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Sustainability in Czech Consumers' Purchasing Decisions: Motivation, Barriers, and Trust in Certification

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Abstract: Interest in sustainable products has increased in recent years, yet significant barriers still limit their broader adoption. This study examines how sustainability influences purchasing behaviour among Czech consumers, identifies key drivers of sustainable product selection, and explores barriers to their wider use. Data were collected through a 2025 survey of 449 respondents, followed by a focus group to deepen understanding of consumer attitudes. Findings show that sustainability is perceived as important but not decisive in purchasing decisions. Product quality, price, and health safety have a stronger influence. Awareness of environmental and ethical certifications remains low; consumers often do not understand them, question their credibility, or find them too complex. These insights are relevant for both theory and practice, particularly in marketing communication, retail, and commerce. Although sustainable consumption has been widely studied internationally, empirical research in the Czech Republic remains limited and fragmented. Existing studies often focus narrowly on specific products, population segments, or variables. There is a lack of comprehensive analysis of sustainability as a multidimensional factor and its interaction with trust, information sources, and perceived “green” costs. This study addresses this gap by providing new empirical evidence from the Czech context.

Keywords: sustainable consumption; purchasing behavior; decision-making; certification; barriers

JEL Classification: M31; D12; Q56

1. Introduction

In recent years, sustainability has become an increasingly important topic not only in political and environmental debates but also in the area of everyday consumption (Akenji & Bengtsson, 2014; Syed et al., 2024). In this study, sustainability is defined as the integration of environmental, social, and economic concerns in our production and use of goods with the goal of reducing our negative impacts on the environment and society while keeping our economic system viable in the long run. A sustainable product is therefore one that, in its entire life cycle, reduces negative impacts on the environment, maintains high ethical and social standards (for example, in terms of labor practices), and uses resources productively. From the consumer’s point of view, however, sustainability in a product is sometimes

subjective and cannot be solely based on objective criteria. For one consumer, sustainability might be based on their subjective experience or feeling about a product based on their observations of its packaging, country of origin, or claims by the manufacturer. For another consumer, sustainability in a product might be based on their perception that it is certified by an organization that promotes environmental or ethical practices. The study will look into both perspectives: the actual product that consumers buy might be based on their subjective experience of sustainability as well as their trust in certification schemes. Although sustainability is often presented as a key value that should influence consumer decisions, actual consumer purchasing behavior often paints a different picture (Rausch & Kopplin, 2021). The literature consistently highlights the discrepancy between declared attitudes and actual purchasing of sustainable products (Munro et al., 2023; Sharma et al., 2023). Although people declare an interest in sustainable lifestyles, when it comes to shopping, they often make decisions based on price, availability, habit, or ignorance (Hoffmann et al., 2025; Tawde et al., 2023). In recent studies, barriers are also operationalized as "green costs" and as cognitive (involving the understanding of information) and transactional (involving time/effort) costs (Feuß et al., 2022; Majer et al., 2022). The concept of “green costs” provides a better understanding of what prevents consumers from making a purchase that is sustainable in nature. These green costs are not only associated with higher prices but are also a function of cognitive cost, where consumers try to make sense of the label, claims, and certifications; transaction cost, where consumers need to search and find products; and psychological cost, where consumers experience a degree of uncertainty or doubt in relation to green claims. Barriers, in this context, are associated with the perceived green cost, and if the green cost is high, sustainability will not drive the purchase decision. From a trust perspective, it is essential that eco-labelling can only work if it is perceived as credible (Gorton et al., 2021; Khachatryan et al., 2021). Current research highlights the risk of "greenwashing perceptions" and the fact that vague or poorly substantiated messages can undermine trust (Zioło et al., 2024). There is growing mistrust and concern about "greenwashing," which can diminish the value of environmental claims in consumer decision-making (Fella & Bausa, 2024; Gorton et al., 2021; Koch & Denner, 2025; Santos et al., 2024; Xiang et al., 2024). Customers often do not understand the significance of certifications, are unsure of their credibility, or consider them too complicated. Practical implications, therefore, point towards improved accessibility, comprehensibility, and transparent communication at the point of sale (Bashir, 2022).

Consumers are not a homogeneous group. Their perceptions of sustainability, willingness to change their purchasing habits, and trust in certifications or labels vary significantly. According to the literature, the factors contributing to the phenomenon of green or sustainable purchasing are varied, and sociodemographic factors only contribute to a part of the explanation. In the literature on green or sustainable purchasing, gender, age, education, and income are found to be significant factors. Women and more educated consumers are found to exhibit higher pro-environmentalism and green product purchase tendencies (Sharma et al., 2023). However, the impact of age is found to vary depending on the product category and the country. Nevertheless, it has been found that sociodemographic

factors do not entirely explain green purchasing behavior, as other factors like values, environmental concern, perceived consumer effectiveness, and consumer trust are found to be more significant predictors. Moreover, the impact of sociodemographic factors tends to become insignificant once the impact of attitude and knowledge is taken into consideration (Cook et al., 2023). In other words, researchers now consider consumer segments to be varying not only according to "who they are" but also according to "how they process the information"—the way they process the information, including their ability to interpret the label and their susceptibility to greenwashing concerns (Bastounis et al., 2021). Another important factor affecting the heterogeneity is the product category. This means that the way consumers respond to sustainability cues and their willingness to pay a higher price for a product varies depending on the product category. In the food product category, the impact of sustainability cues like the label "organic" or "eco-friendly" has been found to be significant in several studies. According to recent findings on the impact of environmental sustainability claims in food products in several countries, the impact of trust and willingness to pay varies depending on the claim type and product category. This shows that sustainability is not a single cue but a complex decision driver in consumer purchase decisions. In other words, the importance of sustainability and the impact of sustainability cues like the label "sustainable product" on consumer purchase decisions vary depending on the product category (Grunert et al., 2014). This selective approach suggests that sustainability only becomes a priority for most customers if it does not require a fundamental change in their purchasing habits or significant effort. It is therefore necessary to acknowledge that the key barriers, in particular, include higher prices, distrust of environmental claims and certifications, limited availability, and a lack of information (Dong et al., 2022; Ladwein & Sánchez Romero, 2021; Munro et al., 2023). Current research shows that the effectiveness of labelling and certification depends on the form of visual stimuli, the amount of information, and the context of purchase (Dorisse et al., 2025; Hoffmann et al., 2025; Majer et al., 2022; Piracci et al., 2024; Weber, 2021).

This article aims to empirically assess the extent to which sustainability influences the purchasing decisions of Czech consumers and to identify key motivational factors and barriers to purchasing sustainable products, with a particular emphasis on trust in environmental and ethical certifications, awareness of them, and their relationship to the frequency of purchasing sustainable products based on a combination of a quantitative questionnaire survey and a qualitative focus group survey.

2. Methodology

The empirical part of the study is based on quantitative research, which involves testing statistical hypotheses and subsequent conditional probabilities, as well as qualitative research. The quantitative part was conducted using an online questionnaire survey. Data collection took place in the first half of 2025. The questionnaire was created and distributed via the Survio.cz platform, and then further disseminated through Facebook and Instagram. A total of N respondents initially participated in the survey. Based on a filter question assessing self-reported familiarity with the concept of sustainability, 52 respondents who

declared no knowledge of the concept were excluded from further analysis. The final analyzed sample therefore consisted of 499 respondents. All statistical analyses reported in this study are based on this final sample (N = 499). The filter question was included to ensure that subsequent answers to the sustainable buying behavior questions came from individuals who at least a basic understanding of what sustainability means. We used a simple self-reporting method to gauge this by asking the participants if they were at least familiar with the concept of sustainability. The rationale behind this was to exclude those who clearly have no understanding of the concept at all, as their understanding of sustainable products would be based on confusion or random interpretation. So, 52 respondents were excluded from the sample (9.4% of the initial sample). This was done to improve the internal validity of the results. As this research seeks to examine the relationship between buying frequency, trust in certification, and sustainability, at least a basic understanding of the concept was a precondition for answering the subsequent questions.

The study finally analyzed 499 responses. The composition of the group was also indicated by gender, age, educational level, and where they live. Women dominated the respondents at 61.12%, while men made up 38.88%. Most respondents belonged to the age bracket 21-25 years at 18.24%, followed by those aged 18-20 years at 16.83%. By educational level, those who completed secondary education and obtained a diploma were the majority at 47.09%, followed by those who completed their studies at the university at 22.24%. Regarding place of residence, 28.06% lived in municipalities under 2,000 inhabitants, 15.03% in municipalities with 2,000–4,999 inhabitants, 11.22% in municipalities with 5,000–9,999 inhabitants, 9.62% in towns with 10,000–19,999 inhabitants, 11.82% in towns with 20,000–49,999 inhabitants, 6.81% in towns with 50,000–99,999 inhabitants, and 17.43% in cities with more than 100,000 inhabitants.

The questionnaire contained 22 questions (14 substantive, six identification, one filter, and one supplementary). The substantive questions focused on respondents' attitudes toward sustainable shopping, their willingness to prefer sustainable products, and the factors that influence their decisions, including their perception of environmental and ethical certifications and their level of trust in them. Categorical responses were evaluated using absolute and relative frequencies. For responses on five-point scales, the mean, standard deviation, and median were calculated. Spearman's correlation coefficient was used to test hypotheses; the significance level was set at alpha = 0.05 (5%), and calculations were performed using TIBCO Statistica software. To decide whether to reject or not reject the null hypothesis, the p-value was compared with alpha = 0.05. Box plots showing the median and quartiles were used to clearly visualize the distribution of data and compare responses between categories.

Tested hypotheses:

H1: H0: There is no correlation between the frequency of purchasing sustainable products and the number of sources of information about the sustainability of these products monitored.

H2: H0: There is no correlation between the frequency of purchasing sustainable products and trust in sustainability certifications.

H3: H0: There is no correlation between the preference for purchasing products with environmental or ethical certifications and the assessment of their low availability in regular stores.

The Spearman coefficient was calculated based on the order of values. For each pair of values, the difference in order di is determined and the coefficient is determined by the relationship:

$$r_s = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n(n^2-1)} \quad (1)$$

where d_i = the difference between the order of values xi and yi of the corresponding correlation pairs

n = number of correlation pairs

To analyse differences between ratings of multiple categories within a single variable, a one-way analysis of variance for repeated measures was used. If the null hypothesis based on the F-statistics was rejected, a comparison between pairs of categories was performed using a post-hoc paired t-test. To avoid type I error accumulation in multiple testing, the Holm-Bonferroni correction was applied; p-values are ranked in ascending order and compared with the adjusted significance level.

Based on these absolute frequencies, relative frequencies were first calculated, i.e., the proportions of individual categories in the total sample. Subsequently, the conditional Probability was calculated for each combination of categories using the formula:

$$P(A|B) = \frac{P(A \cap B)}{P(B)} \quad (2)$$

where: $P(A \mid B)$ = Conditional probability. Indicates the probability that event A will occur if event B has already occurred.

B $P(A \cap B)$ = Joint probability of events A and B

$P(B)$ = Probability of occurrence of phenomenon B

A qualitative focus group survey was conducted on February 21, 2025. The focus group took place via the Microsoft Teams platform, lasting 60 minutes. Respondents were selected based on their voluntary interest expressed at the end of the questionnaire survey. Six participants aged 23 to 60 were included in the group. The discussion was conducted in a free-form manner and moderated according to pre-prepared questions, focusing on the perception of environmental and ethical certifications, motivations and barriers to purchasing sustainable products, and the overall relationship to the concept of sustainable consumption. The focus group consisted of six participants, which represents a small qualitative sample. The purpose of this component was not to confirm the quantitative findings through statistical generalization, but rather to provide exploratory insight into consumer reasoning, perceived barriers, and interpretations of sustainability-related concepts. The qualitative part was therefore designed as complementary to the quantitative survey, aiming to deepen understanding of patterns identified in the statistical analysis.

3. Results

The results of the quantitative part evaluate the relationships between the frequency of purchasing sustainable products, consumer information behavior, trust in certification, and perceived barriers. At the same time, differences in the importance of factors in purchasing decisions and differences in the importance of motivational factors for purchasing sustainable products were compared.

H1 (purchase frequency × number of information sources monitored): The P-value of Spearman's test was 0.002, lower than 0.05. The correlation coefficient reached 0.14. The result shows a weak positive correlation (Figure 1). The null hypothesis was rejected. Purchasing sustainable products more frequently is associated with monitoring more sources of information.

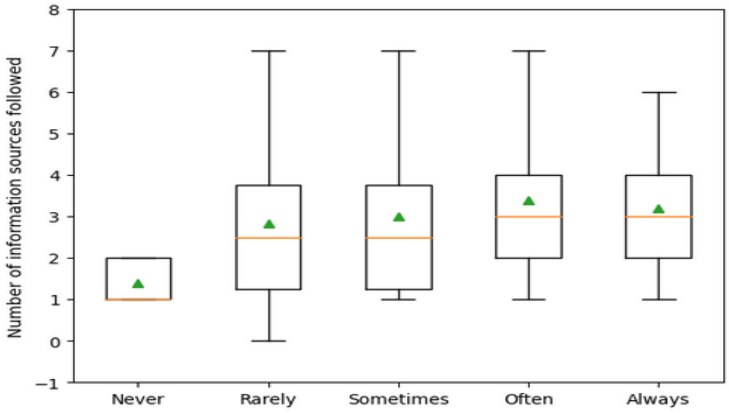

Figure 1. Frequency of purchase × number of monitored sources of information

H2 (purchase frequency × trust in sustainability certifications): Spearman's correlation coefficient reached 0.18, and the P-value was $p < 0.001$, lower than 0.05. The null hypothesis was rejected. A correlation between the frequency of purchasing sustainable products and trust in certifications was demonstrated (Figure 2). As trust increases, so does the frequency of purchasing.

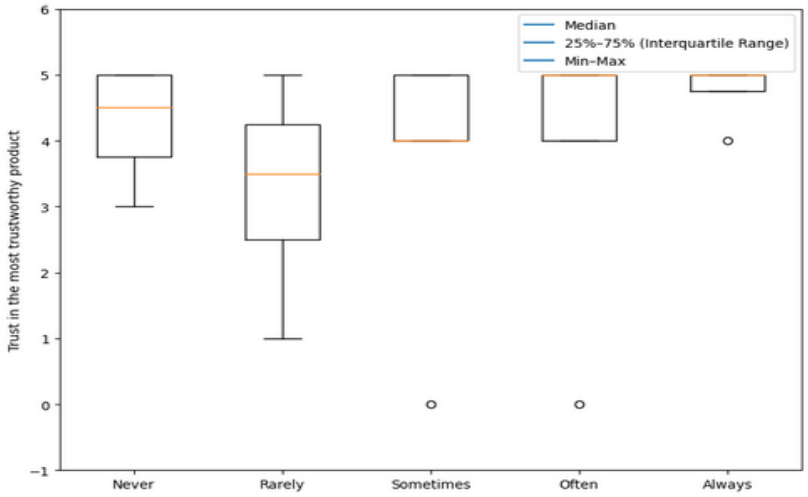

Figure 2. Purchase frequency × confidence in sustainability certifications

H3 (preference for certified products × low availability rating): The Spearman coefficient is 0.04 and the P-value is 0.496, which is higher than 0.05. The null hypothesis was not

rejected. At a significance level of 0.05, no dependence was found between the preference for certified products and the perceived low availability in regular stores (Figure 3).

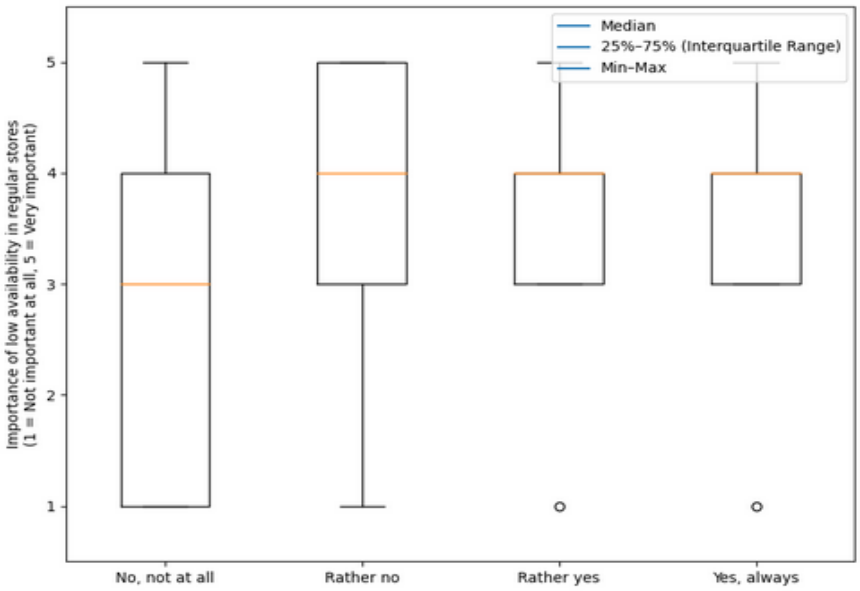

Figure 3. Preference for certified products × low availability rating

To better understand the relative importance of individual factors in purchasing decisions, a comparative analysis of mean evaluations was conducted. The results show that price and product quality remain the most influential criteria in consumer decision-making, while sustainability ranks lower in direct importance. Similarly, among motivational factors for purchasing sustainable products, product quality and health-related considerations were evaluated more strongly than broader environmental or ethical motivations. These findings suggest that sustainability-related attributes are evaluated in relation to traditional economic and quality-based considerations rather than independently dominating decision-making.

The qualitative part supplemented the results with information on barriers and uncertainty. Higher prices repeatedly emerged as the main barrier. Volume discounts or loyalty programs were mentioned as possible tools that could reduce the price difference compared to conventional options. The discussion emphasized the need for better communication and transparency. Respondents reported that they find it challenging to navigate the multitude of different labels and certificates and are unsure what exactly makes a product sustainable. Some of the statements also referred to the limited availability of sustainable products in smaller towns and villages.

The results indicate a correlation between purchase frequency, the number of monitored sources, and trust in certification. At the same time, it confirms that quality, safety, and price are more important than sustainability, and that brand is the least important factor in the context of regular purchases.

4. Discussion

The results show that Czech consumers continue to place the highest value on factors related to personal benefit (especially health/safety) and economic considerations (price)

when making purchasing decisions. Sustainability typically ranks behind these factors. This pattern corresponds to the fact that consumers are aware of sustainability, but when it comes to making actual choices, price, taste, convenience, and health often prevail (Van Bussel et al., 2022). In the food sector, it has also been repeatedly observed that "green" choices are more strongly supported when they are framed as beneficial to health (or "self-oriented" motivations; Gauthier et al., 2022). Our data also shows that a higher frequency of purchasing sustainable products is associated with more intensive information seeking (a higher number of sources monitored). However, this relationship is relatively weak, which is consistent with findings that the information environment can not only "empower" consumers, but also overwhelm them and increase uncertainty (Shahid et al., 2025). Although the correlations reached statistical significance, their strength remains weak according to conventional effect size interpretation thresholds. Therefore, sustainability-related information exposure and trust in certification appear to contribute to purchasing frequency only to a limited extent. Other factors such as price sensitivity and product quality likely play a more substantial role in decision-making.

As we consider these results from the perspective of the Czech Republic, it is helpful to consider the knowledge we already have from the results of the studies about sustainable consumption at the national level. In the Czech Republic, we know that people are aware of a great deal about sustainability and the environment, but their purchasing behavior is largely influenced by price and how good the product is. This was supported by the results from the CZSO (2023) survey for the year 2023. STEM/MARK (2022) also found that the situation is the same in the Czech Republic. Although the inhabitants of the Czech Republic talk positively about eco-friendly products, they are not willing to pay a higher price for them. According to the results from the Ministry of the Environment (2022), which were obtained in the year 2022, the level of trust in environmental labels is quite different among the inhabitants of the Czech Republic. As we found in our study, the level of trust in certification only weakly influences the frequency of purchase. In other words, certification by itself is not enough to change purchasing behavior without additional support from other factors. Further studies about the food habits of the inhabitants of the Czech Republic found that the sustainability of a product is important only in the case of health-related or locally produced products, such as organic or regional foods, but in other product categories, money is more important (STEM/MARK, 2022; CZSO, 2023). Our qualitative results support these findings. As we see, the results from the Czech Republic support the general results at the national level. In other words, sustainability is recognized as important by the inhabitants of the Czech Republic, but other factors, such as price sensitivity, trust in certification, and the complexity of the message, play a role as well.

Current literature suggests that a high number of claims and labels may lead to awareness only among a subset of the population. In contrast, others may resort to snap decisions or resignation (Torma & Thøgersen, 2024). Trust in certifications is linked in our results to a more frequent choice of sustainable products, which supports the interpretation that certifications act as a signal of trustworthiness and reduce transaction uncertainty (Boe-Lillegraven & Demmers, 2025). At the same time, however, qualitative findings suggest that

some consumers have an ambivalent attitude toward certifications and feel uncertain about "what is truly sustainable" and what standards certifications guarantee. This picture aligns well with experimental findings that while education can enhance the ability to identify greenwashing, it can also reinforce general skepticism, even toward legitimate messages. This is particularly true for lesser-known brands (Timmons et al., 2024). Similarly, studies focusing on greenwashed advertising show that consumers adopt defensive strategies (avoiding claims, questioning the company's motives) that reduce their willingness to act on environmental messages (Matthes et al., 2025). Price barriers appear to be significant in our research and correspond well with the fact that the "green" premium and price sensitivity are key moderators of behavior, in categories where consumers can easily compare alternatives (Chen et al., 2024). At the same time, evidence from the real online environment suggests that ecolabels can increase the likelihood of purchase, and that price signals (premiums/discounts) can further influence the effect of ecolabels (Feuß et al., 2022). This is important for interpreting our findings. The price barrier may not indicate a lack of interest in sustainability, but rather sustainability is conditional on price acceptability and understandable information. Interestingly, the perceived low availability of sustainable products did not emerge in our data as a factor that systematically explained the preference for certified products. One possible explanation is that in the context of regular retail offerings, consumers do not perceive availability as a primary barrier as long as they can make decisions based on price, habit, and trust in simple signals (e.g., certification) (Boncompagni et al., 2025). At the same time, some of the barriers are cognitive rather than logistical. Consumers can find the product, but they do not believe the claims or understand the differences between labels (Shahid et al., 2025). In addition, it appears that knowledge of certifications and the ability to interpret them are uneven, and this discrepancy significantly influences whether certification strengthens trust or, conversely, arouses suspicion (Sparacino et al., 2025). In a broader context, the results can be interpreted as indicating that certifications have the potential to reduce information asymmetry, provided they are stable, comprehensible, and perceived as independent (Aminravan et al., 2025). Furthermore, regulatory developments in the EU directly target the issue of unsubstantiated environmental claims and have the potential to strengthen consumer confidence through requirements for substantiation and verification (European Commission, 2023; Council of the EU, 2024). At the same time, however, uncertainty surrounding the legislative process may fuel continued public skepticism, as the topic of greenwashing remains highly visible in the media and political debate. In terms of implications, our results support an emphasis on transparent and verifiable rules for claims and certifications, and on communication that links sustainability to the motives that consumers value most highly (health/safety, price, quality; Van Bussel et al., 2022).

Overall, the findings suggest that sustainability-related factors are associated with purchasing behavior among Czech consumers; however, their influence appears limited in magnitude. Although statistically significant relationships were identified between purchase frequency, information exposure, and trust in certification, the observed correlations were weak, indicating modest practical effect sizes. This implies that sustainability functions as a

complementary rather than dominant purchasing criterion. Traditional factors such as price and perceived quality remain more influential in everyday decision-making. Therefore, while sustainability represents a relevant dimension of consumer behavior, its impact should be interpreted with caution and understood within the broader context of competing economic and cognitive considerations.

5. Conclusion

This study examined the role of sustainability in the purchasing decisions of Czech consumers using a mixed-method approach. The results indicate that sustainability-related factors, including exposure to information and trust in certification, are statistically associated with purchase frequency. However, the identified relationships were weak in strength, suggesting limited practical impact. Sustainability therefore appears to represent one of several considerations influencing purchasing decisions rather than a dominant determinant. Economic factors such as price and perceived product quality remain central in shaping consumer behavior. The focus group discussion identified three dominant themes: (1) price sensitivity as a primary barrier to sustainable purchasing, (2) uncertainty and confusion regarding certification schemes, and (3) perceived trade-offs between convenience and sustainability. Participants repeatedly emphasized that sustainability becomes relevant primarily when price differences are moderate and when information is clearly communicated. Trust in certification was described as conditional upon familiarity and perceived credibility of the label. These findings complement the quantitative results by illustrating how economic and informational factors interact in practical decision-making.

A comparison of the importance of decision-making criteria confirmed that consumers value quality, health, safety, and price the most. Sustainability ranks lower on average, and brand or manufacture is among the least important factors in terms of motivation. Reasons related to product quality and safety dominate. Environmental protection, personal values, ethical treatment, and support for local producers remain relevant, but they are often used as supplementary arguments. The qualitative part of the results was supplemented by repeatedly emphasized barriers, including higher prices, difficulty navigating the multitude of labels, and uncertainty about what exactly makes a product sustainable. The perceived need for better communication and transparency is also significant.

The practical implications are to enhance the clarity and credibility of certifications, to explain their content and verification transparently, and to reduce communication noise. In practice, pricing mechanisms that reduce the barrier of higher prices (e.g., promotions, loyalty programs, volume discounts) and consistent communication that links sustainability to health, quality, and safety can help. For further research, it is advisable to verify the transferability of findings across product categories, analyze differences between consumer segments by age, income, and value orientation, and test which information formats (symbols, brief explanations, digital links) best promote trust and real purchasing behavior.

Conflict of interest: none

References

Akenji, L., & Bengtsson, M. (2014). Making Sustainable Consumption and Production the Core of Sustainable Development Goals. *Sustainability*, *6*(2), 513–529. https://doi.org/10.3390/su6020513

Aminravan, M., Kaliji, S.A., Mulazzani, L., Rota, C., & Camanzi, L. (2025). Ecolabels as a means to satisfy consumers' environmental concerns, need for information, and trust in short fruit and vegetable supply chains: A cross-national study. *Agricultural and Food Economics*, *13*(1), 24. https://doi.org/10.1186/s40100-025-00369-3

Bashir, H. (2022). Leveraging technology to communicate sustainability-related product information: Evidence from the field. *Journal of Cleaner Production*, *362*, 132508. https://doi.org/10.1016/j.jclepro.2022.132508

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*, *13*(8), 2677. https://doi.org/10.3390/nu13082677

Boe-Lillegraven, S., & Demmers, J. (2025). Leveling up on labels? Consumer preferences for firm-level eco-labels as substitutes for or complements to product-level eco-labels. *Corporate Social Responsibility and Environmental Management*, *32*(2), 1920–1944. https://doi.org/10.1002/csr.3051

Boncompagni, A., Cristini, G., & Zerbini, C. (2025). From sustainability to health: Investigating the halo effect in food consumption behavior. *Sustainable Production and Consumption*, *60*, 111–122. https://doi.org/10.1016/j.spc.2025.09.011

Cook, B., Costa Leite, J., Rayner, M., Stoffel, S., Van Rijn, E., & Wollgast, J. (2023). Consumer Interaction with Sustainability Labelling on Food Products: A Narrative Literature Review. *Nutrients*, *15*(17), 3837. https://doi.org/10.3390/nu15173837

Dong, X., Jiang, B., Zeng, H., & Kassoh, F.S. (2022). Impact of trust and knowledge in the food chain on motivation-behavior gap in green consumption. *Journal of Retailing and Consumer Services*, *66*, 102955. https://doi.org/10.1016/j.jretconser.2022.102955

Dorisse, A., Charry, K., & Parguel, B. (2025). When multi-labelling backfires: The influence of sustainability FOP labels valence and orientation. *Appetite*, *213*, 108055. https://doi.org/10.1016/j.appet.2025.108055

Fella, S., & Bausa, E. (2024). Green or greenwashed? Examining consumers' ability to identify greenwashing. *Journal of Environmental Psychology*, *95*, 102281. https://doi.org/10.1016/j.jenvp.2024.102281

Feuß, S., Fischer-Kreer, D., Majer, J., Kemper, J., & Brettel, M. (2022). The interplay of eco-labels and price cues: Empirical evidence from a large-scale field experiment in an online fashion store. *Journal of Cleaner Production*, *373*, 133707. https://doi.org/10.1016/j.jclepro.2022.133707

Gauthier, A.J., Guertin, C., & Pelletier, L.G. (2022). Motivated to eat green or your greens? Comparing the role of motivation towards the environment and for eating regulation on ecological eating behaviours – A Self-Determination Theory perspective. *Food Quality and Preference*, *99*, 104570. https://doi.org/10.1016/j.foodqual.2022.104570

Gorton, M., Tocco, B., Yeh, C.-H., & Hartmann, M. (2021). What determines consumers' use of eco-labels? Taking a close look at label trust. *Ecological Economics*, *189*, 107173. https://doi.org/10.1016/j.ecolecon.2021.107173

Grunert, K.G., Hieke, S., & Wills, J. (2014). Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy*, *44*, 177–189. https://doi.org/10.1016/j.foodpol.2013.12.001

Hoffmann, A., Stork, P., Madysa, M., & Borgianni, Y. (2025). How attractive is sustainability in products: A Systematic Review about eye-tracking studies on sustainability labels. *Journal of Environmental Psychology*, *101*, 102519. https://doi.org/10.1016/j.jenvp.2025.102519

Chen, C., Zhang, D., Zhu, L., & Zhang, F. (2024). Promoting green choices: How price premium displays influence consumer preference for green products. *Resources, Conservation and Recycling*, *207*, 107682. https://doi.org/10.1016/j.resconrec.2024.107682

Khachatryan, H., Rihn, A., & Wei, X. (2021). Consumers' Preferences for Eco-labels on Plants: The Influence of Trust and Consequentiality Perceptions. *Journal of Behavioral and Experimental Economics*, *91*, 101659. https://doi.org/10.1016/j.socec.2020.101659

Koch, T., & Denner, N. (2025). Different shades of green deception. Greenwashing's adverse effects on corporate image and credibility. *Public Relations Review*, *51*(1), 102521. https://doi.org/10.1016/j.pubrev.2024.102521

Ladwein, R., & Sánchez Romero, A.M. (2021). The role of trust in the relationship between consumers, producers and retailers of organic food: A sector-based approach. *Journal of Retailing and Consumer Services*, *60*, 102508. https://doi.org/10.1016/j.jretconser.2021.102508

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*, *33*, 1–14. https://doi.org/10.1016/j.spc.2022.06.012

Matthes, J., Neureiter, A., & Seiffert-Brockmann, J. (2025). Coping with greenwashed ads. Greenwashing perceptions, eco-label confusion, and the willingness to pay more. *Journal of International Consumer Marketing*, 1–13. https://doi.org/10.1080/08961530.2025.2530395

Munro, P., Kapitan, S., & Wooliscroft, B. (2023). The sustainable attitude-behavior gap dynamic when shopping at the supermarket: A systematic literature review and framework for future research. *Journal of Cleaner Production*, *426*, 138740. https://doi.org/10.1016/j.jclepro.2023.138740

Piracci, G., Lamonaca, E., Santeramo, F.G., Boncinelli, F., & Casini, L. (2024). On the willingness to pay for food sustainability labelling: A meta-analysis. *Agricultural Economics*, *55*(2), 329–345. https://doi.org/10.1111/agec.12826

Rausch, T.M., & Kopplin, C.S. (2021). Bridge the gap: Consumers' purchase intention and behavior regarding sustainable clothing. *Journal of Cleaner Production*, *278*, 123882. https://doi.org/10.1016/j.jclepro.2020.123882

Santos, C., Coelho, A., & Marques, A. (2024). A systematic literature review on greenwashing and its relationship to stakeholders: State of art and future research agenda. *Management Review Quarterly*, *74*(3), 1397–1421. https://doi.org/10.1007/s11301-023-00337-5

Shahid, S., Maseeh, H.I., Jebarajakirthy, C., Kumar Sharma, B., Saha, R., & Gupta, S. (2025). Consumer confusion: A meta-analytic review. *Journal of Business Research*, *192*, 115294. https://doi.org/10.1016/j.jbusres.2025.115294

Sharma, K., Aswal, C., & Paul, J. (2023). Factors affecting green purchase behavior: A systematic literature review. *Business Strategy and the Environment*, *32*(4), 2078–2092. https://doi.org/10.1002/bse.3237

Sparacino, A., Mota-Gutierrez, J., Rui, M., Indelicati, S., & Merlino, V.M. (2025). Exploring consumers' knowledge and level of importance of sustainable agri-food certifications in purchasing behavior. *Journal of Agriculture and Food Research*, *22*, 102127. https://doi.org/10.1016/j.jafr.2025.102127

Syed, S., Acquaye, A., Khalfan, M.M., Obuobisa-Darko, T., & Yamoah, F.A. (2024). Decoding sustainable consumption behavior: A systematic review of theories and models and provision of a guidance framework. *Resources, Conservation & Recycling Advances*, *23*, 200232. https://doi.org/10.1016/j.rcradv.2024.200232

Tawde, S., Kamath, R., & ShabbirHusain, R.V. (2023). 'Mind will not mind' – Decoding consumers' green intention-green purchase behavior gap via moderated mediation effects of implementation intentions and self-efficacy. *Journal of Cleaner Production*, *383*, 135506. https://doi.org/10.1016/j.jclepro.2022.135506

Timmons, S., Whelan, A., & Kelly, C. (2024). An experimental test of a greenwashing inoculation intervention in Ireland: Effects of 'pre-bunking' on identification, consumer trust and purchase intentions. *Sustainable Production and Consumption*, *47*, 318–328. https://doi.org/10.1016/j.spc.2024.03.030

Torma, G., & Thøgersen, J. (2024). Can a meta sustainability label facilitate more sustainable consumer choices? *Business Strategy and the Environment*, *33*(2), 283–306. https://doi.org/10.1002/bse.3488

Van Bussel, L.M., Kuijsten, A., Mars, M., & Van 'T Veer, P. (2022). Consumers' perceptions on food-related sustainability: A systematic review. *Journal of Cleaner Production*, *341*, 130904. https://doi.org/10.1016/j.jclepro.2022.130904

Weber, A. (2021). Mobile apps as a sustainable shopping guide: The effect of eco-score rankings on sustainable food choice. *Appetite*, *167*, 105616. https://doi.org/10.1016/j.appet.2021.105616

Xiang, Y., Chen, L., Zhang, Z., & Sun, X. (2024). Does perceived greenwashing promote or inhibit ethical voice? Effects of moral disengagement and perceived competitive pressure. *Journal of Business Research*, *182*, 114793. https://doi.org/10.1016/j.jbusres.2024.114793

Zioło, M., Bąk, I., & Spoz, A. (2024). Literature review of greenwashing research: State of the art. *Corporate Social Responsibility and Environmental Management*, *31*(6), 5343–5356. https://doi.org/10.1002/csr.2842