

SUSTAINABLE CONSUMPTION OF PRODUCTS AND CONSUMER BEHAVIOUR IN THE REPUBLIC OF SERBIA

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Abstract: *Having in mind that sustainable consumption has become an important subject in today's marketing, the paper uses literature review to analyse the theoretical approaches to sustainable consumer behaviour and models that explore the factors that affect the consumer purchasing process. In addition, empirical research was conducted during April and May 2023 with the aim of identifying the factors that impact green purchasing decisions of consumers and influence their awareness of sustainability. The survey has included 171 consumers (N=171) in the Republic of Serbia who rated different statements related to sustainable consumption and purchasing behaviour. The questionnaire was consisted of 28. variables referring to consumers' purchasing decisions, post-purchasing behaviour, environmental awareness, and concern. The research has also included an analysis of sustainable consumption in the context of the respondents' gender. Data processing and presentation of results were performed based on the application of descriptive statistics, t- test and factor analysis.*

Keywords: *sustainable consumption, green purchasing behaviour, sustainable business, consumer behaviour.*

JEL Classification: *M0, M3.*

INTRODUCTION

The paper explores the consumer behaviour related to sustainable consumption in contemporary environment. The concept of sustainable consumption has been widely recognised as a significant aspect of contemporary marketing and business.

In the earliest conceptual definitions, the term sustainable consumption was directly linked to production processes in organisations. Norwegian Ministry of Environment has made one of the first definitions of this term, indicating that “sustainable consumption and production is the use of services and related products, which respond

to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of further generations” (Norwegian Ministry of Environment, 1994). Another important contribution to the concept was made at the World Summit on Sustainable Development in 2002, when it was noted as “one of the key objectives of sustainable development that promotes resource and energy efficiency” (United Nations, 2002). Moreover, sustainable consumption is one of the most important Sustainable Development Goals (SDGs) defined by United Nations in 2015, within The 2030 Agenda for Sustainable Development (United Nations, 2015).

In marketing literature, the term sustainable consumption has been given a wider meaning that includes “the process of decisions and actions regarding purchasing, product use, and the handling of any remaining tangible product after use” (Peattie, 2009). In addition, a study provided by Perčić et al. explained the marketing context of sustainable consumption in terms of adding a sustainable value to the brand (Perčić, 2023).

The starting point in this study arose from the need to provide insight into the patterns of (un)sustainable consumption due to the research gap that exists when it comes to the application of certain models and instruments for measuring consumers’ attitudes towards sustainable consumption.

Regarding that sustainable consumption has become an important subject in marketing, the aim of this study was to identify the factors that influence green purchasing decisions of consumers and affect their awareness of sustainability. To answer this research question, an empirical study was conducted based on a questionnaire developed by Testa et al. within the programme of European Union (Testa, 2020). The survey has included 171 consumers (N=171) in the Republic of Serbia who rated different statements related to sustainable consumption and purchasing behaviour. The questionnaire consisted of 28 variables referring to consumers’ purchasing decisions, post-purchasing behaviour, environmental awareness, and concern. The research has also included an analysis of sustainable consumption in the context of the respondents’ gender and age categories. Data processing and presentation of results were performed based on the application of descriptive statistics, t- test and factor analysis.

LITERATURE OVERVIEW

In early studies, the term sustainable consumption was often observed in the context of ecological modernization of production, with a focus on domestic consumption and individual consumer decisions related to environmental issues (Martens, 2005); (Welch, 2015). However, the practice has shown that dealing with unsustainable consumption patterns must also include holistic and systematic point of view and cannot be overcome with only an individual perspective of consumers. Jaeger-Erben & Offenberg have also indicated that sustainable consumption should be considered from a broader context that would include the framework of individual consumption patterns in combination with specific socio-cultural and socio- technical factors (Jaeger-Erben, 2014). An even broader approach to the study of sustainable consumption was made by Govindan who analysed the supply chains on the example of food industry and emphasised the necessity of stakeholder approach in addressing the sustainability issues (Govindan, 2018). Other significant scientific studies (Anantharaman, 2018); (Corsini,

2019) have pointed out the importance of individual behaviour change and sustainable consumption as main elements of engendering more sustainable societies, as well as their interdependence of social conditions. Studying the consumer perspective of sustainable consumption, Geiger et al. have recognised that the process takes place in “different areas (e.g., food, clothing, mobility) and different phases (e.g., acquisition, usage, disposal)” (Geiger, 2018).

The concept of sustainable consumption has been explored from diverse theoretical approaches, and it has been widely recognised by academicians, policymakers, and practitioners (Quoquab, 2020); (Haider, 2022); (Koval, 2023); (Maduku, 2024). However, the scientific research on this topic is still in its infancy when it comes to the implementation of instruments and models which explore the factors that affect consumer behaviour and their buying decisions regarding sustainability. According to literature review, a few scientific studies were based on the application of certain models in the examination of sustainable consumption and green marketing. For instance, McDonald & Oates provided an empirical test of 40 sustainability activities of consumers that affect environment (McDonald, 2006). Furthermore, a study conducted by Young et al. demonstrated the purchasing process for green consumers regarding consumer technology products in the United Kingdom (UK) (Young, 2010). In addition, Do Paço et al. have developed a model for testing the relationships between consumer environmental values, attitudes, and behaviours (Do Paço, 2013). The model was successfully applied in England, Germany, Portugal, and Spain. A significant scientific contribution was made by Chekima et al. who analysed the influence of environmental knowledge, cultural values, environmental advertising as well as consumers’ demographic factors on their purchasing decisions and sustainable consumption (Chekima, 2016). Lim has developed a “theoretical toolbox” that marketing and consumer behaviour researchers can use in further explorations of sustainable consumption and ecological marketing (Lim, 2017). Another significant study made by Torres-Ruiz, Vega-Zamora & Parras-Rosa was investigating sustainable consumptions of organic food in Spain (Torres-Ruiz, 2018). The authors have proposed an operational model that illustrated the purchasing process and analysed all the steps along the way. Bearing in mind the aim of this study, it is useful to state the findings of a research conducted by Testa et al. who recognised the following seven drivers of green consumptions: “behavioural factors, socio-demographic variables, intrapersonal values—environment, intrapersonal values—non environment, personal capabilities, products and producers-related factors and context-related factors” (Testa F. P., 2021). A special contribution of this study is that the survey was tested in different countries in Europe, such as France, Spain, Italy, Germany, and the United Kingdom.

METHODOLOGY

The theoretical propositions in the study are based on the application of literature review, as a basic research method that aimed to chronologically analyse and compare different approaches to the concept of sustainable consumption. Starting from the relevant studies presented in the literature review, the following research questions were defined.

RQ1 What are the main factors that influence consumer decisions in sustainable consumption and affect their awareness of sustainability?

RQ2 Is there a difference in consumer behaviour and attitudes towards sustainable consumption between genders?

To address the stated research questions an instrument developed by Testa et al. was used in this study (Testa F. I., 2020). Regarding that the research instrument was successfully tested in five different countries in Europe, the questionnaire was considered suitable for applying in Serbia on a selected sample of 171 consumers. The original survey made by Testa et al. has included different variables that have been assumed to affect green consumption, such as: purchasing and post-purchasing intentions, psychographic dimensions of consumers, trust, and greenwashing, ecolabeling and information on green products. Similar variables were also tested in a research conducted on a large sample of 700 participants in Italy in Sweden (Siminelli, 2017). The authors explored the relations between variables such as consumers' decisions in purchase, utilisation, and disposal of products with personal lifecycles. In the study presented in this paper, three dimensions of sustainable consumption were investigated. The questionnaire was consisted of 28 variables referring to consumers' purchasing decisions, post-purchasing behaviour, environmental awareness and concern. The respondents used a five-point scale (0=totally disagree; 1 = disagree; 2= somewhat disagree; 3= somewhat agree; 4=agree; 5=totally agree) for assessing the statements. Data processing and presentation of results were performed by descriptive statistics and factor analysis. Cronbach's Alpha scores for all three dimensions of sustainable consumption were $\alpha > 0.8$ indicating high reliability of the research instrument (table 1).

Table 1. Cronbach's Alpha scores for three dimensions of sustainable consumption

Cronbach's Alpha Variables related to purchasing decisions (Var 1- Var 9)	N of Items
.944	9
Cronbach's Alpha Variables related to post - purchasing behaviour (Var 10 – Var 18)	
.922	9
Cronbach's Alpha Variables related to consumers' environmental awareness, and concern (Var 19 – Var 28)	
.896	10

Source: Authors' calculations in SPSS

RESULTS AND DISCUSSION

The survey was conducted on a sample of 171 consumers (N=171) in the Republic of Serbia, during April and May 2023. Respondents of different age categories were represented in the sample (table 2). However, most of the consumers (27.5%) belonged to the 35-44 age group.

Table 2. Age categories of respondents – descriptive statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	11	6.4	6.4	6.4
	25-34	38	22.2	22.2	28.7
	35-44	47	27.5	27.5	56.1
	45-54	34	19.9	19.9	76.0
	55-64	30	17.5	17.5	93.6
	65- 80	11	6.4	6.4	100.0
	Total	171	100.0	100.0	

Source: Authors’ calculations in SPSS

The gender structure of the sample is shown in table 3, which indicates that male respondents were in the majority of 53.8% compared to 46.2% of female respondents.

Table 3. Gender structure of the sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	92	53.8	53.8	53.8
	female	79	46.2	46.2	100.0
	Total	171	100.0	100.0	

Source: Authors’ calculations in SPSS

Furthermore, the research has included factor analysis of the examined variables. The data was tested with Kaiser-Meyer-Olkin (KMO) test to indicate the suitability for structure detection. Bearing in mind that the result was 0.796, ($p= 0.00 < 0.05$) which was higher than the proposed minimum of 0.6 it was concluded that the data was suitable for the factor analysis.

Table 4. KMO and Bartlett’s Test

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.796
Bartlett’s Test of Sphericity	Approx. Chi-Square	9063.285
	Df	378
	Sig.	.000

Source: Authors’ calculations in SPSS

The application of factor analysis with the extraction method of principal component analysis provided the table of communalities before and after extraction. In principal component analysis it is assumed that the communalities are initially 1. According to the results presented in table 5, the values of communalities after extraction for 27 variables were high, between 0.769 and 0.947. The lowest value (0.648) is recorder for Var 26: I know the meaning of the term “recycled”.

Table 5. Communalities

	Initial	Extraction
Var 1:When buying food, I carefully evaluate the amount I need to avoid waste	1.000	.776
Var 2:When I buy vegetables, I look for local produce	1.000	.931
Var 3:When I buy paper products, I always choose the ones made with recycled paper	1.000	.946
Var 4:When I buy bottled beverages, I look for recycled packaging	1.000	.928
Var 5: When I buy groceries, I choose food with a low environmental impact	1.000	.797
Var 6: When I buy biscuits or similar products, I choose the ones with recyclable packaging	1.000	.887
Var 7:When I buy a laundry detergent, I choose the one with the lowest environmental impact	1.000	.900
Var 8: When I buy soap for personal care, I choose the one with the lowest environmental impact	1.000	.816
Var 9: I usually buy food closer to its expiration date to help supermarkets avoid waste	1.000	.856
Var 10: If I have a product that is closer to the expiration date, I eat it first	1.000	.888
Var 11: When I prepare my meals, I carefully evaluate	1.000	.911
Var 12: When I do my laundry, I use the recommended dosage on the detergent packaging	1.000	.890
Var 13: When I finish a shower-gel I recycle its bottle	1.000	.805
Var 14:When I finish a packaged food product, I carefully separate the packaging for recycling	1.000	.769
Var 15: When I use a shampoo, I use the amount indicated on its packaging	1.000	.789
Var 16: When I finish a liquid hand-soap I usually refill its bottle	1.000	.922
Var 17: I eat food even after the "best before" date	1.000	.814
Var 18:When I finish a packaged food product, I try to reuse the packaging if possible	1.000	.777
Var 19: I recycle my paper, plastic, and metallic waste	1.000	.853
Var 20: I try to save water and energy in my house	1.000	.825
Var 21: I do my best to buy local products	1.000	.887
Var 22: I buy products which have a low impact on the environment	1.000	.919
Var 23: I buy products made in safe and healthy workplaces	1.000	.913
Var 24: I frequently change my preferences in shopping	1.000	.947
Var 25: As a consumer, it is worth making efforts to protect and improve the environment	1.000	.836
Var 26: I know the meaning of the term "recycled".	1.000	.648
Var 27: I know the meaning of the term "organic".	1.000	.920
Var 28: I know the meaning of the term "energy-efficient".	1.000	.901

Extraction Method: Principal Component Analysis.

Source: Authors' calculations in SPSS

The table of Total Variance Explained (table 6) demonstrates that five factors have eigenvalues higher than 1. Together they account more than 85% of the variability in the original variables.

Table 6. Total Variance Explained

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.492	51.756	51.756	14.492	51.756	51.756
2	4.180	14.928	66.684	4.180	14.928	66.684
3	2.468	8.813	75.497	2.468	8.813	75.497
4	1.725	6.162	81.659	1.725	6.162	81.659
5	1.189	4.247	85.907	1.189	4.247	85.907
6	.904	3.230	89.136			
7	.749	2.675	91.811			
8	.572	2.041	93.852			
9	.355	1.269	95.121			
10	.241	.860	95.981			
11	.186	.663	96.644			
12	.160	.572	97.216			
13	.140	.499	97.715			
14	.117	.419	98.134			
15	.096	.342	98.477			
16	.079	.281	98.758			
17	.076	.271	99.029			
18	.053	.188	99.217			
19	.046	.163	99.380			
20	.039	.138	99.518			
21	.031	.109	99.627			
22	.026	.094	99.721			
23	.025	.090	99.811			
24	.018	.064	99.875			
25	.015	.053	99.928			
26	.012	.042	99.969			
27	.006	.023	99.992			
28	.002	.008	100.000			

Extraction Method: Principal Component Analysis.

Source: Authors' calculations in SPSS

Table 7 presents the Component Matrix with the loadings of 28 variables on the five factors extracted. The components can be interpreted as the correlation of each item with the components. According to the presented results, the first factor is highly associated with the variables related to consumers' purchasing and post-purchasing behaviour. The second factor is highly associated with the variables related to consumers' environmental awareness and concern.

Table 7. Component Matrix

	Component				
	1	2	3	4	5
Var 1:When buying food, I carefully evaluate the amount I need to avoid waste	.803	-.249	.051	.109	-.232
Var 2:When I buy vegetables, I look for local produce	.899	-.093	.288	.038	-.174
Var 3:When I buy paper products, I always choose the ones made with recycled paper	.909	-.090	.292	.050	-.157
Var 4:When I buy bottled beverages, I look for recycled packaging	.901	-.089	.289	.014	-.156
Var 5: When I buy groceries, I choose food with a low environmental impact	.831	-.032	.295	.046	.130
Var 6: When I buy biscuits or similar products, I choose the ones with recyclable packaging	.876	.300	.143	-.050	-.087
Var 7:When I buy a laundry detergent, I choose the one with the lowest environmental impact	.892	-.295	-.025	-.020	-.127
Var 8: When I buy soap for personal care, I choose the one with the lowest environmental impact	.864	-.175	.000	-.050	-.190
Var 9: I usually buy food closer to its expiration date to help supermarkets avoid waste	.346	.644	.320	-.168	-.736
Var 10: If I have a product that is closer to the expiration date, I eat it first	.683	.109	-.142	-.486	.391
Var 11: When I prepare my meals I carefully evaluate	.833	.007	-.144	-.442	-.002
Var 12: When I do my laundry, I use the recommended dosage on the detergent packaging	.766	.073	-.122	-.471	.247
Var 13: When I finish a shower-gel I recycle its bottle	.820	-.006	.061	-.359	-.027
Var 14:When I finish a packaged food product, I carefully separate the packaging for recycling	.732	-.056	.155	.446	.084
Var 15: When I use a shampoo, I use the amount indicated on its packaging	.744	-.088	-.445	.157	.070
Var 16: When I finish a liquid hand-soap I usually refill its bottle	.875	-.126	-.341	.140	-.065
Var 17: I eat food even after the "best before" date	.850	-.149	-.076	.087	-.235
Var 18:When I finish a packaged food product, I try to reuse the packaging if possible	.626	.130	-.558	.121	.208
Var 19: I recycle my paper, plastic, and metallic waste	.567	.705	-.116	.009	-.143
Var 20: I try to save water and energy in my house	.247	.848	.094	.077	.171
Var 21: I do my best to buy local products	.707	-.002	-.421	.747	.103

Var 22: I buy products which have a low impact on the environment	.805	-429	-.248	.143	-.076
Var 23: I buy products made in safe and healthy workplaces	.388	.751	-.286	.339	.026
Var 24: I frequently change my preferences in shopping	.137	.924	-.020	.240	.129
Var 25: As a consumer, it is worth making efforts to protect and improve the environment	.805	.120	-.088	-.335	.231
Var 26: I know the meaning of the term "recycled".	.084	.620	.504	-.043	.003
Var 27: I know the meaning of the term "organic".	.463	-.220	.757	.261	.397
Var 28: I know the meaning of the term "energy-efficient".	.567	-.343	.501	.211	.708

Extraction Method: Principal Component Analysis.

5 components extracted.

Source: Authors' calculations in SPSS

Bearing in mind the results of factor analysis, the further part of this study has included the testing of 19 variables that were highly associated with the first component. To answer the Research Question 2, t test was applied with the purpose of finding the difference in answers between male and female respondents. The issue of gender equality and different attitudes towards the concept of sustainability in consumption between men and women is recognised as a very important topic, which was pointed out by many authors (Dzialo, 2017); (Kennedy, 2018); (Godin, 2021). Moreover, MacGregor explains the gender gap in understanding the sustainable consumption by underlining "the connection that exists between women's caring and ecological politics" (MacGregor, 2006). Similar, Brough, Wilkie & Isaac pointed out scientific evidence showing that concepts of greenness and femininity are cognitively connected (Brough, 2016). Other authors (Fathallah, 2020) have recognised that there is lack of studies dealing with differentiation between genders in energy studies. According to findings presented in this study (table 8), the higher means were registered in female answers for all 19 tested variables. However, an Independent Sample test demonstrated that the difference in male and female answers were statistically significant ($p=0.00 < 0.05$) for the following variables: Var 2: When I buy vegetables, I look for local produce, $t(169) = -5.311$; Var 3: When I buy paper products, I always choose the ones made with recycled paper, $t(169) = -5.114$; Var 4: When I buy bottled beverages, I look for recycled packaging, $t(169) = -5.237$; Var 8: When I buy soap for personal care, I choose the one with the lowest environmental impact, $t(169) = -7.335$; Var 10: If I have a product that is closer to the expiration date, I eat it first, $t(169) = -2.264$; Var 11: When I prepare my meals I carefully evaluate, $t(169) = -3.529$; Var 12: When I do my laundry, I use the recommended dosage on the detergent packaging, $t(169) = -2.256$; Var 13: When I finish a shower-gel I recycle its bottle, $t(169) = -2.431$; Var 15: When I use a shampoo, I use the amount indicated on its packaging, $t(169) = -6.535$; Var 16: When I finish a liquid hand-soap I usually refill its bottle, $T(126) = -6.837$; Var 21: I do my best to buy local products, $t(126) = -4.122$. The highest means in female answers were registered for variables: Var 22: I buy products which have a low impact on the environment ($M=4.62$) and Var 25: As a consumer, it is worth making efforts to protect and improve the environment ($M=4.03$).

Table 8. Group statistics in male and female answers related to sustainable consumption

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Var 1:When buying food, I carefully evaluate the amount I need to avoid waste	male	92	2.8370	.73045	.07616
	female	79	3.6582	.65801	.07403
Var 2:When I buy vegetables, I look for local produce	male	92	2.9457	.65237	.06801
	female	79	3.4937	.69565	.07827
Var 3:When I buy paper products, I always choose the ones made with recycled paper	male	92	2.9565	.64473	.06722
	female	79	3.4810	.69542	.07824
Var 4:When I buy bottled beverages, I look for recycled packaging	male	92	2.9565	.64473	.06722
	female	79	3.4937	.69565	.07827
Var 5: When I buy groceries, I choose food with a low environmental impact	male	92	3.1196	.64352	.06709
	female	79	3.5190	.61729	.06945
Var 6: When I buy biscuits or similar products, I choose the ones with recyclable packaging	male	92	2.946	.6353	.0662
	female	79	3.063	.5393	.0607
Var 7:When I buy a laundry detergent, I choose the one with the lowest environmental impact	male	92	2.9891	.60209	.06277
	female	79	3.8354	.58683	.06602
Var 8: When I buy soap for personal care, I choose the one with the lowest environmental impact	male	92	3.0000	.59300	.06182
	female	79	3.6962	.64757	.07286
Var 10: If I have a product that is closer to the expiration date, I eat it first	male	92	3.8152	.64500	.06725
	female	79	4.0000	.35806	.04028
Var 11: When I prepare my meals I carefully evaluate	male	92	3.6304	.65829	.06863
	female	79	3.9367	.43388	.04882
Var 12: When I do my laundry, I use the recommended dosage on the detergent packaging	male	92	3.7717	.63077	.06576
	female	79	3.9620	.43686	.04915
Var 13: When I finish a shower-gel I recycle its bottle	male	92	3.6304	.76629	.07989
	female	79	3.8861	.57707	.06493
Var 14:When I finish a packaged food product, I carefully separate the packaging for recycling	male	92	2.8587	1.10525	.11523
	female	79	3.3165	1.09245	.12291
Var 15: When I use a shampoo, I use the amount indicated on its packaging	male	92	3.2826	.70049	.07303
	female	79	3.8987	.49601	.05581
Var 16: When I finish a liquid hand-soap I usually refill its bottle	male	92	3.2065	.67185	.07005
	female	79	3.8481	.53322	.05999
Var 17: I eat food even after the "best before" date	male	92	3.0870	.87269	.09098
	female	79	3.7342	.82755	.09311
Var 21: I do my best to buy local products	male	92	3.0652	.98119	.10230
	female	79	3.6203	.73909	.08315
Var 22: I buy products which have a low impact on the environment	male	92	3.3043	.76660	.07992
	female	79	4.6203	.77300	.08697
Var 25: As a consumer, it is worth making efforts to protect and improve the environment	male	92	3.7717	.69698	.07267
	female	79	4.0380	.33753	.03797

Source: Authors' calculations in SPSS

Table 9. Independent Samples Test

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Var 1	Equal variances assumed	.208	.649	-7.671	169	.000	-.82127	.10706	-1.03261	-.60993
	Equal variances not assumed			-7.733	168.599	.000	-.82127	.10621	-1.03094	-.61160
Var 2	Equal variances assumed	13.888	.000	-5.311	169	.000	-.54802	.10318	-.75171	-.34433
	Equal variances not assumed			-5.285	161.396	.000	-.54802	.10369	-.75278	-.34325
Var 3	Equal variances assumed	15.681	.000	-5.114	169	.000	-.52449	.10256	-.72695	-.32204
	Equal variances not assumed			-5.085	160.628	.000	-.52449	.10315	-.72819	-.32079
Var 4	Equal variances assumed	15.720	.000	-5.237	169	.000	-.53715	.10257	-.73964	-.33466
	Equal variances not assumed			-5.206	160.605	.000	-.53715	.10317	-.74089	-.33341
Var 5	Equal variances assumed	7.829	.006	-4.123	169	.000	-.39942	.09687	-.59066	-.20819
	Equal variances not assumed			-4.136	166.914	.000	-.39942	.09656	-.59007	-.20878

Var 6	Equal variances assumed	1.275	.261	-1.294	169	.198	-.1176	.0909	-.2972	.0619
	Equal variances not assumed			-1.310	168.981	.192	-.1176	.0898	-.2950	.0597
Var 7	Equal variances assumed	1.604	.207	-9.272	169	.000	-.84631	.09128	-1.02651	-.66612
	Equal variances not assumed			-9.290	166.286	.000	-.84631	.09110	-1.02618	-.66645
Var 8	Equal variances assumed	13.567	.000	-7.335	169	.000	-.69620	.09491	-.88357	-.50883
	Equal variances not assumed			-7.286	159.768	.000	-.69620	.09555	-.88491	-.50749
Var 10	Equal variances assumed	19.174	.000	-2.264	169	.025	-.18478	.08163	-.34592	-.02364
	Equal variances not assumed			-2.357	146.085	.020	-.18478	.07839	-.33971	-.02986
Var 11	Equal variances assumed	30.021	.000	-3.529	169	.001	-.30627	.08680	-.47763	-.13492
	Equal variances not assumed			-3.637	158.913	.000	-.30627	.08422	-.47261	-.13994
Var 12	Equal variances assumed	12.936	.000	-2.256	169	.025	-.19029	.08434	-.35678	-.02379
	Equal variances not assumed			-2.318	162.063	.022	-.19029	.08210	-.35241	-.02816
Var 13	Equal variances assumed	14.456	.000	-2.431	169	.016	-.25564	.10514	-.46321	-.04808
	Equal variances not assumed			-2.483	166.278	.014	-.25564	.10295	-.45889	-.05239

Var 14	Equal variances assumed	.042	.838	-2.715	169	.007	-45776	.16863	-.79065	-.12487
	Equal variances not assumed			-2.717	165.670	.007	-45776	.16848	-.79040	-.12512
Var 15	Equal variances assumed	19.367	.000	-6.535	169	.000	-61613	.09428	-.80224	-.43002
	Equal variances not assumed			-6.703	163.329	.000	-61613	.09191	-.79761	-.43464
Var 16	Equal variances assumed	4.554	.034	-6.837	169	.000	-64158	.09384	-.82683	-.45633
	Equal variances not assumed			-6.957	168.004	.000	-64158	.09222	-.82365	-.45951
Var 17	Equal variances assumed	.044	.834	-4.952	169	.000	-64722	.13071	-.90526	-.38919
	Equal variances not assumed			-4.972	167.317	.000	-64722	.13018	-.90423	-.39021
Var 21	Equal variances assumed	4.471	.036	-4.122	169	.000	-55504	.13464	-.82083	-.28924
	Equal variances not assumed			-4.210	166.287	.000	-55504	.13183	-.81531	-.29476
Var 22	Equal variances assumed	.041	.840	-11.148	169	.000	-1.31591	.11804	-1.54893	-1.08288
	Equal variances not assumed			-11.141	164.694	.000	-1.31591	.11812	-1.54912	-1.08269
Var 25	Equal variances assumed	27.162	.000	-3.097	169	.002	-26624	.08597	-.43596	-.09652
	Equal variances not assumed			-3.247	135.686	.001	-26624	.08199	-.42838	-.10409

Source: Authors' calculations in SPSS

Considering the presented findings, it can be concluded that female respondents from the sample showed higher levels of sustainable consumption intentions in all three dimensions of behaviour: purchasing, post-purchasing and environmental awareness and concern. According to literature review, the similar study was conducted by Bulut, Kökalan & Doğan on a sample of 393 participants in Turkey. The authors indicated that women demonstrated a higher level of “sustainable consumption behaviour both in overall behaviour and tendency to reuse products” (Bulut, 2017). Similar, Grau-Berlanga et al. have stated that women show higher levels of sustainable consumption and presented the practical implications of these findings (Grau-Berlanga, 2023). However, different conclusions and results were demonstrated in a study conducted by Booi-Chen & Teck-Chai, who did not find significant differences between male and female consumers (Booi-Chen, 2009). Another significant study that was conducted on a large sample of 3.000 households in France (Lazaric, 2020) has also showed the importance of age and gender for spurring sustainable consumption. In addition, an experimental study that was carried out by Costa Pinto, Herter, Rossi & Borges has shown that gender sustainable intentions depend on personal and social identity (Costa Pinto, 2014). According to their findings when personal identity was salient, female participants demonstrated higher levels of sustainable consumption compared with male participants. On the contrary, if the social identity was salient, the levels of sustainable consumption within men population have increased at the same levels as female respondents’ attitudes. The presented findings in this research may be also compared with the study conducted by Siminelli who demonstrated that female participants positively influenced sustainable behaviours in the survey (Siminelli, 2017).

CONCLUSION

The findings presented in this paper has provided an additional insight into scientific research of sustainable consumption behaviour on the example of the Republic of Serbia.

However, certain limitations should be considered when interpreting the results, such as the systemic perspective of sustainable consumption, given that social and cultural factors were not regarded in this empirical research. However, the study has a particular scientific and practical contribution, which is reflected in the fact that a research instrument that has already been successfully tested in European countries, was applied in examining sustainable consumption behaviour in the Republic of Serbia. The testing of this instrument was further expanded through the analysis of the attitudes of respondents belonging to different genders.

The survey was consisted of 28 variables referring to consumers’ sustainable behaviour in consumption that were reduced by factor analysis on 19 variables, which were further explored regarding the respondents’ gender differences. The largest number of selected variables referred to consumers’ purchasing decisions and post-purchasing behaviour, while a slightly smaller number of variables included attitudes towards sustainable awareness and concern. The results of the study indicated that there is a significant statistical difference in consumer behaviour and attitudes towards sustainable consumption between genders, in favour of female respondents who demonstrated higher levels of sustainable behaviour in all three dimensions that were tested in this survey: purchasing behaviour, post-purchasing decisions, environmental aware-

ness and concern.

The results of this study can be used for future research on sustainable consumption, as well as for defining guidelines for the effective practice of consumer behaviour that will be in accordance with the principles of sustainable development.

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