Typology of Polish Consumers in Regard to their Sustainable Behaviour

Jadwiga Stobiecka
Cracow University of Economics
stobiecj@uek.krakow.pl

Abstract
The article discusses some aspects of the theoretical and methodological problems of measurement and analysis of sustainable consumer behaviour in Polish conditions. It makes an attempt to identify consumer groups representing similar behaviours in this area. The author focuses on environmental, health-related, legal and local dimensions. All the four dimensions are represented by the same number of indicators –items in a Likert scale. The presented results refer to two models of confirmatory factor analysis, with attention given to 4 latent variables. A model which fits the data well is the one with 8 indicators. The use of a model with 12 indicators does not bring fully satisfactory results.The use of a model with 12 indicators does not bring fully satisfactory results. In order to isolate the homogeneous groups of consumers, k-means cluster analysis was performed three times - twice the arithmetic means obtained for each of the four dimensions were used (they were calculated on the basis of three or two observable variables), the third analysis took into account principal components. Eight observable variables were reduced to four continuous variables. In the next step, relatively homogeneous clusters were identified. Each time two clusters were obtained which differentiate all the 4 variables (at the level of at least $p<0.005$). A detailed description is presented of typology obtained on the basis of the model fitted the data best, and the manner of identifying homogenous groups, based on raw data. Polish consumers can be divided into two groups: "socially responsible" and "uncommitted". Two out of 6 analysed demographic variables show statistically significant differences: professional status and declared financial condition. The identified groups differentiate some behaviours in the area of recycling, and 6 out of 10 Schwartz basic values.

Key words: sustainable behaviour, typology, measurement scale, principal component analysis, confirmatory factor analysis.

JEL classification: A13, F18, M14, M31.

1. Introduction

It is not easy to define the idea of socially responsible or widely sustainable consumption . A number of authors have proposed various definitions. Bray, Johns and Kilburn (2011, p. 597) point to biased assessments and the circumstances out of a researcher's control, as well the fact that the concept comprises various areas of consumer activities. Literature most frequently refers to a definition proposed by Roberts. It states that a socially responsible consumer is "one who purchases products and services perceived to have a positive (or less negative) influence on the environment or who patronizes businesses that attempt to effect related positive social change" (Roberts 1993, p. 140). The above definition refers to the environmental and social aspect of SRC. Every year, the whole world records an increasing number of consumers who are inclined to pay more for products and services offered by social- and environment-oriented companies (Ethical Consumer Market Report, 2012; Nielsen, 2014). However, such concepts as Fair Trade are not given much attention in Poland (Janoś-Kresło 2014, Sprzedaż produktów Sprawiedliwego Handlu, http://www.fairtrade.org.pl/sprawiedliwy-handel/sprzedaz-produktow-sprawiedliwego-handlu). Until the market of socially responsible products is well developed (which is certainly the case of Poland), it is advisable not to research consumers' behaviour in this context, but rather their willingness to carry out specific activities. This statement can be justified by a number of publications which point to differences between consumers' attitudes and their actual behaviour. Sparks and Shepherd (1992), Shaw and Clerke (1999), and Vermeir and Verbeke (2006) claim that the existing gap can be due to the limited availability of products which support the concepts of sustainable development and socially responsible consumption. The objective of research studies presented in the paper is not to

develop an original scale for measuring behaviour, but to present a typology of Polish consumers, based on solutions proposed by other authors, and to discuss the theoretical and methodological aspects of measuring and analysing socially responsible consumer behaviour in the Polish environment.

2. Measuring tools proposed in literature for analysing socially responsible behaviour

Measuring tools presented in literature for analysing responsible consumption behaviour comprise various issues. A good understanding of this area can be gained by analysing measurement scales and particular indicators presented in literature. Roberts was the first researcher to propose a broad ethical perspective (1993, 1995, 1996), identifying two factors. He referred to the first one as ecologically conscious consumer behaviour (ECCB), and the second one - socially conscious consumer behaviour (SCCB) (Roberts, 1995, p. 104; 1996, p. 223). He developed a scale which originally comprised 40 items, and later reduced to 18 items. Some of the items lost their validity in the course of time, but the proposed scale is still a starting point for research on socially responsible consumer behaviour.

Webb, Mohr and Harris (2008, p. 94) propose a three-dimensional solution. The recommended Socially Responsible Purchase and Disposal (SRPD) scale comprises the following: (1) purchasing based on firms' corporate social responsibility (CSR) performance, (2) recycling; and (3) avoidance and use reduction of products based on their environmental impact.

Most authors propose five-dimensional scales. The structure proposed by Francois-Lecompte includes such factors as (1) the firm's behaviour; (2) buying cause-related products; (3) the desire to help small businesses; (4) taking account of the geographical origin of products; (5) reducing the volume of consumption, which is confirmed by Gonzales et al. (2009, p. 32). Samavatyan et al. (2014, p. 85) present tool referred to as Consumers' Social Responsibility Index (CSRI), which comprises the following factors: environmental, health, cultural-national, legal and ethical**.** Sudbury-Riley and Kohlbacher (2016, p. 2704) developed a tool referred to as the Ethically Minded Consumer Behaviour (EMCB) scale. They focus on the following factors: (1) ECOBAY (the choice of ecological products); (2) ECOBOYCOTT (the rejection to purchase products for ecological reasons); (3) RECYCLE (the purchase of products is related to recycling), (4) CSRBOYCOTT (the rejection to purchase products for social reasons), and (5) PAYMORE (the willingness to pay a higher price for ethical products).

One of the most extensive scales is proposed by Durif et al. (2011, p. 215). They consider 8 dimensions: (1) citizenship behaviour; (2) behaviour focused on the environment protection; (3) recycling behaviour; (4) composting behaviour; (5) local consumption behaviour; (6) behaviour with respect to animal protection; (7) de-consumption behaviour; (8) sustainable transport behaviour.

An in-depth analysis of the above presented scales leads to the following conclusions:

1) authors use different terms to name the same areas;
2) the particular dimensions (latent variables) are described by a different number of observable variables; sometimes factor loadings are so low that attributing a given item to a specific dimension is not justified;
3) satisfactory solutions (when the data fit the model well) are achieved in those cases in which one dimension is described by 2-3 items (Gonzales et al., 2009; Sudbury-Riley and Kohlbacher, 2016);
4) adopted measuring tools should take into account the specific conditions in which consumer make their purchases (their knowledge and market maturity).

3. Methodology

The designing of a scale for measuring Polish consumers' socially responsible behaviour gives consideration to a wide spectrum of issues discussed by various authors. Six aspects are taken into account: environmental, health, legal, cultural, local, and ethical. The scale included in the questionnaire contains 30 indicators (observable variables) – the items of a Likert scale. Each

aspect describes five items. The particular items are assessed by respondents in a 7-point scale – ranging from "totally agree" to "totally disagree", with a point in the middle "hard to say". The survey was conducted in the second half of 2016 in the voivodeship of Małopolska with the use of **direct survey method**. It was based on **quota sampling,** with consideration given to gender (two categories) and age (three categories), and the data published by Urząd Statystyczny w Krakowie (2015, p. 99). The below presented analyses are based on 202 responses.

The questionnaire considers 4 demographic variables and 8 variables related to recycling behaviour. The inclusion of the *Schwartz* Value Survey (*SVS*) in the study (Schwartz, 2012) allowed for identifying the values which have an impact of respondents' lives. The importance of each of the 10 base values is assessed in a 10-point scale.

The analysis comprises the following stages:

1) preliminary analysis of the original scale and determination of the number of dimensions for adequate analysis;
2) assessment of the factorial validity and reliability of particular variants of the scale;
3) selection of an appropriate factor model on the basis of relevant criteria;
4) identification of homogenous groups in terms of socially responsible behaviour based on various methodological approaches;
5) presentation of the typology of Polish consumers based on the model which fits the data well.

A preliminary analysis indicates that two dimensions (cultural and ethical) pose difficulties to respondents. It is confirmed by a large number of answers "hard to say" to some questions, as well as a low correlation, as compared with other dimensions, between scale items. For this reason, the typology of consumers takes account of the four remaining dimensions. Simultaneously, a principal component analysis (PCA) carried out with a priori four factors revealed that all the planned scale items loaded only the health, legal and local dimensions. In the case of the environmental dimension it is possible to identify only 3 observable variables, on which factor loadings exceed 0.6. Therefore, the first of the tested models comprises a set of 12 items presented in Table 1. Thus, all the latent variables are represented in the same way.

Dimension	Scale item	Item symbol
1	2	3
Environmental	I try to buy products which do not destroy natural resources.	x_1
	Making a choice between two similar products, I pick the one that can be recycled.	x_2
	I get acquainted with the impact of purchased products on the environment, and I choose safer products.	x_3
Health	I try to purchase products which do not contain conservatives, additives and artificial dyes, or those with a low content of such substances.	x_4
	When making a buying decision, I check and consider product ingredients and standard labelling.	x_5
	I try to buy natural products, avoiding those based on chemicals.	x_6
Legal	I do not buy illegally imported (smuggled) products.	x_7
	Reporting the cases of prohibited or smuggled products is a citizen's obligation – not whistle-blowing.	x_8
	I am concerned about the losses incurred by my country as a result of the sales of fake or smuggled goods.	x_9
Local	I buy handicraft (handmade) products to observe traditions and prevent the disappearance of some professions.	X_{10}
	I buy goods in a bazar to support small manufacturers.	X_{11}
	I try to buy locally manufactured products.	X_{12}

Table 1. Scale items showing socially responsible consumer behaviour, based on 4 dimensions

Two models of confirmatory factor analysis are tested: model 1, containing 12 indicators (presented in Fig. 1), and model 2 – a 4-factor model with 8 indicators, recommended by Sudbury-Riley and Kohlbacher (2016, p. 2704). Model 2 does not take account of the last observable variable presented in Table 1 for the analysed aspect (indicators marked "x3, x6, x9, x12" are eliminated).

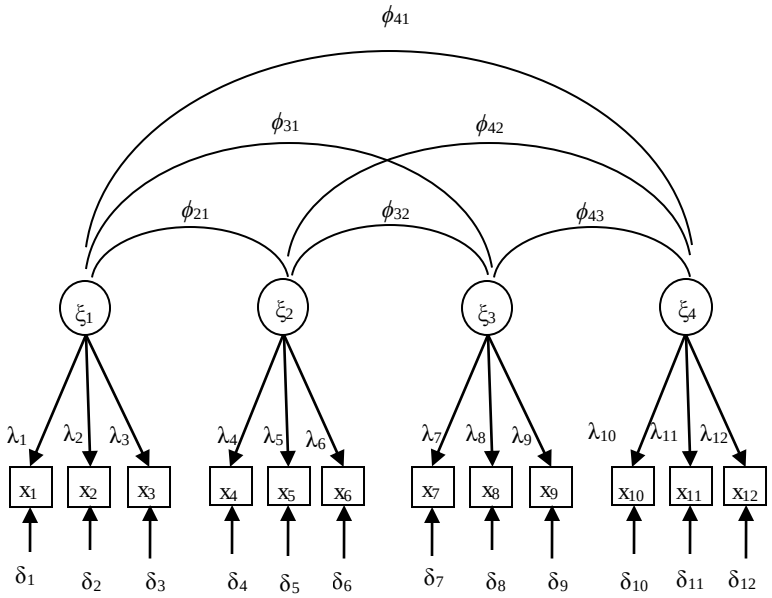

Figure 1. A model of confirmatory factor analysis for four latent variables and twelve indicators (model 1)

4. Data Analysis and Discussion

Firstly, the adequacy of the sample for the factor analysis was checked. Recommended measures for this purpose are KMO and Bartlett's Test of Sphericity. The world-over accepted value for KMO is over 0.6. The result of the Bartlett's Test of Sphericity must be less than 0.05. The values of KMO (0.798 for model 1 and 0.737 for model 2) and of the Bartlett's Test of Sphericity (p=0.000 for both models) justify the factor analysis. Table 2 presents the results of the analysis of reliability of particular dimensions of consumer social responsibility, indicating two measures: Dillon-Goldstein's (or Jöreskog's) rho (composite reliability) and Cronbach's alpha (internal consistency). Additionally, the Table 2 presents the *average* inter-*correlation* among the items – depending on the number of adopted scale items per one dimension**.**

The principal component analysis with varimax rotation allowed to confirm the theoretical factor structure of both models. Table 3 presents the obtained fit indices for the particular models of confirmatory factor analysis. High levels of fitness to data are confirmed, among others, by the following statistics: p>0.05 for Chi-square; Ch^2/df <2; RMSEA below 0.5; GFI and AGFI close to 0.95; and value 1 for Bentler-Bonett normed index and Bentler-Bonett non-normed index (Rencher and Christensen, 2012, pp. 489-191). The data fitted the model 2 (taking account of two indicators for each latent variable) well, the model 1 (with 3 indicators) - reasonably. Correlation coefficients between legal and local dimensions turn out to be statistically insignificant. The highest correlation for model 2 is recorded for enveromental and health dimensions (0.650) and health and local dimensions (0.615).

Number of indicators describing one dimension	Statistical characteristics of the model	Dimension			
		Environmental	Health	Legal	Local
1	2	3	5	5	6
Three	RHO	0.7753	0.8176	0.8055	0.7487
	Cronbach's alpha	0.7762	0.8000	0.7625	0.8257
	The *average* inter-*correlation* among the items	0.5403	0.5815	0.6196	0.6188
Two	RHO	0.7597	0.8113	0.7751	0.8178
	Cronbach's alpha	0.7364	0.8107	0.7793	0.8127
	The *average* inter-*correlation* among the items	0.5841	0.6819	0.6402	0.6904

Table 2. The reliability of consumer social responsibility dimensions considered in the analysis, depending on the number of indicators

Convergent and discriminant validity is confirmed by relevant correlation matrices. Both types of validity are confirmed for model 2. In the case of model 1, the only doubt is aroused by the health dimension. The item marked in Table 1 as x_6 has higher correlation with x_1 (Pearson's correlation coefficient 0.522) from the environmental dimension than with x_4 (Pearson's correlation coefficient 0.421), belonging to the same dimension.

Specification	Number of indicators describing one dimension	
	three (model 1)	two (model 2)
1	3	4
Chi^2	125.520	23.090
df	48	14
p	0.000	0.059
Chi^2/df	2.62	1.65
RMSEA	0.086	0.057
GFI	0.910	0.972
AGFI	0.853	0.928
Bentler-Bonett Normed Fit Index (NFI)	0.886	0.963
Bentler-Bonett Nonnormed Fit *Index* (BBNFI)	0.897	0.969

Table 3. Fit indices values of four-dimensional models with different numbers of observable variables

The next step of the analysis aims to calculate average values for each dimension and model. It is justified by the high inter-correlation of theoretical dimensions (Table 1), as well as the recorded convergent and divergent validity. Using the new variables obtained in this way, the k-means cluster analysis was performed twice to achieve homogeneous groups with similar behaviors considered socially responsible. As few as two clusters bring satisfying results. *Analysis of variance* indicates that new variables differentiate the obtained clusters at the level p=0.000001.

Groups representing relatively high values in the assessment of particular dimensions are referred to as Responsible, while those with much lower values - Uncommitted. In model 1, 41% of respondents are Responsible, and 59% - Uncommitted. In the case of interpretation based on model 2, Responsible respondents account for approx. 50% of the total number of respondents, while Uncommitted ones represent the other half. Additionally, an analysis is carried out – based on 8 observable variables (model 2) – of the principal components, which

identifies 4 factors (uncorrelated continuous variables) corresponding to the theoretical dimensions. All together explain 83.3% of the total variance, and the last of them 10.0%. K-means clustering analysis based on these factors also identifies two homogenous groups (the variables differentiate the obtained clusters at the level p=0.005). In this case, Responsible consumers account for 62% of respondents (the remaining ones represent 38%). The charts of mean values for particular dimensions, based on raw data for the identified clusters, are presented in Fig. 2. The groups are marked in the following way:

- G1/3 – first cluster identified on the basis of model 1 (Uncommitted);
- G2/3 – second cluster identified on the basis of model 1 (Responsible);
- G1/2 – first cluster identified on the basis of model 2 (Uncommitted);
- G2/2 – second cluster identified on the basis of model 2 (Responsible);
- G1/PCA – second cluster identified on the basis of continuous variables determined by an analysis of the principal components (two indicators for one dimension - Uncommitted);
- G2/PCA – first cluster identified on the basis of continuous variables determined by an analysis of the principal components (two indicators for one dimension - Responsible).

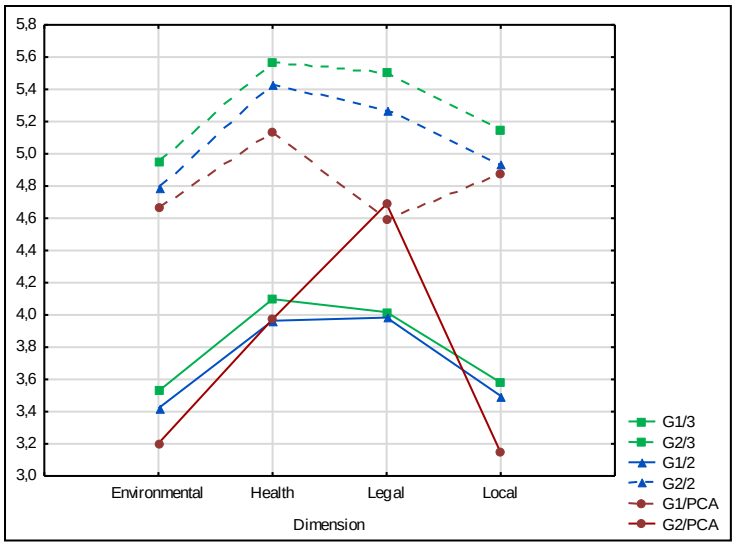

Figure 2. Charts of mean values calculated for the individual dimensions of socially responsible behaviour and each cluster

An analysis of data presented in Fig. 2 indicates that similar charts corresponds to those cases in which cluster analysis is carried out on the basis of data collected in a similar way. The use of two or three indicators describing a single dimension for this studies is of no significance. Taking account of data obtained from the principal component analysis leads to different results, especially in the case of the legal dimension, which can be surprising. In future research studies this dimension will deserve special attention, especially in the Polish environment.

The identification of the profiles of particular homogenous groups is facilitated by testing hypotheses about the lack of association between cluster membership and selected profile variables with the use of a *chi-squared* test for independence. Four demographic variables are considered, and 8 variables related to recycling. Table 4 only shows the results that confirm the association between two categorical variables at the level of $\alpha = 0.05$ in at least one of the analyzed cases.

The tested null hypothesis about the lack of association between identified clusters and:	Table size	Probability value for clusters obtained on the basis of		
		model 1	model 2	
		Average values on raw data	Average values on raw data	Artificial continuous data
1	2	3	4	5
Gender	2x2	**p=0.0006**	p=0.0923	p=0.8922
Professional status	2x3	**p=0.0205**	**p=0.0170**	**p=0.0002**
Declared financial condition	2x2	p=0.9729	**p=0.0020**	**p=0.0037**
Participation in the recycling of plastics	2x3	**p=0.0338**	**p=0.0012**	p=0.2549
Participation in collecting plastic bottle tops	2x3	**p=0.0097**	**p=0.0280**	p=0.9776
Delivery of used equipment to recycling centres	2x3	**p=0.0002**	**p=0.0033**	**p=0.0003**
The use of shopping bags made of fabric	2x3	**p=0.0000**	**p=0.0128**	**p=0.0003**

Table 4. Results of the verification of null hypotheses about the lack of* association *between cluster membership and selected profile variables

In the case of clusters identified in model 1, statistically significant differences are recorded for 4 variables (table 4, row 3), including one demographic variable - gender. An analysis of clusters identified in model 2 (table 4, row 4) identifies 6 similar cases. Two of them refer to demographic variables: professional status and perceived financial condition. In the third case (clusters identified on the basis of continuous variables obtained from the analysis of the principal components according to model 2, row 5) statistically significant differences are recorded for 4 variables, including two demographic variables – professional status and perceived financial condition.

The analysis also aims to describe those consumer values that differentiate the identified clusters. A t-test is carried out for independent groups. Null hypotheses about the lack of differences between relevant mean values are tested. The obtained results are presented in Table 5.

The basic Schwartz values	Symbol of a Group*					
	G1/3 Uncommitted	G2/3 Responsible	G1/2 Uncommitted	G2/2 Responsible	G1/PCA Uncommitted	G2/PCA Responsible
	N=119	N=83	N=100	N=102	N=76	N=126
1	2	3	4	5	6	7
Benevolence	**8.68**	**9.34**	8.83	9.07	9.13	8.84
Universalism	**7.41**	**8.58**	**7.51**	**8.26**	7.71	8.00
Self-Direction	**7.84**	**8.77**	8.00	8.44	8.13	8.28
Stimulation	6.26	6.41	6.17	6.47	**5.61**	**6.75**
Hedonism	6.23	6.27	6.22	6.26	**5.67**	**6.59**
Achievement	7.82	7.55	7.76	7.66	7.72	7.70
Power	**5.40**	**4.73**	**5.48**	**4.78**	5.09	5.15
Security	**8.53**	**9.17**	8.82	8.76	8.91	8.72
Conformity	**7.61**	**8.53**	**7.47**	**8.50**	**7.59**	**8.23**
Tradition	**6.45**	**7.77**	**6.53**	**7.45**	6.64	7.21
* Markings of groups are as in Fig. 2.						

Table 5. Mean values obtained for basic Schwart values

Statistically significant differences are marked. Results in rows 2-3, and 4-5 seem to be more logical than in the case of the use of PCA (rows 6-7).

The typology of Polish consumers is based on the model which fits the data best (model 2). Table 6 presents data characterising two types of Polish consumers: Responsible and Uncommitted. The group of socially responsible consumers is represented by approx. 67% of white collar workers. Unfortunately, the share of students in this group is low as compared with the group of Uncommitted consumers. Responsible consumers declare more frequently that their financial condition is good or very good (61% and 39%, respectively). 69% of the members of this group regularly recycle plastics. Responsible consumers (as a matter of principle) collect plastic bottle tops and deliver used equipment to recycling centres. Also, they carry their own shopping bags made of fabric (62%). The identified groups of consumers in the field of recycling are best characterized by the activities which they never engage in: Uncommitted consumers (29%) never collect bottle tops to raise funds for children with disabilities, they do not deliver used equipment to recycling centres (34%), and they do not use their own shopping bags made of fabric (34%).

Profile variable	Group	
	G1/2 - Uncommitted	Group G2/2 - Responsible
Professional status		
High school/college student	31.46%	16.49%
White collar worker	47.19%	67.01%
Blue collar worker	21.35%	16.49%
Declared financial condition		
Average	61.00%	39.22%
Good or very good	39.00%	60.78%
Recycling of plastics		
From time to time	54.00%	31,37%
Yes, always	46.00%	68.63%
Collection of plastic bottle tops		
No	29.00%	13.73%
Yes, from time to time	28.00%	31.37%
Yes, always	43.00%	54.90%
Delivery of used equipment to recycling centres		
No	34.00%	13.73%
Yes, from time to time	24.00%	31.37%
Yes, always	42.00%	54.90%
The use of shopping bags made of fabric		
No	34.00%	20.59%
Yes, from time to time	33.00%	26.47%
Yes, always	37.93%	62.07%

Table 6. Polish consumer profiles with regard to socially responsible behaviour

Neither group of consumers is well-informed. 52% of Uncommitted consumers are not familiar with the concept of Fair Trade (48% of Responsible consumers). The Fair Trade label is recognised by 5% of Uncommitted and 15% of Responsible consumers.

Conclusions

The paper aims to present a typology of Polish consumers with regard to their socially responsible behaviour. The adopted measuring scale comprises 4 narrowly defined dimensions: environmental, health, legal and local. The model which fits the data best is a basis for identifying two types of respondents: Responsible and Uncommitted. Responsible consumers are more active and inclined to make an effort. The fact that Responsible consumers are more concerned with other people's interests is also confirmed by their respect for such values as universalism, conformity and tradition, unlike power. Special attention should be given in the future to the legal aspect of the discussed issues (which turns out to be significant in the context of results of the principal component analysis) and ethical dimension. It is worth noting that

scale items of the legal dimension focus on consumers' acceptance of the cases of law breaking. This information is of key significance to marketing managers, as well as social and consumer organizations and politicians. Undoubtedly, the deficiency of the presented data results from a small sample of respondents. Work in this area is continued, and it can be hoped that it will lead to a more detailed typology of Polish consumers and a better understanding of the factors which affect socially responsible decisions.

Acknowledgements
This work was carried out with the aid of Polish Ministry of Science and Higher Education research grant No 028WZ-KAR/02/2017/S/7028.

References

BRAY J., JOHNS, N. & KILBURN, D. 2011. An Exploratory Study into the Factors Impeding Ethical Consumption. *Journal of Business Ethics*, 98(4), 597-618 (online).

Nielsen, 2014. Doing Well by Doing Good: Increasingly, Consumers Care About Social Responsibility, but Does Concern Convert to Consumption. New York, NY: The Nielsen Co.

DURIF, F., BOIVIN, C., RAJAOBELINA, L. & FRANÇOIS-LECOMPTE, A. 2011. Socially Responsible Consumers: Profile and Implications for Marketing Strategy. *International Review of Business Research Papers*, 7(6), 215-224.

Ethical Consumer Markets Report, 2012, The Co-Operative. Available at: http://www.
ethicalconsumer .org/portals/0/downloads/ethical-consumer-markets-report-2012, pdf . [Accessed on 16 May 2017].

GONZALEZ, C., KORCHIA, M., MENUET, L. & URBAIN, C. 2009. How Do Socially Responsible Consumers Consider Consumption? An Approach with the Free Associations Method. *Recherche et Applications en Marketing*, 24(3), 25-41.

JANOŚ- KRESŁO, M. 2014, Polacy o idei Sprawiedliwego Handlu (w świetle wyników badań). *Handel Wewnętrzny*, nr 3, 229-241.

RENCHER, A., C. & CHRISTENSEN, W. F. 2012. Method of Multivariate Analysis. 3rd Edition, John Wiley & Sons, Inc., Hoboken, New Jersey.

ROBERTS, J.A. 1993. Sex Differences in Socially Responsible Consumers' Behaviour. *Psychological Reports*, 73(1), 139-148.

ROBERTS, J. A. 1995. Profiling Levels of Socially Responsible Consumer Behavior: A Cluster Analytic Approach and Its Implications for Marketing. *Journal of Marketing Theory and Practice*, 3 (4), 97-117.

ROBERTS, J. A. 1996. Green Consumers in the 1990: Profile and Implications for Advertising. *Journal of Business Research*, 36(3), 217-231.

SAMAVATYAN, H., FERESHTEH, A. & ZAREIE, S. 2014. Consumer Social Responsibility: Towards a Comprehensive Index. *OIDA International Journal of Sustainable Development*, 7, 81-92.

SCHWARTZ, S. H. 2012. An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1), 1-20. http://dx.doi.org/10.9707/2307-0919.1116.

SHAW, D. & CLARKE, I. 1999. Belief Formation in Ethical Consumer Groups: An Exploratory Study. *Marketing Intelligence & Planning*, 17(2), 109–19.

SPARKS, P. & SHEPHERD, R. 1992, Self-identity and the Theory of Planned Behavior: Assessing the Role of Identification with Green Consumerism. *Social Psychology Quarterly*, 55(4), 388–399.

Sprzedaż produktów Sprawiedliwego Handlu, http://www.fairtrade.org.pl/sprawiedliwy-handel/sprzedaz-produktow-sprawiedliwego-handlu. [Accessed on 16 May 2017]

SUDBURY-RILEY, L. & KOHLBACHER, F. 2016. Ethically Minded Consumer Behavior: Scale Review, Development, and Validation. *Journal of Business Research*, 69(8), 2697 - 2710.

VERMEIR I. & VERBEKE W. 2006. Sustainable Food Consumption: Exploring the Consumer "Attitude–Behavioral Intention" Gap. *Journal of Agricultural and Environmental Ethics*, 19, 169–194.

WEBB, D. J., MOHR, L. A. & HARRIS, K. E. 2008. A Re-examination of Socially Responsible Consumption and its Measurement. *Journal of Business Research,* 61(2), 91-98.

Urząd Statystyczny w Krakowie, 2015. Rocznik statystyczny województwa małopolskiego, rok XVI.