
UNRAVELING THE DRIVERS OF ORGANIC FOOD PURCHASE INTENTIONS: A THEORY OF PLANNED BEHAVIOR PERSPECTIVE FROM SERBIA

Tamara Rajić¹, Ivana Ostojić², Marko Jovanović³, Predrag Jovanović⁴

*Corresponding author E-mail: iostojic@idn.org.rs

ARTICLE INFO

Original Article

Received: 16 May 2026

Accepted: 15 June 2026

doi:10.59267/ekoPolj2603855R

UDC 159.947.5:339.138]:631.1
47(497.11)

Keywords:

*Theory of planned behavior,
organic food consumption,
food safety concern, perceived
environmental knowledge,
PLS-SEM, emerging European
economies*

JEL: I12, Q00

ABSTRACT

The study aims to examine the determinants of Serbian consumers' purchase intentions related to organic food, building upon and enhancing the well-established framework of the Theory of Planned Behavior. Data collection by means of a web-based structured questionnaire has resulted in 461 responses, which have been subjected to Partial Least Squares Structural Equation Modeling (PLS-SEM), using SmartPLS 4. The study's findings indicate that favourable attitudes are the key driver of organic food purchase intentions and that they are shaped by food safety concern and perceived environmental knowledge. Significant others' expectations directly influence consumers' willingness to purchase organic food, and indirectly contribute to positive attitudes towards organic food. Organic food availability and affordability directly contribute to customers' purchase intentions and enhance positive influence of attitudes on purchase intentions. Theoretical and managerial implications have been discussed and limitations and future research directions are outlined.

-
- 1 Tamara Rajić, PhD, Research Associate, Institute of Social Sciences, Kraljice Natalije 45, Belgrade, Serbia, Phone:+381603680534, E-mail: trajic@idn.org.rs, ORCID ID (<https://orcid.org/0000-0002-2797-584X>)
 - 2 Ivana Ostojić, PhD, Research Associate, Institute of Social Sciences, Kraljice Natalije 45, Belgrade, Serbia, Phone:+381641613733, E-mail:iostojic@idn.org.rs, ORCID ID (<https://orcid.org/0000-0002-8608-9506>)
 - 3 Marko Jovanović, PhD Student, University of Belgrade, Faculty of Economics, Kamenička 6, Belgrade, Serbia, Phone: +381643000012, E-mail: jovanovicvrclj@gmail.com, ORCID ID (<https://orcid.org/0009-0004-5931-6496>)
 - 4 Predrag Jovanović, PhD, Associate Professor, University of Belgrade, Faculty of Organisational Sciences, Jove Ilića 154, Belgrade, Serbia, Phone: +381638119360, E-mail: predrag.jovanovic@fon.bg.ac.rs, ORCID ID (<https://orcid.org/0000-0003-0841-7022>)

Introduction

Over the last two decades, there has been a growing interest among both the public and research communities in the consumption of organic food and the key factors influencing it. This has been motivated by factors such as increasing consumer concern regarding pesticide and antibiotic residues in agricultural products, as well as concerns about environmental pollution and its impact on human health. Most previous studies are based on the Theory of Planned Behavior (TPB) and emphasize the importance of this theoretical framework in explaining the factors influencing the intention to purchase and consume organic food (Ngo et al., 2026; Mostafizur et al., 2025; Chan et al., 2025; Milojević et al., 2025; Loera et al., 2022). In contrast to developed economies (Gundala & Singh, 2021; Hong et al., 2023; Liu et al., 2021) and developing economies (Chan et al., 2025; Mostafizur et al., 2025; Amit Kumar 2021; Bonisoli & Tinoco-Egas, 2025; Rosić & Vilma Getman, 2025; Dinc-Cavlak & Ozdemir, 2022; Ngo et al., 2026), insufficient attention has been devoted in previous research to the determinants of organic food consumption and consumers' willingness to purchase organic food in developing European countries. Therefore, this research aims to expand knowledge about the factors contributing to the purchase of organic food, using Serbia as an example of a developing European country.

Some scholarly attention has been devoted thus far to organic food consumption and its determinants from the perspective of Serbian consumers. Vlahović et al. (2011) have shown that those who opt for organic food have a more positive attitude toward it and higher levels of education and income. Grubor et al. (2018) point to education and income as the main drivers and higher prices and unavailability as the key obstacles to organic food consumption among the urban population in Serbia. The outbreak of COVID-19 did not significantly alter the typical profile of the pre-pandemic organic food consumer, yet it drove a higher demand, with many willing to pay more for this type of produce due to heightened health concerns (Ćirić et al. 2020, Vapa Tankosić et al. 2022, Vapa Tankosić & Carić 2023). Additionally, Radojević et al. (2021) define three main groups of organic food consumers: those who buy it because of the occasional lower price, the highly informed ones with concerns for health, quality and life choices and the ones who value its health benefits but do not necessarily care about the origin of the produce. Interestingly, the consumers of organic food are primarily knowledgeable of its health benefits, while they largely remain uninformed about other positive aspects of purchasing these types of products (Čolović & Mitić, 2023; Mitić & Čolović, 2022).

In previous research on organic food in Serbia, insufficient attention has been given to the simultaneous examinations of inter-relationships among the determinants of purchase intention and their influence on the intention to purchase organic food. To address this gap in the existing literature on Serbia, this study is grounded in the TPB and aims to emphasize the relative importance of the key determinants of consumers' willingness to purchase organic food. The remainder of the paper is structured as follows. The next section provides a brief review of the relevant literature, based on which the research

hypotheses are developed. The following section presents the research methodology, after which the results and discussion of the main findings are reported. Based on the empirical results, the theoretical contributions of the study and policy recommendations are highlighted, followed by the study's limitations and suggestions for future research.

Literature review and hypotheses development

The Theory of Planned Behavior (Ajzen, 1991), developed by Icek Ajzen in the 1980s, assumes that human behavior is directly guided by behavioral intention, which is shaped by three key factors: attitudes (positive/negative evaluation), subjective norms (perceived social pressure), and perceived behavioral control (self-confidence, i.e., the ease or difficulty of performing the behavior that reflects previous experience). A study examining the factors influencing the intention to purchase organic food in Vietnam confirmed that consumer attitudes towards organic food have a positive effect on purchase intention (Ngo et al., 2026). Numerous studies revealed that a positive attitude toward organic food influences purchase intention and behavior (Chan et al., 2025; Božić & Knežević, 2025; Loera et al., 2022; Bonisoli & Tinoco-Egas, 2025; Sultan et al., 2020). Based on the existing literature, the following hypothesis is formulated: *H₁: Attitudes towards organic food positively affect customers' purchase intentions.*

Food safety encompasses consumers' concerns about the presence of residues in food caused by chemical treatments, fertilizers, and added substances such as preservatives, which are commonly linked to farming practices (Yee et al., 2005). Nguyen et al.'s (2019) study has revealed a significant impact of food safety concerns on Vietnamese consumers' attitudes toward organic meat. Similarly, food safety concerns emerged as the most influential determinant of Scottish consumers' attitudes toward organic food (Michaelidou & Hassan, 2008). Many studies have also supported this relationship (Dinc-Cavlak & Ozdemir, 2022; Tan et al., 2021; Waqas & Hong, 2019). Based on extant literature, the following hypothesis is posited: *H₂: Food safety concern positively affects customers' attitudes towards organic food.*

Environmental knowledge captures individuals' awareness of environmental challenges along with their understanding of key facts, concepts, and interconnections within the natural environment and its major ecosystems (Fryxell & Lo, 2003). Bonisoli and Tinoco-Egas's (2025) study in the domain of organic food consumption has revealed a significant impact of environmental knowledge on attitudes. Several studies have also supported this relationship (Roh et al., 2022; Hong et al., 2023, Amit Kumar 2021). Based on these previous findings, the following hypothesis is proposed: *H₃: Perceived environmental knowledge positively affects attitudes towards organic food.*

Bhakar et al. (2025) found that subjective norms emerge as a significant determinant of organic food purchase intention. This relationship has been supported in numerous other studies (Ngo et al., 2026; Radovanović, 2025; Hong et al., 2023; Mostafizur et al.,

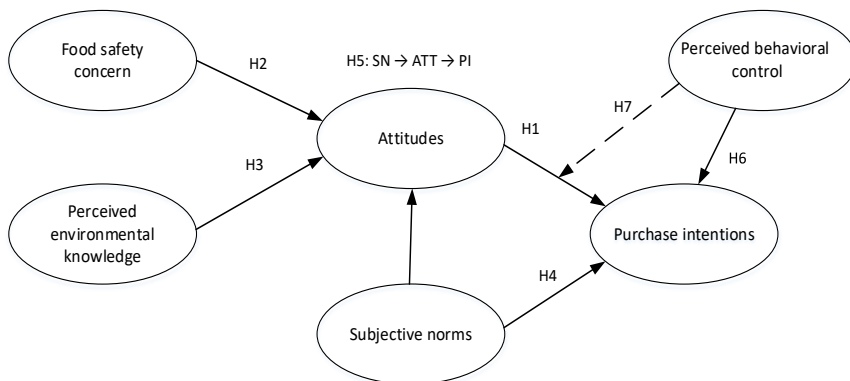
2025; Gundala et al., 2022). Grounded in the existing body of literature, the following hypothesis is developed: *H₄: Subjective norms directly affect customers' purchase intentions towards organic food.*

Research in the domain of sustainable consumption has indicated the influence of significant others' expectations on consumers' attitudes, which further lead to customers' sustainable behavior (Kristia et al., 2023). Research in the domain of organic food consumption has also revealed significant influence of subjective norms on attitudes, which further shape customers' purchase intentions. The mediating role of attitudes in the relationship between subjective norms and customers' green food purchase intentions has been supported by several other studies (Bhakar et al., 2025; Wongsachia et al., 2022; Gundala et al., 2022). In light of prior research, the following hypothesis is formulated: *H₅: Attitudes towards organic food mediate the impact of subjective norms on customers' purchase intentions towards organic food.*

Amit Kumar (2021) demonstrated that perceived behavioral control represents a significant predictor of consumers' green purchasing behavior. Other studies have also supported this relationship (Hong et al., 2023; Dinc-Cavlak & Ozdemir, 2022; Wang et al., 2019; Dorce et al., 2021). Therefore, the following hypothesis is proposed: *H₆: Perceived behavioral control positively and directly affect customers' purchase intentions towards organic food.*

La Barbera and Ajzen (2021) found that perceived behavioral control moderates the relationship between attitudes and behavioral intentions. Although the moderating influence of perceived behavioral control on the relationship between attitudes and behavioral intention has received less scholarly attention in the context of green consumption (Botha & Wieste, 2024; La Barbera & Ajzen, 2020), it is reasonable to assume that increased affordability and availability of organic food would contribute to the translation of favourable attitudes into purchase intentions. Therefore, the following relationship is proposed: *H₇: Perceived behavioral control moderates the impact of attitudes on customers' purchase intentions towards organic food.* Hypothesized relationships are summarized in *Figure 1*.

Figure 1. Conceptual model



Source: Authors' presentation

Materials and methods

Data collection

The cross-sectional survey was carried out on a convenience sample of adult respondents in Serbia, by means of a web-based structured questionnaire. Data collection was anonymous. Respondents were recruited via e-mail accounts and social media advertising. Prospective respondents were informed about the purpose of the study and informed consent was sought from the survey participants, prior to the questionnaire fulfillment. Data were collected in the period from December 2024 to June 2025. In total, 461 completely filled out questionnaires were entered into data analysis.

Measurement instrument

Constructs included in the study were measured by multiple items, which were adapted from previous research. Questionnaire items were slightly modified to fit the context of the study. Pilot-testing of the questionnaire was performed prior to the large-scale survey, which enabled minor modifications related to the wordings and sequence of the questionnaire items, to enhance its readability and comprehensibility. Four items, borrowed from the study of Rausch and Kopplin (2021), were used to measure attitudes (e.g., *Generally, I have a favorable attitude towards organic food*). Three items, borrowed from the study of Nguyen et al. (2019), were used to measure food safety concern (e.g., *I am very concerned about the presence of antibiotics and preservatives in food*). Four items, adapted from the study of Rausch and Kopplin (2021), were used to measure perceived environmental knowledge (e.g., *I understand how I could reduce negative environmental consequences of my behavior*). Three items from the study of Rausch and Kopplin (2021) were used to measure subjective norms (e.g., *My family expects me to buy sustainable food*). Perceived behavioral control was measured using four items which were proposed in accordance with the study of Shin and Hancer (2016) (e.g., *Whether I will purchase organic food is entirely up to me*). Three items, borrowed from the study of Shin et al. (2017), were used to measure purchase intentions (e.g., *I plan to purchase organic food in the future*). Questionnaire items were measured on a 7-point Likert-type scale, anchored by 1-strongly disagree and 7-strongly agree.

Data analysis

Partial least squares structural equation modeling (PLS-SEM), following Anderson and Gerbing's (1988) two-step procedure, was applied to examine proposed hypotheses. Measurement model analysis was performed first, to assess internal consistency reliability and validity of the constructs, which was followed by structural model analysis. Moderation analysis was applied to examine whether the relationship between attitudes and purchase intentions depended on the level of perceived behavioral control. Data analyses were performed using SmartPLS 4 (Ringle et al., 2024).

Results

Measurement model analysis

Internal consistency reliability of the constructs was supported by Cronbach's alpha and composite reliability (CR) values, which exceeded the threshold of 0.70 (Hair et al., 2017). Evidence in support of convergent validity was provided by the average variance extracted values (AVEs) exceeding the threshold of 0.50, as displayed in *Table 1*, which indicated that the items measured the constructs they were intended to measure. The majority of outer loadings were above the lower threshold of 0.708, as suggested by Hair et al. (2017), which provided additional evidence in support of convergent validity. Several outer loadings which were below the threshold of 0.708, but above the value of 0.40, were retained in the model, as no adverse effect was produced related to the constructs' reliability.

Table 1. Descriptive statistics, reliability and validity assessment

Constructs	Items	Outer loadings	t-values*	Cronbach's alpha	CR	AVE	Mean	SD
Attitudes	ATT1	0.904	59.302	0.929	0.950	0.825	5.872	1.286
	ATT2	0.918	78.474					
	ATT3	0.937	106.228					
	ATT4	0.872	53.110					
Purchase intentions	PI1	0.926	96.570	0.920	0.949	0.862	4.706	1.590
	PI2	0.945	128.904					
	PI3	0.914	82.027					
Perceived behavioral control	PBC1	0.906	19.809	0.753	0.802	0.579	4.901	1.568
	PBC2	0.698	6.678					
	PBC3	0.656	5.871					
Subjective norms	SN1	0.896	62.173	0.900	0.938	0.833	3.033	1.744
	SN2	0.916	100.620					
	SN3	0.926	89.972					
Food safety concern	FSC1	0.811	24.541	0.872	0.921	0.795	6.156	1.171
	FSC2	0.933	71.055					
	FSC3	0.926	76.746					
Perceived environmental knowledge	PEK1	0.822	32.687	0.895	0.927	0.761	5.757	1.138
	PEK2	0.883	36.313					
	PEK3	0.904	63.240					
	PEK4	0.879	52.409					

Note: * $p < 0.001$

Source: Authors' calculations

The square root of AVE value of each construct which surpassed correlations among respective construct and every other construct in the model provided evidence in support of discriminant validity (Fornell & Larcker, 1981), i.e. that the constructs were truly distinct from each other. Additional evidence in support of discriminant validity was provided by the heterotrait-monotrait (HTMT) ratios, which were below the threshold of 0.85, as suggested by Henseler et al. (2015). Additional evidence in support of

discriminant validity was provided by applying the bootstrapping procedure with 5000 subsamples and 95% Bias-corrected and accelerated (BCa) confidence interval method, which indicated that none of the confidence intervals related to the HTMT ratios included the value of 1, as suggested by Hair et al. (2017). Results displayed in *Table 2* provide evidence in support of discriminant validity of the constructs.

Table 2. Discriminant validity assessment – Fornell-Larcker criterion, HTMT ratio

	ATT	PI	PBC	SN	FSC	PEK
ATT	0.908	0.714 [0.645; 0.744]	0.132 [0.068; 0.169]	0.419 [0.347; 0.485]	0.521 [0.404; 0.618]	0.425 [0.311; 0.528]
PI	0.662	0.928	0.299 [0.200; 0.407]	0.522 [0.438; 0.598]	0.404 [0.303; 0.497]	0.335 [0.235; 0.430]
PBC	0.162	0.341	0.761	0.262 [0.161; 0.361]	0.044 [0.021; 0.056]	0.258 [0.143; 0.365]
SN	0.388	0.479	0.282	0.913	0.187 [0.095; 0.276]	0.176 [0.096; 0.266]
FSC	0.482	0.371	0.015	0.176	0.892	0.360 [0.250; 0.471]
PEK	0.393	0.306	0.217	0.166	0.315	0.872

Note: ATT – Attitudes, PI – Purchase intentions, PBC – Perceived behavioral control; SN – Subjective norms, FSC – Food safety concern; PEK – Perceived environmental knowledge; diagonal values represent the square roots of AVEs; values displayed below the diagonal represent correlations among the constructs; values above the diagonal refer to the HTMT ratios, values in square brackets represent confidence intervals corresponding to the HTMT ratios

Source: Authors' calculations

Structural model analysis

To avoid misleading conclusions stemming from high multicollinearity in the inner model, variance inflation factor values (VIFs) were inspected first. According to Hair et al. (2022), VIF values equal to or above 5 would indicate critical collinearity. As all VIF values in the structural model were below the suggested threshold, collinearity among the constructs was not at a critical level, which enabled the examination of structural paths in the following stage.

A bootstrapping procedure in PLS-SEM, using 5000 subsamples and 95% bias-corrected and accelerated (BCa) confidence interval method, was applied to estimate hypothesized relationships. As none of the confidence intervals stemming from the bootstrapping procedure included zero, all hypothesized relationships were supported by the data. Attitudes towards organic food emerged as a significant determinant of customers' purchase intentions (H_1 : $\beta=0.553$, $p<0.001$). Both food safety concern (H_2 : $\beta=0.317$, $p<0.001$) and perceived environmental knowledge (H_3 : $\beta=0.182$, $p<0.01$) significantly contributed to attitudes. Subjective norms emerged as a significant direct determinant of purchase intentions (H_4 : $\beta=0.203$, $p<0.001$). In addition, the impact of subjective norms on purchase intentions was also partially mediated by attitudes (H_5 :

$\beta=0.140$, $p<0.001$). The study indicated significant direct effect of perceived behavioral control on purchase intentions (H_6 : $\beta=0.182$, $p<0.001$). In addition, the effect of attitudes on purchase intentions was positively moderated by perceived behavioral control (H_7 : $\beta=0.089$, $p<0.05$), which will be elaborated in more detail in the following subsection.

The coefficient of determination (R^2) which indicates the proportion of variance in endogenous variable which is accounted for by the model, was examined to assess the model's predictive ability. Explained variance in behavioral intentions of 53.8% was above the acceptable threshold in consumer behavior research which amounts to 20% (Hong et al., 2023), indicating acceptable predictive validity of the proposed model. The strength of the direct relationships was assessed on the basis of Cohen's (1988) effect size (f^2), according to which values of 0.02, 0.15 and 0.35 indicate weak, moderate and substantial effect size, respectively. Taking into account the effect size, there is a substantial impact of attitudes on purchase intentions ($f^2=0.542$) and attitudes are moderately influenced by food safety concern ($f^2=0.134$). Hence, managerial actions aimed at enhancing the demand for organic food should primarily address these two constructs. The results of structural model analysis are summarized in *Table 3*.

Table 3. Structural model evaluation

Hypothesized relationships	Structural paths	t-values	95%(BCa)CI		Results	Effect size (f^2)	VIF
			LBCI	UBCI			
H1: ATT $\rightarrow$ PI	0.553	14.692*	0.479	0.627	Supported	0.542	1.184
H2: ESC $\rightarrow$ ATT	0.317	5.985*	0.204	0.414	Supported	0.134	1.233
H3: PEK $\rightarrow$ ATT	0.182	3.293**	0.077	0.295	Supported	0.043	1.281
H4: SN $\rightarrow$ PI	0.203	4.923*	0.122	0.283	Supported	0.076	1.260
H5: SN $\rightarrow$ ATT	0.140	6.722*	0.103	0.185	Supported		
H6: PBC $\rightarrow$ PI	0.182	4.848*	0.105	0.254	Supported	0.072	1.104
H7: PBC $\times$ ATT $\rightarrow$ PI	0.089	2.498***	0.020	0.159	Supported	0.016	1.027
$R^2(PI)=0.538$; $R^2(ATT)=0.391$							

Note: * $p<0.001$; ** $p<0.01$; *** $p<0.05$; LBCI – lower bound of the confidence interval, UBCI – upper bound of the confidence interval

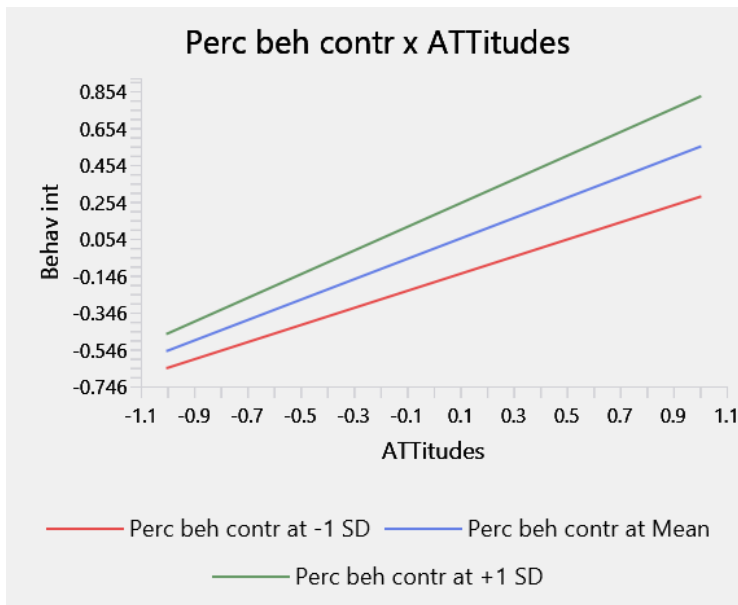
Source: Authors' calculations

Moderation analysis

Moderation analysis was performed to examine whether the strength of the relationship between attitudes towards organic food and customers' purchase intentions depended on the level of perceived behavioral control. The analysis revealed statistically significant positive moderating effect of perceived behavioral control on the relationship between attitudes and purchase intentions ($\beta=0.089$, $p<0.05$), providing support to hypothesis H_7 . This finding indicates that the relationship between attitudes and purchase intentions is not constant, but one standard deviation increase in perceived behavioral control above the mean would yield an increase in a simple effect of attitudes on purchase intentions by 0.089. This implies that the relationship between attitudes and purchase intentions is stronger (the slope is steeper) at a higher level of perceived behavioral control, i.e.

an increase in perceived behavioral control would strengthen the impact of attitudes on purchase intentions (*Figure 2*). Effect size (f^2) of a moderator indicates an extent to which the moderation contributes to the explanation of an endogenous variable. According to Hair et al. (2022), it is reasonable to expect a rather limited effect size in case of a moderation analysis, taking into account that an average value based on previous research is equal to 0.009. In light of this, values of 0.005, 0.01 and 0.025 point to small, medium, and large effect sizes of a moderation (Kenny, 2018). Therefore, the moderation effect in the present study of 0.016 could be considered as medium.

Figure 2. The moderating effect of perceived behavioral control



Source: Authors' calculations

Discussion

Findings of the study point to attitudes as the most prominent direct determinant of purchase intentions towards organic food, which corroborates recent findings in the context of organic food consumption in Europe (Mostafizur et al., 2025; Loera et al., 2022). Therefore, hypothesis H_1 has been supported. Both food safety concern and perceived environmental knowledge emerged as positive determinants of attitudes, supporting hypotheses H_2 and H_3 . However, the stronger impact of food safety concern indicates that, from the perspective of Serbian consumers, personal benefits act as a more influential driver of organic food purchases, in comparison with concern for environmental preservation, which complies with Chan et al.'s (2025) claim of personal considerations of health and well-being as crucial motivators of organic food purchases. The positive influence of food safety concerns on attitudes has also been confirmed in previous studies (Dinc-Cavlak & Ozdemir, 2022; Tan

et al., 2021; Nguyen et al., 2019). Positive impact of perceived environmental knowledge on attitudes toward organic food implies that consumers who are more knowledgeable about environmental issues and how to mitigate them are more predisposed towards organic food. Several recent studies have also indicated that environmental knowledge and consciousness contribute to favourable evaluation of organic food. The positive effect of environmental knowledge on attitudes is also confirmed by other studies (Bonisoli & Tinoco-Egas, 2025; Roh et al, 2022; Hong et al., 2023, Amit Kumar 2021).

Research demonstrates that subjective norms have a significant and positive effect on consumers' purchase intentions toward organic food, providing empirical support for hypothesis H₄. This indicates that consumers are more likely to purchase organic food when significant others such as family, friends, or society support this behavior. This result is consistent with previous research (Ngo et al., 2026; Bhakar et al., 2025; Mostafizur et al., 2025; Hong et al., 2023; Gundala et al., 2022). In addition, attitudes have been found to mediate the relationship between subjective norms and purchase intention supporting H₅, which is similar to the results obtained by Bhakar et al., 2025; Kristia et al., 2023; Wongsachia et al., 2022; Gundala et al., 2022. This suggests that consumers who feel socially encouraged to purchase organic food are more likely to develop favorable attitudes, which subsequently strengthen their purchase intentions. These findings emphasize the importance of positive attitudes towards organic food and offer deeper insight into how subjective norms shape consumer intentions.

Research findings indicate that perceived behavioral control positively influences consumers' intentions to purchase organic food, thereby providing empirical support for hypothesis H₆. This suggests that organic food affordability and availability lead to customers' willingness to purchase such products, which corresponds with the findings reported in earlier studies (Amit Kumar, 2021; Hong et al., 2023; Dinc-Cavlak & Ozdemir, 2022; Wang et al., 2019; Dorce et al., 2021).

When individuals perceive a higher level of control over their behavior, the relationship between their attitudes and intentions to purchase organic food becomes stronger. Consistent with this, the findings support H₇, confirming that perceived behavioral control moderates the impact of attitudes on customers' purchase intentions towards organic food. This implies that the more capable individuals feel of purchasing organic food, the stronger the influence of their attitudes on their intentions, and the greater the likelihood that they will actually engage in such behavior. This relationship has been confirmed by previous studies (Botha & Wieste, 2024; Barbera & Ajzen, 2021; La Barbera & Ajzen, 2020). To improve effectiveness, communication strategies should emphasize how simple and beneficial it is to buy organic food, while also helping to reduce perceived obstacles such as higher prices, extra effort, and limited consumer knowledge.

Conclusions

Theoretical and practical implications

The present study bears theoretical and managerial relevance. From a theoretical perspective, it contributes to the body of knowledge on sustainable food consumption by examining interrelationships among the determinants and their contribution to organic food purchase intentions, in thus far under-studied context of an emerging European economy. The study also provides important insights for marketers and policy-makers. Taking into account significant effect of food safety concern and perceived environmental knowledge on attitudes, marketers of organic food would benefit by emphasizing health-related benefits of their products and by educating customers on environmental footprint of food consumption. Knowledge on health related benefits of organic food and how consumption choices can contribute to environmental preservation would enhance positive attitudes towards organic food and customers' purchase intentions towards organic food.

Significance of subjective norms as a determinant of intentions also bears relevance for marketers. Significance of perceived behavioral control indicates that improved affordability and availability of organic food would facilitate transition from positive perceptions into actual purchases of organic food. Incentives to motivate more widespread production of organic food and its distribution should be considered by respective authorities. When it comes to local organic food production, measures to regain and instill customer trust into local producers, taking into account affairs from the recent past in the area of organic food production in Serbia, should be high on the agenda of responsible authorities, which points to the relevance of more thorough qualitative and quantitative research of customers' perceptions related to organic food produced in Serbia.

On the production side, numerous incentives supporting organic agriculture are already available, whereas comparable support measures targeting consumers remain relatively limited. Within the context of the influence of PBC on purchase intention, one potential measure is the introduction of monthly green vouchers of a fixed value that households could exclusively use for the purchase of organic food products. Additionally, the adoption of a National Organic Food Strategy could substantially contribute to the development of the organic sector by integrating organic production with public health, sustainable development, tourism, and education policies. Such a strategy could encourage public institutions, including preschools, schools, student canteens, and hospitals, to prioritize the procurement of food from certified organic producers. This would enhance the accessibility of organic food to the broader population while simultaneously promoting healthier dietary habits among younger consumers from an early age. Furthermore, greater attention should be devoted to incorporating organic food into support measures aimed at rural tourism development. One possible policy instrument could involve the introduction of subsidies or tax incentives for rural tourism households that incorporate certified locally produced organic food into their gastronomic offerings. Such measures would strengthen the linkage between organic agriculture and rural tourism, increase

demand for domestically produced organic products, and contribute to the creation of authentic tourism experiences based on local and sustainable food systems.

Limitations and future research directions

Several limitations of the study should be noted. Convenience sampling and data collection by means a web-based questionnaire advertised via social media, or a delivery of a link to the survey via e-mail accounts, represent the most concerning among the study's drawbacks. This mode of non-probability sampling excluded those prospective respondents who are not social media users and who do not have an active e-mail account. Cross-sectional design of the study indicates that structural relationships revealed by this research should be regarded with caution, which calls for future replications using longitudinal survey design or experimental research. Future research would benefit from a more representative sample of Serbian customers and the examinations of eventual cross-generational differences in customers' perceptions and intentions related to organic food. This would enable tailored marketing strategies to increase organic food purchases.

Acknowledgements

The paper was written as part of the 2026 Research Program of the Institute of Social Sciences with the support of the Ministry of Science, Technological Development and Innovation of the Republic of Serbia.

Conflict of interests

The authors declare no conflict of interest.

References

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
2. Amit Kumar, G. (2021). Framing a model for green buying behavior of Indian consumers: From the lenses of the theory of planned behavior. *Journal of Cleaner Production*, 295, 126487. <https://doi.org/10.1016/j.jclepro.2021.126487>
3. Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. <https://doi.org/10.1037/0033-2909.103.3.411>
4. Bhakar, S., Bhakar, S. S., & Bhakar, S. (2023). Consumer knowledge, environmental concerns and subjective norms as predictors of consumer attitude and purchase intention: A study of organic food. *International Journal of Trade and Global Markets*, 17(2), 133–150. <https://doi.org/10.1504/IJTGGM.2023.130739>
5. Bonisoli, L., & Tinoco-Egas, R. (2025). When doing good feels heavy: The double-edged role of moral obligation in organic food choices. *Cleaner and Responsible Consumption*, 18, 100320. <https://doi.org/10.1016/j.clrc.2025.100320>

6. Botha, E. I., & Wiese, M. (2024). Modelling zero waste behavioural intent: The moderating role of perceived behavioural control and socio-demographic factors. *Cleaner and Responsible Consumption*, 12, 100177. <https://doi.org/10.1016/j.clrc.2024.100177>
7. Božić, K., & Knežević, V. (2025). Activity-based costing as a function of information support for modern management. *Oditor*, 11(2), 127-148. <https://doi.org/10.59864/Oditor62502KB>
8. Chan, T. J., Lim, S. H., Mohan, Y. M., Huam, H. T., Suki, N. M., & Kasim, M. A. (2025). Does health consciousness matter? Factors influencing consumer buying behavior of organic food products through an extended theory of planned behavior. *British Food Journal*, 127(10), 3723–3743. <https://doi.org/10.1108/BFJ-09-2024-0975>
9. Čolović, M., & Mitić, V. Č. (2023). The main motives for buying organic food in people of the former Yugoslavia. *British Food Journal*, 125(6), 2257–2274. <https://doi.org/10.1108/BFJ-06-2021-0651>
10. Ćirić, M. R., Ilić, D. S., Ignjatijević, S. D., & Brkanlić, S. D. (2020). Consumer behaviour in online shopping organic food during the Covid-19 pandemic in Serbia. *Food & Feed Research*, 47(2), 149–158. <https://doi.org/10.5937/ffr47-28815>
11. Dinc-Cavlak, O., & Ozdemir, O. (2024). Using the Theory of Planned Behavior to Examine Repeated Organic Food Purchasing: Evidence from an Online Survey. *Journal of International Food & Agribusiness Marketing*, 36(2), 147–176. <https://doi.org/10.1080/08974438.2022.2068102>
12. Dorce, L. C., da Silva, M. C., Mauad, J. R. C., de Faria Domingues, C. H., & Borges, J. A. R. (2021). Extending the theory of planned behavior to understand consumer purchase behavior for organic vegetables in Brazil: The role of perceived health benefits, perceived sustainability benefits and perceived price. *Food Quality and Preference*, 91, 104191. <https://doi.org/10.1016/j.foodqual.2021.104191>
13. Fornell, C.G. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
14. Fryxell, G. E., & Lo, C. W. H. (2003). The Influence of Environmental Knowledge and Values on Managerial Behaviours on Behalf of the Environment: An Empirical Examination of Managers in China. *Journal of Business Ethics*, 46(1), 45–69. <https://doi.org/10.1023/A:1024773012398>
15. Grubor, A., Milicevic, N., & Djokic, N. (2018). Serbian Organic Food Consumer Research and Bioeconomy Development. *Sustainability*, 10(12), 4820. <https://doi.org/10.3390/su10124820>
16. Gundala, R. R., Nawaz, N., Harindranath, R. M., Boobalan, K., & Gajenderan, V. K. (2022). Does gender moderate the purchase intention of organic foods? Theory of reasoned action. *Heliyon*, 8, e10478. <https://doi.org/10.1016/j.heliyon.2022.e10478>

17. Gundala, R.R., & Singh, A. (2021). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLoS ONE* 16(9): e0257288. <https://doi.org/10.1371/journal.pone.0257288>
18. Hair, J.F.Jr., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. A. (2017). *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Second Edition. SAGE Publications, Ltd., London.
19. Hair, J.F.Jr., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. A. (2022). *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Third Edition, SAGE Publications, Inc., California.
20. Henseler, J., Ringle, C.M. & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://link.springer.com/article/10.1007/s11747-014-0403-8>
21. Hong, Y., Hu, J., Chen, M. & Tang, S. (2023). Motives and antecedents affecting green purchase intention: implications for green economic recovery. *Economic Analysis and Policy*, 77, 523-538. <https://doi.org/10.1016/j.eap.2022.12.005>
22. Kenny, D. A. (2018). Moderation. Retrieved from: <https://davidakenny.net/cm/moderation.htm>
23. Kristia, K., Sandor Kovacs, & Erdey Laszlo. (2023). Food delivery platform and food waste: Deciphering the role of promotions, knowledge, and subjective norms among Indonesian generation Z. *Cleaner and Responsible Consumption*, 11, 100152. <https://doi.org/10.1016/j.clrc.2023.100152>
24. La Barbera, F., & Ajzen, I. (2020). Control Interactions in the Theory of Planned Behavior: Rethinking the Role of Subjective Norm. *Europe's Journal of Psychology*, 16(3), 401-417. <https://doi.org/10.5964/ejop.v16i3.2056>
25. La Barbera, F., & Ajzen, I. (2021). Moderating role of perceived behavioral control in the theory of planned behavior: A preregistered study. *Journal of Theoretical Social Psychology*, 5(1), 35-45. Portico. <https://doi.org/10.1002/jts5.83>
26. Liu, C., Zheng, Y., & Cao, D. (2021). An analysis of factors affecting selection of organic food: Perception of consumers in China regarding weak signals. *Appetite*, 161, 105145. <https://doi.org/10.1016/j.appet.2021.105145>
27. Loera, B., Murphy, B., Fedi, A., Martini, M., Tecco, N., & Dean, M. (2022). Understanding the purchase intentions for organic vegetables across EU: A proposal to extend the TPB model. *British Food Journal*, 124(12), 4736-4754. <https://doi.org/10.1108/BFJ-08-2021-0875>
28. Michaelidou, N., & Hassan, L. M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32, 163-170. <https://doi.org/10.1111/j.1470-6431.2007.00619.x>

29. Milojević, S., Beke-Trivunac, J., & Knežević, S. (2025). The impact of adopting international public sector accounting standards on corruption: transparency and financial accountability. *Akcionarstvo*, 31(1), 77-84. <https://doi.org/10.65772/ak202516>
30. Mitić, V., & Čolović, M. (2022). The main demographic characteristics of customers and the frequency of purchases organic food. *Economics of Agriculture*, 69(2), 349–364. <https://doi.org/10.5937/ekoPolj2202349M>
31. Mostafizur R. M., Asma K. M., Islam, M., & Kotani, K. (2025). Drivers for sustainable food purchase intentions: Prosocial attitudes for future generations and environmental concerns. *Future Foods*, 11, 100609. <https://doi.org/10.1016/j.fufo.2025.100609>
32. Ngo, T. T. A., Le, T. N. T., Phan, T. Y. N., & Le, T. B. N. (2026). Exploring the influence of health consciousness, environmental consciousness, knowledge, and trust in shaping purchase intentions of Generation Z towards organic food. *Journal of Agriculture and Food Research*, 27, 102839. <https://doi.org/10.1016/j.jafr.2026.102839>
33. Nguyen, H.V., Nguyen, N., Nguyen, B.K., Lobo, A., Vu, P.A. (2019). Organic Food Purchases in an Emerging Market: The Influence of Consumers' Personal Factors and Green Marketing Practices of Food Stores. *International Journal of Environmental Research and Public Health*, 16(6), 1037. <https://doi.org/10.3390/ijerph16061037>.
34. Radojević, V., Tomaš Simin, M., Glavaš Trbić, D., & Milić, D. (2021). A profile of organic food consumers-Serbia case-study. *Sustainability*, 13(1), 131. <https://doi.org/10.3390/su13010131>
35. Radovanović, T. (2025). Contribution to achieving sustainable development. *Održivi razvoj*, 7(1), 63-76. <https://doi.org/10.5937/OdrRaz2501063R>
36. Rausch, T. M., & Kopplin, C. S. (2021). Bridge the gap: Consumers' purchase intention and behavior regarding sustainable clothing. *Journal of Cleaner Production*, 278, 123882. doi:10.1016/j.jclepro.2020.123882
37. Ringle, C. M., Wende, S., & Becker, J.-M. (2024). SmartPLS 4 [Computer software]. Bönningstedt: SmartPLS. Available from <https://www.smartpls.com>
38. Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing and Consumer Services*, 67, 102988. <https://doi.org/10.1016/j.jretconser.2022.102988>
39. Rosić, M., & Vilma Getman, R. (2025). Menadžerski aspekti timova i grupa. *Finansijski Savetnik*, 30(1), 95-105. <http://fa-journal.com/index.php/fa/article/view/5>
40. Shin, Y. H., & Hancer, M. (2016). The role of attitude, subjective norm, perceived behavioral control, and moral norm in the intention to purchase local food products. *Journal of Foodservice Business Research*, 19(4), 338–351. <https://doi.org/10.1080/15378020.2016.1181506>

41. Shin, Y. H, Im, J., Jung, S. E. & Severt, K. (2017) Consumers' Willingness to Patronize Locally Sourced Restaurants: the Impact of Environmental Concern, Environmental Knowledge, and Ecological Behavior, *Journal of Hospitality Marketing & Management*, 26(6), 644-658. <https://doi.org/10.1080/19368623.2017.1263821>
42. Sultan, P., Tarafder, T., Pearson, D., & Henryks, J. (2020). Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: moderating roles of communication, satisfaction and trust in organic food consumption. *Food Quality and Preference*, 81, 103838. <https://doi.org/10.1016/j.foodqual.2019.103838>
43. Tan, B. C., Lau, T. C., Sarwar, A., & Khan, N. (2022). The effects of consumer consciousness, food safety concern and healthy lifestyle on attitudes toward eating "green". *British Food Journal*, 124 (4), 1187–1203, <https://doi.org/10.1108/BFJ-01-2021-0005>
44. Vapa Tankosić, J., & Carić, B. (2023). Tržište organskih proizvoda i stavovi potrošača o organskim proizvodima. *International Journal of Economic Practice and Policy*, 20(1), 58–67. <https://doi.org/10.5937/skolbiz1-49126>
45. Vapa Tankosić, J., Hanić, H., & Bugarčić, M. (2022). Consumer's characteristics and attitudes towards organic food products in times of COVID-19 pandemic. *Economic of Agriculture*, 69(2), 469–481. <https://doi.org/10.5937/ekoPolj2202469V>
46. Vlahović, B., Radojević, V., & Živanović, I. (2011). Research on consumer attitudes of organic food consumption in Serbia. *Economic of Agriculture*, 58 (3), 443- 456. <https://doi.org/10.22004/AG.ECON.244943>
47. Wang, X., Pacho, F., Liu, J., & Kajungiro, R. (2019). Factors Influencing Organic Food Purchase Intention in Developing Countries and the Moderating Role of Knowledge. *Sustainability*, 11(1), 209. <https://doi.org/10.3390/su11010209>
48. Waqas, A., & Hong, C. (2019). Study on Consumer Behaviour and Food Safety of Organic Products in Pakistan. *E3S Web of Conferences*, 78, 02021. <https://doi.org/10.1051/e3sconf/20197802021>
49. Wongsachia, S., Naruetharadhol, P., Schrank, J., Phoomsom, P., Sirisoonthonkul, K., Paiyasen, V., Srichaingwang, S., & Ketkaew, C. (2022). Influences of Green Eating Behaviors Underlying the Extended Theory of Planned Behavior: A Study of Market Segmentation and Purchase Intention. *Sustainability*, 14(13), 8050. <https://doi.org/10.3390/su14138050>
50. Yee, W. M. S., Yeung, R. M. W., & Morris, J. (2005). Food safety: building consumer trust in livestock farmers for potential purchase behaviour. *British Food Journal*, 107(11), 841–854. <https://doi.org/10.1108/00070700510629788>