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Predictors of the Frequency of Consumption and Purchase of Convenience Food in Modelling Approaches

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ABSTRACT

Objective: To determine the variables influencing the frequency of consumption and purchase of convenience foods with the use of economic modelling.

Research Design & Methods: The empirical material consisted of the results obtained using computer-assisted web interviewing methodology (by means of Google Forms). The study was conducted among 393 respondents living in Gdynia (Northern Poland). The survey included questions in the following areas: lifestyle, attitudes towards new products, selection attributes of convenience foods, frequency of consumption and purchase of convenience foods, as well as demographic data (gender, age, and income). To achieve the objectives of the study, logistic regression analysis was used, thus predicting the probability of a set of independent variables influencing the regularity of purchasing convenience foods and the frequency of purchasing convenience food products for direct consumption (ready-to-eat).

Findings: Men were found to be almost three times more likely to consume convenience foods on a regular basis as women. In turn, individuals belonging to Generation Y have an approximately 70% higher chance of consuming convenience food products more regularly than representatives of Generation X. Moreover, the subjects for whom the freshness of consumed food is very important are about 59% less likely to purchase products for direct consumption (ready-to-eat) than individuals for whom the freshness of consumed products is not so important.

Implications/Recommendations: A potential segment of convenience food consumers are men, individuals from Generation Z, who value both the freshness and short preparation time of the products. Therefore, building awareness of convenience food brands/products should be especially targeted at this group of buyers.

Contribution: The presented models expand the knowledge of the factors determining the consumption of convenience foods.

Article type: original article.

Keywords: convenience food, regularity of consumption, purchase determinants, purchase predictors, purchase forecasting.

JEL Classification: A14, D10, M3, M31, Q13.

1. Introduction

The term “convenience food” represents a highly contentious category, subject to diverse definitions, interpretations, and applications. Convenience foods encompass a diverse spectrum of processed and semi-processed items, often contrasted with “fresh” foods composed of raw ingredients and prepared from scratch. This category is frequently regarded as one of the least healthy and most unsustainable dietary choices, owing to its low nutritional value, excessive packaging, and heavy reliance on imported ingredients (Jackson & Viehoff, 2016).

The convenience food category consists of any form of pre-packaged or prepared food designed for easy and rapid consumption, requiring minimal or no cooking or additional preparation. The convenience food segment constitutes approximately 6% of the global food market, resulting in retail sales of approximately USD 564 billion in 2022, projected to increase to USD 839 billion by 2028. The market is anticipated

to grow at an annual rate of 6.28% (CAGR 2024–2028). A significant proportion of revenues is derived from China (USD 154 billion in 2024). Additionally, the market exhibits substantial development in Canada, the UK, the US, and other nations (Statista, 2023).

Initially, within the food sector, when deliberating upon the concept of convenience food, there was a diminished emphasis on quality and nutritional value, with a greater focus on convenience and accessibility. Nevertheless, due to the heightened interest in convenience foods, this category poses persistent challenges for food manufacturers. The provision of suitable products improves consumer satisfaction, consequently enhancing economic efficiency for producers (Oroian *et al.*, 2017). A comprehensive understanding of consumer needs and expectations is an indispensable element for the success of new products (Cooper, 2018). Failure to incorporate market orientation into the design of new products, reluctance to conduct requisite market assessments, or oversight of consumer expectations are primary factors contributing to the failure of new products in the market (Cooper, 2019).

The convenience food market is undergoing evolution. Increasing consumer awareness propels current convenience food manufacturers to seek recipes that are both swift and straightforward to prepare, while concurrently possessing high sensory and nutritional quality. A novel trend is emerging in the market concerning the production of convenience foods with eco-friendly attributes (Stranieri, Ricci & Banterle, 2017; Ricci, Banterle & Stranieri, 2018). A recent shift in the evaluation of convenience foods is notable; it is no longer perceived as having adverse health effects and is now advocated as a means of supporting the dietary patterns of the elderly and other demographics (Nakano & Washizu, 2020). Identifying trends in convenience food consumption is imperative to ensure the nutritional needs of current and future generations are adequately addressed (Platta *et al.*, 2023). Therefore, continuous analysis and monitoring of attitudes towards convenience food and market behaviour are of paramount importance.

2. Literature Review

There is a substantial body of literature elucidating the factors that influence the demand for ready-to-eat foods. The popularity of these products can be attributed to demographic shifts in households, such as an increased number of working women and a generational transition in household cooking skills (Brunner, van der Horst & Siegrist, 2010; Mallinson, Russell & Barker, 2016). Convenience foods represent an indispensable component of the contemporary household food basket. In some instances, this has resulted in a decline in the nutritional quality of the diet. Peltner and Thiele (2018) posit that it is imperative to offer convenience foods with a higher nutrient density and a lower energy density. Interventions designed to enhance

cooking skills could prove an effective strategy for increasing the purchase of unprocessed foods, which, in turn, could contribute to an enhanced quality of diet.

Busy lifestyles, demanding work schedules, and multiple responsibilities in the context of a time of scarcity (Hena, Peeyush & Vimolwan, 2023), as well as a convenience orientation (Hena, Peeyush & Vimolwan, 2021), have been demonstrated to influence consumers' intentions to purchase and consume convenience foods. Attitudes and behaviours towards convenience foods may vary due to dissonance in awareness of dietary needs, attitudes towards new foods, lifestyle, and socio-demographic variables (Platta *et al.*, 2023). Links between the consumption of ready-to-eat foods and inadequate nutritional status have been investigated in the literature. It has been observed that frequent consumption of instant or takeaway foods among school-aged children results in inadequate nutrient intake (Rahman *et al.*, 2022). Research indicates that convenience, sensory appeal, health, price, and mood are pivotal factors influencing the choice of convenience foods (Januszczyńska, Pieniak & Verbeke, 2011). Age has been identified as a variable that strongly differentiates the consumption of various categories of convenience food, as well as overall consumption. Older consumers tend to consume fewer convenience products (Brunner, van der Horst & Siegrist, 2010). A study by Mallinson, Russell and Barker (2016) investigated whether household food waste is associated with a convenience food lifestyle in younger UK consumers (18–40 years). Through cluster analysis of 24 lifestyle factors, five distinct convenience profiles emerged: epicures ($n = 135$), traditional consumers ($n = 255$), casual consumers ($n = 246$), food-detached consumers ($n = 151$), and kitchen evaders ($n = 141$). Casual consumers and kitchen evaders were found to be the most reliant on convenience foods.

Attempts have been made in the literature to explain intentions to purchase convenience foods using the theory of planned behaviour (TPB). Stranieri, Ricci and Banterle (2017) examined the correlation between eco-friendly and health-conscious convenience foods, with a specific emphasis on factors influencing the acquisition of health-oriented convenience food items possessing environmentally sustainable features. Notably, the study spotlighted minimally processed vegetables adhering to voluntary standards associated with integrated agriculture.

The results indicate positive relationships with consumer purchasing habits, food-related environmental behaviour, gender, income, and knowledge. In contrast, other results (Ricci, Banterle & Stranieri, 2018) confirm the significant role of consumer trust, positively influencing attitudes towards the purchase of convenience foods with eco-friendly attributes and negatively affecting consumer concerns about agricultural practices in relation to environmental and health impacts.

While consumer studies elucidating convenience food consumption can be found in the literature (Adamczyk, 2010; Babicz-Zielińska, Jeżowska-Zychowicz & Laskowski, 2010; Mojka, 2012; Peura-Kapanen, Jallinoja & Kaarakainen, 2017;

Peltner & Thiele, 2018; Wróblewska, Pawlak & Paszko, 2018; Lemanowicz & Adamska, 2023; Platta *et al.*, 2023), few of them focus on model-based approaches to assessing attitudes and behaviours (Mallinson, Russell & Barker, 2016; Stranieri, Ricci & Banterle, 2017; Ricci, Banterle & Stranieri, 2018). This study endeavors to redress this lack of scholarship.

The aim of the study was to determine the variables influencing the frequency of consumption and purchase of convenience foods using economic modelling. The following research hypotheses were formulated:

H1. Lifestyle, attitudes towards new foods and consumer-related variables (such as e.g., gender, generation, income) may influence the regularity of convenience food consumption.

H2. The purchase of convenience food products for direct consumption (ready-to-eat) may be related to the attitudes towards new foods, attributes of convenience foods, as well as demographic variables related to the consumer (gender, generation, income).

3. Methodology

The conducted research is a continuation of previous studies on the factors influencing the purchase and consumption of convenience foods, the results of which were only partially published (Platta *et al.*, 2023). The empirical material consisted of the results obtained using a computer-assisted web interview surveying technique (by means of Google Forms). The survey was conducted in the spring of 2023 among a group of 393 respondents living in Gdynia (Northern Poland). The respondents were recruited using the snowball sampling technique. Detailed characteristics and the structure of the study sample are provided in Table 1. The surveyed sample of respondents is not representative. Therefore, the results cannot be generalised to the total population of prepared meal consumers in Poland.

A partially standardised interview questionnaire (Jeżewska-Zychowicz, 2015) was used in the study. The research tool consisted of the following scales:

– *Lifestyle*. The measurement included 4 statements rated on a 5-point Likert scale (Arvola *et al.*, 2007): “I pay attention to the naturalness of food,” “I value tradition in terms of the foods I consume,” “I value the convenience and short preparation time of meals I consume,” “I am health-conscious in my eating habits.”

– *Food neophobia/The Food Neophobia Scale (FNS)*. A modified scale developed by Pliner and Hobden (1992) was used in the study. The FNS consists of 10 statements. Statements 5, 6 and 10 of the FNS scale were changed to the following: “So-called healthy foods look too strange for me to eat” (5), “At parties/when I go out, I like to try new foods” (6), “I like trying new dishes” (10). Moreover, the scale itself was revised and the 7-point rating scale was replaced with a 5-point Likert scale. After recoding the statements in which higher points corresponded

to a neophobic attitude, the answers were collated, and the following two indicators were calculated: mean value (X) and standard deviation (SD). Furthermore, three categories of attitudes corresponding to neophilia, ambivalent attitude, and neophobia were distinguished.

– *Factors (attributes, features) influencing the selection of convenience foods.* Participants were asked to rank the factors from the most important (1) to the least important (13). The following attributes and features were assessed: taste, affordable price, health considerations, naturalness, freshness, product familiarity, attractive appearance, long shelf life, food preparation does not require culinary skills, short preparation time, possibility of immediate consumption after purchase, possibility of consumption while travelling, product availability.

– *Frequency of consumption and purchase of convenience foods.* The survey participants indicated the frequency of consumption of convenience foods by responding to the following statements: “I eat convenience food products regularly” and “I buy convenience food products for direct consumption (ready-to-eat)” expressed on a 5-point Likert scale.

– *Demographics:* gender, age, income.

The subject of our research was respondents belonging to different groups of consumers (Generations X, Y, Z). Demographically, consumers can be divided into distinct groups by age. Commonly recognised age classifications include the baby boomer generation, born between 1946 and 1964; Generation X, born between 1965 and 1979; Generation Y, also known as millennials, born between 1980 and 1994; and Generation Z, born after 1995, often referred to as Generation C (“connected”) or the post-millennial generation (Twenge, 2017).

Table 1. Study Sample Characteristics

Parameters	Number of Respondents	Percentage
Gender		
Female	197	50.13
Male	196	49.87
Generation		
X	134	34.09
Y	130	33.08
Z	129	32.83
Monthly income		
Allows meeting of basic needs	118	30.02
I/we can afford some, but not all expenses	184	46.82
I/we can afford to buy everything I/we need	91	23.16

Source: the authors, based on survey results.

The collected empirical material obtained from the questionnaires 3 and 4, after preliminary activities related to data coding and tabulation, was subjected to statistical analysis using the R 4.1.2 software. Logistic regression analysis was used to verify the research hypotheses established in the study, predicting the probability with which a set of explanatory/independent variables – X will affect: the regularity of purchasing convenience foods and the frequency of purchasing convenience food products for direct consumption (dependent/explained variables – Y), in accordance with the equation elaborated by Danieluk (2010). The ordered logistic regression models were constructed based on the Wald test. The likelihood ratio tests were also performed for the estimated models. Interpretations for individual independent variables were obtained using the odds ratio measure. The correctness of the models was assessed by means of the Brant test. In turn, the predictive power of the models was assessed using the count R^2 coefficient obtained on the basis of the prediction accuracy table. The significance level of $p < 0.05$ was assumed for all statistical analyses.

4. Results

4.1. Assessment of Factors Influencing the Regularity of Consumption of Convenience Foods

To confirm hypothesis 1, a multinomial ordered logit model was built. Due to the fact that the independent variable “I eat convenience food products regularly” was an ordinal variable, a change was introduced in the coding of the target variable, combining similar categories. As a result, three categories were obtained for the independent variable (Table 2).

Table 2. Changes in the Coding of the Independent Variable

Initial Value	Modified Value
no, rather no	no
neither yes nor no	neither yes nor no
rather yes, yes	yes

Source: the authors, based on survey results.

The following explanatory variables were examined: gender (categories: woman, man), generation (categories: X, Y, Z), income (categories: low, average, high), lifestyle scale, attitudes towards new foods (neophiliac, ambivalent, neophobic). Variables were selected based on the stepwise regression method. The Brant test was performed in order to check the correctness of the model, which allows verification of the null hypothesis regarding the assumption of proportionality of

chances. Assuming the significance level of 5%, there were no grounds to reject the null hypothesis for the combined test, as well as for individual ones. Therefore, the required assumption of proportionality of chances has been met, which allows the model specification to be considered correct.

Table 3 presents the accepted final model with the variables influencing the regularity of consumption of convenience foods.

Table 3. The Model Containing the Variables Influencing the Regularity of Consumption of Convenience Foods

Variables	Specifica- tion	Coeffi- cient	Std. Err.	<i>t</i> -value	<i>p</i> -value	95% Confi- dence Interval		Odds Ratio
Gender	male	1.079	0.212	5.096	0.000	0.668	1.499	2.943
Generation	Y	0.525	0.243	2.161	0.031	0.050	1.004	1.691
	Z	1.22	0.258	4.729	0.000	0.720	1.732	3.388
FNS	ambivalent	0.094	0.281	0.334	0.738	-0.458	0.647	1.099
	neophobic	-0.432	0.383	-1.129	0.259	-1.187	0.316	0.649
Income	average	0.253	0.247	1.023	0.306	-0.231	0.739	1.288
	high	0.007	0.302	0.022	0.983	-0.585	0.600	1.007
I pay attention to the naturalness of food	somewhat/ rather disagree	-0.578	0.501	-1.153	0.249	-1.584	0.394	0.561
	neither disagree nor agree	-0.709	0.492	-1.441	0.150	-1.701	0.242	0.492
	somewhat/ rather agree	-1.149	0.49	-2.346	0.019	-2.138	-0.203	0.317
	agree	-2.016	0.532	-3.788	0.000	-3.086	-0.989	0.133
I value the con- venience and short preparation time of meals I consume	somewhat/ rather disagree	-0.442	0.766	-0.577	0.564	-1.953	1.077	0.643
	neither disagree nor agree	-0.29	0.642	-0.452	0.651	-1.529	1.015	0.748
	somewhat/ rather agree	0.859	0.6	1.431	0.153	-0.291	2.091	2.360
	agree	1.557	0.603	2.581	0.010	0.405	2.798	4.744
Constant term	no/neither yes nor no	0.364	0.725	0.502	0.616	0.668	1.499	2.943
	neither yes nor no/yes	1.883	0.731	2.577	0.010	0.050	1.004	1.691

Source: the authors, based on survey results.

To assess the reliability of the model, a prediction accuracy table was used. The count R^2 based on the calculation of the ratio of correctly qualified cases by the model to all cases analysed in the study was approximately 60%. Assuming the significance level of 5%, it was found that the statistically significant variables in the model are: gender, generation (categories Y, Z), “I pay attention to the naturalness of food” (categories: somewhat/rather agree, agree), “I value the convenience and short preparation time of meals I consume” (category: agree).

In order to interpret the impact of individual independent (explanatory) variables on the dependent (explained) variable, the odds ratio was used. The obtained results (Table 3) are as follows:

- men are almost three times more likely to consume convenience foods on a regular basis than women, assuming *ceteris paribus*,
- individuals belonging to Generation Y have about a 70% higher likelihood of consuming convenience food products more regularly compared to Generation X, assuming *ceteris paribus*,
- individuals from Generation Z are more than three times more likely to consume convenience foods regularly than Generation X, assuming *ceteris paribus*,
- individuals who somewhat/rather agree with the statement that they pay attention to the naturalness of food have about a 68% lower probability of consuming convenience food products on a regular basis compared to those who do not agree with this statement, assuming *ceteris paribus*;
- individuals who agree with the statement that they pay attention to the naturalness of food have about an 87% lower chance of consuming convenience foods more regularly in comparison to those who do not agree with this statement, assuming *ceteris paribus*,
- individuals who agree with the statement that they value the convenience and short preparation time of meals they consume are 4.7 times more likely to consume convenience food products regularly compared to those who do not agree with this statement, assuming *ceteris paribus*.

4.2. Assessment of Factors Influencing the Purchase of Ready-to-Eat Convenience Food Products

To confirm hypothesis 2 assumed in the study, a multinomial ordered logit model was built. Due to the fact that the independent variable “I buy convenience food products for direct consumption (ready-to-eat)” was an ordinal variable, a change was made in the coding of the target variable, combining similar categories. As a result, three categories were obtained for the independent variable (Table 2). The following explanatory variables were examined: gender (categories: woman, man), generation (categories: X, Y, Z), income (categories: low, average, high), attitudes towards new foods (neophilic, ambivalent, neophobic), attributes

of convenience foods: taste and smell, freshness, speed of preparation (binary variables, categories: yes, no). Variables were selected based on the stepwise regression method. To check the correctness of the model, the Brant test was performed again, as it allows verification of the null hypothesis regarding the assumption of proportionality of chances. Assuming the significance level of 5%, there were no grounds to reject the null hypothesis for the combined test, as well as for individual ones. So, again, the required assumption of proportionality of chances has been met, and thus the model specification may be considered correct. Table 4 presents the accepted final model showing the variables influencing the regularity of consumption of convenience foods. To assess the reliability of the model, a prediction accuracy table was used. The count R^2 based on the calculation of the ratio of correctly qualified cases by the model to all cases analysed in the study was approximately 69%.

Assuming the significance level of 5%, it was found that the statistically significant variables in the model are: freshness, speed of preparation, gender, generation (category: Z), income (category: high). To interpret the impact of individual independent (explanatory) variables on the dependent (explained) variable, the odds ratio was used. The obtained results (Table 4) are as follows:

- men are approximately 96% more likely to consume ready-to-eat products more often than women, assuming *ceteris paribus*,
- individuals for whom the freshness of products is very important are approximately 59% less likely to consume products for direct consumption (ready-to-eat) more often than those for whom the freshness of products is not so important, assuming *ceteris paribus*,
- consumers for whom a short time for food preparation is very important are almost 2.5 times more likely to purchase ready-to-eat products compared to those for whom a short preparation time is not so important, assuming *ceteris paribus*,
- individuals from Generation Z are 2.4 times more likely to consume ready-to-eat products more often than individuals from Generation X, assuming *ceteris paribus*,
- high-income consumers are 61% less likely to purchase ready-to-eat products compared to low-income individuals, assuming *ceteris paribus*.

Our study revealed that men were nearly three times more likely to consume convenience foods regularly than women. Other research (Lemanowicz & Adamska, 2023) indicates that the gender of respondents influences their attitudes toward the quality and nutritional value of convenience foods. Men were more inclined to perceive convenience foods as having high quality and nutritional value and were more likely to express a desire to consume them. Other findings (Daniels & Glorieux, 2015) indicate that single-living households, particularly single men, tend to prioritise convenience in their food preparation patterns compared to

couples and households with children. The consumption of semi-convenient meal components appears to be more closely related to the conventional definition of home-cooking. Older generations, those with lower levels of education, those who are not in employment and those who adhere to traditional nuclear family structures are more likely to spend a larger share of their food budget on non-convenient and “shortcut” ingredients.

Table 4. The Model Containing the Variables Influencing the Purchase of Convenience Foods for Direct Consumption (Ready-to-Eat)

Variables	Specification	Coefficient	Std. Err.	<i>t</i> -value	<i>p</i> -value	95% Confidence Interval		Odds Ratio
Taste and smell	yes	−0.253	0.243	−1.042	0.297	−0.728	0.224	0.777
Freshness	yes	−0.886	0.258	−3.441	0.001	−1.396	−0.385	0.412
Quick preparation time	yes	0.877	0.29	3.027	0.002	0.315	1.455	2.405
Gender	male	0.675	0.228	2.962	0.003	0.231	1.126	1.964
Generation	Y	0.344	0.274	1.256	0.209	−0.192	0.884	1.411
	Z	0.88	0.286	3.079	0.002	0.326	1.449	2.412
FNS	ambivalent	−0.341	0.328	−1.042	0.298	−1.002	0.287	0.711
	neophobic	−0.788	0.425	−1.855	0.064	−1.630	0.040	0.455
Income	average	0.009	0.297	0.032	0.975	−0.580	0.589	1.010
	high	−0.95	0.332	−2.865	0.004	−1.608	−0.305	0.387
Constant term	no/neither yes nor no	−1.851	0.507	−3.649	0.000	−0.728	0.224	0.777
	neither yes nor no/yes	−0.749	0.497	−1.506	0.132	−1.396	−0.385	0.412

Source: the authors, based on survey results.

Additionally, our research demonstrates that individuals from Generations Y and Z are more inclined to consume convenience foods regularly when compared to Generation X. Moreover, research conducted by Barska (2018) focusing on Generation Y reveals that attributes such as convenience, speed of preparation, and time savings are crucial for individuals from this generation. Approximately 66% of millennial consumers admitted to consuming convenience foods. These findings align with a prior study (Platta *et al.*, 2023), which revealed significant variations in the consumption of convenience foods based on factors such as gender, monthly income levels, and lifestyle. Generation Z was found to be more likely to express a desire to consume convenience foods. The results of other studies have

indicated that factors such as age, gender, and culture appear to influence the likelihood of purchasing ready-to-eat meals (Luo *et al.*, 2019). Older consumers tend to resist altering their traditional dietary habits, whereas younger generations are more inclined to adopt newly popularised food products (Keller, López & Moreno, 2015). The explanation for gender differences in food choices suggests that women are more likely to consume healthy foods due to weight control concerns and health-related beliefs (Luo *et al.*, 2019).

Other studies conducted in the academic environment in India using the pathway model have demonstrated a positive relationship between sensory attractiveness, nutritional quality, safety attributes, healthiness, and the intention to purchase ready-to-eat food. These studies revealed that both purchase intent and consumption, as well as consumption and satisfaction, were positively associated with ready-to-eat-foods. Sensory attractiveness emerged as a key determinant influencing purchase intent, consumption, and consumer satisfaction with convenience food scarcity (Imtiyaz, Soni & Yukongdi, 2021). Choi, Lee and Hong (2022) conducted a segmentation of single-person households aged 19 to 39 in Vietnam, focusing on consumption of convenience food. The results suggest that convenience orientation may be the most effective criterion among market segmentation factors. The consumer type seeking simplicity and convenience demonstrated a preference for products with high convenience, while showing reluctance to invest significant effort in meal preparation and organisation. Furthermore, improving the ease of storing ready-to-eat meals was considered highly important. In contrast, the consumer type considering multiple options took various factors, including convenience, into account when selecting convenience foods, while the family safety-oriented type did not regard convenience as a key factor compared to other groups. These findings suggest that convenience plays a significant role in food consumption, given the dynamic and demanding lifestyle of modern consumers.

As noted by Bogard *et al.* (2024), there is a need to introduce standardised definitions of convenience in research, as well as to develop measurement tools that incorporate the multidimensional components of convenience and can be used to assess how convenience influences dietary choices across different settings. Convenience is a widely discussed concept, yet it is often inconsistently measured and ambiguously defined in the food environment and nutrition literature (Toure *et al.*, 2021). This limits the ability to design and implement food-environment interventions aimed at improving or enhancing the convenience of consuming nutritious foods and dietary patterns to achieve health objectives (Bogard *et al.*, 2024).

The commercial success of convenience food can be easily explained by its alignment with consumers' domestic routines and their perception of their busy lifestyles. It is also technically feasible, owing to industrial innovations and domestic

technologies, and practically achievable through transformations in food retailing and supermarket shopping practices (Raj, Suvadarshini & Mishra, 2021).

5. Conclusion

Knowledge of consumer preferences regarding convenience foods is crucial from the perspective of companies offering such products. The obtained results are practical and can be applied in marketing communication. A potential consumer segment for convenience foods comprises men from Generation Z who value freshness while prioritising the speed of product preparation. Branding of convenience food products should be tailored to appeal to this specific group of buyers.

Our study is limited in subject as well as object scope. The study was conducted on a narrow study sample (X, Y and Z generations among the inhabitants of Gdynia). The models presented fitted to the empirical data would therefore need to be verified in a wider subject range. It would also be valuable to extend the research to a broader subject scope (with regard to assortment groups of convenience foods).

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Authors' Contribution

The authors' individual contribution is as follows: Anna Platta 80%, Anna Mikulec 5%, Karolina Mikulec 5%, Monika Radzyńska 5%, Grzegorz Suwała 5%.

Conflict of Interest

The authors declare no conflict of interest.

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