes were not related to green clothing purchase behaviour and this is consistent with the results of Chan and Wong (2012) concerning consumer eco-fashion consumption decision in fashion sector. Consumers usually have personal favourite brands and they prefer them over green brands (Young *et al.*, 2010). These conclusions are not compatible with other studies concerning the choice of the green products representing another categories (Chen and Lobo, 2012; Chen and Chang, 2012; Mondelaers *et al.*, 2009; Schmitt *et al.*, 2010; Tsakiridou *et al.*, 2008). This can be explained by the specificity of the clothing sector. However, it should be underlined that for chosen groups (women and young people (18-24) the functional quality value influenced their choice behaviour toward green clothing products. The functional price value had impact on choice behaviour toward green clothing products only in case of older consumers and people with high education level. For majority of consumer this factor did not affect the green clothing purchase intentions. Similar research results were obtain in Malaysia (Mohd Suki and Mohd Suki, 2015) and in Taiwan (Lin and Huang, 2012), where functional price value had no effect on consumers' environmental behaviours.

## **6. Conclusions**

The results of this study show that Polish consumers are willing to buy green clothing products because of emotions of using these products, changes in their situational variables, and environmental responsibility. On the other hand, the price, quality, social or epistemic values are less important for that shopping. Thus, our study contributes to existing literature, both sustainable consumers' behaviours and the theory of consumer values by the evaluation of different factors influencing consumers' decision towards purchasing green clothing products. Our research also enhances findings of other scholars related to a necessity of study the environmental value in case of consumers' behaviours towards purchasing green clothing products.

From managerial implications, our results can be useful for both, retailers and producers of green clothing products. Retailers can use them to build a marketing communication campaign for Polish market. Such a campaign should be based on customers' emotions and environmental value that green clothing products can bring. Retailers should also deliver information about green characteristics of clothes. According to our study results Polish consumers are more and more ecologically conscious appreciating the environmental value of the green clothing

products purchase, therefore it will be beneficial for producers to label those products even though it could be related to additional costs. Labels and eco-brands should be created to differentiate between green and non-green clothing products.

Our research is not free from limitations, which set further directions of research. Firstly, the research was limited to a non-representative group of Polish consumers with experience of green clothing products, so the conclusions can only be read in relation to them. It would therefore be recommended to carry out similar research in a much bigger, representative sample. Due to the fact that only Polish people were investigated, an interesting further direction of research would be studying consumers' choice behaviour toward green clothing products with implementation of Sheth *et al.* (1991) model in various cultures and countries with different economic growth. Future research can also examine the role of additional demographic variables such as income and occupation as well as characteristic of green cloths like type of material and design on decision to purchase green clothing products. These directions for further research do not exhaust all possibilities, and analysing incentives of buying green clothing products through the lens of consumption values will remain an interesting subject for academic discussion in the future.

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