

A typology of Polish consumers and their behaviours in the market for sustainable textiles and clothing

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Abstract

The paper discusses Polish consumers' behaviours in the market for sustainable textiles and clothing.

The analysis presented in this article was undertaken because of:

- 1 the scarcity of studies on socially responsible consumption in so-called new consumer countries characterized by slowly developing ethical consumer movement;
- 2 few studies analysing consumer behaviour compared with the volume of literature exploring sustainable development and corporate social responsibility of textile and clothing manufacturers.

The typology of Polish consumers presented in this article was developed based on consumers' buying habits and general apparel selection criteria, and also on ecological and social criteria that other typologies and clothing market segmentations omit. The six types of consumers that emerged from the analysis were described with respect to their specific attitudes to sustainable textiles and clothing. In analysing the consumers' behaviours, the following aspects were addressed: communication between customers and producers, product differentiation and actual purchases made by consumers.

Introduction

It became more apparent in the 1970s that the accelerated development and economic upturn after World War II had its downside. As a result of the deteriorating quality of the natural environment several ecological movements were created, which in the last 2–3 decades of the 20th century managed to instil environmental awareness and a sense of ethics into large groups of the public and to modify their daily behaviours, mainly their consumption patterns (Bywalec, 2007).

The western European literature points to globalizing environmental and social awareness as one of the most distinct phenomena in the sphere of consumption observed in the recent years (Mayers and Kent, 2003; Carbone and Moatti, 2008; Wigley, 2008).

More and more consumers wish to know today if the product they like was made by a manufacturer that respects the natural environment and adheres to basic ethical principles, and also if the raw materials were acquired in a sustainable, socially acceptable and ethical manner. Consumers have grown powerful enough to demand, and to receive, new products and services that meet not only their long-established preferences regarding prices, styles and quality, but also social and environmental criteria (Brown and Dacin, 1997; Creyer and Ross, 1997; Forte and Lamont, 1998; Mayers and Kent, 2003; Delmas and Montiel, 2009; Koszewska, 2011a).

It is not surprising, therefore, that corporate social responsibility (CSR) has become today one of the subjects that scientists, institutions and enterprises discuss the most frequently. CSR poses huge demands on all industries, but only few of them feel such strong pressure from consumers, the media and non-governmental organizations calling for the implementation of social responsibility standards as the textile and clothing (T&C) industry.

The direct or indirect sources of many ecological and social concerns that beset the T&C industry are related to surging consumption and fast fashion that comes with it (Sluiter, 2009; Koszewska, 2011b)

Contrary to what might be expected, mass consumption is not a problem of the long rich countries, but of some developing and transition countries that are sometimes called new consumer countries. Although today's new consumers are consuming as fast and as variously as they can, most of them still have a very long way to go before catching up with North American and West European lifestyles. The group of new consumer countries in Eastern Europe consists of Poland, Ukraine and Russia. The other countries in the region are either too small in population or too poor to fall into this category.¹

¹New consumers are defined as people within an average of four-member households who possess purchasing power of at least \$US10 000 per year, or at least \$US2500 per person. These cut-off figures may seem a trifle arbitrary, but they are no more so than a parallel categorization in

Almost all knowledge about socially responsible consumer behaviour that has been amassed to date is based on studies on the long rich countries (Cotte *et al.*, 2009), mainly those leading in ethical consumer movements, such as the fair trade movement in the UK and the US. Because little empirical evidence has been gathered so far on countries where ethical consumer movements are in the fledgling stage, e.g. Poland (Papaoikonomou *et al.*, 2011), these countries seem particularly interesting as an object of studies into consumers' attitudes to CSR.

The study presented in this article aimed to determine whether the buying patterns of consumers in Poland being a new consumer country evolve towards socially responsible consumption, like those of consumers in the long rich countries. The research was structured as follows. After the weight of ecological and social criteria applied by Polish consumers buying garments was assessed in relation to the general set of their buying criteria and habits, homogenous categories of Polish consumers of T&C products were formed to analyse their respective market behaviours. The purpose of the last step was to determine whether Poland has a group of consumers whose buying behaviours are clearly influenced by environmental and social considerations, as well as its size, characteristics and actual market behaviour.

Conceptual background and basic hypotheses

Studies on socially responsible consumption of textiles and clothing

The environmental aspects of consumer behaviour have been studied for quite a long time now, with the scope of research gradually extending also to social and ethical issues (Anderson and Cunningham, 1972; Anderson, Henion and Cox, 1974; Brooker, 1976; Mayer, 1976; Balderjahn, 1988). However, work in the realm of socially conscious consumption experienced a surge of research only in the last few years (Cotte *et al.*, 2009), with a particular increase in academic output on ethical consumer behaviour being observed from 2006 (Papaoikonomou *et al.*, 2011).

A review of articles authored by Cotte, Ivey and Trudel points to two predominant types of studies, one dealing with consumers' reactions to ethical products (53%) and the other occupied with their general buying attitudes and behaviours rather than attitudes to a specific category of products (29%). The definite majority of studies into consumer attitudes cover broad categories of products, e.g. fair trade products (De Pelsmacker *et al.*, 2006; Goig, 2007; Pedregal and Ozcaglar-Toulouse, 2011; Andorfer and Liebe, 2012; Ma and Lee, 2012; Ma *et al.*, 2012; White *et al.*, 2012), ecological products or socially responsible products (Herberger, 1975; Bhate and Lawler, 1997; Laroche, 2001; Auger *et al.*, 2008; Bhargava and Chakravarti, 2009; Davis, 2013). Studies into particular groups of products are scarce and focus mainly on foodstuffs (organic food) (Bartels and Hoogendam, 2011; Janssen and Hamm, 2012; Krystallis *et al.*, 2012) whereas textiles and clothing tend to be omitted.

developed countries. PPP of \$US10 000 per household is a minimum estimate, and most new consumers possess purchasing power way higher, often several times more. The basic figures are used here because they mark the rough stage when people start to engage in a distinctly middle-class lifestyle (Mayers and Kent, 2003).

In the sample of 80 empirical studies on ethical consumer behaviour analysed by Papaoikonomou, Ryan and Valverde, seven concerned food and grocery, four clothing, one environmentally friendly detergents, and two wood products and furniture (Papaoikonomou *et al.*, 2011).

This should not be interpreted that researchers have little interest in CSR of T&C manufacturers. The industry's sustainable development and CSR have already been extensively covered in the literature (Robins and Humphrey, 2000; Allwood *et al.*, 2006, 2008; Yperen, 2006; de Brito *et al.*, 2008; Brosdahl and Carpenter, 2010; Niinimäki and Hassi, 2011). There is, however, one field of research that seems to attract less attention – consumer behaviour. Little is known about the environmental and social impacts of changes in consumer trends. There is also lack of information on what drivers and incentives influence consumer trends and behaviour (Madsen *et al.*, 2007).

In an attempt to reduce this information gap, this study set out to determine how general apparel selection criteria applied by consumers (fashion, comfort, quality, wearability, price, etc.) and their buying habits, on the one hand, and environmental and social apparel selection criteria, on the other, influence their behaviour towards sustainable textiles and clothing. It also sought to find out how important the latter criteria are for different groups of consumers formed in the course of research, as well as the relationship between someone's belonging to one of the distinguished groups and their behaviours in the market for sustainable textiles and clothing. To this end, the following research hypotheses were formulated and tested:

H1: General apparel selection criteria and buying habits of consumers differentiate their behaviours towards sustainable textiles and clothing.

Notwithstanding growing interest in sustainable consumption, studies comparing and contrasting the varied ethical consumption discourses that arise in different cultures are still few. Many authors also point to the need to extend to scope of analysis also to other cultural contexts (Newholm and Shaw, 2007; Papaoikonomou *et al.*, 2011).

In her previous study, the author of this article compared attitudes to socially responsible consumption in Poland (a new consumer country) and the UK (a long rich country) (Koszewska, 2011a). The greatest differences were found in consumer attitudes requiring increased activity and conscious involvement.

Although the main focus of the study was the overall sensitivity of Polish consumers to ecological and social issues rather than their reactions to particular markets or groups of products, some of its findings pointed to the following hypothesis as worth testing:

H2: There is a group of consumers in Poland who apply ecological and social criteria to buy their clothes.

To test this hypothesis, this study develops a typology of Polish consumers based on their apparel selection criteria and then identifies groups of those for whom ecological and social criteria are particularly important.

Typology of consumers and market segmentation – an investigation into socially responsible textiles and clothing

Consumer typologies have been developed for a long time and their comprehensive descriptions are readily available in the

Table 1 Typologies of consumers in the clothing market

Source	Criteria	Types of consumers and their shares (%)	Scope of research
Richards and Sturman, 1977	Attitude/need statements in a range of areas: <ul style="list-style-type: none"> ■ Social/work/family relationships ■ Fashion/importance of clothes ■ Shopping preferences ■ Value/price ■ Brands ■ Basic bra preferences 	Conservative consumer – 19 Fashionable consumer – 16 Brand conscious consumer – 24 Outgoing consumer – 18 Home/price-oriented consumer – 23	1000 women Non-rural areas Median household income of at least \$15 000 Women of 18–59 years of age Women who purchased bras in specific outlets
Gutman and Mills, 1982	General shopping behaviour <ul style="list-style-type: none"> ■ Fashion orientation ■ Perceived self-image ■ Inventory ■ Store patronage 	Leaders Followers Independents Neutrals Uninvolved Negatives Rejectors	6261 female US consumers
Kopp <i>et al.</i> , 1989	<ul style="list-style-type: none"> ■ Store patronage – frequency of shopping ■ Store image data ■ Psychographics – fashion lifestyle ■ Benefit importance ■ Source of information ■ Demographics 	Price shoppers – 18.4 Budget values – 25.2 Young careers – 23 Senior shoppers – 5.3 Fashion enthusiasts – 18.8 Fashion elites – 9.3	Chicago metropolitan area Female household member Eighteen years and older
Reynolds and Beatty, 1999	Four personal needs: <ul style="list-style-type: none"> ■ Time poverty ■ Shopping enjoyment ■ Shopping confidence ■ Social needs 	Happy busy shoppers – 23.8 Challenged shopping lovers – 10.7 Happy social shoppers – 17.9 Capable shopping haters – 26.6 Asocial busy shopping avoiders – 4.5 Challenged shopping avoiders – 16.6	South-eastern US Valid sample of 821 The customers with whom the salespeople had an ongoing relationship
Eunju <i>et al.</i> , 2007	<ul style="list-style-type: none"> ■ Fashion lifestyle ■ Recognition of advertisements and the brand ■ Advertising effectiveness ■ Nationality 	Information seekers – 26.6 Sensation seekers – 29.5 Utilitarian consumers – 25.2 Conspicuous consumers – 18.5	Korean, European and US female consumers
Cardoso <i>et al.</i> , 2010	<ul style="list-style-type: none"> ■ Fashion involvement ■ Fashion innovativeness ■ Self-expression through fashion ■ Impulsive buying ■ Prudence 	Moderates – 36.5 Apathetics – 37.4 Enthusiasts – 26.1	Portuguese young adults A convenience sample composed of 213 undergraduate management and communication students from two Oporto Universities

literature (Myers and Nicosia, 1968; Wind, 1978; Spiggle and Sanders, 1984; Verain *et al.*, 2012). Empirical classification procedures and typology have begun with time to find applications in many marketing studies (Williams *et al.*, 1978; Dillon and Mulani, 1989; Holt, 1995; Yue-Teng *et al.*, 2011)

The literature offers also many typologies of the consumers of textiles and clothing and of socially responsible consumers.

Most typologies of consumers of textiles and clothing and the subsequent segmentations of the T&C market do not delve into the ecological and social aspects of buying clothes. The majority of classifications use variables such as consumers' attitude to clothes, their brand commitment, interest in fashion, shopping preferences, store, patronage, fashion, lifestyle and the effectiveness of advertising (Richards and Sturman, 1977; Gutman and Mills, 1982; Kopp *et al.*, 1989; Reynolds and Beatty, 1999; Moye and Kincade, 2003; Eunju *et al.*, 2007; Cardoso *et al.*, 2010). All these authors

have analysed different countries using distinct samples and constructs, but almost all of them are similar in focusing their studies on women. Some examples of the studies are presented in Table 1. A more extensive list can be found in the article by Gutman and Mills (1982).

Other studies that have been carried out in the space of the last 3 decades provide the profiles of socially responsible or ethical consumers, but usually in general terms and without any reference to particular market or groups of products (Roberts, 1995; Auger *et al.*, 2008).

Studies presenting typologies of the consumers of sustainable T&C products are few (some are presented in Table 2).

The typology of Polish consumers of textiles and clothing developed for the purpose of this study is based on the motivations and criteria they use to choose apparel, including ecological and social criteria.

Table 2 Typologies of socially responsible consumers in clothing market

Source	Criteria	Types of consumers and their shares (%)	Scope of research
Jacommet, 2010	<ul style="list-style-type: none"> ■ Knowledge of sustainable clothing ■ Sustainable clothing being bought so far ■ Possibility of a purchase in the future 	Convinced – 9 Occasional – 11 Tempted – 15 Sceptical – 26 Opened – 10 Reluctant – 27	France sustainable clothing
Tangl, 2010	<ul style="list-style-type: none"> ■ Motivations for and frequency of buying eco-fashion ■ Lifestyle ■ Preferences regarding clothing (materials, origin) ■ The importance of price for the buyer ■ Socio-demographics 	Heavy users – 20 Fashion-conscious occasional buyers – 21 Distanced-occasional buyers – 25 Inaccessible – 30	Austria eco-textiles

Method

An omnibus survey of a representative sample of 981 Polish adults drawn from the official population database was conducted between 30 November and 8 December 2010.² The sample was compiled and the interviews were carried out by the Public Opinion Research Centre. The face-to-face interviews were carried out using the CAPI technique (computer-assisted personal interviewing). The socio-demographic characteristics of the respondents are presented in Table 3.

Factors likely to influence people purchasing textiles and apparel were identified from the relevant literature (Behling and Wilch, 1988; Friend *et al.*, 1989; Wall and Heslop, 1989; Shim and Drake, 1990; Roach, 1994; Abraham-Murali and Littrell, 1995; Kawabata and Rabolt, 1999; Forney *et al.*, 2005; Hugo and van Aardt, 2012; Momberg *et al.*, 2012).

The range of typical reasons for consumers to choose and buy clothes (fashion, brand and style, price, quality, wearability, comfort of wear, fit, the shopping place, etc.) was extended in the research to account for ecological and social criteria that other studies omit or rarely address. This produced a set of 21 different reasons (variables) that were compiled into a 7-grade scale. It was presented to respondents to determine how strongly they identified themselves with them.

In the next step, cluster analysis commonly used in this type of studies was applied (Williams *et al.*, 1978; Roberts, 1995; Moye and Kincade, 2003; Schoefer and Diamantopoulos, 2009; Michaelidou, 2012). Specifically, non-hierarchical clustering with k-means was applied as a result of which homogenous clusters of consumers were produced. The analysis of four, five and six clusters pointed to six clusters as the best research option, allowing the optimal differentiation between the clusters.

²An omnibus survey is a multi-topical survey carried out by the Public Opinion Research Centre (CBOS). It consists of face-to-face interviews with a representative sample of 1000 adult Poles, which are conducted in the third week of each month by trained interviewers. The questionnaires contain blocks of questions requested by several clients of the CBOS. All omnibus surveys have a large demographic section for collecting socio-demographic information about the respondents, such as age, gender, place of residence, education, occupation and marital status (CBOS, 2013).

The last step in developing the typology of consumers was profiling – the distinguished clusters of consumers were described through socio-demographic characteristics commonly adopted in this type of studies (Dickson, 2001; Diamantopoulos *et al.*, 2003).

Finally, the clusters of consumers were analysed to determine if the consumers comprising them differently behaved in the market for sustainable textiles and clothing. The identified differences were investigated with respect to three areas: communication, product differentiation and actual purchases. To find out if the differences were statistically significant, cross-tabulation analysis and the chi-square statistic were applied.

Research results

Typology of consumers – the outcomes of cluster analysis

The typology of Polish consumers presented in this section is based on the motivations and criteria they apply to choose clothing, including ecological and social criteria. As already mentioned, the cluster analysis produced six types (clusters) of consumers. This number ensured the best intra-cluster homogeneity and inter-cluster heterogeneity, thereby perfectly meeting the purpose of the research (see Table 4).

The type 1 consumers are fashionistas. These people are very interested in fashion; frequently buy new clothes; give priority to original designer clothes; intend to wear the clothes they buy for several years; are sensitive to brands; like to buy clothes of global or European brands; would prefer to buy one upmarket product rather than several less expensive; check clothes for the producer country and raw materials composition; appreciate natural materials; rarely look for eco-labels; do not care if the product was made by children or workers' rights were infringed; buy on impulse, i.e. without really intending to wear their buy, relatively less frequently than the other groups of consumers. This group of consumers accounted in the survey for 13.8% of the whole sample.

The type 2 consumers, slow fashionistas, are moderately interested in fashion and fashion trends; buy new clothes not so often (only the fashionistas do it more frequently); plan to wear their new clothes for quite a long period; appreciate brands and like original designer clothes (these two characteristics make them

Table 3 Socio-demographic structure of Polish respondents

		% from N in the column
Gender	Male	47.6
	Female	52.4
Age (years)	18–24	13.6
	25–34	17.4
	35–44	14.6
	45–54	18.1
	55–64	18.1
Place of residence	65 and older	18.3
	Rural areas	37.6
	Town with population up to 20 000	13.9
	20 000–100 000	20.0
	101 000–500 000	15.8
Education	501 000 and more	12.7
	Elementary	25.3
	Basic vocational	25.7
	Secondary	33.7
Socio-occupational group Economically active	Tertiary	15.3
	Managers, specialists with tertiary education	17.4
	Middle-level personnel, technicians	8.2
	Office and administrative personnel	13.7
	Personnel in the service sector	10.6
	Skilled workers	23.2
	Unskilled workers	11.2
	Farmers	9.3
	Self-employed	6.5
	Economically inactive	Disability pensioners
Old-age pensioners		44.1
Schoolchildren and students		14.0
Unemployed		17.4
Housewives and others		11.0

similar to fashionistas), definitely give preference to upmarket clothes; rarely check clothes for the producer country or eco-labels; are quite unconcerned about raw materials composition; their liking for natural clothes is less distinct than among fashionistas, ecological conservatives or ethical consumers; have little interest in learning whether child labour is involved in the product or workers' rights were infringed to make it; generally stay clear of second-hand stores; occasionally buy their clothes at the sale or in the open-air market; their price sensitivity is the lowest among all types of consumers. This group made up 10.7% of the sample.

The third type of consumers has been called neutral minimalists. These people are not interested in fashion at all; rarely buy new clothes and when they do this they expect to wear them for several years; are not brand sensitive; do not buy original designer clothes; would buy several downmarket garments rather than one high-end product; rarely check clothes for the producer country; ignore eco-labels; hardly ever look for the raw materials composition; the type of raw materials is not important to them; are unconcerned about child labour being involved in the product or workers' rights being infringed; rarely buy clothes at the sale and even more rarely in second-hand stores, their first choice being open-air markets. Neutral minimalists represented 18.2% of the surveyed population of consumers.

Type 4 is ecological conservatives. These consumers have little interest in fashion; rarely buy new clothes; do not care about brands;

would buy one high-end item rather than several less expensive of inferior quality; check for the producer country and raw materials composition; appreciate natural raw materials and favour a subdued, classical style of dressing; frequently check if eco-labels are attached; are quite indifferent to whether child labour is involved in the product or workers' rights were infringed in making it; avoid second-hand stores; rarely think buying a garment that they may not wear it. This group accounted for 15.7% of the sample.

The type 5 consumers are ecologically and socially sensitive individuals, so they are the most interesting regarding the purpose of this study. These consumers are not indifferent to fashion and its trends, but stay somewhat aloof from them; buy new clothes more frequently than neutral minimalists but less often than fashionistas; intend to wear their new clothes for a long time; the brand makes some difference to them; occasionally choose original designer clothes; would definitely prefer one upmarket product to several low-end items; look for the producer country and for information about the raw materials composition; give preference to natural clothes; check clothes for eco-labels; are frequently concerned about the possibility of the product being made by children or workers' rights being infringed in the course of production. Sometimes they have second thoughts about wearing what they just bought. They have relatively less problems with finding their sizes of clothing than the other types of consumers. The ecologically and socially sensitive consumers constituted 16.3% of the sample.

Table 4 Types of consumers resulting from cluster analysis

Answers on a 7-point scale	Means by cluster				Totals		
	Fashionistas	Slow fashionistas	Neutral minimalist	Ecological conservative		Ecologically and socially sensitive	Thrifty
1 – 'I'm not interested in fashion and new trends at all'; 7 – 'I'm very much interested in fashion and new trends'	5.13	3.74	1.72	2.79	3.90	2.78	3.27
1 – 'I very rarely buy new clothes for myself or a member of my family'; 7 – 'I buy new clothes for myself or a member of my family very frequently'	5.26	4.01	2.22	3.13	3.93	3.25	3.57
1 – 'When buying clothes I plan to wear them for a maximum of several months'; 7 – 'When buying clothes I plan to wear them for several years'	4.85	4.73	4.47	5.74	4.67	4.92	4.89
1 – 'The brand is completely unimportant to me'; 7 – 'The brand is very important to me'	4.93	4.96	1.55	2.73	3.62	2.01	3.14
1 – 'I don't like original, unique, designer clothes at all'; 7 – 'I like original, unique, designer clothes very much'	5.26	5.20	1.95	2.34	4.02	2.55	3.42
1 – 'I never buy clothes of global or European brands'; 7 – 'I like to buy clothes of global or European brands very much'	4.51	4.43	1.43	2.10	3.40	2.15	2.87
1 – 'I'd rather buy several less expensive items than one upmarket product'; 7 – 'I'd rather buy one upmarket product than several less expensive products of inferior quality'	5.49	6.12	2.83	5.50	5.01	3.39	4.58
1 – 'I never feel like I will not wear what I have bought'; 7 – 'I very frequently feel like I will not wear what I have bought'	3.42	2.24	1.82	2.25	3.22	2.74	2.62
1 – 'I never check for the raw materials composition'; 7 – 'I always check for the raw materials composition'	5.11	3.05	1.80	5.54	5.27	2.27	3.80
1 – 'I don't value a classical, subdued style of dressing'; 7 – 'I highly value a classical, subdued style of dressing'	5.16	5.08	4.01	5.95	5.28	4.55	4.98
1 – 'I never check for the producer country'; 7 – 'I always check for the producer country'	4.86	3.40	2.02	5.54	5.62	2.62	3.97
1 – 'I never check if the clothes have eco-labels or eco-symbols'; 7 – 'I always check if the clothes have eco-labels or eco-symbols'	2.90	3.00	1.63	3.98	5.04	1.75	3.00
1 – 'I never consider whether or not the product involves child labour'; 7 – 'I frequently consider whether or not the product involves child labour'	1.87	2.16	1.48	2.20	5.15	1.40	2.36
1 – 'I never consider whether or not the rights of the workers making the product were infringed'; 7 – 'I frequently consider whether or not the rights of the workers making the product were infringed'	1.79	1.93	1.54	2.16	4.97	1.39	2.29
1 – 'I do not pay any attention to whether or not the clothes are natural'; 7 – 'I only buy natural clothes'	5.09	4.15	2.29	5.65	5.62	3.63	4.36
1 – 'I never buy clothes at the sale'; 7 – 'I very frequently buy clothes at the sale'	5.38	2.61	2.25	2.71	4.55	5.44	3.90
1 – 'I never buy clothes in second-hand stores'; 7 – 'I frequently buy clothes in second-hand stores'	3.34	1.44	1.54	1.42	3.66	3.81	2.62
1 – 'I never buy clothes in the open-air market'; 7 – 'I frequently buy clothes in the open-air market'	3.04	2.52	3.49	3.18	3.56	4.59	3.48
1 – 'The price of the clothes is not the most important to me'; 7 – 'The price of the clothes is the most important to me'	4.56	3.83	4.98	4.54	4.80	5.44	4.76
1 – 'Many garments that I buy wear out fast and I have to discard them'; 7 – 'It is very rare for the things I buy to wear out fast'	4.95	5.18	4.46	5.03	4.85	4.67	4.83
1 – 'I frequently have a problem finding my size of clothing'; 7 – 'I have no problem finding my size of clothing'	5.17	4.91	5.26	5.30	4.45	5.04	5.03

The boldface represents apparel selection criteria that are the most characteristic of particular typological groups (the means of responses).

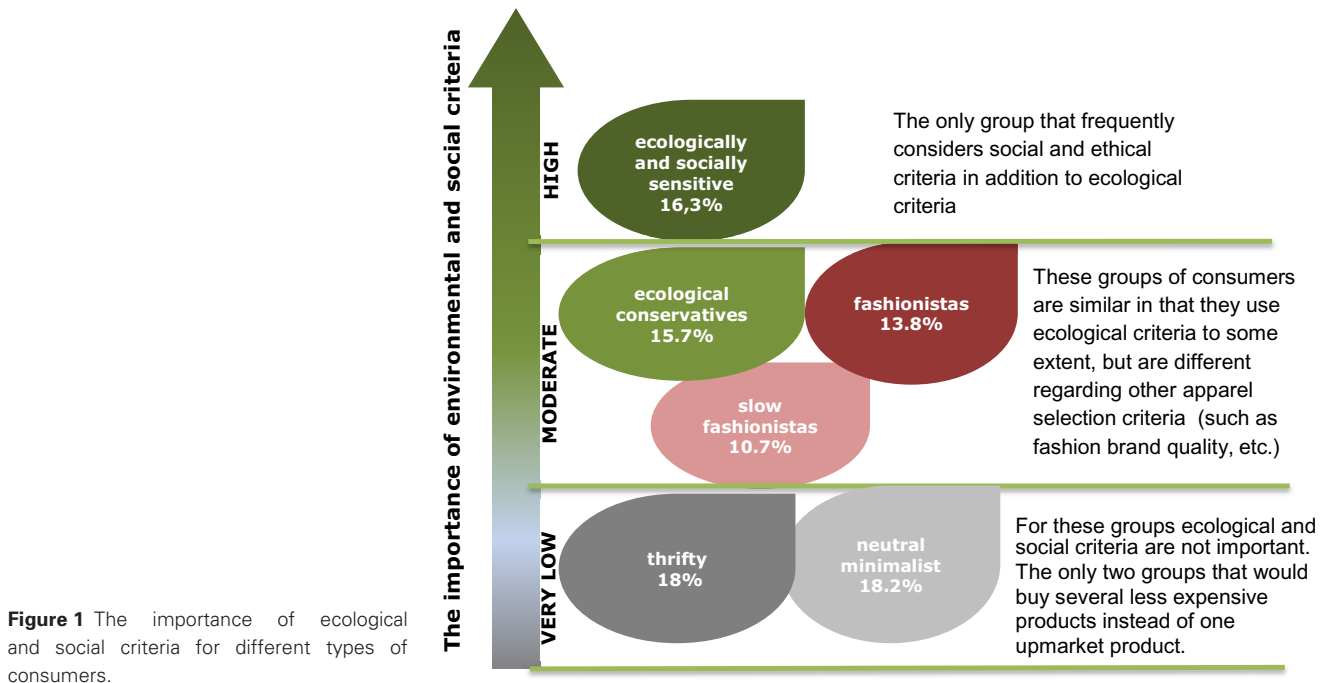


Figure 1 The importance of ecological and social criteria for different types of consumers.

Thrifty consumers are the sixth and last type distinguished in the survey. These people usually ignore fashion; rarely buy new clothes; typically intend to wear their new clothes for several years; are not sensitive to brands; do not like original designer clothes; would buy several low-end products rather than one upmarket garment; do not pay attention to the producer country and raw materials composition; completely ignore eco-labels and whether or not child labour was involved in the product or workers' rights were infringed; go to the open-air market to buy clothes definitely more often than other consumers and are the most sensitive to prices; it is rather rare for them to think they will not wear the clothes they bought. The thrifty consumers represented 18% of the sample.

The above typology of Polish consumers shows considerable differences in how ecological and social criteria guide their choices (5.3% of consumers in the sample declared they did not buy clothes, so they were omitted from the analysis) (Fig. 1).

By confirming that Poland has a group of consumers responsive to environmental and social considerations, the outcomes of this part of analysis corroborate H2.

In the next step, the socio-demographic characteristics (e.g. age, gender, income, etc.) of the six types of consumers were established and analysed to see if they made the groups differ statistically significant from each other. The characteristics are presented in Table 5.

The six groups of consumers were found to be statistically distinct with respect to all socio-demographic characteristics. This finding was subsequently confirmed by the chi-square analysis (at $P = 0.001$).

The Cramer's V statistics show that characteristics causing the greatest differences between the identified types of consumers include gender (V Cramer statistics = 0.26), educational attainment (V Cramer statistics = 0.25) and occupational status (V Cramer statistics = 0.24).

Comparing the types of consumers who deemed ecological criteria as important or relatively important (fashionistas, slow fashionistas, ecologically and socially sensitive consumers, and ecological conservatives) with those who ignored them (neutral minimalists, thrifty consumers), we can generally conclude that most consumers in the first group had higher educational and income status, high or medium occupational status, and lived in towns or cities rather than in the country. Only ecological conservatives, most of whom were old-age pensioners, did not fit the pattern because their incomes were much lower.

Differences in the market behaviour of the presented types of consumers

The next step in the analysis was to show whether belonging to one of the typological groups of consumers was related to different market choices and behaviours.

To do this, and to test one of the main hypotheses (H1) stating that apparel selection criteria and general buying habits of consumers differentiate their behaviour towards sustainable textiles and clothing, the following specific hypotheses were formulated and verified (see Fig. 2).

The developed types of consumers were first analysed to establish their receptiveness of the CSR content of manufactures' messages. As found, the most receptive were ecologically and socially sensitive consumers followed by ecological conservatives and fashionistas whereas neutral minimalists were ranked the lowest (see Fig. 3). Because the chi-square statistics ($P < 0.001$) confirmed that the particular groups of consumers varied in their openness to the messages, H1.1 was corroborated.

In the next step, consumers' abilities to recognize ecological and social labels that producers attach to T&C products in Poland were analysed. The respondents were shown seven typical labels and were asked to indicate if they had already seen them on

Table 5 Comparison of the socio-demographic characteristics of the established types of consumers

	Fashionistas	Slow fashionistas	Ecological conservatives	Ecologically and socially sensitive	Neutral minimalists	Thrifty consumers
Gender	Predominantly female (65.0%)	Mostly male (75.0%)	Relatively equal shares of male (45.5%) and female (54.5%) followers	Predominantly female (63.5%)	More often male (57.5%)	Most were female (62.2%)
Age	More than half (54.5%) was younger than 34 years of age Three-fourths (75.9%) in the age group to 44 years	Have a large proportion of people aged: ■ 18–34 years (37.9%) ■ 35–54 years (46.5%)	Most were aged 55+ (68.0%)	The shares of younger people (25–34 years) and older people (55–64 years) are almost equal.	Half of them were aged 55+ (49.2%)	The age structure was less clear
Occupation status	Most had high or medium occupational status (managers, specialists with tertiary education (21.9%), administration and office staff (23.4%), pupils and students (30.5%))	Among them, skilled workers (35.8%) and pupils and students (36.3%) were the most numerous.	Most of them were old-age pensioners (71.2%)	People with high occupational status (26.1%) and skilled workers (20.5%) were more frequent	Old-age pensioners accounted for half of them a relatively large group of skilled workers (37.3%) and farmers (25.8%)	Old-age pensioners represent one-third of them a relatively large group of unemployed (29.5%) and unskilled workers (22.4%).
Income	People in different income groups	Usually relatively wealthy (32.1% of them were in the highest income group)	Low incomes	Somewhat wealthier than ecological conservatives but not as wealthy as slow fashionistas	Low incomes	32.7% of them were in the lowest income group

textiles and clothes, bedclothes, towels, curtains, etc. As before, the groups of consumers were found to be significantly different from each other (for all labels, $P < 0.05$). Those ecologically and socially sensitive were the most knowledgeable of eco-labels while neutral minimalists knew the least about them (see Fig. 4). These outcomes confirm that H1.2 was also true.

Another hypothesis that was verified empirically (H1.3) stated that particular types of consumers prefer different sustainable textile innovations. The verification results are presented in Fig. 5.

The differences between the behaviours of distinct types of consumers were analysed based on the percentages of the same answers they gave to individual questions. Additionally, the statistical significance of the differences was tested by comparing column proportions (a z -test) at $P = 0.05$.

Statistical analysis did not find major differences between the typological groups only for two types of innovations, i.e. textiles made using environmentally safe processes and drug-releasing textiles.

As regards the ethically made textiles, the ecologically and socially sensitive consumers were distinct from the other groups in that every second of them was interested in this type of innovation.

Textiles with built-in devices for monitoring user's health were the most interesting for fashionistas (10.7%) and slow fashionistas (8.9%). These groups were significantly different from ecological conservatives in that respect, among which only 5.2% found the textiles interesting.

While textiles free of heavy metals, toxic agents, chemicals, etc. were the most interesting for the ecologically and socially sensitive consumers (39.5%), relatively strong interest in these products could also be found among ecological conservatives and fashionistas (32.2 and 30.2% respectively). This interest made the three groups statistically significantly different from minimalists who were the least interested.

The availability of customized clothing in chain stores (an innovation related to mass customization) was the most interesting for slow fashionistas (16.2%), fashionistas (13.7%), as well as ecologically and socially sensitive consumers (12.5%). The groups were statistically different from the other three groups where the rates did not exceed 6%.

The least interested in textiles offering thermal comfort were neutral minimalists. The difference between them and the most interested group (fashionistas) exceeded 20%.

The fashionistas were also markedly distinct regarding their attitudes to textiles ensuring increased comfort and safety of wear. This innovation was found interesting by every second consumer in this group.

Textiles made from renewable and biodegradable raw materials were the most interesting for the ecologically and socially sensitive consumers and fashionistas. Both these groups were clearly different in that respect from neutral minimalists.

According to the analysis results, the ecologically and socially sensitive consumers were way different from the other groups with respect to most of the considered innovations. Their preferences differed the most from those expressed by neutral minimalists, and then thrifty consumers and ecological conservatives, being the most similar to those presented by fashionistas.

In the next step, consumers' buying patterns were analysed to find out whether these also varied the particular types of consumers.

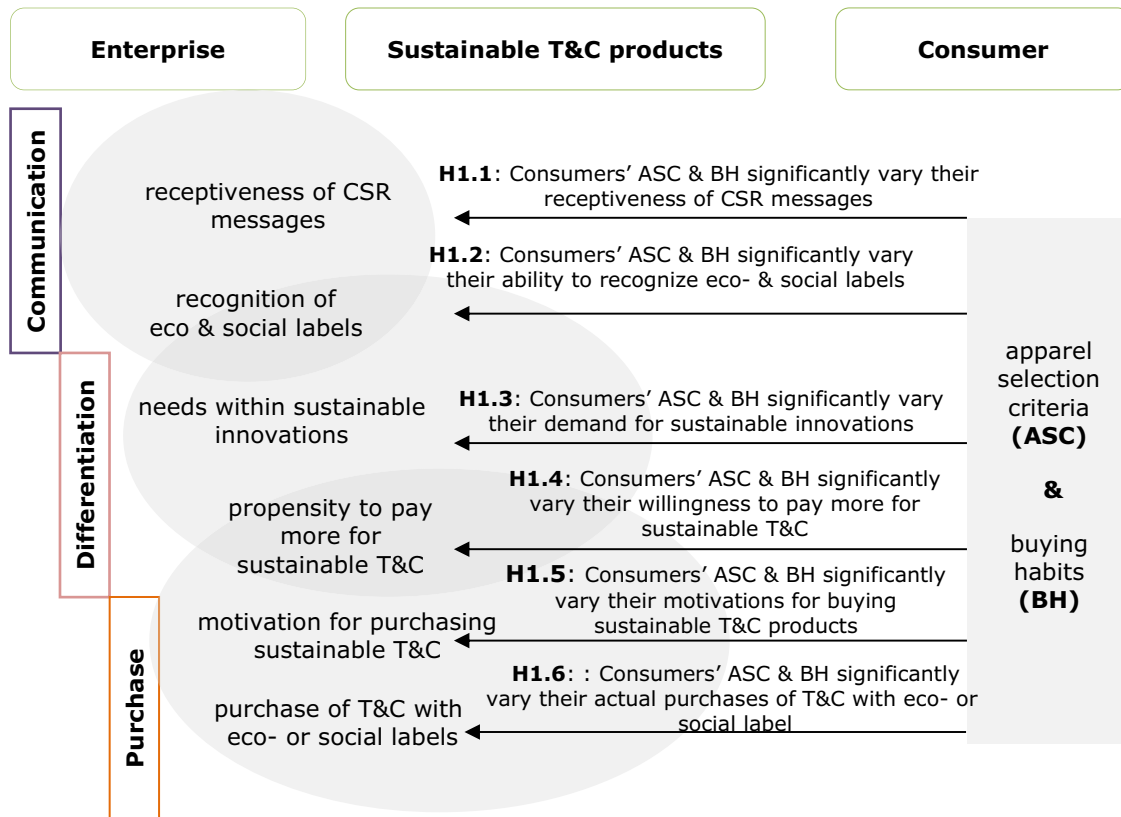


Figure 2 Areas of consumer behaviour analysed. H1.1–H1.6 – specific hypotheses formulated to test the main hypothesis, H1, stating that general apparel selection criteria and buying habits of consumers differentiate their behaviours towards sustainable textiles and clothing. ASC, apparel selection criteria; BH, buying habits; T&C, textiles & clothing; CSR, corporate social responsibility.

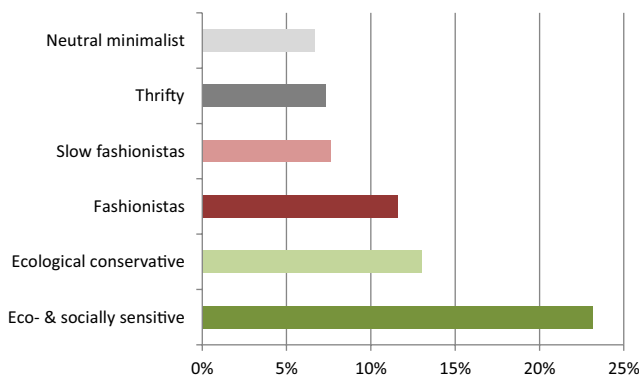


Figure 3 The receptiveness of corporate social responsibility messages by typological group.

Consumers were first analysed for their willingness to pay more for T&C products. Fig. 6 shows an evident relationship between a person's belonging to a given type of consumers and his willingness to pay a higher price for T&C; this finding was also confirmed statistically ($P < 0.001$), so H1.4 was corroborated (see Fig. 2).

Among consumers willing to pay more for socially responsible textile products, ecologically and socially sensitive consumers were ready to pay the most and the neutral minimalists the least (Fig. 6).

In order to know whether the motivations for purchasing sustainable T&C also varied consumers, the respondents were asked to give their reasons for buying these products despite their higher prices. Fig. 7 shows that different types of consumers attached different weights to particular motivations.

The statistical significance of differences between the established typological groups of consumers was verified by comparing column proportions (a z-test) at $P = 0.05$.

As regards the ecological factors, fashionistas and thrifty consumers differed statistically significantly in their opinions on environmentally safe production (almost every second respondent in the first group considered it important compared with every third in the second group).

Within the set of ecological factors, all typological groups considered the environmental impacts of products more important than their recyclability.

The factor related to human ecology (products safe for humans) did not differentiate the opinions of particular groups of consumers statistically significantly, but ecological conservatives picked it the most often (56%) (see Fig. 7).

Among the social criteria, the protection of children attracted more attention from consumers than workers' rights (Fig. 7). Every second ecologically and socially sensitive consumer would buy sustainable T&C products despite their higher prices, if they were guaranteed not to be made by children. This group of consumers was statistically significantly different in that respect from

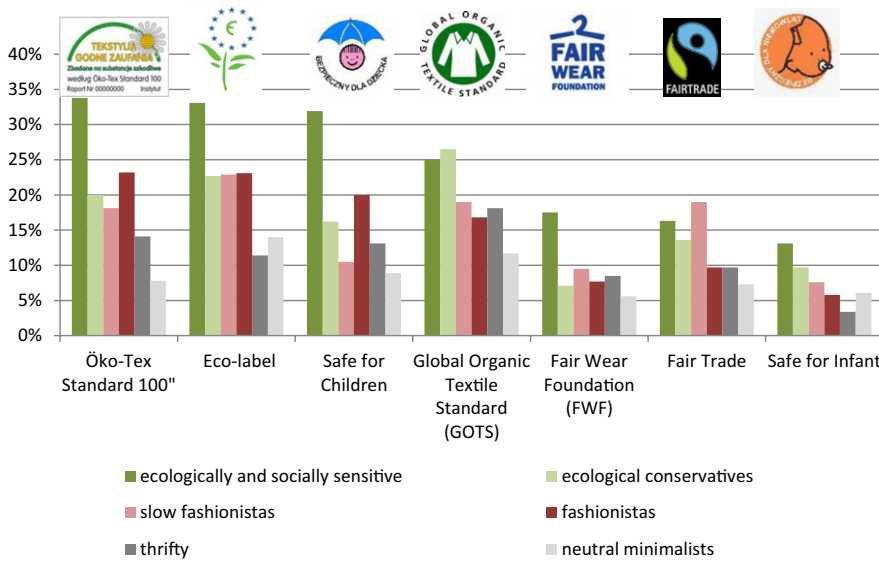


Figure 4 Consumers' abilities to recognize labels. (Labels with various signs are attached to textile products such as clothing, bed-clothes, towels and curtains. Have you seen this label?)

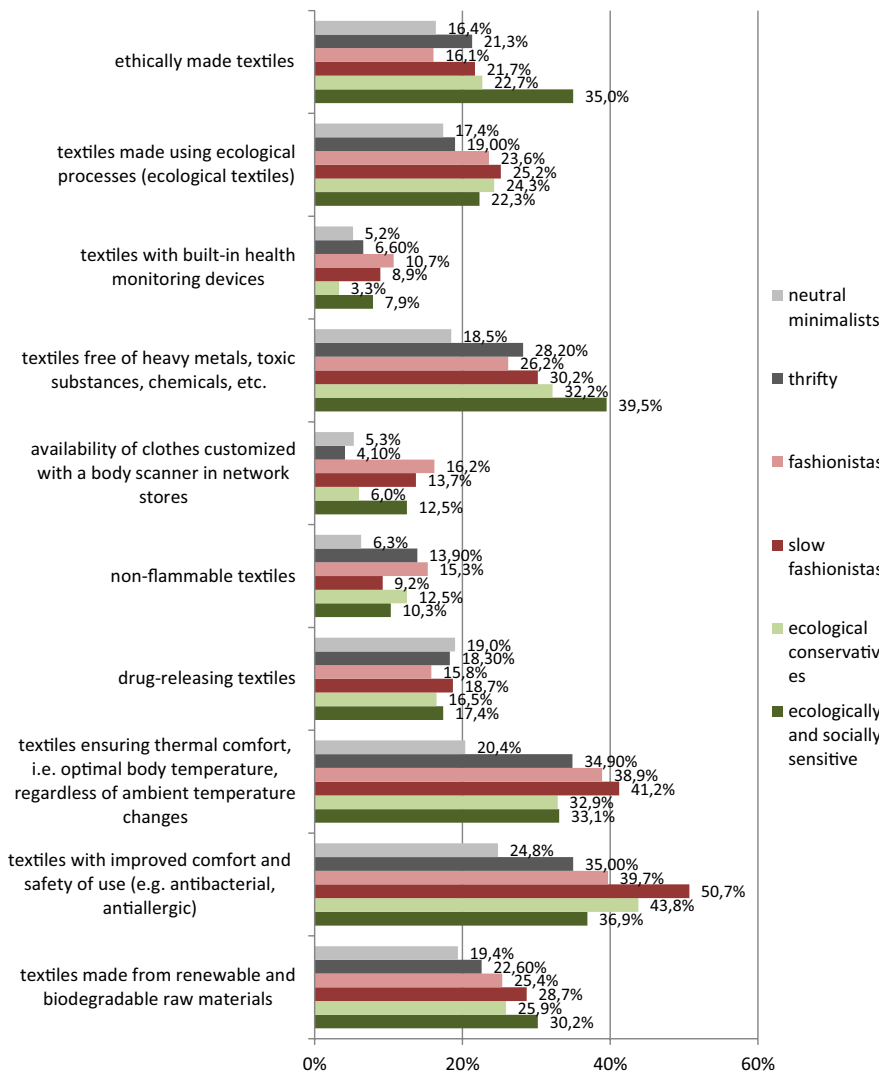


Figure 5 Consumers' preferences for innovative textiles by typological group.

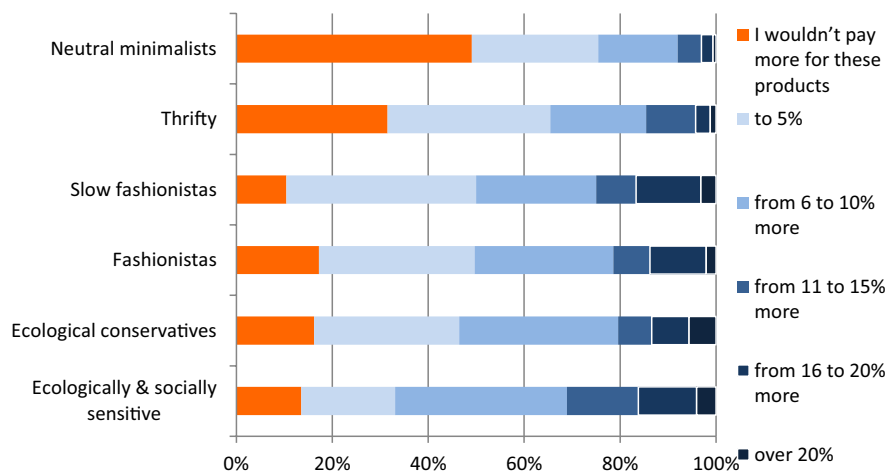


Figure 6 Willingness to pay more for sustainable textiles & clothing by typological group.

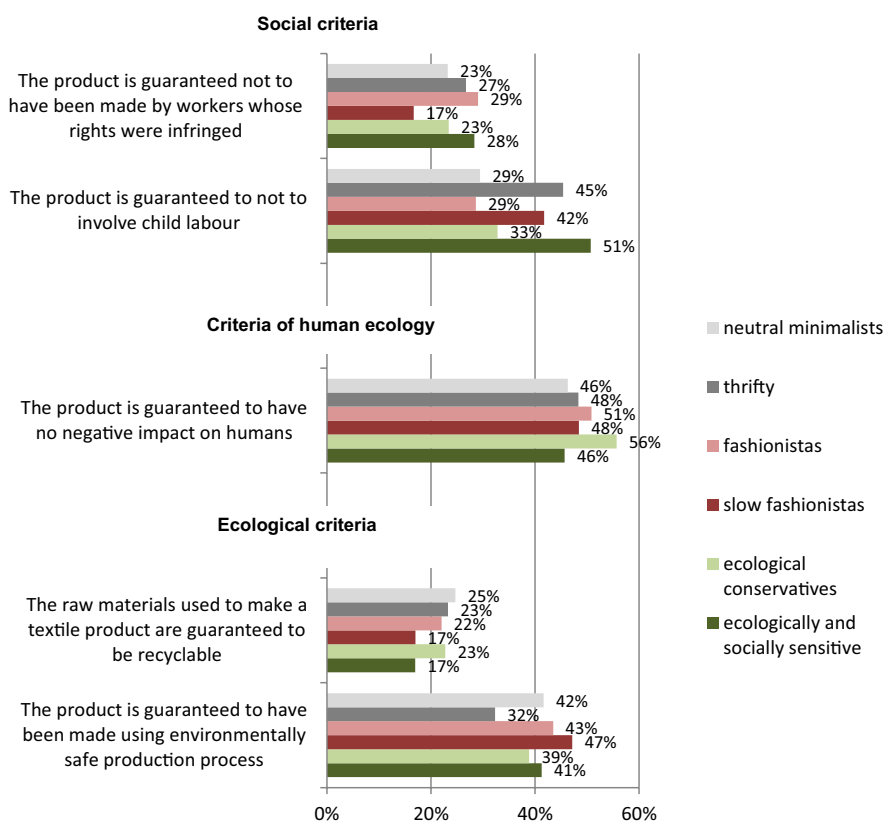


Figure 7 Different factors motivating Polish consumers to purchase textile products (clothing, linens, towels, curtains, etc.) made in a socially responsible way by typological group.

neutral minimalists, ecologically sensitive consumers and slow fashionistas (see Fig. 7).

H1.6 stating that belonging to a particular type of consumers and person's preference for (actual purchases of) textiles and clothing with social or eco-labels are related to each other was verified last. In this case, too, significant differences were found between the types of consumers ($P < 0.001$) (see Fig. 8).

The highest percentage of consumers willing to buy products with social or eco-labels (over 50%) was identified among the ecologically and socially sensitive. The rate was relatively high also among fashionistas and slow fashionistas (above 30%).

Neutral minimalists and thrifty consumers ranked the lowest again (12%).

The research results corroborated all specific hypotheses (see Fig. 2) as well as the main hypothesis, H1, stating that apparel selection criteria and general buying habits of consumers vary their behaviours towards sustainable textiles and clothes.

Another finding was that consumers who considered it important that their clothes meet ecological and social criteria and whose general buying habits are the most influenced by environmental and ethical considerations were also the most receptive of manufacturer messages, have the best knowledge of ecological and

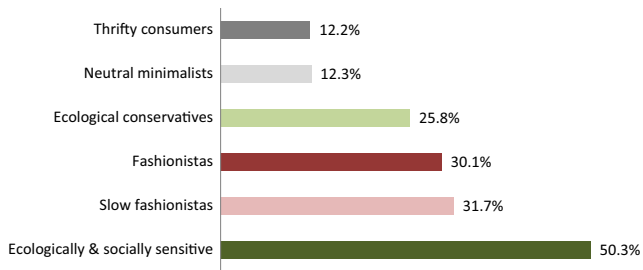


Figure 8 The relationship between belonging to a specific type of consumers and the decision to buy products with social or eco-labels.

social labels, were the most willing to pay more for sustainable T&C and in fact purchased these products the most frequently.

Discussion

Today's T&C industry is expected to solve its ecological and social problems and to cope with consumption patterns that change as consumers' awareness, mentality and buying behaviours evolve towards socially responsible consumption. This evolution leads to slow fashion, influences clothes maintenance processes (cleaning, drying and repair), as well as the ways clothes are reused and recycled (Connell, 2010). In the long rich countries, this process has been going on for quite a long time now. The growing power of consumers known as green consumers (Diamantopoulos *et al.*, 2003), socially responsible consumers (Thomas *et al.*, 1974; Roberts, 1995) or socially conscious consumers (Webster, 1975; Brooker, 1976; Mayer, 1976; Cotte *et al.*, 2009) makes them an increasingly important and interesting market segment for both clothing manufacturers and researchers.

The literature presents few typologies of the consumers of textiles and clothing that address the growing importance of ecological and social aspects (see Table 2). At the same time, studies in this area use different methodologies, making intercountry comparisons more problematic. Despite this, a more detailed analysis allows to identify some similarities and differences between consumers in different countries.

As a result of the research presented in this article, six homogeneous types of consumers were developed, each giving a different role to ecological and social criteria. The type most similar to consumers that the literature defines as 'socially responsible' was called 'ecologically and socially sensitive consumers' (these people buy clothes fulfilling ecological and social criteria and show the greatest sensitivity to environmental and social issues). This type accounted for 16.3% of the sample of consumers. In an Austrian survey on eco-fashion, a similar group of consumers called 'heavy users' constituted 20% of all Austrian population and purchased 66% of organic products (Tangl, 2010).

The presented research identified among the Polish population other groups of consumers that were similar in that they used ecological criteria to some extent and did not care about the ethical and social aspects of clothing, but differed in their use of other apparel selection criteria (such as fashion, brand, quality, etc.). These consumers were put into three groups called ecological conservatives (15.7% of the sample), fashionistas (15.8%) and slow fashionistas (10.7%).

The aforementioned Austrian survey did not identify a group of consumers similar to Polish ecological conservatives (more than a half of whom are aged 55+). In Austria, people in this age group are mostly 'heavy users' and represent a very important segment of the consumers of eco-fashion (Tangl, 2010). In the near future, the importance of older consumers can be expected to grow also in the Polish sustainable T&C market. There are several reasons in support of this prediction. First of all, the popular in Poland stereotype of an old-age pensioner as a consumer distrustful of new things, conservative and poor is becoming outdated. In fact, this segment of consumers is very diverse. It has a rising proportion of educated people who speak foreign languages, are open to new technologies and innovative products, and have accumulated additional funds to enjoy their retirement. Secondly, the segment is growing in both size and purchase power (Olejnik, 2012).

The other two of the three aforementioned types of consumers closely followed fashion trends. These were called fashionistas (15.8%) and slow fashionistas (10.7%). In the literature, we can find similar types of consumers, named as fashionable consumers and brand-conscious consumers (16 and 24% of the population, respectively, in the Richards and Sturman's 1977 study), fashion enthusiasts and fashion elites (18.8 and 9.3%; Kopp *et al.*, 1989), enthusiasts (26.1%; Cardoso *et al.*, 2010) and, finally, fashion-conscious occasional buyers (21%; Tangl, 2010) who seem to be the most similar to Polish fashionistas.

Analysing the results of this research, we can conclude that 'fast fashion' still has a relatively weak influence on Polish buyers, unlike the western European countries where it is counted among the causes of numerous ecological and social problems troubling the T&C industry (Allwood *et al.*, 2008; Morgan and Birtwistle, 2009; Byun and Sternquist, 2011; Joy *et al.*, 2012). As found, there are too few fast fashionistas in Poland to consider them a separate type. Most of them fell under the category of fashionistas.

The research identified also two groups of Polish consumers that were completely uninterested and unconcerned about the ecology and ethics of clothing – neutral minimalists (18.2%) and thrifty consumers (18%). These represented a total of almost 40% of Polish population. In the Austrian survey, a similar group of consumers called 'inaccessible' was estimated at 30%.

The developed types of Polish consumers were significantly different in their demographic characteristics (gender, age, social status, educational attainment, income, etc.). The consumers whose market behaviours showed strong ecological and environmental influences had relatively high incomes and usually tertiary education. Most of them lived in towns and cities. These characteristics make them very similar to Austrian 'heavy users' (Tangl, 2010).

The research also found that even though ecological preferences guided the choices of Polish consumers much more often than social sensitivity, the preferences were fairly superficial. Three of the six distinguished types of consumers clearly preferred clothing made from natural fibres and would check for the raw materials composition, but only those classified as 'ecologically and socially sensitive' would frequently seek eco-labels and eco-symbols.

It is very probable, however, that with improving standard of living in the new consumer countries, stronger activity of consumer movements and organizations, and rising awareness of citizens, Polish consumers too will join the worldwide trend of expanding sustainable consumption. T&C products will then have

to meet higher ecological and social standards to be marketable. They will also have to reflect values and beliefs that consumers consider important more often than before.

To find out if these predictions are coming true, this survey should be repeated in a few years time. Its results will show which trends in the behaviour of Polish consumers are sustainable, whether they are consistent with those observed in Western Europe and whether their pace is similar.

Conclusions

The study aimed to determine whether Poland being a new consumer country has a group of consumers whose buying habits are clearly influenced by ecological and social considerations. From the perspective of the purpose of the study, the most interesting among the developed types of consumers were ecologically and socially sensitive consumers, who applied ecological and social criteria to buy clothes and were the most open to environmental and social issues. This group accounted for 16.3% of the sample of consumers. Most of them lived in towns and cities, had relatively high incomes and usually had tertiary education.

Apparel selection criteria and buying habits towards sustainable textiles and clothing were also analysed to find out if they significantly varied the types of consumers. It was found to be so, because both the criteria and the buying habits determined consumers'

- receptiveness of CSR messages;
- preferences for sustainable, innovative textiles and clothing;
- motivations for buying a product;
- readiness to pay more for socially responsible textiles and clothing, as well as their actual purchases.

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