



Research Article

Personality Traits and Disgust Sensitivity in Shaping Consumer Intentions toward Insect-Based Foods in Croatia

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ABSTRACT

Insects represent a nutritious and environmentally friendly alternative to meat. However, cultural acceptance is a significant challenge in promoting insect consumption; in Western societies, insects are often associated with negative experiences rooted in cultural and religious beliefs, traditions, myths, and personal experiences. To better understand the barriers to insect consumption in the Croatian national context, we conducted a paper-and-pencil study, using a sample of 609 participants who had never eaten insect-based food to replicate previous findings on the role of disgust sensitivity and personality traits. Our findings showed that, for both males and females, pathogen disgust sensitivity was negatively related to the intention to consume insect-based food; moral disgust (violation of social norms) was not associated with consumer intention. For females, conscientiousness was negatively related to the consumption of insect-based food. For males, consumption intention was positively related to openness and negatively related to extraversion and agreeableness. The study results partially align with previous findings from other cultural contexts and point to the role of psychological mechanisms in explaining insect-based food consumption.

Keywords: disgust sensitivity, personality traits, insect eating, food neophobia, Croatian sample

UDK: 159.923:612.39(497.5)

DOI: [10.19090/pp.v19i1.2630](https://doi.org/10.19090/pp.v19i1.2630)

Received: 03.05.2025.

Revised: 12.09.2025.

Accepted: 09.10.2025.



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Introduction

In the EU, including Croatia, novel food is defined as food not significantly consumed before May 15, 1997, under the first Novel Food Regulation (Regulation - 258/97, 1997). The current regulation (Regulation - 2015/2283, 2015) mandates that new food products undergo rigorous scientific assessment by the European Food Safety Authority (EFSA) before market approval. Since 2021, the EU has authorized several insect species for consumption, including the yellow mealworm (*Tenebrio molitor*), migratory locust (*Locusta migratoria*), house cricket (*Acheta domesticus*), and Lesser mealworm (*Alphitobius diaperinus*). In January 2025, the European Commission approved the use of UV-treated *Tenebrio molitor* larvae powder in various food products, with mandatory allergen labelling for individuals allergic to crustaceans and dust mites (Regulation - 2025/89, 2025).

Insects have a high content of micro- and macronutrients, which can be even higher than in animal foods (Imathiu, 2020). They are particularly rich in proteins, lipids, fibre, and minerals (Acosta-Estrada et al., 2021). Compared to beef and pork, for example, insects are particularly rich in unsaturated fatty acids, with some species containing up to 75% of the total fatty acid content (Lange & Nakamura, 2023). Insects are also an environmentally friendly alternative to meat (Onwezen et al., 2019). Their production produces fewer greenhouse gases and requires less land (Aidoo et al., 2023).

Globally, an estimated two billion people consume approximately 1,900 insect species (Omuse et al., 2024). In the European Union (EU), major markets for insect-based food products include Sweden, Belgium, Germany, Italy, Poland, and France (International Platform of Insects for Food and Feed, 2024). In contrast, the Croatian market is relatively small. Previous research on edible insects in Croatia shows a diverse landscape of knowledge, perceptions, and sustainability awareness. International surveys to which Croatia was included (Guiné et al., 2022; Guiné, Duarte, et al., 2023; Guiné, Florença, et al., 2023; Guiné, Florença, Bartkiene, et al., 2024; Guiné, Florença, Costa, et al., 2024) show that knowledge about edible insects is limited, with many consumers expressing disgust or aversion to eating them (Guiné, Florença, Bartkiene, et al., 2024). Consumption is generally low, with

curiosity or food scarcity being potential motivations for experimentation (Guiné et al., 2022). Compared to countries such as Mexico, insect consumption in Croatia is lower, and participants often perceive insects as exotic and culturally taboo, reflecting the general European trend (Guiné, Florença, et al., 2023). Acceptance is influenced by socio-demographic factors such as age, education, and income, while gender and living environment appear to be less influential (Guiné, Florença, Bartkiene, et al., 2024). Croatian consumers are only moderately aware of the high protein content of insects, but are less well informed about possible antinutritional effects and general nutritional benefits compared to populations in countries such as Lithuania (Guiné, Florença, Costa, et al., 2024).

A significant challenge in promoting insect consumption is cultural acceptance (Guiné et al., 2022). In Western societies, insects are often associated with negative experiences rooted in cultural and religious beliefs, traditions, myths, and personal experiences. Investigating these barriers can provide insights into consumer preferences, cultural influences, and potential shifts in dietary choices. It may also aid in developing strategies to overcome reluctance and promote insect-based food products (Orkusz & Orkusz, 2024).

As a first step toward understanding the mechanisms influencing insect consumption, this study aims to replicate and expand previous findings on the role of personality traits (Machado-Oliveira et al., 2020) and disgust sensitivity (Andrić et al., 2023) in insect consumption. By examining these factors, the present study seeks to contribute to a broader understanding of consumer behavior and potential interventions to increase the acceptance of insect-based food.

Personality traits

Personality traits represent stable interindividual differences related to adaptation and interaction (Larsen & Buss, 2008), allowing behavioral predictions across situations and time (Church et al., 2008). The Big Five model (McCrae & Costa, 1987) remains the most prominent model of personality, encompassing Openness (intellectual curiosity, aesthetics), Conscientiousness (competitiveness, self-discipline), Extraversion (sociability,

sensation-seeking), Agreeableness (altruism, tenderness), and Neuroticism (anxiety, impulsivity; Borghans et al., 2008).

Regarding novel food acceptance, Machado-Oliveira et al. (2020) found openness and extraversion negatively related to food neophobia, while openness and agreeableness positively related to approach motivation towards new food. However, research on personality and food neophobia remains scarce, particularly concerning insect consumption.

Muiruri (2024) reported that conscientiousness negatively predicted willingness to eat insect-based food in a Norwegian sample, with the roles of extraversion (positive) and agreeableness (negative) being significant only for females. In a study by Wang and Park (2024), openness was positively related to entomophagy in both genders in Japan, whereas conscientiousness (negative for females) and agreeableness (positive in males) had gender-specific effects. Moreover, according to Russell and Knott (2021), the willingness to eat insects was positively predicted by extraversion and openness and negatively predicted by conscientiousness; neuroticism emerged as an additional negative predictor in their second study.

Disgust sensitivity

Disgust is one of the central human emotions, with women generally scoring higher than men on measures of disgust sensitivity (Tybur et al., 2009). Unlike personality traits, disgust sensitivity has been extensively studied in the context of insect-eating, likely due to its role in pathogen avoidance (Cepon-Robins, 2024). Health concerns have been identified as a barrier to insect consumption among Western children (Jones, 2020) and the general Polish population, with allergic reactions being a specific concern (Szlachciuk & Żakowska-Biemans, 2024). This aligns with findings showing that pathogen disgust sensitivity negatively correlates with insect consumption (Andrić et al., 2023; Modlinska et al., 2021; Peksever et al., 2024; Ruby & Rozin, 2019; Russell & Knott, 2021; Serpico et al., 2021; Sogari et al., 2023).

However, disgust extends beyond the pathogen domain. Tybur et al. (2009) proposed an evolutionary basis for disgust, encompassing sexual and moral dimensions, with moral disgust being linked to avoidance of norm

violators. Social norms play a crucial role in insect consumption: Berger & Wyss (2020) found that beliefs about descriptive norms (e.g., how many others consume insects) influence willingness to eat insects in Western samples. Similarly, Mulazzani et al. (2023) reported that Italians who view eating fish fed with insects as moral exhibit stronger consumption intentions. Russell & Knott (2021) also noted moral concerns as a barrier to insect consumption. Such findings align with the Theory of Planned Behavior (Ajzen, 1991), which highlights subjective norms as key determinants of behavioral intentions.

Present research

Considering the noted nutritional benefits of insect consumption and the lack of research on insects in Croatia, this study had two specific objectives. Firstly, given the lack of research on the relationship between personality traits and insect consumption, we wanted to further explore the relevance of personality traits to insect consumption and verify previous findings in a national sample. Given the cultural diversity and lack of previous research, we had no well-founded *a priori* hypotheses. However, as the previous results regarding the roles of openness and conscientiousness appeared to be fairly consistent, we expected openness to be positively related and conscientiousness to be negatively related to consumption intention (Russell & Knott, 2021; Muiruri, 2024; Wang & Park, 2024). Second, given the relevance of pathogen disgust and moral norms to insect consumption (Berger & Wyss, 2020; Szlachciuk & Żakowska-Biemans, 2024), we wanted to investigate whether we could confirm previous findings in the national sample. We expected both domains of disgust to be negatively associated with consumer intention (Andrić et al., 2023; Mulazzani et al., 2023).

Method

Participants

The initial sample included 682 participants from the general population of Croatia. Of those, 609 participants who were sure that they had never eaten insects were retained as the final sample. Most participants were females ($n = 348$), had no bachelor or master studies finished ($n = 403$),

lived in the urban environment ($n = 371$), had an average national income ($n = 343$), and worked or studied in the areas ($n = 324$) that are not directly relevant for the research domain (e.g. not in nutritionism, agriculture, environmental research, biology, medicine, tourism). The average age of the participants was 37.14 years ($SD = 15.31$).

Instruments

Disgust Sensitivity

To measure disgust sensitivity, we used the Croatian adaptation (Ćubela Adorić et al., 2014) of the Three Domains of Disgust Scale (Tybur et al., 2009). The original scale measures disgust sensitivity in three domains: pathogen, sexual, and moral. For this research, we used items to measure pathogen (7 items, e.g. *Stepping on dog poop*) and moral disgust (7 items, e.g. *Stealing from a neighbour*). Participants rated their agreement with each statement on the Likert-type scale ranging from 0 (*not disgusting at all*) to 6 (*extremely disgusting*). The internal consistency of the Pathogen subscale was $\alpha = .76$, while that of the Moral subscale was $\alpha = .81$. Correlation between the two subscales was $r(605) = .16, p < .01$.

Personality Traits

Personality was measured using Croatian adaptation (Kardum et al., 2006) of Big Five Inventory (John & Srivastava, 1999) that measures Openness (10 items, *I see myself as someone who is original, comes up with new ideas*), Conscientiousness (9 items, *I see myself as someone who does a thorough job*), Extraversion (8 items, *I see myself as someone who is talkative*), Agreeableness (9 items, *I see myself as someone who is helpful and unselfish with others*), Neuroticism (8 items, *I see myself as someone who is depressed, blue*). Participants rated their agreement with each statement on a Likert-type scale ranging from 1 (*completely disagree*) to 5 (*completely agree*). Internal consistency of the personality dimensions was Openness: $\alpha = .78$, Conscientiousness: $\alpha = .82$, Extraversion: $\alpha = .65$, Agreeableness: $\alpha = .70$, Neuroticism: $\alpha = .76$. Openness, conscientiousness, extraversion, and agreeableness were positively correlated, with the highest correlation being between agreeableness and conscientiousness ($r(606) = .44, p < .01$).

Intention of Insect Eating

The intention of the insect-eating was assessed with the following question: “If you have never eaten insects, would you consider consuming them?” Response options were: 1. Surely no, 2. Maybe, 3. Yes, but only in the form of prepared food that includes insects (for example, hamburger or cookies), and 4. Yes, in the form of whole insects and prepared foods.

Procedure

Data collection took place from October 2021 to December 2021 as part of the wider research under the *EISufood: Study about food habits and knowledge about edible insects as sustainable foods* project (Guiné et al., 2022). Trained student assistants distributed the paper-pencil questionnaires to at least 10 participants, respecting both gender (equal distribution) and age of participants. To participate in the survey, participants had to be at least 18 years of age. Participation was voluntary and anonymous. Before completing the questionnaire, respondents were informed by student assistants about the study’s aims and purpose. Respondents were given sufficient time to decide whether to participate, and study leaders or student assistants were available to answer any questions. Then, they completed the questionnaire privately. Contact details of the principal investigators (email and phone number) were available in case participants encountered any difficulties or later wished to withdraw from participation.

Participants first reported on their socio-demographic data, including age, gender (male/female/without answer), education (PhD/bachelor or master degree/without bachelor or master degree), living environment (village/suburban/urban), income (significantly below the national average/below the national average/equal to national average/higher than national average/significantly higher than national average), and field of work (nutrition /agriculture/ environmental research /biology/ medicine/ tourism/ other). After the socio-demographics, participants completed other measures listed in the Instruments.

The study was approved by the Ethics Committee of the University of Zadar (approval number: KLASA: 114-06/21-01/19; URBROJ: 15-21-01; approval date: October 5, 2021) and was conducted according to the principles of the Declaration of Helsinki.

Formal analyses

For the purposes of the main analyses, we summed the frequencies of the answers to the question of intention of insect eating and created two categories: *Surley No* ($n = 421$) and *Would consider* ($n = 182$); the latter was created by merging the three response options: *Maybe* ($n = 138$), *Yes, but only in the form of prepared food that includes insects (for example, hamburger or cookies)* ($n = 19$), and *Yes, in the form of whole insects and prepared foods* ($n = 25$). The reason for dividing participants into those categories is assumption that participants who would surely eat insects in some form and those who may eat them are more similar to each other than the group of participants who are sure they would not eat insect-based foods.

All the correlational analyses were calculated separately for both genders, controlling for the age (in male sample) and living environment (in female sample). The reason for doing so is that gender has emerged as a confounding variable when it comes to the relationship between personality and insect eating (Muiruri, 2024; Wang & Park, 2024), and there are gender differences in disgust sensitivity (Tybur et al., 2009). Furthermore, in this research age in men sample ($\rho(255) = -.17, p < .01$) and living environment in female sample ($\rho(340) = -.15, p < .01$; females from more urban areas are less willing to consume insect based food) were negatively correlated with the willingness to eat insect-based products. Due to the unbalanced distribution of intention to consume insects, for both genders, Spearman coefficient was used to quantify the relationship between this variable and disgust sensitivity and personality traits.

All analyses were carried out using the average values of the participants for the selected continuous variables in the JASP software (v. 0.19.3, JASP Team, 2024) with p value set to 0.05. Missing cases were excluded pairwise.

Results

First, we present descriptive statistics for disgust sensitivity and personality traits for both women and men. Participants' scores on both personality and disgust sensitivity dimensions were moderate, with women's results, in absolute terms, being somewhat higher (Table 1).

Table 1

Descriptive Data on Disgust Sensitivity and Personality Traits for Females and Males

	Females					Males				
	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>n</i>
Pathogen disgust	3.64	1.20	0	6	347	3.28	1.25	0	6	259
Moral disgust	4.39	1.19	0	6	348	4.12	1.22	0	6	260
Openness	3.57	.62	1	5	347	3.40	.62	1	5	260
Conscientiousness	3.81	.65	1	5	348	3.61	.69	1	5	259
Extraversion	3.56	.61	1	5	348	3.52	.56	1	5	260
Agreeableness	3.81	.56	1	5	348	3.65	.58	1	5	260
Neuroticism	2.69	.74	1	5	348	2.56	.67	1	5	260

Note. *n* – number of participants.

Furthermore, additional analyses revealed that all skewness and kurtosis indices for females fell within the ± 1.4 range, whereas for males, they were within the ± 0.7 range, indicating no strong departure from the normal distribution. In addition, pathogen disgust was negatively correlated with openness in females ($r(344) = -.11, p < .05$), whereas moral disgust was significantly correlated with openness ($r(345) = .15, p < .01$), extraversion ($r(346) = .15, p < .01$), conscientiousness ($r(346) = .18, p < .01$), and neuroticism ($r(346) = -.15, p < .01$). In males, pathogen disgust was correlated with conscientiousness ($r(256) = -.21, p < .01$), while moral disgust was associated with conscientiousness ($r(257) = .19, p < .01$), agreeableness ($r(258) = .30, p < .01$) and neuroticism ($r(258) = -.24, p < .01$).

Within each gender, approximately 70% of participants reported being sure about not intending to consume insect food; approximately 30% of participants reported they would consider consuming it (Table 2).

Table 2

Frequency of Willingness to Consume Insect Food for Females and Males

	Females	Males
Surley No	245 (71.01%)	175 (68.09 %)
Would consider	100 (28.99%)	82 (31.91%)

Furthermore, we explored the relationship (partial Spearman correlation) between disgust sensitivity and willingness to consume insects in both genders, controlling for age (male sample) and living environment (female sample). According to our results (Table 3), pathogen disgust was negatively related to the intention of insect food consumption in both females ($\rho(339) = -.16, p < .01$) and males ($\rho(254) = -.18, p < .01$). Moral disgust was not related to the eating intention in any gender ($\rho_{\text{females}}(340) = -.11, p > .05$; $\rho_{\text{males}}(255) = -.02, p > .05$). Moreover, more conscientious females were less likely to consume insect-based food. In the subsample of males, participants who were more open were more likely to consume insect-based food, while participants who were more extraverted and agreeable were less likely to do so.

Table 3

Partial Spearman Correlations (ρ) Between Personality Traits and Intention of Insect Food Consumption for Females and Males

Personality trait	Females	df	Males	df
Openness	.09	339	.15*	255
Conscientiousness	-.11*	340	-.12	254
Extraversion	-.09	340	-.14*	255
Agreeableness	-.02	340	-.18*	255
Neuroticism	.02	340	.09	255

Note. * $p < 0.05$.

Discussion

The aim of the present study was to explore the relationship between personality traits and disgust sensitivity with the intention to consume insect-based food in a Croatian sample from the general population. Our results partially align with some of the previous findings in the field, further emphasizing the importance of assessing the role of gender in these relationships.

Personality traits and intention to consume insect-based food

In line with the results of previous studies (Muiruri, 2024; Wang & Park, 2024), our findings suggest gender is an important factor to consider in entomophagy research. Namely, while both approach and inhibitory effects was observed in males, only the inhibitory effect was present in females.

The inhibitory effect of conscientiousness in females is in accordance with the findings of Wang & Park (2024), and it may be explained by concerns related to health and nutrition (Jones, 2020; Szlachciuk & Żakowska-Biemans, 2024). Specifically, conscientiousness is generally linked to careful decision-making, a preference for structured behaviour, and a strong adherence to personal or socially accepted health norms. This may be especially true in a traditionally male-dominated culture, which may lead females to prioritize health-related behaviours over personal preferences, impacting their dietary choices (Polić & Holy, 2021; Żurawska et al., 2025). Additional confirmation for the relationship between conscientiousness and acceptance of social norms in females comes from its positive relation with moral disgust. Individuals who score high in conscientiousness often demonstrate a heightened awareness of dietary risks and benefits, making them more selective in their food choices. Given that conscientiousness is positively associated with healthy eating habits (Tsartsapakis & Zafeioudi, 2024), it is possible that health-conscious females avoid consuming insect-based foods due to concerns about their safety, nutritional adequacy, or potential contaminants.

Despite their high protein content and recognized nutritional benefits, concerns regarding the presence of pollutants, allergens, or microbial contamination in insect-based products may deter health-conscious consumers. For instance, depending on the environment in which they are cultivated, insects may accumulate heavy metals, pesticides, or other harmful substances, raising questions about food safety (Labu et al., 2022; Li et al., 2023; Schrögel & Wätjen, 2019; van der Fels-Klerx et al., 2018). If conscientious individuals prioritize food purity and minimal exposure to contaminants, they may be particularly hesitant to consume insects unless they are assured of strict quality control measures. This suggests that the willingness of conscientious females to adopt insect-based diets could, at least to some extent, be influenced by targeted education and transparent

information about food safety standards. If consumers receive well-structured and scientifically backed data on the regulation, processing, and nutritional benefits of insect-based products, they may be more likely to reconsider their initial reluctance.

In males, extraversion and agreeableness had an inhibitory effect, while openness was related to approach motivation. Such findings may be explained by the characteristics of these traits – since extraverted individuals are seeking positive emotionality (Borghans et al. 2008), they may avoid stimuli that can induce negative emotions due to unfamiliarity. Besides, agreeable individuals make decisions based on automated processing that favours the simplicity of thinking (Madjaroski 2018). Since food based on insects is novel and familiarization with it requires more effort, more agreeable males may not be ready to invest resources into finding the facts about insect-based food. This implies that it would be important to present critical facts about insect-based food in a straightforward and easy-to-access manner to promote its consumption among highly agreeable males. Presumably, this strategy would be more effective if social values favoured insect consumption, as agreeableness in the male sample appears to be positively related to social norms (moral disgust). Approach motivation related to openness is in accordance with the previous research (Russell & Knot, 2021; Wang & Park, 2024) and may be explained by the notion that people high on openness are curious (Borghans et al., 2008) and therefore willing to try new food (Tsartsapakis & Zafeiroudi, 2024). Therefore, focusing on the novel experience of insect-based food, according to these results, may promote its consumption among males with high openness.

As mentioned, the effect of personality traits in females may be inhibited due to cultural context and social norms (Buczek & Tomaszek, 2022; Otterbring & Festila, 2022; Roberts et al., 2009; Tsartsapakis & Zafeiroudi, 2024). Females are more responsive to social norms regarding food choices than males, probably due to reputation and guilt concerns (Dannenberg et al., 2024). This may explain the non-significant effects of extraversion, agreeableness, and openness in the female sample, as well as the non-significant effect of conscientiousness in the male sample.

Furthermore, it is important to note that the lack of association between neuroticism (impulsiveness) and insect eating (also seen in the

previous studies; e.g., Muiruri, 2024; Study 1 in Russell & Knot, 2021; Wang & Park, 2024) suggests that consuming insect-based foods is not driven by spontaneous decision-making in any gender. However, given different cultural contexts, statistical approaches, and methodological differences among conducted studies, further research is needed before making a strong conclusion about these relations.

Disgust sensitivity and intention to consume insect-based food

When it comes to the relationship between pathogen disgust sensitivity and participants' intention to consume insect-based food, results of the previous studies (Andrić et al., 2023; Modlinska et al., 2021; Peksever et al., 2024; Ruby & Rozin, 2019; Russell & Knott, 2021; Serpico et al., 2021; Sogari et al., 2023) were confirmed for both genders. Participants who reported more disgust were less likely to consume insect-based food. Given that pathogen disgust has evolved with the goal of disease prevention (Tybur et al., 2009) and that health concerns are one of the barriers to insect eating (Jones, 2020; Szlachciuk & Żakowska-Biemans, 2024), these findings were to be expected. Since a strong physiological reaction is a core characteristic of disgust (Alladin et al., 2024), interventions aimed at increasing consumer acceptance of insect-based foods should focus on minimizing these automatic aversive responses. One effective strategy is to modify the presentation of insect-based products to make them more visually and conceptually appealing. This could include using attractive packaging, processing insects into powders or pastes to eliminate visible features that remind consumers of whole insects, and clearly communicating that these products are cultivated under strict hygiene standards (de Boer and Lemke, 2024). Such measures could help reduce the initial disgust response and increase consumer openness to trying insect-based foods. However, while modifying the presentation of insect-based foods may help reduce aversion, it must be done in compliance with food regulations. According to EU No 1169/2011 (European Union, 2011), food labelling and marketing must not mislead or deceive consumers. This means that while businesses can enhance the visual appeal of insect-based foods and provide reassuring information about their safety, they cannot obscure or misrepresent the product's true nature. If insect-derived ingredients are hidden in a way that prevents consumers from making informed choices, this would contradict

the ethical and legal standards established for food marketing and labelling. A balanced approach, therefore, would involve emphasizing the benefits of insect-based foods—such as their high protein content, environmental sustainability, and safety—while ensuring that consumers are fully informed about what they are purchasing. Educating the public on the rigorous production and quality control measures in place for edible insects could also help build trust and acceptance. Additionally, future research should explore whether repeated exposure, sensory adaptation, or culinary innovations (e.g., integrating insect-based ingredients into familiar food products) can further reduce the initial disgust reaction and promote wider acceptance of insect consumption.

Contrary to some previous research findings (Berger and Wyss, 2020; Mulazzani et al., 2023; Russell and Knott, 2021), adherence to social norms, operationalized as moral disgust, was not correlated with the intention to eat insect-based products in our study. One possible reason for the non-significant finding may be associated with how we measured disgust toward violation of social norms (i.e., we measured disgust toward violation of social norms in a general sense [e.g., stealing], but not in the context of food consumption). Besides, it is important to note that moral disgust is conceptually hard to define, given that participants may use the word disgust in the moral domain for similar emotions with negative valence (e.g., repulsion) (masked for review). However, given the novelty of this research question in both domestic and a broader international context, further research is needed before drawing any more definitive conclusions.

Limitations

One of the limitations of the present study is statistical in the sense that responses on the intention to consume insect-based food were unbalanced, meaning that approximately 30% of the participants, for both genders, declared their willingness to consume insects. To overcome this issue, we used a non-parametric approach (Spearman Rho). However, by doing so, we lost some statistical power. For the same reason, we did not conduct regression analysis to explore which personality trait is the most predictive of the consumer intention in males. Such an analysis would require the use of robust estimators (e.g., Bayesian estimation or robust maximum

likelihood) and was beyond the scope of this article. Relatedly, it would be interesting to compare the predictive power of disgust sensitivity and personality traits, which, for the reason mentioned, was not done. According to the bandwidth-fidelity dilemma (Cronbach & Gleser, 1957), specific predictors should predict specific outcomes better than general ones. In this regard, given that disgust sensitivity, especially pathogen one, is closely related to the gustatory system, it may have more predictive power than personality traits. However, to the best of our knowledge, this has yet to be examined. Moreover, personality trait extraversion had somewhat lower internal reliability due to the sample characteristics. Also, the sample is not representative of the population (e.g., women are overrepresented, participants are on average younger than the national average age), so the results cannot be generalized. Finally, to measure participants' intention to consume insect-based food, we relied on self-reports. To complement these findings and improve external validity, behavioural measures should be used.

Conclusion

Food neophobia, the tendency to avoid unfamiliar foods, is a key factor influencing the acceptability of insect-based foods (Ros-Baró et al., 2022). Individuals with neophobic tendencies are expected to be more hesitant to consume insect-based foods (Faccio & Guiotto Nai Fovino, 2019; Hopkins et al., 2023; Sogari et al., 2019). As the demand for sustainable food alternatives grows, understanding the psychological barriers and motivators associated with insect consumption will become increasingly important. To the best of our knowledge, this is the first study in Croatia that explored the relationship between personality traits, disgust sensitivity, and consumers' intention to eat insect-based food. Results are partly in accordance with the previous international findings; however, future studies are needed before making any stronger conclusions about the relationships of interest.

Given the increasing relevance of insect-based foods in the modern food industry—both as a sustainable protein source and as an environmentally friendly alternative to traditional livestock—continued research in this field is essential. Future studies should explore these relationships in greater depth, incorporating diverse methodologies such as longitudinal research designs, experimental interventions, and cross-cultural

comparisons to determine the stability and generalizability of these findings. Additionally, examining the impact of targeted educational campaigns, sensory exposure, and marketing strategies on consumer willingness to adopt insect-based diets could offer practical insights for policymakers, food producers, and sustainability advocates.

Acknowledgement

The authors thank to student assistants for the help with data collection.

Funding

This work is funded by National Funds through the FCT—Foundation for Science and Technology, I.P., within the scope of the projects Ref. UIDB/00681 (CERNAS), research unit, and it was prepared in the ambit of the project EISuFood of the CERNAS-IPV and the Polytechnic University of Viseu.

Conflict of interest

We have no conflicts of interest to disclose.

Data availability statement

Data are available at <https://github.com/kjaksic/Eisu-food>.

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