Research Journal 31, No. 4 (2024), pp 159-172

Received: January 2024 Accepted: December 2024 DOI: 10.7862/rz.2024.hss.50

Katarzyna KILIAŃSKA¹

ECOLOGICAL AND SOCIALLY RESPONSIBLE ACTIVITIES OF BUSINESSES AS A DETERMINANT OF CUSTOMER PURCHASING BEHAVIOR

The paper aims to identify the relationship between businesses engaging in socially responsible measures that affect the environment and society at large and the purchasing behaviors of customers, taking into account differences in their declared knowledge of ecological and social symbols. The paper presents the methodology and results of a survey conducted on a sample of 801 individuals. The research indicated that awareness of eco-labels positively influences the decision to purchase a product from an entity engaged in pro-environmental and pro-social activities. Customers are willing to pay more for a product labeled with an eco-symbol or social symbol. It was also demonstrated that individuals under the age of 35 are more likely to buy products from companies undertaking pro-environmental and pro-social initiatives. The findings of the research have practical value and can enable businesses to more effectively shape the purchasing behaviors of customers by undertaking pro-environmental and pro-social measures.

Keywords: corporate social responsibility, customer purchasing behavior, environment, society, food industry.

1. INTRODUCTION

Companies, motivated by social expectations, investors, and customers, set non-economic goals for themselves (Gallardo-Vazquez, Sanchez-Hernandez, 2014). Increasingly, they incorporate plans for implementing measures aligned with the concept of corporate social responsibility (CSR) into their strategies. CSR entails the obligation of businesses to make decisions and take measures that align with their goals and the values of society. This obligation stems from the belief that companies, especially large ones, are centers of power and decision-making, and their activities influence many aspects of citizens' lives (Bowen, 1953).

CSR is a dominant research topic in the literature on customer purchasing behavior (Kraus, Cane, Ribeiro-Soriano, 2022). Customer purchasing behavior refers to measures aimed at satisfying individual consumption needs by acquiring goods, correlated with the perceived system of preferences and human needs (Zalega, 2012). Customer behaviors in the market for goods, the determinants of their purchasing decisions, are multidimensional and diverse, making them challenging to clearly identify and describe. The factors shaping

¹ Katarzyna Kiliańska, Kielce University of Technology, Poland: e-mail: k.kilianska@tu.kielce.pl. ORCID: 0000-0002-9170-266X.

customer purchasing behaviors are characterized by variability, necessitating the repetition and expansion of research to determine the interdependencies between the factors influencing when and from which companies customers buy products. From the perspective of the considerations undertaken in the paper, it is particularly important to assess whether and how pro-environmental and pro-social measures shape these behaviors.

The structure of the article is as follows: In the theoretical part, a synthetic review of the literature addressing the impact of CSR and the knowledge of eco-labels and social symbols on customers' purchasing decisions is conducted. Subsequently, the methodology of the conducted study is presented, and its results are discussed. The paper concludes with a summary containing recommendations for companies wishing to influence customer purchasing behaviors through their pro-social and pro-environmental activities.

2. LITERATURE REVIEW

Social engagement by businesses, although not a direct component of the goods they sell, is one of the factors encouraging purchases. Customers do not solely buy products based on their basic features such as price, quality, functional characteristics, or the extent to which they can satisfy their needs. They purchase products from companies that offer the right product and produce it with the principle of minimizing negative impact on society and the natural environment (Lakatos, Nan, Bacali, Ciobanu, Ciobanu, Cioca, 2021). By purchasing such products, customers can indirectly contribute to environmental protection or create value for society.

Customers are becoming increasingly aware that every process occurring in a business indirectly or directly affects the natural environment (Brajer-Marczak, Piwowar-Sulej, 2023). In addition, they identify with society as a whole and prefer to buy products from companies that engage in CSR, care for society, and provide services for it (Ahmad Jafar, Waheed, Sun, Kazmi, 2023). It should be noted, however, that environmental issues have a greater impact on customer purchasing decisions than social issues (Čerkasov, Huml, Vokáčová, Margarisová, 2017; Nguyen-Viet, 2022).

Customer purchasing behaviors are also influenced by emotions (Tkach, 2019). Buying products from socially responsible entities gives customers a sense of satisfaction and fulfillment (Green, Peloza, 2011; Yu, Han, Ding, He, 2021). Research has also shown that CSR influences the positive evaluation of the product and the company, loyalty to them, and consequently, purchasing decisions (Eisingerich, MacInnis, Park, 2023; Ahmad et al., 2023). CSR also contributes to building trust in customers, which is crucial in preventing them from switching to competitors (Waheed, Shehzad, Arif, Abbas, Mehmood, Usman, 2022). It can be concluded that the benefits of socially responsible measures taken by businesses are diverse (Yang, 2023), both for the business entity itself and for customers.

However, CSR should not only be associated with benefits but also with costs, which can lead to an increase in the final product's price offered to customers (Kiliańska, Krechowicz, 2021). Indeed, CSR requires financial investments, and this translates into costs that impact the prices of products (*Habel, Schons, Alavi, Wieseke*, 2016).

Customers are willing to pay a higher price for a product from a socially responsible entity (Bastounis, Buckell, Hartmann-Boyce, Cook, King, Potter, Bianchi, Rayner, Jebb, 2021; de-Magistris, Gascia, 2016; Duckworth, Randle, McGale, Jones, Doherty, Halford, Christiansen, 2022), especially when they are informed about CSR activities (Wójcik, 2014). Ecolabels and social symbols are tools through which companies can communicate information about their social responsibility to customers. Therefore, they can influence customers' purchasing decisions (Majer, Henscher, Reuber, Fischer-Kreer, Fischer, 2022; Rossi, Rivetti, 2020), especially when customers are familiar with ecolabels and social symbols (Kabaja, Wojnarowska, Cesarani, Varese, 2022; Samant, Seo, 2016). Research conducted in Poland, however, shows that especially young customers have a low level of knowledge on this topic (Kabaja, Wojnarowska et al., 2022).

The literature also provides knowledge that customer characteristics differentiate the impact of CSR on their purchasing decisions. Women are more inclined than men to buy environmentally friendly products (Fotopoulos, Krystallis, 2002; Siuda, 2022) and are more aware of environmental issues (Bojanowska, Kulisz, 2020; Shauki, 2011). They also pay more attention to pro-social measures undertaken by businesses (Vicente-Molina, Fernández-Sáinz, Izagirre-Olaizola, 2013) and are more interested in purchasing products from entities engaging in such measures. According to studies, young customers have a higher level of trust in companies implementing pro-social and pro-environmental measures than older individuals (Cho, Hu, 2009). Research also demonstrates that as education levels increase, customers are more likely to make purchasing decisions favoring climate protection (Kurowski, Rutecka-Góra, Smaga, 2022) and supporting initiatives related to CSR (Youn, Kim, 2008).

3. RESEARCH METHODOLOGY

The motivation for conducting the research was to identify a research gap, characterized by insufficient recognition of the impact of knowledge of ecological and social symbols on the purchase of products from companies undertaking pro-environmental and pro-social initiatives by customers from less developed regions (including the Świętokrzyskie Voivodeship).

The objective of the study was to identify the relationship between businesses' engagement in socially responsible measures for the environment and society and the purchasing behaviors of customers, considering differences in their declared knowledge of ecological and social symbols.

Regarding the research objective, 5 research hypotheses were formulated:

- H1: Knowledge of social symbols is higher than eco-labels.
- H2: There is a positive correlation between knowledge of eco-labels and the frequency of customers purchasing products from companies undertaking environmental initiatives.
- H3: Knowledge of social symbols differentiates the frequency of customers buying products from companies undertaking societal initiatives.
- H4: Customers with very good financial situations are more likely to be willing to pay a higher price for a product labeled with an eco-label or social symbol.
- H5: The age of customers differentiates the frequency of their purchases of products from companies undertaking pro-social and pro-environmental initiatives.

To achieve the set goal and verify the research hypotheses, it was necessary to design and conduct an original study. The study was conducted using a diagnostic survey method with a custom-designed questionnaire. Brainstorming with experts in the field of CSR and Environmental, Social, and Governance (ESG) played a crucial role in designing the questionnaire. It helped identify pro-environmental and pro-social measures, which were then included in the survey questionnaire. A pilot study validated the research tool and semantically adjusted the questions in the questionnaire. In the actual study, respondents answered metric questions and substantive questions, using a five-point Likert scale. A purposive sampling method was adopted, selecting units for the research sample based on the following control characteristics: gender and year of birth². Invitations to participate in the actual study were accepted by 1960 adults residing in the Świętokrzyskie Voivodeship, and data from 801 respondents were qualified for analysis. The structure of the research sample is presented in Table 1.

Respondents' data were acquired through the use of: pen-and-paper personal interviews (PAPI), computer-assisted web interviews (CAWI), and computer-assisted telephone interviews (CATI). The study was conducted in two-time intervals: December 2019 – February 2020 and November 2020 – March 2021 (with a break due to the outbreak of the COVID-19 pandemic).

Feature	Feature	e values	Number of respondents in the survey sample (N)	Share of respondents in the survey sample (%)
Gender and age	Men	~18 24)	109	14
	Women	<18–34)	105	13
	Men	<35–54)	135	17
	Women		129	15
	Men (55 1)	142	18	
	Women	(55 and more)	181	23
Education	Primary		38	5
	Basic vocational		82	10
	Moderate		345	43
	Higher		336	42
Professional	Business owner		64	8
status	Employee not in a managerial position		122	15
	Employee in a man	agerial position	305	38
	Pupil/student		57	7
	Retiree/pensioner		177	22
	Unemployed		76	9
Material	Very good		43	6
situation	Good		324	40
	Average		366	46
	Bad		59	7
	Very bad		9	1
Total			801	100

Table 1. Research sample characteristics

Source: own study.

The data obtained from respondents underwent a process of cleaning and coding. Various elements of descriptive statistics and frequency analysis were utilized for their analysis. To examine the normality of the data distribution, the Shapiro-Wilk test for

² In the study, data regarding the age structure of respondents were aggregated into three intervals, and this determination was aided by conducting preliminary data analyses.

normality was employed. Non-parametric tests for one-way analysis of variance, specifically the Kruskal-Wallis (H) test, were used to determine the statistical significance of the diversity of the variables under investigation. For the mentioned tests, a significance level α of 0.05 was adopted.

The use of data mining techniques, specifically association analysis, allowed for exploratory discovery of relationships between the financial situation of customers and their willingness to pay a higher price for products labeled with an eco-label or social symbol. This method facilitated the detection of patterns and rules governing the set of analyzed data (Larose, 2006) and identified relationships between co-occurring elements. These relationships are described using association rules in the form "if antecedent, then successor." The rules have specific quality measures: support calculated according to formula 1 (the percentage of customer responses in which the antecedent and successor of the rule occurred relative to the total number of respondents) and confidence calculated according to formula 2 (determining the conditional probability of choosing the successor if the antecedent is chosen).

 $support (antecedent \rightarrow successor) =$ $= \frac{number of responses in which the predecessor and successor occurred}{number of respondents in the dataset}$ (1) $= \frac{support (antecedent \rightarrow successor) =}{support (antecedent \rightarrow successor)}$ $= \frac{support (antecedent \rightarrow successor)}{number of responses from respondents in which the predecessor occurred}$

All calculations were conducted using the Statistica 13.3 software and the interactive programming environment YupiterLab.

4. PRESENTATION OF RESEARCH RESULTS

4.1. Knowledge of social and ecological symbols

Ecolabels and social symbols are expressions of businesses' engagement in initiatives aimed at helping solve environmental and social issues.

The results of the conducted analysis of customer responses are presented in Chart 1.

Among ecological symbols, the most recognized turned out to be the *Do not litter* symbol, with 37% of respondents declaring familiarity. The least known symbols were the *EU Ecolabel* (7%) and the *Green Dot* (13%). Regarding social symbols, the most well-known ones are those placed on alcoholic beverages: *I never drink and drive* (55%) and *Alcohol Only for Adults* (48%), while the least known is *Mom, Dad, I prefer water*! (22%). The visible, significant disparity in the recognition of these two types of symbols confirms hypothesis 1.

(2)

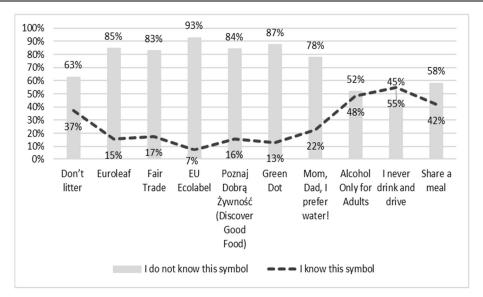


Chart. 1. Knowledge of ecological and social symbols Source: own study.

It can be observed that the four most recognized symbols are primarily characterized by having non-symbolic names, directly conveying their essence. The names of two of them take the form of imperative mode, and the other two provide a very clear and specific message to anyone encountering such a symbol. Unambiguous names that do not require customers to search for information about the meaning of the symbol undoubtedly contribute to their more frequent recognition and association with specific issues that businesses want to highlight/address. Therefore, familiarity with these symbols may stem from the specificity and simplicity of their nomenclature, which helps identify them with specific behaviors or measures.

4.2. Knowledge of ecological and social symbols as a determinant of customer purchasing behavior

To determine whether there is a statistically significant relationship between purchasing products from entities undertaking pro-environmental and pro-social initiatives and whether customers are familiar with ecological and social symbols, further analyses and tests were conducted. Given that the examined variables do not have a normal distribution (Shapiro-Wilk test statistic W ranged between 0.801-0.808; p=0.000), the relationship between them was assessed using non-parametric tests.

Firstly, a synthetic indicator reflecting the number of symbols known was created for each respondent. For ecolabels, it took integer values <0-6>, and for social symbols, <0-4>. Subsequently, significance tests for one-way analysis of variance Kruskal-Wallis were conducted to examine whether the indicator value differentiates customer purchasing behaviors. The test statistic values confirmed that knowledge of ecolabels significantly differentiates the frequency of customers purchasing products from entities setting environmental goals: doing more than the law requires for the environment (H=14.609; p=0.023), the use of eco-certified raw materials in the production process, even if they are more expensive than non-certified raw materials (H=26.833; p=0.002), taking measures to reduce the consumption of resources and energy (H=21.851; p=0.013). The relationships between the examined variables are presented in Table 2.

	Indicator of knowledge of ecological symbols						
Measure / Frequency of making purchases	0	1	2	3	4	5	6
Doing more than the law requires for the environment							
Never or rarely	27%	22%	20%	17%	14%	0%	11%
Sometimes	45%	48%	51%	30%	43%	54%	47%
Often or always	28%	30%	29%	53%	43%	46%	42%
The use of eco-certified raw materials in the production process, even if they are more expensive than non-certified raw materials							
Never or rarely	33%	25%	24%	20%	7%	0%	0%
Sometimes	38%	46%	36%	30%	43%	45%	44%
Often or always	28%	30%	40%	50%	50%	55%	56%
Taking measures to reduce the consumption of resources and energy							
Never or rarely	24%	23%	18%	12%	7%	8%	11%
Sometimes	47%	41%	40%	33%	43%	37%	22%
Often or always	29%	36%	42%	55%	50%	55%	67%

Table 2. Frequency of customers purchasing products from entities undertaking environmental initiatives, and the indicator of knowledge of ecolabels

Source: own study.

Based on the data presented in Table 2 and the heat maps included in it, it can be concluded that the knowledge of ecolabels positively influences the frequency of customers purchasing products from entities implementing pro-environmental measures. This is evidenced by the fact that as the knowledge of ecolabels increases, the percentage of customers who claim to never or rarely buy products from companies implementing these initiatives generally decreases. At the same time, the percentage of customers who respond by indicating that they often or always purchase goods from such entities increases. These relationships are most pronounced in the case of the second and third analyzed measures. In the case of the first recycled asphalt pavement, related to companies setting proenvironmental tasks beyond legal requirements, this dependence is somewhat less pronounced. The percentage of customers who never or rarely buy products from companies voluntarily imposing more restrictive commitments towards the environmentexcept for one exception - decreases as the knowledge of ecolabels increases. However, the percentage of responses indicating that customers often or always buy products from such entities only increases until the indicator reaches a value of 3. Afterward, the relationship between the variables reverses, but the percentage of responses indicating that respondents often or always buy products from entities taking these measures remains high.

It can be concluded that customers familiar with ecolabels have a higher propensity to purchase products from companies with environmental goals than those who are completely unfamiliar with ecolabels. Therefore, the truth of the second research hypothesis should be confirmed.

The impact of companies' pro-social activities on the purchasing behavior of customers does not statistically significantly differentiate whether customers are familiar or unfamiliar with social symbols. This is evidenced by the values of statistical test statistics, which are as follows for individual measures: counteracting social problems (H=9.360; p=0.067), free-of-charge performance of works/services for the benefit of the local community (H=14.826; p=0.060), material support for people in need and charities (H=5.061; p=0.281). This means that the recognition of social symbols placed on the product or its packaging is not a statistically significant determinant of the decision to purchase that product. Customers who are unfamiliar with social symbols altogether or know one or more of them buy products from companies with social goals with a similar frequency. The obtained results of testing allow for the falsification of the third hypothesis.

In light of the above considerations, it can be stated that social symbols, despite their higher recognizability, have a weaker impact on shaping the purchasing behavior of customers than ecological symbols. This may be because social symbols are not subject to the certification process. It legitimizes the pro-social activity of a given company in the eyes of customers. It is also essential that social symbols can be arbitrarily created in companies and are only carriers of information for customers, unverified by an external or certifying entity.

4.3. Willingness of customers to pay a higher price for a product with an eco-symbol or social symbol

The association rules generated in the YupiterLab programming environment allowed for the falsification of the fourth hypothesis suggesting that customers with a very good financial situation are most often characterized by a willingness to pay a higher price for a product with an ecolabel or social symbol. Among the association rules with specified quality measures (min. support=0.2; min confidence=0.5), none appeared involving customers with a very good financial situation. Among all the rules, those with the highest quality measures related to the financial situation of customers were selected (Table 3).

The conducted association analysis provides knowledge that just over half of customers with a good financial situation most often exhibit a willingness to pay a higher price for a product with a social symbol (Rule 1). 69% of them may pay more for a product with an ecolabel (Rule 2). It is worth emphasizing that as many as 50% of this group of customers simultaneously declared their willingness to incur a higher cost of purchasing both a product labeled with an ecolabel and a social symbol (Rule 3).

The statement that customers evaluating their financial situation as good more often than the entire surveyed population declare a willingness to incur a higher cost of purchasing products with an ecolabel and a social symbol is confirmed by higher confidence measures of association rules 4 and 6 compared to rules 5 and 7.

No.	Antecedent	Successor	Quality measures of the rule
1	Good financial situation	I am willing to pay a higher price for a product with a social label	confidence: 0.546 support: 0.221
2	Good financial situation	I am willing to pay a higher price for a product with an eco-label	confidence: 0.688 support: 0.278
3	Good financial situation	I am willing to pay a higher price for a product with an eco-label; I am willing to pay a higher price for a product with a social label	confidence: 0.503 support: 0.203
4	Good financial situation; I am willing to pay a higher price for a product with a social label	I am willing to pay a higher price for a product with an eco-label	confidence: 0.920 support: 0.203
5	I am willing to pay a higher price for a product with a social label	I am willing to pay a higher price for a product with an eco-label	confidence: 0.901 support: 0, 435
6	Good financial situation; I am willing to pay a higher price for a product with an eco-label	I am willing to pay a higher price for a product with a social label	confidence: 0.730 support: 0.203
7	I am willing to pay a higher price for a product with an eco-label	I am willing to pay a higher price for a product with a social label	confidence: 0.685 support: 0, 435

Source: own study.

4.4. Purchasing behavior of customers of different ages

To verify the validity of the fifth hypothesis regarding the relationship between the age of customers and the frequency of purchasing products from companies implementing pro-social and pro-environmental activities, a Kruskal-Wallis ANOVA test was conducted. The results of the testing are presented in Table 4.

Table 4. Purchasing behavior and the age of customers

Working		Values of test statistics
al	Doing more than the law requires for the environment	H=18.663 p=0.001
Pro-social	Taking measures to reduce the consumption of resources and energy	H=3.171 p=0.204
Pr	The use of eco-certified raw materials in the production process, even if they are more expensive than non-certified raw materials	
dly	Counteracting social problems	H=25.060 p=0.000
Eco-friendly	Free of charge performance of works/services for the benefit of the local community	H=11.306 p=0.003
	Material support for people in need and charities	H=0.499 p=0.779

Legend – Bold values of test statistics indicate the result of a statistical test to reject Ho. Source: own study. For one environmental measure and two socially responsible measures towards society, a statistically significant relationship between the age of customers and their purchasing decisions was observed. Upon closer analysis of the data (see chart 2), it can be noted that the company's environmental measures beyond legal requirements often or always motivate 30% of customers in the youngest age group to make a purchase, while in the other age groups, this percentage averages at 19.5%. Additionally, 22% of individuals under the age of 35 declare that engaging in the mentioned measure rarely or never leads to the purchase of a product from an entity implementing it. For other customers, this percentage is higher, averaging at 35%. Therefore, it can be concluded that the discussed socially responsible measure more frequently influences the purchasing behavior of individuals under the age of 35 than older customers.

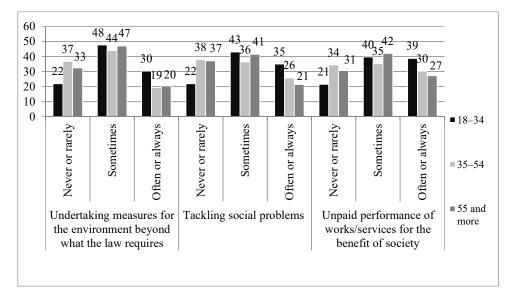


Chart 2. Impact of implementing proceological and environmental measures on the purchasing behavior of customers of different ages.

Source: own study.

Similarly to the measure described above, purchasing behaviors of customers of different ages are influenced by the company's efforts to address social issues. Often or always, under the influence of such measures, 35% of individuals under the age of 35 decide to purchase goods from entities implementing them, while only 23.5% of older customers cite this as a reason for making a purchase. A noticeable disproportion can also be observed in the responses of customers declaring that the company's measures aimed at solving social problems rarely or never shape their purchasing behaviors. This response was least frequently indicated by those under the age of 35 (22%). On average, 37.5% of older customers rarely or never buy products from entities addressing societal issues.

Performing unpaid work for society by a company very often leads to the purchase of its products by customers under 35 (39%). The percentage of responses suggesting that customers very often purchase goods from entities undertaking such measures is lower both in the 35-54 age group (30%) and among respondents aged 55 and over (27%).

The data presented in Figure 2 allows us to conclude that socially responsible measures benefiting society and the silent stakeholder of companies – the environment – most often shape the purchasing decisions of the young customer segment, up to 35 years old. The higher sensitivity to social and environmental issues among customers under 35 may be due to the fact that they are largely individuals undergoing education or have recently completed their education – these issues are often the subject of consideration during university courses. The research results partially confirm hypothesis 5. It holds true for three out of the six socially responsible measures included in the study.

5. SUMMARY AND CONCLUSIONS

The number of alternative products on the market that cater to the same needs of customers is increasing. Companies can offer a product very similar to those offered by competitors with relatively low costs. This makes the properties and characteristics of products (e.g., appearance, quality) not necessarily crucial in shaping customers' purchasing decisions. What becomes crucial is what the customer gets along with the product – satisfaction, a sense of participation in solving social and environmental problems.

Knowledge about customers' buying behaviors is important for companies planning their actions based on it. The research results presented in this work provide new knowledge to economic entities that want to influence customers' purchasing decisions through the implementation of pro-social and pro-environmental measures.

The study results demonstrated that social symbols are significantly better recognized by customers than ecological symbols. Nevertheless, companies placing these symbols on their products should make efforts to increase their recognition to build trust among customers towards the branded products over the long term and strengthen their attachment and loyalty to specific goods or brands. A way to increase the visibility of ecological and social symbols is to provide concise, textual information about them directly on the product or its packaging. This will contribute to spreading knowledge about the symbols, especially in the case of eco-labels, resulting in an increase in the sales volume of products labeled with them. Customers, especially those sensitive to social and environmental issues, will perceive them as superior to unlabeled goods, may trust them more (especially in the case of certified symbols), and feel a stronger need to purchase them.

Companies should formulate names for symbols that convey information about their socially responsible measures in a way that is simple and directly related to the essence of these measures, even at the expense of the conciseness of the symbol's name. Names should allow customers to intuitively understand what they represent. In the case of social symbols, this is facilitated by the fact that they are not subject to certification, and their names depend on the creative ingenuity of companies. On the other hand, business entities wanting to place certified ecological symbols on products are deprived of the freedom to name them. Companies can create individual marks, which, despite voluntarily imposed restrictions by the company, will not have confirmation of their compliance with external certifying bodies in the eyes of customers.

Customers with a good financial situation are most often willing to pay a higher price for a product marked with an eco-label or a social symbol. Both in this group and among all customers, a greater willingness to incur a higher purchase cost with an eco-label than a social symbol was declared more frequently. For companies, this means that they should shape the pricing policy of products with an ecological and social designation differently. Higher prices for eco-labeled products will probably be accepted by a larger proportion of customers than in the case of products with a social symbol. However, providing customers with credible and verifiable information about the product is a condition, as demonstrated by research (Sołtysiak, Zając, 2022). Therefore, in the case of the latter goods, the pricing policy should be determined more cautiously.

The involvement of companies in measures related to addressing social problems; performing unpaid work/services for society; undertaking pro-environmental activities beyond those required by law most often influences the buying behaviors of the youngest customer segment (up to 35 years old). The effectiveness of influencing the buying behaviors of individuals under 35 through the implementation of pro-social and pro-environmental tasks is higher than in other customer segments.

Companies can strengthen the relationship between implementing these initiatives and customer purchasing decisions by conducting extensive and comprehensive informational campaigns on this topic. This will inform and reassure customers that the company sets social and environmental goals that it strives to achieve. It is essential to present credible, verifiable data on the achieved effects. However, it may be necessary to adapt communication tools to the preferences of customers from different age groups, performing different social roles, to increase the chances of influencing their purchasing decisions.

Conclusions drawn from the conducted research are of an applied nature. They can contribute to the development of companies by increasing the efficiency of using resources for the implementation of socially responsible tasks, which is extremely important given the limited resources. Companies can implement those measures that most strongly influence customers' purchasing behaviors. Additionally, by implementing the recommendations presented in this work, companies can more effectively influence their buying behaviors by adapting marketing messages to the level of knowledge, e.g., about eco-labels and social symbols. Ultimately, this may translate into an improvement in sales volume and an increase in profits achieved.

Research and practical limitations:

One should be aware of the limitations in generalizing the conclusions from the study described in this work. The research was conducted in one of the voivodeships in Poland; therefore, caution should be exercised when making generalizations about the conclusions presented in the dissertation, even in relation to customers living in regions with similar economic, social, and political situations. However, the research methodology presented in this work has a universal character and can be used to conduct studies in other geographical regions.

REFERENCES

- Ahmad, W., Jafar, R.M.S., Waheed, A., Sun, H., Kazmi, S.S.A. (2023). Determinants of CSR and green purchase intention: Mediating role of customer green psychology during COVID-19 pandemic. "Journal of Cleaner Production", Vol. 389. DOI: 10.1016/ j.jclepro.2023.135888.
- Bastounis, A., Buckell, J., Hartmann-Boyce, J., Cook, B., King, S., Potter, C., Bianchi, F., Rayner M., Jebb S.A. (2021). The Impact of Environmental Sustainability Labels on Willingness-to-Pay for Foods: A Systematic Review and Meta-analysis of Discrete Choice Experiments. "Nutrients", Vol. 13. DOI:10.3390/nu13082677.
- Bojanowska, A., Kulisz, M. (2020). Polish Consumers' Response to Social Media Eco-Marketing Techniques. "Sustainability", Vol. 12, No. 21/2020. DOI: 10.3390/ su12218925.

Bowen, H.R. (1953). Social Responsibilities of the Businessman. New York.

- Brajer-Marczak, R., Piwowar-Sulej, K. (2023). Green human resource managementas an element of green businessprocess management. "Humanities and Social Sciences", Vol. 30, No. 3. DOI: 10.7862/rz.2023.hss.23.
- Čerkasov, J., Huml, J., Vokáčová, L., Margarisová, K. (2017). Consumer's attitudes to corporate social responsibility and green marketing. "Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis", Vol. 65, No 6. DOI: 10.11118/actaun 201765061865.
- Cho, J., Hu, H. (2009). The effect of service quality on trust and commitment varying across generations. "International Journal of Consumer Studies", Vol. 4. DOI: 10.1111/j.1470-6431.2009.00777.x.
- de-Magistris, T., Gracia, A. (2016). Consumers' willingness-to-pay for sustainable food products: the case of organically and locally grown almonds in Spain. "Journal of Cleaner Production", Vol. 118. DOI: 10.1016/j.jclepro.2016.01.050.
- Duckworth, J.J., Randle, M., McGale, L.S., Jones, A., Doherty, B, Halford, J.C.G., Christiansen, P. (2022). Do front-of-pack 'green labels' increase sustainable food choice and willingness-to-pay in U.K. consumers? "Journal of Cleaner Production", Vol. 371. DOI: 10.1016/j.jclepro.2022.133466.
- Eisingerich, A.B., MacInnis, D.J., Park, C.W. (2023). Do CSR efforts that focus on helping the environment influence brand purchase more than other forms of CSR? "Journal of Business Research", Vol. 168. DOI: 10.1016/j.jbusres.2023.114240.
- Fotopoulos, C., Krystallis, A. (2002). Purchasing motives and profile of the Greek organic consumer: a countrywide survey. "British Food Journal", Vol. 104. DOI: 10.1108/ 00070700210443110.
- Siuda, D. (2022). The Role of Sustainable Consumption and Green Marketing in Consumers' Purchase Decisions in the SMART Era. "Management Issues", Vol. 20, No. 2. DOI: 10.7172/1644-9584.96.11.
- Gallardo-Vazquez, D., Sanchez-Hernandez, M.I. (2014). Measuring corporate social responsibility for competitive success at a regional level. "Journal of Cleaner Production", Vol. 72. DOI: 10.1016/j.jclepro.2014.02.051.
- Green, T., Peloza, J. (2011). How does corporate social responsibility create value for consumers? "Journal of Consumer Marketing", Vol. 21, No. 16. DOI: 10.1108/ 07363761111101949.
- Habel, J., Schons, L.M., Alavi, S., Wieseke, J. (2016). Warm Glow or Extra Charge? The Ambivalent Effect of Corporate Social Responsibility Activities on Customers' Perceived Price Fairness. "Journal of Marketing", Vol. 80. DOI: 10.1509/jm.14.0389.
- Kabaja, B., Wojnarowska, M., Cesarani, M.Ch., Varese, E. (2022). Recognizability of ecolabels on E-commerce websites: the case for younger consumers in Poland. "Sustainability", Vol. 14, No. 9. DOI: 10.3390/SU14095351.
- Kiliańska, K., Krechowicz, M. (2021). Risk and opportunity assessment model for CSR initiatives in the face of coronavirus. "Sustainability", Vol. 13, No. 11. DOI: 10.3390/ su13116177.
- Kraus, S., Cane, M., Ribeiro-Soriano, D. (2022). Does doing good do well? An investigation into the relationship between consumer buying behavior and CSR. "Economic Research-Ekonomska Istraživanja", Vol. 35. DOI: 10.1080/1331677X.2021.1970605.
- Kurowski, Ł., Rutecka-Góra, J., Smaga, P. (2022). Is knowledge on climate change a driver of consumer purchase decisions in Poland? The case of grocery goods and green banking. "Journal of Cleaner Production", Vol. 369. DOI: 10.1016/j.jclepro.2022.133444.

- Lakatos, E.S., Nan, L.M., Bacali, L., Ciobanu, G., Ciobanu, A.-M., Cioca, L.-I. (2021). Consumer Satisfaction towards Green Products: Empirical Insights from Romania. "Sustainability", Vol. 13, No. 19. DOI: 10.3390/su131910982.
- Larose, D.T. (2006). Odkrywanie wiedzy z danych. Wprowadzenie do eksploracji danych. Warszawa: PWN.
- Majer, J.M., Henscher, H.A., Reuber, P., Fischer-Kreer, D., Fischer, D. (2022). The effects of visual sustainability labels on consumer perception and behavior: A systematic review of the empirical literature. "Sustainable Production and Consumption", Vol. 33. DOI: 10.1016/j.spc.2022.06.012.
- Nguyen-Viet, B. (2022). Understanding the Influence of Eco-label, and Green Advertising on Green Purchase Intention: The Mediating Role of Green Brand Equity. "Journal of Food Products Marketing", Vol. 28, No. 2. DOI: 10.1080/10454446.2022.2043212.
- Rossi, C., Rivetti, F. (2020). Assessing Young Consumers' Responses to Sustainable Labels: Insights from a Factorial Experiment in Italy. "Sustainability", Vol. 12, No. 23. DOI: 10.3390/su122310115.
- Samant, S.S., Seo, H.S. (2016). Quality perception and acceptability of chicken breast meat labeled with sustainability claims vary as a function of consumers' label-understanding level. "Food Quality and Preference", Vol. 49. DOI:10.1016/j.foodqual.2015.12.004.
- Shauki, E. (2011). Perceptions on corporate social responsibility: A study in capturing public confidence. "Corporate Social Responsibility and Environmental Management", Vol. 18, No. 3. DOI: 10.1002/csr.267.
- Sołtysiak, M., Zając, D. (2022). Information as a factor in consumer demand for organic food. "Humanities and Social Sciences". Vol. 29, No. 2. DOI: 10.7862/rz.2022.hss.12.
- Tkach, A. (2019). The role of emotions in economic desion-making. "Humanities and Social Sciences", Vol. 26, No. 2. DOI: 10.7862/rz.2019.hss.21.
- Vicente-Molina, M.A., Fernández-Sáinz, A., Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting proenvironmental behaviour: Comparison of university students from emerging and advanced countries. "Journal of Cleaner Production", Vol. 61. DOI: 10.1016/j.jclepro.2013.05.015.
- Waheed, A., Shehzad, F., Arif, F., Abbas, A.A., Mehmood, Z., Usman, M. (2022). Role of CSR in achieving customers' satisfaction and retention during COVID-19 and post-pandemic period: empirical evidence from emerging nations. "Human Systems Management". DOI: 10.3233/HSM-211564.
- Wójcik, P. (2014). The efects of corporate social responsibility initiatives and price premiums on polish consumers' responses: An experimental study. "International Journal of Management and Economics", Vol. 38, No. 1. DOI: 10.2478/ijme-2014-0016.
- Yang, J. (2023). The implementation of corporate social responsibility (CSR) by dhl and sf-express: a comparative analysis in Germany and China. "Humanities and Social Sciences". Vol. 30, No. 3. DOI: 10.7862/rz.2023.hss.37.
- Youn, S., Kim, H. (2008). Antecedents of consumer attitudes toward cause-related marketing. "Journal Advertising Research", Vol. 48. DOI: 10.2501/S0021849908080136.
- Yu, W., Han, X., Ding, L., He, M. (2021). Organic food corporate image and customer co-developing behavior: The mediating role of consumer trust and purchase intention. "Journal of Retailing and Consumer Services", Vol. 59. DOI: 10.1016/j.jretconser. 2020.102377.
- Zalega, T. (2012). Konsumpcja w wielkomiejskich gospodarstwach domowych w Polsce w okresie kryzysu finansowo-ekonomicznego. Warszawa: Wydawnictwo Naukowe Wydziału Zarządzania Uniwersytetu Warszawskiego.