

DIETARY HABITS AND SUSTAINABLE ONLINE ORDERING AMONG ROMANIAN PROVINCIAL STUDENTS

Lavinia Iancu*

Bucharest University of Economic Studies, Bucharest, Romania

Abstract

The digital age has significantly transformed commerce, with the advent of GIG delivery applications marking a pivotal change, especially in urban settings, by facilitating convenient access to last-mile food delivery services. This study delves into the impact of these technological advancements on Gen Z's food preferences in metropolitan areas, with a particular focus on Romania's provincial regions. It investigates the role of traditional homemade food - a staple of Balkan and South-Eastern European culture, which remains under-researched - in shaping online food ordering habits among students. The current research fills a gap in the scientific literature, touching upon the socio-demographic-economic implications. It comprises a literature review and quantitative and qualitative data collection and interpretation. It aims to shed light on how deeply rooted culinary traditions influence modern consumer behaviour, especially among students who moved from provincial areas to urban centres for education. By examining the characteristics of these students and assessing the viability of a GIG delivery model that respects these cultural practices, the study employs a mixed-methods approach, combining empirical data and qualitative insights from interviews with students living in Bucharest. A questionnaire was used to gather information on their eating habits, focusing on those who have experienced a change in their situation due to university attendance, as they are more likely to utilise online food delivery apps. A regression model was performed to find relations between the students' profiles and online consumer behaviours, testing the feasibility of creating an app that delivers homemade food. The findings offer an understanding of the interplay between traditional preferences and the convenience provided by delivery apps, contributing to the discourse on digital commerce and the accommodation of cultural values in it.

Keywords

students, diet, ecommerce, GIG, sustainability.

JEL Classification

R11, Regional Economic Activity: Growth, Development, Environmental Issues, and Changes

* Corresponding author, **Lavinia Iancu** – lavinia@sustenobil.ro.

Introduction

The current research dives into a phenomenon deeply rooted in the economic and cultural landscapes of Romania - notably, the pronounced economic disparity between rural areas, smaller townships, and their affluent urban counterparts, such as Bucharest, Ilfov county, Cluj-Napoca, Iasi, Timisoara, Sibiu, Craiova and Constanta. These urban centres are not only economic centres but also academic hubs attracting a youthful demographic eager for higher education opportunities, often resulting in a permanent settling to these cities. This migration is primarily led by students whose economic realities significantly shape their living conditions and lifestyle choices. The challenges they encounter - ranging from lack of cooking facilities in state dormitories, insufficient cafeteria infrastructures, unaffordable restaurant prices, to disproportionate rent costs - necessitate a frugal approach to managing their limited financial resources. A culturally ingrained practice has emerged in response to these hardships: sending homemade food by parents and grandparents to their kin in urban centres.

This study aims to delve into how this tradition affects students' sustainable online food ordering habits and preferences, highlighting the intricate interplay between economic factors and cultural practices. The research question and hypotheses formulated for this study seek to uncover the impact of these socio-economic and cultural dynamics on students' food consumption behaviours, particularly in the context of the growing online food delivery market.

To dive deep into dietary habits and sustainable online ordering among Romanian provincial students, the current research paper explores the complex relationship between socioeconomic factors, cultural practices, and the sustainability of students' online food ordering behaviours.

Therefore, the current study aims at a few objectives: 1) to investigate how students' financial resources impact their choices regarding sustainable food ordering via online platforms, 2) to explore how traditional culinary habits affect the online food ordering preferences and behaviours of students, 3) to determine the influence of social factors on students' food choices and online food ordering behaviours, particularly concerning sustainability, 4) and lastly, to investigate the conflict between the convenience of online food ordering and students' commitment to sustainable consumption.

It revolves around a few research questions: 1) how do economic factors influence provincial Romanian students' sustainable online food ordering behaviours? 2) what role do cultural traditions and practices play in shaping students' preferences for online food ordering? 3) to what extent does social pressure influence students' decisions to opt for convenience-driven, unsustainable food choices via online platforms? 4) how does the convenience of online food ordering affect students' awareness and commitment to sustainable consumption?

The research hypotheses I assume are: 1) economic constraints negatively impact the ability to make sustainable online food orders, 2) cultural food traditions significantly influence the types of food Romanian students order online, potentially reducing the preference for more sustainable options, 3) peer influence increases the likelihood of students opting for unsustainable, convenience-driven food choices when ordering online 4) students with higher food literacy are more likely to engage in sustainable online food ordering behaviours despite the convenience, 5) students receive homemade

food from their families as a sustainable habit, particularly from the economic point of view.

This paper aims to contribute to the existing body of literature on dietary habits, which traditionally focuses on medical and nutritional aspects, by offering insights into the new behaviours that have emerged with the advent of food-ordering apps. It seeks to explore how these technological developments influence eating patterns among Romanian provincial students, who are more prone to order food online. Additionally, it provides a deeper understanding of these students' socio-economic and demographic profiles, offering a fresh perspective on their food consumption behaviours and testing the feasibility of creating an app that delivers homemade food.

By examining the intersection of technology (i.e., food-ordering platforms) and socio-economic factors, this study aims to address a gap in the literature where the impact of modern conveniences on students' dietary habits still needs to be explored. Specifically, it investigates how food-ordering apps alter traditional behaviours and how students' economic status, cultural background, and geographical location shape their engagement with these platforms. This approach provides both a contemporary angle and a socio-demographic focus that is often overlooked in existing research.

The study offers a novel contribution by linking the rise of food-delivery services to broader socio-economic trends and student health. It provides a foundation for further studies on the implications of modern technology on dietary habits, which has a potential impact on public health interventions and educational initiatives targeting healthier food choices in the digital age.

The survey comprises two sets of variables categorised as dependent and independent. The dependent variables include how often students travel home in a month, the cost of a round trip home, their eating habits, whether they have ever picked up food packages from home, their likelihood of ordering food online, their weekly food expenditures, and their average monthly income from various sources. These variables reflect the outcomes influenced by various lifestyle and demographic factors. In contrast, the independent variables encompass the year of study, the university attended, the origin of the respondents, their modes of travel home, the distance from their home locality to the university centre, their living arrangements, their current status, age and gender. These independent variables serve as predictors that may influence the dependent variables, providing insights into students' behaviours and choices.

1. Review of the scientific literature

The scientific literature remains relatively underexplored in terms of student dietary habits. The majority of existing studies primarily emphasise the medical and nutritional aspects rather than the socio-economic and cultural dimensions of it. While research has been conducted in various regions, revealing regional variations, few studies have specifically addressed contemporary eating behaviours, including the growing influence of online food ordering on students' dietary patterns, creating a socio-economic-demographic profile of students, especially those from provincial areas who move to larger cities to attend universities, and their lifestyle change and impact.

Analysing sustainable consumption behaviour is essential for developing effective private strategies and public policies aimed at minimising negative impacts on sustainable development. (Muresan et al., 2021)

In today's society, food consumers face a wide range of choices that often require complex decision-making. Bombarded by conflicting media messages and societal pressures to maintain a slim physique, many consumers become confused, drifting away from traditional dietary habits. However, most experts advocate for adopting healthy eating behaviours centred around minimally processed, natural products, as these choices may support a more sustainable food system. (Voinea et al., 2019)

Transitioning from school to university marks a significant moment in young adults' lives with numerous psychological and health-related implications. Food preferences at university may vary due to patterns of food consumption during childhood, gender, and living conditions, particularly for those students residing away from their family home. From personal empirical data, university students undergo a transitional period frequently associated with unhealthy eating habits and weight gain, due to convenience and peer pressure. Many students move away from home and take on financial responsibilities, which often results in changes to their diet and lifestyle habits (Vadeboncoeur et al. apud Almoraie et al., 2021). Research has shown that shifts in the economic and social status of young adults tend to promote weight gain, unhealthy eating habits, and sedentary behaviours (Vadeboncoeur et al. apud Almoraie et al., 2021; Beaudry et al. apud Almoraie et al., 2021). It is mainly because, currently, energy-dense, nutrient-poor, and processed foods are widely accessible, relatively inexpensive, and heavily marketed in many environments (Swinburn et al. apud Almoraie et al., 2021).

In this context, the COVID-19 pandemic highlighted the critical role of preventive measures, including a balanced diet and healthy lifestyle, with the most at-risk groups being individuals with severe chronic illnesses, those who are overweight, and those with compromised immune systems. Among the young participants surveyed in Romania during the pandemic, the majority, 2,892 individuals aged 18 to 40, represented 61.5% of the sample. Sadly, a significant portion of male respondents were either overweight (1,400) or even obese (780). Many young people reported a pattern of consuming only 1–2 irregular meals per day, whereas only 974 participants reported adhering to a healthy diet, and even less, 578, to a healthy lifestyle. Therefore, it is evident that there is a low adherence to healthy dietary (20.7%) and lifestyle habits (12.28%), particularly among younger adults under 30 years. The same research highlights a general trend toward low fruit and vegetable consumption, below daily recommended levels, along with a tendency for sedentary behaviour and inadequate hydration among some respondents. These adverse patterns could lead to a series of long-term nutritional and psycho-emotional imbalances. (Mititelu et al., 2024) Mitigating these risks may become an international strategy with effects in the short- and long-run.

Analysis of the collected data by another Romanian study revealed significant behavioural changes among respondents due to the pandemic, including some instances of psycho-affective effects. Anxiety, depression, and nervousness rose by as much as 20%. Most respondents (over 57%) were aged 30 or younger, with 43.5% being

students and 33.2% employed in workplaces. In terms of dietary habits, the data suggested a need for increased daily consumption of fruits, vegetables, fish, and seafood. Concerning weight changes during the pandemic, 34.7% of respondents with a normal weight reported weight gain, compared to 49.7% of overweight individuals and 52.5% of those classified as obese, with results showing high statistical significance. Regarding psycho-emotional health, 11.81% of women and 11.63% of men reported frequent depressive states during the pandemic. (Năstăsescu et al., 2022)

To assess young adults' behaviour, one needs to look into their early ages. In 2016, a descriptive and observational study was conducted involving 251 children, ages 7-17, from three elementary schools and one high school in Bucharest, Romania. A questionnaire assessed their dietary behaviours, eating habits, and lifestyle choices. The results revealed that boys displayed a significantly larger average waist circumference (71.18 ± 9 cm) compared to girls (67.46 ± 9.91 cm), with 27% of boys classified as overweight or obese, compared to 22% of girls. Differences were observed between the two groups in terms of meal routines: 36.3% of girls skipped breakfast, while 63.8% of boys brought food from home to eat at school. Additionally, 23.8% of boys and 24% of girls reported eating in front of a screen, whether a computer or TV. Therefore, boys were found to have a higher prevalence of overweight and obesity compared to girls. The rise in pediatric obesity in Romania may stem partly from the nation's post-communist transition, a trend seen across Eastern Europe, which has led to increased access to fast foods, sugary drinks, and sweets, along with high salt and additive consumption. This shift toward calorie-dense, nutrient-poor foods has replaced healthier options. Additionally, leisure time is often spent on sedentary activities such as watching TV or using tablets, at the expense of physical exercise or outdoor recreation. Given the influence of family habits, continuous education on the risks of unhealthy foods and inactivity is essential. (Pantea-Stoian, 2018)

Diet influences overall health, performance and well-being and can have different impacts on the environment, it is highly influenced by various factors, among which one can mention the culture. Maintaining a healthy diet is one of the most effective methods to enhance overall well-being. A balanced diet should include natural, fresh foods, such as fruits, vegetables, and foods rich in essential vitamins and minerals (Nelson et al. apud Almorai et al., 2021).

The same idea is reiterated by Dernini et al. (apud Nemeth et al., 2019) that a healthy lifestyle is highly influenced by eating habits, directly correlated to sustainability. For example, the Mediterranean diet promotes a sustainable lifestyle, in comparison to Hungarian or Romanian traditional diets, high in fat. Mediterranean cuisine is nutrient-dense and abundant in vitamins, supporting ideal body weight and reducing the risk of diseases such as metabolic syndrome, obesity, type-II diabetes, and the effects of ageing. By minimising environmental impact and fostering biodiversity, culture enhances the socio-cultural significance of food while stimulating the local economy. A study reveals that international students have varied interpretations of the concept of culture, yet common themes emerged, including traditions, habits, and lifestyles. Sustainable nutrition also reflects connections across social segments, relying heavily on strong ties between agriculture and other sectors. Understanding this process is essential, as weak connections lead to negative environmental impacts, such as soil

degradation from pesticides and stimulants on the production side, and food waste on the consumer side (Nemeth et al., 2019), compromising future generations' access to it. Therefore, most times culture can indirectly influence sustainability, as it is notable that the Italian meatless diet not only has the lowest levels of pollutants, energy use, and carbon footprint but is also the most affordable option for households overall. (Pairoti et al. apud Nemeth et. al.) However, although students in the same study are environmentally conscious, this is not strongly reflected in their purchasing and consumption habits, as price tends to be the primary deciding factor. (Scalvedi et al. apud Nemeth et. al.) (Nguyen et al. apud Nemeth et. al.)

As young adults transition from adolescence to early adulthood, they face various challenges in making healthy food choices. (Stok FM et al. apud Almoraie et al., 2024) This phase also introduces behaviours such as weight control, excessive alcohol consumption, and reduced physical activity. These behaviours can lead to adverse negative outcomes, so it is essential to identify interventions that help young adults prioritise their health and make informed decisions (Sogari G et al. apud Almoraie et al., 2024). With the rise in students attending higher education institutions, incidences of poor eating practices and weight gain have increased (Papadaki A et al. apud Almoraie et al., 2024). In this context, many students struggle to maintain a balanced diet due to hectic schedules, stress, limited access to healthy food, and unhealthy eating habits (Escoto et al. apud Almoraie et al., 2024).

The connection between university life and eating attitudes is shaped by a variety of factors, including the transition to academic life and broader societal influences. Recognising these factors is essential for promoting healthy eating behaviours among students. University life often brings changes in dietary habits due to new food options and routines. Additionally, societal influences like social media and the spread of Westernized ideals can affect students' perceptions of food, body image, and eating behaviours. Research has shown that disordered eating attitudes and body dissatisfaction among university students are influenced by a combination of sociocultural, biological, genetic, and psychological factors (Aparicio-Martinez et al. apud Almoraie et al., 2021; Hilbert et al. apud Almoraie et al., 2021). Body dissatisfaction in both university students and adolescents has been associated with disordered eating behaviours, which often stem from habits formed early in life and carried into adulthood (Hilbert et al. apud Almoraie et al., 2021).

Additionally, young adults face several obstacles to eating healthily, including a lack of interest among males, the influence of peers and family members with poor dietary habits, the affordability of unhealthy foods, time constraints, inadequate cooking facilities in their new homes, and a lack of nutritional knowledge. These combined challenges significantly hinder young adults from adopting and maintaining healthy eating practices. (Munt AE et al., apud Almoraie et al., 2024)

It is widely acknowledged that an unhealthy diet can lead to several health problems, such as fatigue, reduced concentration, and a weakened immune system (Althunibat et al. and Almoraie et al., 2021). This issue is worsened by the scarcity of affordable, nutritious food options on campus, as many institutions either provide limited choices or offer healthy food that is too expensive for students (Munt et al., Langford et al., Solomou et al. apud Almoraie et al., 2021). Due to time constraints or limited resources,

students often skip meals, resulting in energy deficits and nutritional shortages, negatively affecting their academic performance (Merhy et al. apud Almoraie et al., 2021). Additionally, students frequently consume high-calorie foods like pizza, chips, and ice cream when staying up late to study, which can cause weight gain and poor sleep quality from late-night snacking (Alafif & Alruwaili apud Almoraie et al., 2021). Possessing proper food skills could enhance diet quality and help in preventing chronic diseases. Despite its importance, this subject has received minimal attention in research to date. There is a scarcity of research focusing on the food skills and related behaviours of students (Wilson et al., 2017), and online ordering, as well as homemade food they receive, remains under-researched in the scientific literature and even market research. An explanation might be that major economic players often neglect the student demographic in market studies, attributing this oversight to their constrained financial resources. Additionally, students themselves are unlikely to investigate this matter, as the realities of their dietary habits are self-evident and their perspectives may be inherently biased.

Therefore, a new reality has emerged. Culinary sustainability is highly influenced by personal preferences, such as taste or cultural habits, but also by objective factors, such as the price or availability and convenience of certain food products.

The COVID-19 pandemic led to global disruptions, including in labour, economy, production and health, beginning with its identification as a novel disease caused by SARS-CoV-2 in Hubei Province, China, in December 2019. This situation quickly escalated, prompting the declaration of a pandemic by March 2020 (Chowell & Mizumoto, 2020; Martinez-Alvarez et al., 2020, as cited in Skotnicka et al., 2021). In this context, a study found that the COVID-19 lockdown period significantly impacted eating behaviours and physical activity levels among adults worldwide and in Poland, Austria and the United Kingdom, as a new reality emerged. Overall, the frequency of shopping decreased across different settings, but there was a noticeable increase in online grocery shopping. The data also showed a rise in daily consumption of foods like dairy, grains, fats, vegetables and sweets, as well as an uptick in the purchase of frozen and long-shelf-life foods. Changes in work conditions, such as shifts to remote work or job losses, likely contributed to an observed increase in alcohol consumption. Meanwhile, physical activity levels dropped significantly, corresponding with changes in body weight. Therefore, the dietary habits in these countries have shifted due to the pandemic, potentially exacerbating issues related to excess body weight and its associated health risks. (Skotnicka et al., 2021)

The changes in dietary habits during the COVID-19 pandemic have been acknowledged by similar studies. They have influenced body mass among individuals, with some factors increasing or decreasing the likelihood of body mass gain. A study's model simulation highlights variables affecting body mass fluctuations in Austria, Poland and the United Kingdom. Thus, the likelihood of gaining body mass was linked to variables such as eating 4–5 meals a day, ordering ready-made meals, and increasing consumption of sweets, fruits, and alcohol. Conversely, frequent shopping, eating out, and regular physical activity were associated with a lower risk of body mass gain. The model also identified factors that promote body mass loss during the pandemic. For instance, increased preparation of homemade meals, higher consumption of fish and

seafood, and elevated physical activity all positively impacted body mass loss. On the other hand, frequent eating out and consuming fruits, and alcohol could potentially reduce the likelihood of losing body mass. There were slight variances between the countries researched. For instance, Polish respondents showed distinctive dietary behaviours, with 40.30% preparing homemade meals daily before the pandemic, while this percentage was much lower in Austria (16.99%) and the United Kingdom (20.90%). (Skotnicka et al., 2021) During the same period, daily homemade meal preparation increased across all three countries, reaching 42.21% in Austria, 45.02% in the UK, and a notably higher 75.68% in Poland. Before the lockdown, most participants reported grocery shopping several times per week, with 61.67% in Poland, 55.52% in Austria, and 54.98% in the UK. During the pandemic, shopping frequency decreased; people in Poland (46.44%), Austria (40.23%), and the UK (43.73%) reported shopping several times per week, while a significant portion also shopped several times per month (Poland 41.28%; Austria 34.84%; UK 33.12%). Supermarket shopping was particularly popular in Poland both before and during the pandemic, with 41.03% of Polish respondents shopping at discount stores several times weekly, compared to 25.21% in Austria and 20.90% in the UK. In contrast, shopping at local markets was more common in Austria (40.51%) and the UK (46.30%) than in Poland. (Skotnicka et al., 2021)

The statistics are relevant in the larger context. Before COVID-19, online grocery shopping was infrequent, with 73% of Austrians, 80% of Britons, and 74% of Poles reporting they had never or rarely shopped online. During the pandemic, online shopping became more common, with 42.49% of Austrians, 38.91% of Britons, and 41.52% of Poles shopping online several times a month. There was also a notable difference in the frequency of ordering ready-made meals before the pandemic. A greater number of respondents in Austria (21.25%) and the UK (19.94%) ordered food from restaurants for home delivery several times a week, compared to only 6.14% in Poland. Moreover, 30.47% of Polish respondents never ordered takeout, compared to 19.55% in Austria and 16.08% in the UK. Significant changes were also observed in dining-out habits. Before the pandemic, residents in Austria (35.69%) and the UK (30.55%) dined out multiple times per week, a habit far less common in Poland, where only 8.60% reported eating out this frequently. During the pandemic, the frequency of dining out dropped markedly, with 20.15% of Poles dining out several times a month, compared to 14.16% in Austria and 11.58% in the UK. Furthermore, 56.66% of Austrians and 59.49% of Britons stopped dining out altogether during the pandemic, in contrast to 43.24% of Poles. Before the COVID-19 lockdown, there were no significant differences in frozen goods consumption frequency among respondents from Austria, the UK, and Poland. Most respondents reported purchasing frozen goods several times a month, with frequencies of 39.80% in Poland, 35.13% in Austria, and 46.62% in the UK. Less frequent purchases were also common: Poland 38.33%, Austria 39.38% and the UK 31.51%. During the pandemic, the reduced frequency of shopping led to an increase in the purchase of frozen and long-shelf-life goods, with a statistically significant uptick. Differences in frozen goods purchases were noted between Poland and the UK, as well as between Poland and Austria, mirroring trends in preserved foods. The UK saw a marked increase in preserves consumption compared to Austria and Poland. (Skotnicka et al., 2021)

The same study indicates that prior to the pandemic, sweets consumption was notably high, especially in Poland, where 36.86% of respondents ate sweets multiple times per week. Slightly lower levels were reported in Austria (27.48%) and the UK (21.22%). A smaller percentage in each country also consumed sweets several times daily: Poland 3.93%, Austria 5.67%, and the UK 3.59%. Before the pandemic, UK residents consumed sweets significantly less frequently than Polish respondents. The pandemic led to an increase in sweets consumption across all three countries, though no statistical differences emerged among them. The majority continued to report eating sweets multiple times per week during the pandemic. (Skotnicka et al., 2021)

Egg and dairy consumption increased during the pandemic. Before the lockdown, respondents frequently consumed these items several times per week: Austria 47.88%, the UK 53.38%, and Poland 42.51%. No significant differences existed among countries before the pandemic. However, while Poland's frequency of dairy consumption remained steady, Austria and the UK saw an increase during the pandemic. (Skotnicka et al., 2021)

Survey results indicated a rise in grain consumption during the pandemic. Differences in pre-pandemic grain consumption were significant, with variation in responses from Poland compared to Austria and the UK. This increased grain consumption trend persisted across countries during the pandemic, maintaining the initial differences. (Skotnicka et al., 2021)

Although the data collected suggested a general increase in fat and edible oil consumption, there were no significant differences in consumption rates either before or during the pandemic. (Skotnicka et al., 2021)

For fruit consumption, there were no significant differences in frequency before and during the pandemic, although variations between countries were statistically notable. Regardless of location, most respondents reported eating fruit several times a week before COVID-19, a trend that continued during the lockdown (Austria: 53.82% before, 52.69% during; the UK: 59.16% before, 59.81% during; Poland: 37.84% before, 52.69% during). (Skotnicka et al., 2021)

The majority of respondents in Poland (52.58%), Austria (49.01%), and the UK (49.84%) reported eating meat several times a week. A portion of the sample refrained from consuming meat altogether, with rates of 5.9% in Poland, 6.52% in Austria, and 2.89% in the UK. The pandemic saw both an increase in meat consumption and a slight rise in the percentage of people avoiding meat entirely, with post-pandemic rates of 7.13% in Poland, 7.37% in Austria, and 3.27% in the UK. These results indicate significant differences in meat consumption frequency between Poland, Austria, and the UK before and during the pandemic. (Skotnicka et al., 2021)

Prior to the pandemic, most respondents consumed fish and seafood several times a month, with Poles reporting the lowest frequency. Statistical analysis showed differences between Poland and Austria and between Austria and the UK. However, these differences did not persist during the pandemic, as fish and seafood consumption decreased across all groups. (Skotnicka et al., 2021)

Before COVID-19, coffee was consumed several times daily by 43.24% of Poles, 23.23% of Austrians, and 12.86% of Britons, with additional respondents drinking coffee at least once daily: Poland 33.66%, Austria 39.38%, and the UK 41.48%. The

frequency of coffee consumption declined in all three countries during the pandemic, though location-based differences in consumption remained statistically significant. (Skotnicka et al., 2021)

Tea drinking habits also showed country-specific trends. Before the pandemic, 35.37% of UK respondents, 32.19% of Poles, and 26.91% of Austrians reported drinking tea multiple times daily, with these patterns remaining stable across the pandemic. The British continued to consume tea more frequently than respondents in Poland and Austria. (Skotnicka et al., 2021)

Regarding water consumption, there were no significant differences observed between the three countries at any time point. Juice consumption, however, declined during the pandemic. Differences in juice and sweetened beverage consumption were noted before the pandemic between Poland and the other two countries, the UK and Austria; during the pandemic, significant differences were observed primarily between Poland and the UK. (Skotnicka et al., 2021)

Alcohol consumption was relatively common before the pandemic, with 45% of respondents reporting alcohol intake several times a month and 14% drinking alcohol multiple times a week. The pandemic led to an increase, with 22% of respondents consuming alcohol several times per week. (Skotnicka et al., 2021)

Therefore, the overall analysis indicated that for many individuals, the isolation and restrictions of the pandemic had no significant effect on body mass. However, these results reveal important trends linking dietary and lifestyle changes to body mass outcomes during COVID-19.

A sustainable diet has many characteristics and it is usually seen as healthier for the individual and the environment. For instance, a wide variety of seasonal foods is generally available at affordable prices. Fruits and vegetables harvested in season are typically grown in fields, reducing energy demands and lowering carbon footprints. Many people enjoy waiting for seasonal fruits rather than opting for out-of-season options, which tend to be less flavourful and more costly. Long-distance foods often require extensive packaging, resulting in significant waste, while locally sold products - often available at markets and traditional shops - are commonly unpackaged or simply wrapped. Purchasing local food supports small farms amidst growing competition, and these products are often organic, promoting soil health. Local producers are also well-acquainted with their products, allowing consumers to learn more about their food sources. Cultural traditions play a vital role, and the interviews conducted by researchers with international students in Hungary reveal that most participants have strong cultural ties, as seen in food choices shared with family and ethnic groups. Additionally, the younger demographic of their participants contributes to their openness to trying new foods, experimenting with cooking methods, and expanding their food preparation skills. Such shifts in preferences and cooking habits can encourage more sustainable food consumption. (Nemeth et al., 2019)

As with any market niche, sustainable products have their consumer affinities and behaviours, and sustainability is not a one-size-fits-all. For instance, Fuentes (as cited in Muresan et al., 2021) identified two consumer clusters: first, the mature and product cautious, consisting of older individuals with higher incomes who are generally willing to adopt eco-friendly products but only after thorough market research; and second the

young and socially pressured, a group of younger individuals with lower incomes who, despite being informed about environmentally friendly products, are less inclined to pay a premium for them. In addition, a study conducted in Romania labelled the consumers into certain categories based on factors deemed distinctive for their sustainable food behaviours, as follows: Cluster 1 as indifferent consumers towards sustainability, Cluster 2 as pro-environment protection, and Cluster 3 as health-concerned. The study, which investigated residents' perceptions in Romania's North-West Development Region concerning sustainable food choices during the COVID-19 pandemic, indicated generally positive attitudes toward sustainable food consumption. However, as observed in prior research, a noticeable gap between attitudes and actual behaviours emerged (Young et al., 2009; Carrington et al., 2010; Eckhardt et al., 2010; Yamoah & Acquaye, 2019, as cited in Mureşan et al., 2021). On one side, respondents showed support for local producers, understood the value of domestic agriculture, and expressed concerns about health and waste reduction when planning meals. Conversely, despite these positive attitudes, their purchasing behaviours often diverged, especially concerning buying local products or supporting producers in developing countries. This inconsistency may stem from higher costs of local foods compared to those in supermarkets (Roman et al., 2015, as cited in Mureşan et al., 2021) or from Romanian consumers not yet being prepared to shift their consumption habits, a change that likely requires a complex, gradual process (Sharma & Jha, 2017, as cited in Mureşan et al., 2021). Another noteworthy finding was the respondents' neutral position on environmental issues, as their engagement in pro-environment actions was generally limited to food packaging recycling, with minimal participation in broader environmental protection activities.

In addition, consistent with previous findings, the indifferent consumer group was predominantly male, aligning with research suggesting that men, while generally more knowledgeable about environmental issues, tend to show less interest in environmental protection (Davidson & Freudenburg, 1996; Diamantopoulos et al., 2003, as cited in Mureşan et al., 2021). In an Italian study, this group was termed the inattentive food consumer cluster (Guzman et al., 2021, as cited in Mureşan et al., 2021) and exhibited similar behaviours to those observed in the Romanian context. Membership in this cluster was more common among Romanian individuals over 50 years old, reinforcing findings that older adults often show less interest in environmental issues (Roman et al., 2015; Chan, 1996; Straughan & Roberts, 1999; Ottman, 1993; Fisher et al., 2012, as cited in Mureşan et al., 2021). In contrast, the largest cluster was composed of respondents engaged in pro-environmental actions, primarily educated women with higher incomes. This supports previous research showing that green behaviours are more common among women (Laroche et al., 2001; Loureiro et al., 2002; Anderson & Hansen, 2004; Lee, 2009; Casaló & Escario, 2018; Harris et al., 2000, as cited in Mureşan et al., 2021) and are often associated with higher education levels (Davidson & Freudenburg, 1996; Diamantopoulos et al., 2003, as cited in Mureşan et al., 2021). This pro-environmental cluster resembles the responsible food consumer cluster identified in Vecchio and Annunziata's (2013) study, which also demonstrated similar socio-demographic traits. The size of this group reflects prior research indicating that environmental protection is a significant concern among consumers, often leading to the

emergence of green consumers (Autio & Heininen, 2004; Dolnicar & Grün, 2008, as cited in Mureşan et al., 2021). This cluster is also akin to the so-called sustainable cluster found by Guzman et al. (2021, as cited in Muresan et al., 2021), which was similarly female-dominated. Ideally, the pro-environmental attitude in this group should lead to behaviours such as recycling, using eco-friendly products, reducing consumption (Autio & Heininen, 2004; Dolnicar & Grün, 2008, as cited in Mureşan et al., 2021), and willingness to pay a premium for sustainable products (Laroche et al., 2001, as cited in Mureşan et al., 2021). However, this does not always translate into sustainable purchasing behaviours, a pattern seen in other countries as well (Smiglak-Krajewska & Wojciechowska-Solis, 2021, as cited in Muresan et al., 2021). Last but not least, the third group, labelled as the health concerned, reflects another aspect of green consumer behaviour, marked by a preference for foods that are safe for both personal health and the environment (Paço & Raposo, 2008, as cited in Mureşan et al., 2021). Health-conscious attitudes have previously been observed among Romanian consumers when selecting dining options, where food sourcing plays a critical role, leading to a preference for supporting local producers (Zahra et al., 2021, as cited in Mureşan et al., 2021). This group includes a higher proportion of women, individuals with advanced education, and a notable number of retirees. A similar cluster, termed consumption of organic products and eco-friendly food, was identified by Sesini et al. (2020, as cited in Mureşan et al., 2021) as one of the largest groups, marked by a strong interest in environmental sustainability, personal health, and organic products.

The region, personal characteristics, education or income level and other personal characteristics directly influence the relationship with sustainability from a dietary perspective. For instance, locality is a key factor influencing individuals' food choices. In this support, qualitative research of international students living in Hungary indicates a preference for fresh, locally available, or locally produced items, supporting sustainable consumption. (Nemeth et al., 2019)

The few existing research comparing students living with their parents and those living independently revealed consistent trends across the countries. This consistency suggests that despite varying cultural backgrounds in dietary habits, moving out of the parental home is linked to distinct changes in food consumption patterns. Whereas food consumption habits vary among countries like Germany, Denmark, Poland and Bulgaria, there is a tendency for females to generally opt for healthier food choices (El Ansari et al., 2012). Beyond gender influences, research conducted at a Saudi university identified a correlation between economic situation and dietary habits, showing the relation between a lower household income and a higher fast-food consumption (Sami et al. apud Almoraie et al., 2021).

In support, most studies suggest that female university students generally make healthier food choices, such as eating more fruits and vegetables and consuming higher amounts of dietary fibre, compared to male students (Gil et al. apud Almoraie et al., 2021; Kowalska & Tarnowska apud Almoraie et al., 2021; Yahia et al. apud Almoraie et al., 2021). However, young women tend to eat chocolate more frequently than men and consume fast food as a snack at a higher rate (25.7% versus 19.5%) (Fryar et al. apud Almoraie et al., 2021). Men are typically more likely to consume fast food, with some research indicating that young males eat more fast-food options like pasta,

rice, fried potatoes, and crisps at lunch compared to females (48.3% versus 39.1%) (Fryar et al. apud Almoraie et al., 2021).

Therefore, young adults' dietary habits are significantly shaped by their lifestyles. Students' hectic schedules notably affect their food consumption patterns. Irregular class schedules, different levels of physical activity, social engagements, and, for many, the experience of living away from home for the first time can lead to a reliance on convenience foods. Students' dietary habits often stray from a balanced and healthy diet due to various factors, including living away from home, financial challenges, heavy academic demands, time limitations, and insufficient knowledge of nutritional concepts (Papadaki et al. apud Almoraie et al., 2021; Sprake et al. apud Almoraie et al., 2021).

Crucial lifestyle factors might encompass access to food, the influence of perceived social norms, support from one's social circle for healthy eating, stress levels, and the management of one's lifestyle. (Nelson et al., 2009).

Another study sought to identify the types of eating behaviours - sustainable versus unsustainable - and the socio-demographic factors influencing them among students in Romania, Bulgaria, and Moldova. The findings highlight both positive aspects, such as a sustainable diet characterised by high consumption of fruits and vegetables, and negative aspects, including adopting a mixed diet that may have long-term environmental impacts. Age emerged as a strong predictor of unhealthy eating habits among students, often leading to weight gain. Other factors influencing food consumption behaviour include gender, household size, rural or urban residency, and country of residence. Additionally, unhealthy practices like eating while standing and having the last meal of the day after 23:00 were found to have negative health effects. To promote healthy lifestyles, campaigns to educate students on sustainable food consumption are essential in all three countries (Pocol et al., 2020).

In many countries, cultural traditions, disparities in food availability, and social as well as economic factors significantly influence dietary choices (Suliga et al. apud Almoraie et al., 2021). Likewise, the global shift toward a "Westernised" diet has led to the replacement of traditional eating practices with greater consumption of sugary foods, sweetened drinks, fast food, red meat, and processed items (Suliga et al. apud Almoraie et al., 2021). The Western diet is linked to a higher risk of chronic illnesses, particularly during the transition from adolescence to adulthood. However, since the negative effects of poor diet quality take time to appear, young people are often less mindful of following healthy eating habits (Suliga et al. apud Almoraie et al., 2021).

For instance, in Albania, students consume sweets, soft drinks, and meat products more often outside the home, whereas the intake of fruits and vegetables was notably low. Upon analysing the costs of food and beverages consumed at home versus those consumed outside the home, it was found that items consumed out of home were, on average, approximately 0.25 EUR more expensive than those eaten at home. Additionally, students incurred significantly higher expenses on grains, meat products, dairy, sweets, and drinks when opting for out of home options compared to at home counterparts. Nevertheless, the prices for fruits and vegetables remained consistent regardless of whether they were prepared at home or out of home. They appear to face limited choices due to the scarcity of food sources and the variety of food options available to them. Foods consumed outside the home had higher levels of saturated fats

in terms of their composition. Nevertheless, the proportion of energy derived from saturated fats was greater in foods consumed at home. Despite at-home foods being a significant source of fats, the comparison with out-of-home foods showed no significant difference, both in terms of the absolute content of nutrients and their contribution to energy intake (Llanaj et al., 2018).

In Sweden, students' knowledge and practices related to food safety fall short of expectations. Male students, in particular, were found to be at greater risk regarding food safety practices, such as managing hazardous foods, reheating, and cleanliness. HCS instruction proves to be particularly beneficial for male students who rarely engage in cooking activities at home. Moreover, there are essential risk areas that need to be considered, which encompass the four C's: Cooking, Cleaning, Chilling, and avoiding Cross-contamination (Lange et al., 2016).

Food consumption habits among students varied by country, with a general trend towards unhealthy food choices, which proves another research. In a study conducted in 4 countries, Bulgarian students notably consumed sweets, cakes, and snacks like chips and fast food more frequently. Conversely, Polish students showed the lowest frequency of vegetable consumption and a limited intake of fruits. Except in Bulgaria, male students across the country tended to consume snacks more frequently than female students. Those residing with their parents tended to have a higher intake of fruits, vegetables, and meat compared to their counterparts living away from home in all the countries examined. The consumption of cakes and salads showed greater variability, with Bulgarian female students and Danish male students consuming cakes more frequently, and Danish female students not living at home consuming salads more often than their peers in other countries. Overall, dietary habits among university students were influenced by geographic location, gender, and whether they lived at their parental home, with those staying at home generally exhibiting healthier dietary patterns, albeit with some exceptions (El Ansari et al., 2012).

International students in Hungary revealed the most popular courses. Despite the local specifics of their new country, they unanimously agreed that sandwiches, particularly vegetable and vegetarian versions, are the top sellers. Fruit consumption, especially bananas and apples, is notably high, and chicken dishes are preferred over pork. Popular international options include pasta, pizza, and fish and chips. The rising demand for healthy foods is evident; for instance, a dedicated shelf in the dormitory buffet features oat-based items, while the COOP chain store has introduced a "health corner" with English-labelled products for foreign students. In addition, chicken dishes dominate restaurant menus, and vegetarian options are increasingly popular. A wider range of choices is now essential, with shelves stocked with four to five items compared to just two or three previously. The fitness menu, featuring fish and chicken, is well-received, reflecting a growing interest in health-conscious options. Demand for speciality foods catering to lactose and glucose sensitivities is also on the rise. Interest in green salads has surged, with a 300% increase. The affordable three-course menu remains popular for its low price, while fruit consumption, especially of bananas, apples, and lemons, is high. Chicken meat sells in large quantities, and the popularity of semi-prepared meals and sandwiches continues to grow, with vegetable and vegetarian versions leading the trend. The interviews indicate a high demand for oat products across all units, with

increasing consumption of instant soups. In terms of meat, non-breaded, unseasoned chicken is the most popular choice. Plain yoghurt and fresh vegetables are often paired with fruit. A buffet manager noted that the majority of foreign buyers are looking for vegetarian and vegetable options. Among meat products, chicken is the most popular with foreign customers, while fatty pork is less preferred. Foreigners tend to favour healthier choices, especially oatmeal, porridge, and plain yoghurt. In terms of sandwiches, they usually choose chicken, while Hungarian customers also opt for salami and ham varieties. Foreign customers consume more fruit, with bananas being especially popular, followed by apples and oranges to a lesser extent. Many international students seek familiar flavours from home and often purchase familiar snacks like Snickers or Twix. Overall, customers gravitate toward international and familiar flavours that align with their home-country tastes. (Nemeth et al., 2019)

The same study reveals that in Hungary, students are the primary customers of the proximity shops, with spending increasing each year. The average purchase amount rose from 1500 HUF to 2000 HUF, approximately €3.83 to €5.10. International students generally spend more than Hungarian students, and both groups are well-represented among shoppers. According to the assistant manager, 55–60% of buyers are Hungarian, while 40–45% are foreign, which gradually increased over the past years. Of the foreign buyers, 50% are Arabic, 30% Asian, and 20% from other regions. Interestingly, premium products make up 30% of all offerings, with foreigners accounting for 90% of these purchases. (Nemeth et al., 2019)

Aligning the international culinary trends from other countries, foreign students living in Hungary seek familiar flavours and internationally recognised dishes, prompting a continuous expansion of healthy food options to meet their preferences. The popularity of traditional Hungarian food is steadily declining and is often omitted from the selection altogether. Demand for premium, higher-priced items is on the rise, broadening the range of healthier choices. International students, in particular, value products that resemble their home-country flavours, which typically include more vegetables and fewer spices than traditional Hungarian offerings. Overall, food consumption trends are shifting towards healthier options, with foreigners' preferences also influencing the purchasing habits of Hungarian students. (Nemeth et al., 2019)

Students make no exception from the overall consumer trends. Among international students in Hungary, demand for gluten- and lactose-free products has surged in recent years, alongside requests for vegan options. Alongside the cultural factors, religious ones highly influence the dietary habits, implicitly the sustainability. For instance, Muslim students often prefer chicken dishes accompanied by specific vegetables. The influence of international students has led to significant changes in product offerings, bringing healthier choices to the store shelves. As a result, Hungarian students are increasingly opting for vegetable and chicken-based options over pork. Additionally, there has been a sharp rise in demand for gluten- and lactose-free muesli products, which are healthy, and however, chips remain among the popular choices, even rising over the past years. (Nemeth et al., 2019)

Because of strong cultural backgrounds, students retain significant portions of their nutritional and social values, even during extended stays abroad. The research conducted on international students in Hungary indicates that identifying the actual food

needs of a community is complex, as preferences for sustainable or healthy food often shift and are heavily influenced by the community's ethnic composition. Most respondents expressed a preference for local products, citing freshness and perceived safety. Local foods are also generally more affordable, and purchasing them supports local producers. The influence of foreign consumer habits on local food chains is thus multifaceted, as international consumers seek diverse options shaped by their cultural backgrounds. This demand is gradually transforming traditional food supplies and impacting producer and supplier networks through the purchase of local, budget-friendly items. The extent of these changes in the supply chain largely depends on the proportion and number of foreign consumers (Nemeth et al., 2019) and their specificity. With the rise of social media and age-specific interest in looking good, there is no surprise that the demand for fitness-oriented foods is increasing rapidly among international students in Hungary, especially for meals featuring chicken and vegetables or designated fitness meals. Breaded options like cauliflower, mushrooms, zucchini, and eggplant are regularly available, often paired with rice. Foreign customers frequently seek low-fat options, along with lactose- and gluten-free items, contributing to their growing presence on the menu. Seasoning has been reduced, with less salt, pepper, and paprika used in preparation, resulting in more neutral, international flavours that appeal to a wider audience. (Nemeth et al., 2019)

Global tendencies and age-specific interests shape the consumer's preferences rather than the cultural factors. In support of this comes the fact that traditional Hungarian dishes are generally not popular among foreigners due to their fatty and spicy nature. Catering to different age groups poses a challenge for restaurants, as the food preferences of older customers often differ significantly from those of younger, international visitors. This variation requires adaptation such as longer operating hours in restaurants and buffets to accommodate diverse schedules. International students, in particular, prefer healthier and higher-quality food options, driving continuous growth in sales and the need to expand product offerings. Introducing international dishes and enhancing food quality can significantly elevate service standards. Additionally, digital innovations, such as online menu tracking, digitised table reservations, and delivery options like room service, present promising opportunities for food services on university campuses. However, rapid changes in student demographics may challenge shops' flexibility, particularly with significant shifts between nationalities that affect product demand. Another downturn may be that due to the special demand of international students, the volume of imported products can increase significantly, which may lead to unsustainable practices. (Nemeth et al., 2019)

Individuals interpret the concept of culture in varied ways, though common themes emerge, including tradition, customs, and lifestyle. A wide variety of foods is consumed, underscoring the vital role food plays in the daily lives of different nations. Beyond sustenance, food also serves social functions, symbolizing social class, reflecting income, and expressing cultural identity. For the international students in Hungary, sustainable food consumption primarily relates to family, community, and health preservation. However, the sustainability characteristics often highlighted in scientific literature do not appear prominently in their personal preferences. Abroad, international students actively maintain their food culture, frequently dining at

restaurants that offer flavours reminiscent of home. This impact on community life becomes especially apparent in areas where populations from a particular nationality grow. (Nemeth et al., 2019)

Today, food consumption patterns vary between developed and developing countries, yet on the global market, developing countries often follow trends set by the developed world. In response to rapidly shifting demand, nations like China, India, and Brazil face the challenge of reorganising supply chains, impacting global flows of products for both human and animal consumption. Food consumption significantly impacts both the economy and individual health. Beyond providing sustenance, food and meals serve various social roles, including fostering human connections. (Nemeth et al., 2019) An investigation of the food consumption habits among international students in Hungary reveals how cultural factors shape eating habits and local food supply dynamics within the cultures of various ethnic groups, causing environmental burden, because of the population rising and increased per capita consumption patterns. (Heinrich Böll Stiftung apud Nemeth et al., 2019)

There is a strong correlation between food intake, well-being and sustainability, and cultural habits play a crucial role in the young adult's culinary preferences. For instance, the most efficient sources of protein generate 150 times less carbon emissions than the least sustainable options (Heinrich Böll Stiftung apud Nemeth et al., 2019). In animal production, by-products unsuitable for human consumption can often be repurposed to allow animals to produce milk or eggs. However, competition exists between the cultivation of edible crops and animal feed. In less advantaged regions, impoverished individuals sometimes sell nutrient-dense animal products like dairy and eggs rather than consuming them, which may compromise their food security. Yet, this decision often allows them to allocate more resources toward their children's education, potentially supporting long-term well-being (Heinrich Böll Stiftung apud Nemeth et al., 2019).

Dangelico et al. (2021, as cited in Muresan et al., 2021) concluded that satisfaction with green purchases is a strong predictor of purchase frequency. Similarly, Roman et al. (2015, as cited in Muresan et al., 2021) investigated whether environmental concerns translate into consumer purchases and found that, although there is a general willingness to adopt sustainable behaviours, high prices and limited information about green products often lead to alternative purchasing behaviours.

The results indicated that Romanian consumers from the North-West region's attitudes toward sustainable food behaviour are primarily shaped by age and education level. Additionally, health considerations play a significant role in defining food consumption behaviour. (Mureşan et al., 2021)

The epidemic has led to shifts in dietary habits across the studied countries, which have, in turn, exacerbated issues related to excess body weight and its associated health risks. According to studies cited in Skotnicka et al. (2021), individuals with less healthy eating habits tended to respond adversely to the restrictions imposed during the pandemic, showing effects such as body mass gain and decreased physical activity. In contrast, those with healthier dietary practices generally maintained their habits or even improved them during this period.

Therefore, from personal empirical evidence and studies invoked, a limited number of young adults adhere to ideal dietary guidelines, with slight differences given by the location, type of lodging and facilities, infrastructure such as kitchenettes and, not lastly, the knowledge of nutrition and skills to cook impact significantly the young students' lifestyle and eating habits.

2. Research methodology

This study's methodology encompasses qualitative and quantitative research approaches to examine the sociodemographic profiles of students originating from provincial areas. It focuses on assessing the potential of an intercity GIG economy delivery model that incorporates traditional food practices. This investigation draws on empirical evidence and employs in-depth interviews with students who have migrated from provincial regions to Bucharest, aiming to understand their dietary preferences and the impact of relocation on their sustainable online food ordering behaviours.

A specifically designed questionnaire on Google Form was disseminated online on the main social media platforms, mainly Facebook and LinkedIn, to gather data on the dietary habits of these students, with a particular emphasis on those who have moved to university cities. This group has a higher propensity for utilising online food delivery services. This approach aimed to collect detailed information on their perspectives and experiences, thereby gaining a deeper insight into the factors influencing their choices and behaviours regarding food consumption. The research initially aimed to explore the feasibility of developing a GIG app to deliver homemade food to students from rural and provincial areas. However, it evolved into a broader study, incorporating socio-economic and demographic data to serve a larger purpose.

The research design and execution allow for a comprehensive analysis of the current trends and practices in online food ordering among university students in urban settings. Additionally, the study utilised various softwares, such as Google Forms and Google Sheets, as well as DataTab Software as a Service (SaaS) website, to analyse statistical data, enabling a robust examination of the patterns and correlations within the collected data. This methodological framework aims to thoroughly understand the interplay between students' sociodemographic backgrounds, their transition to urban centres, and their engagement with online food delivery services, contributing valuable insights to the discourse on the GIG economy and food culture in urban environments. The underlying hypothesis posited that students from provincial areas either receive homemade food from their families at the end of the week or make trips back home specifically to replenish their food supplies, which influences their online ordering habits.

The respondents consist of a convenience sample, selected based on their availability and accessibility rather than through a nationally representative sampling, sourcing from „Student din Provincie” Facebook page. A snowball sampling technique was utilised for the interviews. In this method, initial participants were asked to recommend or recruit additional respondents from their networks, creating a growing chain of interviewees. For this reason, the answers may limit the ability to generalise the findings to a broader population, which would require a more representative sample to accurately reflect diverse socio-economic and demographic characteristics across the country, and

qualitative responses may be quite biased due to the selection of respondents, mentioning these aspects as limitations of the research.

3. Results and discussion

Following the scientific literature and global trends, students in Romania are more likely to skip meals or eat at irregular times due to their schedules. This can lead to overeating later in the day or making poor food choices out of convenience or urgency. With limited time between classes and study sessions, students may gravitate towards fast food or processed snacks that are readily available but high in calories, fats, sugars, and salt. Especially for those living in dormitories or without access to kitchen facilities, there may be a reliance on microwavable meals or other processed food options. Additionally, a lack of cooking skills can further limit the ability to prepare healthy meals. Moreover, social events and peer influences can lead to consumption patterns that favour eating out, snacking, and consuming alcohol, all of which can contribute to poor dietary habits. Hence, financial limitations can restrict students' food choices, leading them to opt for cheaper, less nutritious food options. Additionally, the stress associated with academic pressures, social concerns, and adapting to new environments can lead to emotional eating or the consumption of comfort foods that are typically high in calories and low in nutritional value.

The research delves into the dynamics within the academic sphere, specifically examining the fluctuation in student enrolment numbers at Romanian universities over a span of five academic years, from 2017-2018 to 2021-2022. This analysis reveals varied trends in both the absolute numbers and the percentage changes of enrolled students. Initially, in the academic year 2017-2018, there were 538,800 students enrolled. This number experienced a minor decline of 5,100 students (equating to a -0.95% change) to 533,700 in the following 2018-2019 academic year. Contrarily, the 2019-2020 academic year observed a positive shift with an increase of 9,600 students (+1.80%), totalling 543,300 students. This upward trajectory persisted into the 2020-2021 academic year, which saw a notable rise of 17,200 students (+3.17%), culminating in 560,500 students. Nevertheless, the 2021-2022 academic year marked a slight reduction of 6,500 students (-1.16%), resulting in a total enrolment of 554,000 students (Ionescu, 2022). Although specific data regarding the proportion of students hailing from provincial areas within these figures remains unreported, it is inferred that a significant portion, likely more than half, of the student body originates from such regions.

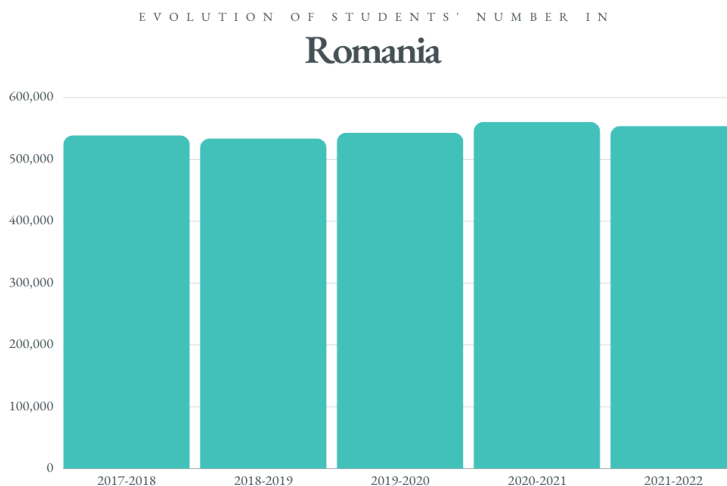


Figure no. 1: Evolution of Students' Number in Romania
(Source: the National Institute of Statistics cited by EduPedu.ro)

In 2019, an online survey was developed and disseminated to explore the dietary habits of Generation Z students from provincial areas of Romania, a group known for being digital natives and early adopters, pivotal role in shaping consumption patterns within the GIG economy. This cohort is poised to become middle-class leaders with significant disposable income and purchase power that could notably affect e-commerce trends and, consequently, the dynamics of delivery service business models. The survey was disseminated through personal Facebook and LinkedIn profiles and shared within "Student din Provincie" (Provincial Student), a prominent online student community in Romania with over 189,000 followers on Facebook. The initiative successfully boasts 1,602 respondents. Following a preliminary filter question that excluded the unsuitable respondents, 98% of the respondents (1,571 individuals) were confirmed as belonging to the intended demographic and completed the survey. The initial hypothesis posited that, during their university years, students from Romania's provincial regions frequently received homemade food from their families. This practice, widespread in Southeast Europe, is believed to have a considerable impact on their online food ordering habits within the GIG economy.

Out of the total 1,571 responses received after the filter question regarding the year of university studies participants are currently in, the distribution is as follows: 35.9% (564 individuals) are in their first year of a Bachelor's degree program, indicating a significant proportion of respondents are at the beginning of their university journey. The second year of a Bachelor's degree saw a slight decrease, with 22.8% (358 individuals) of the participants, followed by the third year with 20.1% (316 individuals). The fourth year of Bachelor's studies accounts for 7.4% (116 individuals), showing a notable drop as students' progress in their academic journey. For postgraduate studies, 6% (94 individuals) are in their first year of a Master's degree, and 5.2% (82

individuals) are in their second year. Regardless of the year, PhD students represent a small fraction of 0.8% (13 individuals), highlighting the lesser prevalence of doctoral studies among the respondents. Additionally, 1.9% (30 individuals) are pursuing a different form of education, showcasing a variety of academic paths outside the traditional Bachelor's and Master's degree programs.

Respondents hailed from 39 distinguished academic institutions spread across Romania. In Bucharest, there were 16, including the Police Academy Alexandru Ioan Cuza, Bucharest University of Economic Studies, National Academy of Information Mihai Viteazul, The Military Technical Academy, Bucharest Politechnic University, University of Medicine and Pharmacy Carol Davila, Bucharest University of Agronomic Sciences and Veterinary Medicine, Bucharest Ecological University, National Defense University Carol I, National University of Theatre and Film I.L. Caragiale, National University of Arts, National University of Physical Education and Sports, National University of Music, Romanian-American University, Bucharest Technical University of Civil Engineering (UTCB), National University of Political and Administrative Studies (SNSPA) and Spiru Haret University.

DISTRIBUTION OF STUDENTS RESPONDENTS

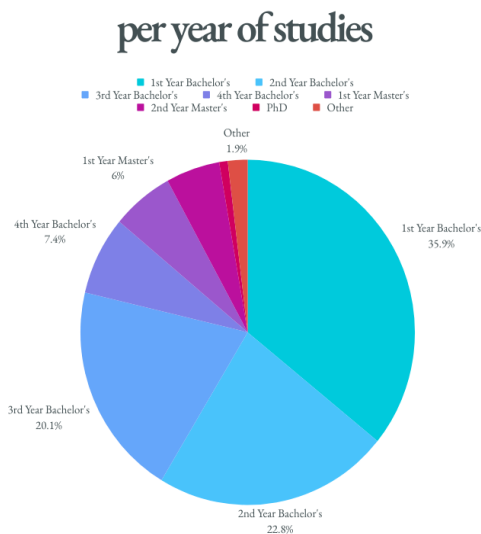


Figure no. 2: Distribution of student respondents per year of studies

Cluj-Napoca was home to four institutions: Gheorghe Dima Music Academy, Babeş-Bolyai University (UBB), Iuliu Hațieganu University of Medicine and Pharmacy and the University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca. Braşov featured two institutions: Henri Coandă Air Force Academy and Transilvania University of Braşov. Iaşi boasted four institutions: Alexandru Ioan Cuza University, Grigore T. Popa University of Medicine and Pharmacy, George Enescu University of Arts, and Gheorghe Asachi Technical University (TUIASI). Sibiu had two institutions:

Lucian Blaga University (ULBS) and Victor Papilian University of Medicine. Timișoara also featured four institutions: University of Agricultural Sciences and Veterinary Medicine of Timișoara, West University of Timișoara, Politehnica University of Timișoara and Victor Babeș University of Medicine and Pharmacy of Timișoara. Additionally, there was one institution each in Alba Iulia (1st December 1918 University), Constanța (Ovidius University), Târgoviște (Valahia University), Bacău (Vasile Alecsandri University), Suceava (Ștefan cel Mare University), Arad (Aurel Vlaicu University), and Galați (Dunărea de Jos University). The majority of respondents indicated they were enrolled in other universities, with the largest group stating they attend the University of Bucharest (19.3%). This was closely followed by Politehnica University of Bucharest (10.4%) and the Academy of Economic Studies (10.1%), which is understandable given that these are among the most numerous universities.

Among the 1,571 responses, 41.5% originated from rural areas. This is followed by 22.2% from urban areas with cities up to 50,000 inhabitants and 15.3% from urban areas with cities housing 50,001-100,000 inhabitants. Additionally, 18% of responses came from urban areas with cities of 100,001-500,000 inhabitants, 2.3% from urban areas with cities of 500,001 to 1 million inhabitants, and finally, 0.8% from urban areas with cities exceeding 1 million inhabitants.

DISTRIBUTION OF STUDENT RESPONDENTS

according to their residency

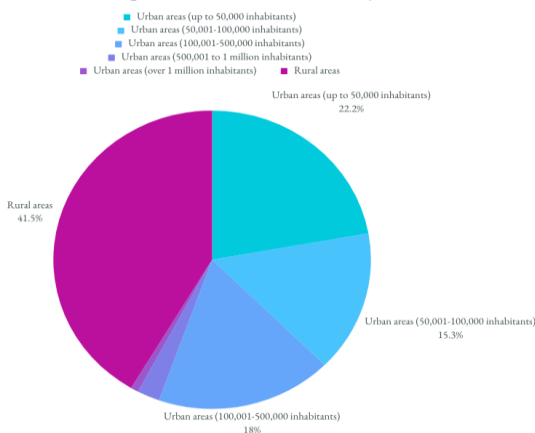


Figure no. 3: Distribution of student respondents according to their residency

When asked about their preferred mode of transportation for returning home, out of 1,571 respondents, 57.4% indicated they primarily use the train. This is followed by 17.6% who travel by maxi taxi/coach, 14.7% who drive their own car, and 8% who ride in a car owned by friends or acquaintances. Additionally, 1.7% utilise carpooling services such as BlaBlaCar, and 0.6% rely on hitchhiking. The high preference for trains can be attributed to the cost-free travel for students as per legislation, underscoring the mode’s popularity. Notably, the fact that owning a car is common among students

places personal vehicle use as the third most popular option, after trains and coaches. Interestingly, only a small fraction of respondents opts to travel with acquaintances. Carpooling's limited appeal could be due to perceived risks and relatively scarce national availability. The least favoured option, hitchhiking, suffers from its inherent unpredictability, risks and difficulty in planning.

DISTRIBUTION OF STUDENT RESPONDENTS
by means of transport to return home

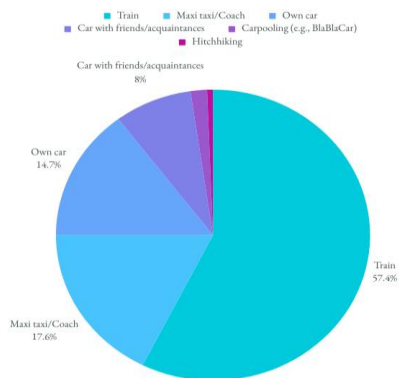


Figure no. 4: Distribution of student respondents by means of transport to return home

DISTRIBUTION OF STUDENT RESPONDENTS
by distance range (km) home-university

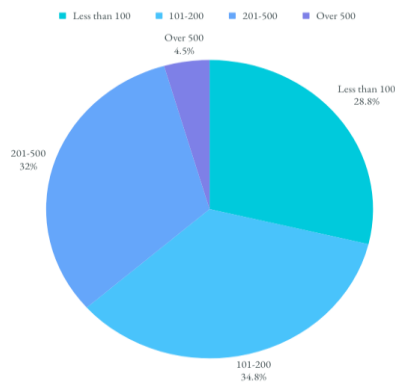


Figure no. 5: Distribution of student respondents by distance range (km) home-university

Among 1,571 respondents discussing the distance of their hometown from the university centre, 28.8% reported living less than 100 km away. Another 34.8% are

situated 101-200 km away, while 32% reside within a 201-500 km range. Additionally, 4.5% mentioned their hometowns are over 500 km away from the university centre. The majority of respondents live under 500 km away from the university, 101-200 km is the most common category, closely followed by 201-500 km, and then localities under 100 km away, an indicator of how often students travel home.

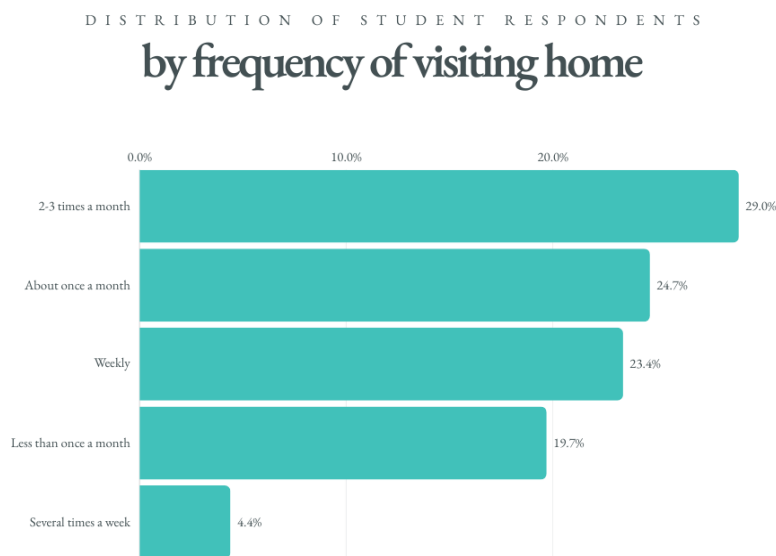


Figure no. 6: Distribution of student respondents by frequency of visiting home

When asked about their frequency of travelling home within a month, the responses were as follows, in order of most frequent to least frequent: 29% of respondents travel home 2-3 times a month, making it the most common frequency. This is followed by 24.7% who travel home about once a month, and closely behind, 23.4% make weekly trips home. Less frequently, 19.7% of participants travel home less than once a month, and the smallest group, at 4.4%, travels home several times a week, in strong correlation with the distance.

DISTRIBUTION OF STUDENT RESPONDENTS

by amount paid to travel home

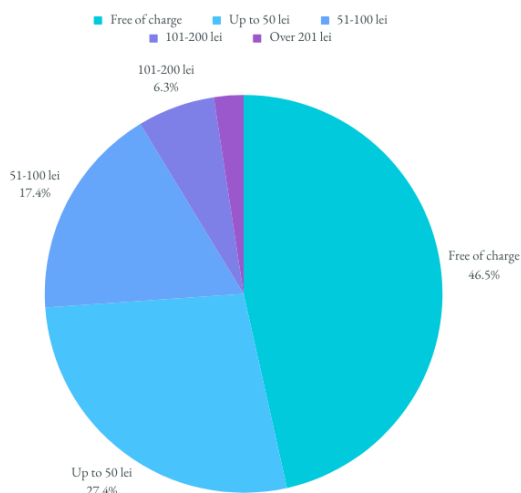


Figure no. 7: Distribution of student respondents by the amount paid to travel home return

Regarding the cost of a round trip home, out of 1,571 responses, the majority, 46.5%, reported that their journey was free of charge. The next highest group, at 27.4%, indicated that their trip costs up to 50 lei. Following this, 17.4% spend between 51-100 lei. At 2.4%, a smaller fraction stated their costs exceeded 201 lei. The percentage for those spending between 101-200 lei would complete the remainder of the responses. This distribution of travel costs could be influenced by the fact that train travel is free for students and the relatively short distance between their university city and place of origin. These statistics reflect a tendency towards more traditional or convenient eating arrangements rather than regular having lunch or dinner out.

In Romania, there is a deeply ingrained cultural tradition for families to send homemade meals to their children towards the weekend. This practice, more prevalent in South-Eastern Europe compared to Western European nations, stems from a place of affection. It also arises due to inadequate cooking facilities in student dormitories, the students' busy schedules, which often leave little time for cooking, and a lack of culinary skills. Additionally, financial constraints prompt families to be more mindful of their spending. This tradition significantly impacts the patterns of online food ordering, particularly in cities with universities.

Interviews with students across Europe revealed that the tradition of families sending homemade meals to their children is also common in Balkan countries, including Bulgaria, Turkey, the former Yugoslav nations, as well as Moldova and Ukraine, highlighting potential areas for further exploration.

Despite its prevalence across Romania and Southeastern Europe, this cultural practice lacks documentation in scientific literature, even though it significantly impacts the economic, social and cultural lives of millions.

Student testimonials reveal that the cost of sending packages via train or bus is often half the price of a passenger ticket. This informal parcel delivery service, utilised by drivers and ticket inspectors (known in Romanian folklore as "naşul" - Godfather) of the Romanian Railway Company (CFR), operates without official taxation. Conversations with current and former students indicate that this practice has been around for over three decades, tracing back to the era of communism, and has remained unchanged since then. Families typically pack items in raffia bags, often from well-known supermarkets, and hand them over to drivers at specific times at bus or train stations. Parents inform their students of the vehicle's registration details or train information to facilitate pickup. Students then await their arrival at their university city's bus station, identifying their parcels by colour and design, usually marked with a paper ticket bearing the consignee's name, before taking them home by public transport or by cab or car-sharing platforms. Rarely do they mention acquaintances delivering packages.

Regarding student accommodation preferences, the majority opt for rented private spaces, choosing to either live alone or share their living quarters. Specifically, 33.7% of students share a flat, 14.3% have other unspecified living conditions, and 13.8% reside independently in a house, flat, or studio. Students have various dormitory options, often affiliated with their university, named after prominent figures or based on their location within the university districts. There are also private dormitories that lack direct university affiliation. Other living situations reported include staying with parents or family, aunts or uncles most commonly, commuting from another city, or residing in unique accommodations like military academy barracks.

In Bucharest, students have access to a range of dormitories affiliated with specific universities, alongside various private dormitories. Similar accommodation options are available in Cluj-Napoca, Iaşi, Timișoara, Galați, Sibiu, and Brașov, catering to the diverse needs and preferences of the student population across different cities, with some students opting to live at home or commute.

In Bucharest, the most frequently mentioned accommodation is the Regie campus, cited by 5.5% of students. This is followed by the Academia de Studii Economice's (ASE) Campus such as Moxa or Belvedere and Grozăvești Campus, each mentioned by 3.7% and 3.6% of students. Other notable mentions include the Agronomie campus and the Universitatea București campus, two large universities in Bucharest. ARCAA Vitan Village or Campus West Gate are highlighted as the private campuses, followed by the SNSPA campus, with Bucharest Polytechnic, Mihail Kogălniceanu, and others, each receiving 1% of mentions. Some other dorm rooms are Theodor Pallady or Măgurele in the outskirts of Bucharest. In Iași, students mention Tudor Vladimirescu or Codrescu dormitories, whereas in Cluj-Napoca often mentioned Campus Hașdeu or Mărăști.

DISTRIBUTION OF STUDENT RESPONDENTS

by meal source

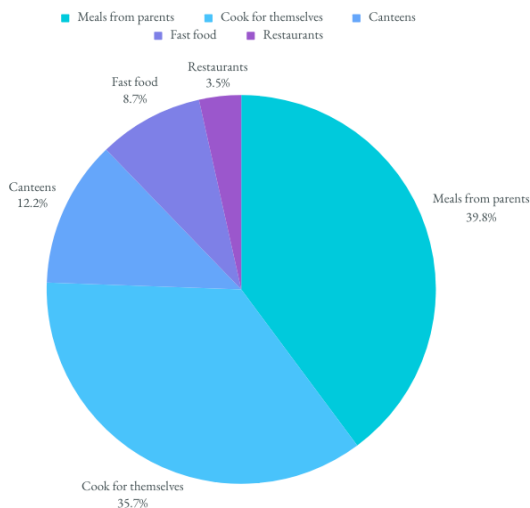


Figure no. 8: Distribution of student respondents by meal source

Most respondents report that they predominantly receive meals from their parents, with 38.8% citing this as their main habit, while 34.8% typically cook for themselves. Smaller proportions of individuals opt for eating out, with 11.9% frequenting canteens, 8.5% choosing fast food, and 3.4% dining at restaurants. The proportion of students relying on homemade food appears to be decreasing annually, primarily serving as the primary meal source during the initial years of their Bachelor's degree. This trend is notably correlated with students living in dormitories, which often lack adequate kitchen facilities, making cooking challenging. Similarly, students sharing apartments find it difficult and sometimes inconvenient, contributing to the declining reliance on homemade food. Additionally, as students grow older and enter the workforce, they begin to earn their own income, which enables them to eat out more frequently. With their increased financial independence and busier schedules, they find themselves with less time to collect and consume the meals sent by their families. This shift towards greater autonomy and employment demands contributes to a reduced reliance on homemade food sent from home.

A substantial majority, totalling 75.5%, either receive homemade meals (39.8%) or prepare food themselves (35.7%), reflecting a strong preference for sustainable culinary practices over fast-food alternatives that could be ordered online or procured in the city. This trend suggests that a significant portion of the population is actively choosing

homemade, potentially healthier and more eco-friendly meal options, which could reduce dependency on processed, fast-food choices and support long-term health and environmental benefits, confirming the prior research that reveals students' preference for more sustainable alternatives.

DISTRIBUTION OF STUDENT RESPONDENTS

by reception of parcel

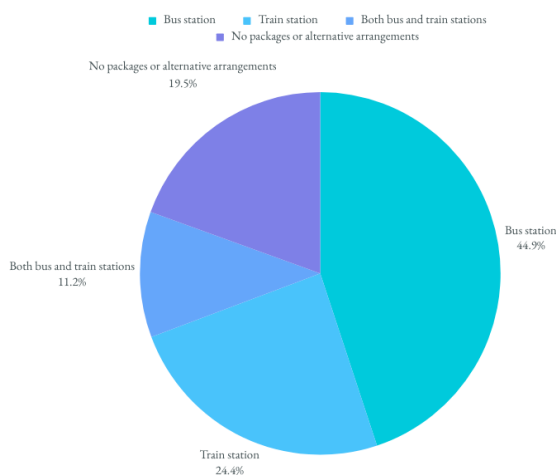


Figure no. 9: Distribution of student respondents by reception of parcel

The responses show various locations and methods by which individuals receive food packages sent by their parents or grandparents. The summary of these methods, along with the provided percentages, indicate that 44.9% of respondents pick up their food packages at the bus station, significantly less - 24.4% at the train station, and even less - 11.2% use both the bus and train stations. The remaining participants either do not receive food packages or have alternative arrangements. Therefore, most individuals who receive food from home collect their packages at transportation hubs like bus and train stations. Others have the packages delivered by friends visiting Bucharest, sent through courier services, or brought directly by their parents. Some individuals personally bring food from home when returning to the city. There are also mentions of receiving packages at specific meeting points along the routes of minibuses or from known acquaintances who travel from their hometown. A few respondents noted unique arrangements, such as a business that specialises in distributing packages in Bucharest. Nonetheless, a significant portion of respondents do not receive food packages or prefer to collect them when they go home themselves.

Interestingly, despite students' preference for travelling home by train, they favour using bus services for courier deliveries. This preference can be attributed to several

factors: buses tend to be faster than trains, offer more departure times throughout the day, and have more stations across cities, including services provided by private companies. Furthermore, interviews revealed a trend among students to choose accommodation in parts of the university city they are familiar with, which are often more accessible and located along major transportation routes. This familiarity and convenience likely influence their preference for bus services for sending and receiving parcels, including food packages from their families.

DISTRIBUTION OF STUDENT RESPONDENTS
by frequency of online food ordering

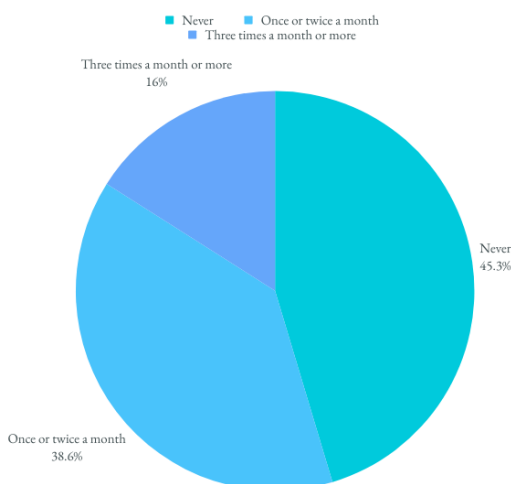


Figure no. 10: Distribution of student respondents by frequency of online food ordering

When asked if they usually order food online, out of the 1,571 students answered as follows: an overwhelming 45.3% of respondents never order food online, 38.6% do so once or twice a month, and 16% order food online three times a month or more. This suggests that the majority of respondents either rarely use or entirely refrain from using online food ordering services. This can be attributed to the fact that they do not need to order, as they receive homemade food or they do not have the pecuniary means to order more often. The frequency with which students travel home significantly connects to their online ordering habits. For instance, most students reported visiting their families two or three times a month, which aligns with their pattern of ordering food online once or twice a month. This correlation suggests that the intervals between their visits home may influence the timing of their online food orders, possibly bridging the gap between receiving homemade food from their families and their next visit home.

Additionally, as the data were collected in 2019, the adoption of online food ordering was lower compared to the increased reliance observed during and after the COVID-19 pandemic. Prior research supports this shift; for example, Skotnicka et al. (2021) found that before the pandemic, online grocery shopping was relatively rare, with 73% of Austrians, 80% of Britons, and 74% of Poles reporting they had never or only occasionally shopped online. This tendency was also evident in Romania, particularly among students, who, understandably, have less disposable income and therefore may have been less inclined to adopt online food ordering.

4. Online ordering habits

Confirming the international trends in culinary preferences for fast-food and quite unhealthy options stated by the previous studies explored, the current research revealed that the respondents order predominantly from popular chains. Men are more prone to order food online than women of the same age. Multiple mentions of large chain restaurants such as Domino's, KFC, Pizza Hut and Jerry's Pizza exist. These chains are repeatedly referenced, indicating a preference for well-known brands. In addition, several local restaurants or food places are mentioned, such as "Ando's Braşov," "Calif," and "Casa Mureşana." This shows a mix of local and international preferences and diversity. The frequent mentions of "Food Panda" and "Glovo" suggest a high reliance on food delivery services. These platforms are referenced alone and in conjunction with specific restaurants, which indicates that the convenience of delivery is a significant factor in ordering food. Phrases like "depends on what I want", "from wherever I can", and "different restaurants" suggest that there is no strict loyalty to a particular restaurant and that variety is sought in food choices. The responses reference a range of different cuisines, from pizza and burgers to (traditional food) and "Shaorma Băneasa" in Bucharest. This indicates a diversity in the type of food ordered. Some text entries like "I order very rarely, once every 2-3 months" provide insight into the frequency of orders, suggesting that not everyone orders regularly.

The pattern of ordering food online once or twice a month among students may also be influenced by their receipt of homemade food from their families or their cooking activities, often motivated by financial considerations. When students visit their families, they are likely to return with homemade meals, reducing their need to order food online. Additionally, financial constraints encourage students to cook for themselves as a more cost-effective option compared to eating out or ordering in. This blend of factors—receiving homemade food during visits, cooking for financial efficiency, and the occasional online order—creates a comprehensive picture of how students manage their dietary habits in the context of their lifestyle and economic situation.

Upon inquiry regarding their present status, a significant portion of the 1,571 individuals surveyed, 74.1%, identified as solely students. A smaller fraction, 13.9%, are students who are concurrently employed in part-time or flexi-time positions, while 10.3% balance full-time employment with their studies. Additional statuses provided include student entrepreneurs, individuals fully employed following their master's completion, recent graduates currently unemployed, students juggling part-time and

full-time jobs, those pursuing both undergraduate and vocational training, volunteers involved with various organisations, makeup artists, those only working seasonally in summer, and individuals managing dual employment along with their college education.

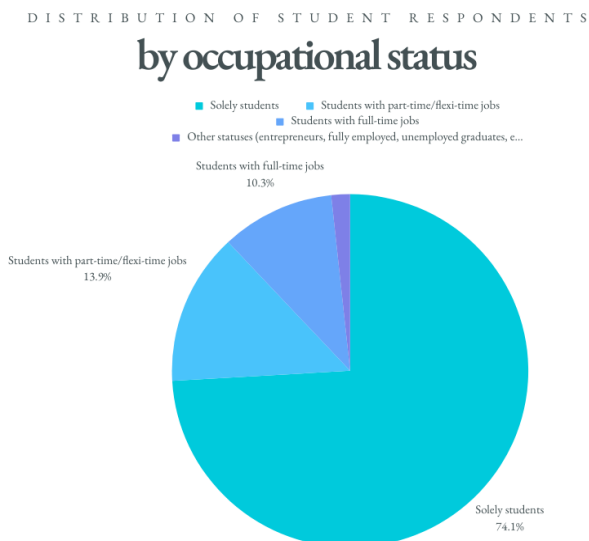


Figure no. 11: Distribution of student respondents by occupational status

When asked how much money they spend weekly on food, out of the 1,565 respondents - 43.1% mentioned 100 lei, 41.1% between 101-200 lei, 10.4% between 201-300 lei and 5.4% - Over 300 lei." The data indicates that the majority of the respondents, 43.1%, spend up to 100 lei per week on food, which suggests a significant portion of the surveyed group is either on a tight budget or has minimal food expenses. The next substantial group, 41.1%, spends between 101 to 200 lei, reflecting perhaps a more comfortable but still budget-conscious approach to food expenditure. A smaller percentage, 10.4%, reports spending between 201-300 lei, which might indicate a higher discretionary income or preference for more expensive food options. Only 5.4% spend over 300 lei, suggesting either a preference for high-end food products, dining out frequently or less concern about food costs due to higher income levels. Some respondents mentioned they do not need to spend extra or have limited financial resources, which could imply that they are either supported by someone else for their food needs (like living with family or having meals provided at work or school) or that they have to manage within a very constrained budget. The overall modest expenditure points to a general frugality or financial constraint trend.

DISTRIBUTION OF STUDENT RESPONDENTS

by expenditure range (Lei)

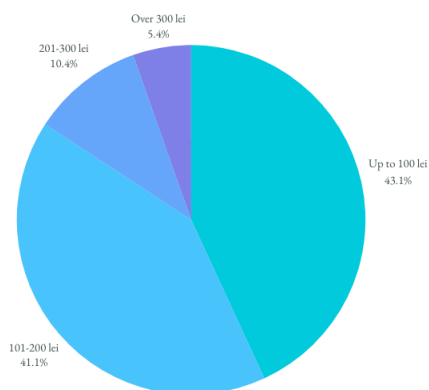


Figure no. 12: Distribution of student respondents’ expenditure ranges on food

In 2019, Romanian students’ spending was considerably lower than in other countries. A study by Nemeth et al. (2019) highlights that, in Hungary, students’ spending is steadily rising each year, because of international students as well. Therefore, the average purchase amount at stores increased from 1,500 HUF to 2,000 HUF (approximately €3.83 to €5.10), whereas in Romania, students spend less than 20 euros per week.

DISTRIBUTION OF STUDENT RESPONDENTS

by income (Lei)

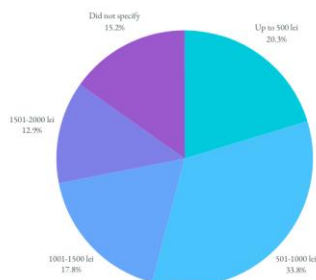


Figure no. 13: Distribution of student respondents by average monthly income

The survey of 1,571 individuals regarding their average monthly income, inclusive of familial support and other forms of income, reveals a varied economic landscape. A portion 20,3%, up to 500 lei, did not specify an amount, suggesting a low-income bracket. The largest group, making up 33.8%, reported earnings between 501 to 1000 lei, indicating a modest income level. Nearly one-fifth, or 17.8%, have a slightly higher income, ranging from 1001 to 1500 lei. Those earning between 1501 to 2000 lei make up 12.9% of the respondents, transitioning into a middle-income segment. A smaller percentage, 6%, see their incomes fall between 2001 to 2500 lei, while 3.7% earn between 2501 to 3000 lei, suggesting a more comfortable financial situation. Above this, the percentages drop further, with 1.1% earning between 3001 to 3500 lei, 1.7% between 3500 to 4500 lei, and 2.2% exceeding 4500 lei, reflecting a segment with higher earnings. A few individuals noted their earnings depend on seasonal work, while others expressed uncertainty about their exact income. An interesting note was the daily earning of 50 lei, pointing to a day-to-day income scenario for some individuals.

As a reference, according to the Ministry of Labour, in 2019 the minimum gross salary was established at 2,080 lei, with a higher threshold of 2,350 lei for employees in positions that require a higher education level and at least one year of work experience in their field of study (The Ministry of Labour, 2019).

To add more context to those numbers, 86,3% of the respondents to this questionnaire are women. They are aged between 17 years old and 45 years, the majority in their bachelor studies - 20 years old (24%), 19 years old (23.6%), and 21 (21,3%) years old make the majority of them, significantly dropping at master's degree and PhD. The wide range of ages can explain better the income variations. As Romania employs the Bologna academic system, students are considered to have higher education with 3 years of Bachelor's studies, which explains the threshold of earnings.

Despite facing financial constraints, these students demonstrate resourcefulness in managing their limited means. One of the critical strategies involves leveraging support from their network, notably receiving homemade meals from their parents and utilising informal delivery services through public transportation, reflecting a deep-rooted cultural habit and a practical approach to minimising living costs and a solid intergenerational and community bond.

Moreover, their spending habits, particularly concerning food and transportation, reveal a strategic prioritisation of needs over wants. The predominant choice of free train travel and the minimal expenditure on food, with a significant portion of students spending less than 200 lei weekly, highlights their frugality. This is further corroborated by their cautious approach to online food ordering, with a notable majority either refraining from it entirely or limiting it to a few times a month. The employment status of these students further underscores their efforts to balance academic responsibilities with the need to earn. While the majority are solely focused on their studies, a substantial minority engage in part-time or full-time work, navigating the challenges of juggling employment with education to sustain themselves and possibly contribute to their household income.

The regression analysis was performed using the DataTab.net website. Many types of regressions performed between variables did not pass the tests and were not included in the article. A logistic regression was performed to predict the likelihood of being male

("M") based on the frequency of online food orders. The following categories were analysed: 1-2 times per month (Value = 1), Never orders food online (Value = 2), 3 or more times per month (Value = 3), where: Intercept ($\beta_0 = -2.2803$) represents the log-odds of being male when the online order frequency is "1-2 times per month", Coefficient for Online Order Frequency ($\beta_1 = 0.2490$) that means that for each increase in the frequency of ordering food online, the log-odds of being male increase by 0.2490. In terms of probabilities, the likelihood of being male increases as we move from lower to higher frequency categories. This increase is small but significant. Model Significance ($\text{Chi}^2(2) = 9.4, p = 0.009$): The model as a whole is statistically significant, meaning that online food ordering frequency has some predictive power for gender. However, it is not a strong predictor.

Using the logistic regression formula, the predicted probabilities for being male based on the online order frequency were calculated: 1-2 times per month: The predicted probability of being male is 11.6% ($P(M) = 0.1159$); Never: The predicted probability of being male is 14.4% ($P(M) = 0.1440$); 3 or more times per month: The predicted probability of being male is 17.5% ($P(M) = 0.1755$).

The difference between the lowest and highest probabilities (11.6% to 17.5%) suggests that more frequent online orders are associated with a higher likelihood of being male, but the effect is not significant. For example, even for those who order online 3 or more times per month, the probability of being male is still relatively low at 17.5%.

A ROC (Receiver Operating Characteristic) curve was generated to assess the model's performance. The AUC (Area Under the Curve) measures how well the model can distinguish between males and females. Therefore, $\text{AUC} = 0.526$, which is very close to 0.5, which means that the model is only slightly better than random guessing. In other words, the frequency of online food orders is weak in predicting gender. An AUC of 1.0 would mean perfect discrimination, where the model can perfectly distinguish between males and females. However, with an AUC of 0.526, this model's predictions are only marginally better than random chance. This aligns with the small effect size in the logistic regression.

In conclusion, males are slightly more likely to order food online frequently. Specifically, those who order 3 or more times per month have a 17.5% chance of being male, and those who order 1-2 times per month have an 11.6% chance of being male; this increase in probability (from 11.6% to 17.5%) is small but statistically significant. Qualitative responses indicate a preference for online food orders that lean toward fast food and generally healthier options, aligning with findings from previous research.

The logistic regression model is statistically significant ($p = 0.009$); however, the effect size is small. The ROC curve shows an AUC of 0.526, indicating that the model's ability to predict gender is only slightly better than random guessing.

There are a few potential reasons why men may be more likely to order food online more frequently than women despite the overall weak relationship. These reasons can be tied to both traditional behaviours and modern lifestyle factors.

Men are often perceived as prioritising convenience when it comes to food choices. This might be due to time constraints, lifestyle choices, or simply a preference for minimal effort in meal preparation. Online food ordering is a quick solution to satisfy hunger without the need for cooking or meal planning, which could explain why men tend to

order food more frequently. In modern times, this tendency is supported by the availability of food delivery apps that offer a wide range of choices with minimal effort. In many cultures, including Romania, men are still less likely to engage in home cooking compared to women. Although these traditional gender roles are shifting, men may still be more inclined to outsource their meal preparation through food delivery services rather than cook for themselves. As a result, men might order food online more often to avoid cooking at home.

In addition, men who live alone or have a bachelor lifestyle might be more likely to order food online due to the practicality of single servings, the ease of accessing meals without planning, and the convenience of ordering for one. Furthermore, men may also order food more frequently when socialising, especially during events like watching sports, gaming, or gathering with friends, which often includes takeout or delivery.

On average, men tend to have higher caloric needs than women due to differences in body size and metabolism. This might drive them to order larger or more frequent meals, especially when they are too busy to cook. Food delivery offers them easy access to meals that fulfil these needs, making it a popular option.

Men, particularly younger men and students, are often early adopters of technology and digital services. They may be more inclined to use mobile apps for ordering food, benefiting from features like meal customisations, discounts, and convenience through seamless transactions. This tech-savvy behaviour may contribute to more frequent online food orders among men, especially in demographics that heavily rely on technology in their daily lives.

Cultural norms also play a role, with men more likely to order food when dining with friends or during informal social gatherings. Ordering food online is an easy way to cater to groups during casual get-togethers, which could contribute to men appearing more likely to order food online. This is particularly relevant in social or work environments where food delivery is a common practice.

In summary, men may be more likely to order food online due to a combination of factors like prioritising convenience, a tendency to avoid cooking, a bachelor lifestyle, higher caloric needs, greater tech-savviness, and social dining habits. These behaviours collectively make online food ordering a particularly attractive option for men, resulting in their higher likelihood of using these services frequently. However, it is important to note that the effect is small, indicating that many women also engage in similar behaviours, reflecting changing gender roles in modern society.

While the current study highlights a potential gender difference in the frequency of online food ordering, whether the food men order is sustainable remains a subject for further investigation.

Conclusions

In the absence of specific scientific literature on this topic, the conclusions are primarily supported by the author's own data and findings. In conclusion, the research data paint a vivid picture of Generation Z students hailing from provincial areas, showcasing their awareness of expenses and their direct impact on their income. Their profile is very diverse in gender and age or home of residency, with a prevalence of women and first-

year students, making generalisation and representativeness at the national level difficult.

Both qualitative and quantitative data collected confirm the previous studies conducted in scientific literature and indicate that young people often choose convenience when it comes to their dietary habits, with slight variances between genders. Despite this fact, as a particularity from other countries, many Romanian students, especially during their bachelor's studies, rely on homemade meals provided by their families, which helps offset their fast-food consumption and reduces the need for extra spending. To the best of my knowledge, this fact has not been documented in other studies, opening up more in-depth investigation as a particularity of Romanian, implicitly in the Southeast of Europe. A significant number of students begin cooking for themselves. However, men are generally more inclined to order food online, likely due to a perceived lack of cooking skills and a preference for convenience.

Overall, in Romania, provincial students rarely order food online, and when they do, they typically choose fast-food chains or nearby local restaurants. These choices generally reflect a preference for tasty international cuisine rather than healthy options, making their food habits less sustainable by prioritising convenience and taste over health and environmental concerns.

Additionally, the survey reveals a nuanced understanding of economic self-sufficiency among these students. While many rely on family support, there is also a significant emphasis on personal responsibility, as seen in the numbers cooking for themselves or working alongside their studies. This blend of support and independence characterises the Gen Z student population in provincial areas as not just passive recipients of aid, but active participants in managing their economic realities. The overarching narrative is one of resilience, adaptability, and strategic planning. Gen Z students from the province navigate their educational journey with a keen eye on expenses, leveraging mutual support and personal initiative to make the most of their resources. This cohort's ability to adapt to their economic environment not only speaks to their individual resourcefulness but also points to broader societal and cultural factors that shape their approaches to financial management. The research, while providing valuable insights into the lifestyle, financial conditions, and habits of Gen Z students from provincial areas, also has several limitations that should be acknowledged. The survey relies on self-reported data, which can introduce biases such as overestimation or underestimation of personal habits, expenses, and income. Respondents may also be influenced by social desirability bias, leading them to provide answers they believe are expected or viewed favourably by society.

The focus on students from provincial areas may not capture the full diversity of the student population in Romania or similar contexts. Urban students or those from capital cities might have different experiences and resources, influencing their spending habits, lifestyle, and access to opportunities differently. The predefined categories for income and expenses might not accurately capture the nuances of students' financial situations. For instance, the income brackets and expenditure ranges might need to be narrower or reflective of the actual costs faced by students, especially in varying economic climates. The results are specific to the sample surveyed and may not be generalisable to all Gen Z students, especially those in different countries or educational systems. Cultural,

economic, and educational factors can vary widely, affecting the applicability of the findings beyond the surveyed group.

It is uncertain whether homemade food is caused by or causes limited expenditure on food intake, that will be a subject of further investigation. Future research could employ longitudinal designs to track changes over time, include a broader geographic sample to enhance diversity, and use mixed methods to validate self-reported data through objective measures to address these limitations. Expanding the scope to compare urban and rural student experiences and integrating qualitative insights could also provide a more comprehensive understanding of Gen Z students' financial behaviours and challenges.

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Questionnaire for Provincial Students**Welcome!**

This questionnaire aims to gather more information about the habits of students. Thank you for taking a few minutes to complete it!

Are you a student from the provinces?

- Yes
- No

Thank you for your time, but you do not fall within the target audience of this survey.

Faculty

Tell me more about yourself!

What year of study are you in?

Answer required

Which university are you studying at?

- Polytechnic University of Bucharest
- University of Bucharest (UNIBUC)
- Bucharest University of Economic Studies (ASE)
- University of Agronomic Sciences and Veterinary Medicine of Bucharest
- National University of Political Studies and Public Administration (SNSPA)
- "Spiru Haret" University of Bucharest
- Romanian-American University of Bucharest
- "Titu Maiorescu" University of Bucharest
- "Hyperion" University of Bucharest
- Technical University of Civil Engineering of Bucharest (UTCB)
- National University of Arts Bucharest
- "Dimitrie Cantemir" Christian University of Bucharest
- Ecological University of Bucharest
- "Alexandru Ioan Cuza" Police Academy of Bucharest
- "Carol I" National Defense University of Bucharest
- Military Technical Academy of Bucharest
- "Nicolae Titulescu" University of Bucharest
- "I. L. Caragiale" National University of Theatre and Film of Bucharest
- National University of Music Bucharest
- "Artifex" University of Bucharest
- National University of Physical Education and Sport of Bucharest
- "Ion Mincu" University of Architecture and Urbanism, Bucharest
- "Carol Davila" University of Medicine and Pharmacy, Bucharest
- "Athenaeum" University of Bucharest
- "Mihai Viteazul" National Intelligence Academy, Bucharest
- "BIOTERRA" University of Bucharest
- "Gheorghe Cristea" Romanian University of Sciences and Arts, Bucharest

- Pentecostal Theological Institute
- Baptist Theological Institute of Bucharest
- Other (please specify):

Hometown

Tell me more about yourself!

Do you come from...

- A rural area
- An urban area, town with up to 50,000 inhabitants
- An urban area, town with 50,001-100,000 inhabitants
- An urban area, town with 100,001-500,000 inhabitants
- An urban area, town with 500,001 - 1 million inhabitants
- An urban area, town with more than 1 million inhabitants

How do you usually travel home?

- Train
- Maxitaxi/bus
- Personal car
- Friends/acquaintances' car
- Carpooling (services like BlaBlaCar)
- Hitchhiking

How far is your hometown from the university center?

- Less than 100 km
- 101-200 km
- 201-500 km
- More than 500 km

How often do you travel home in a month?

- Less than once a month
- About once a month
- 2-3 times a month
- Weekly
- Multiple times a week

How much does a round trip home cost you?

- Free
- Up to 50 lei
- 51-100 lei
- 101-200 lei
- Over 201 lei
- Other:

Where do you live?

- University of Bucharest Campuses
- Agronomy Campus
- Grozăvești Student Campus
- Mihail Kogălniceanu Dormitory
- Universal Dormitory

- Poligrafie Dormitory
- Th. Pallady Dormitory
- Stoian Militaru Dormitory
- Fundeni Dormitory
- Panduri Dormitory
- Măgurele Complex
- Politehnica University of Bucharest Campus
- SNSPA Dormitories
- Regie Student Campus
- Leu Student Campus
- Academy of Economic Studies Campus
- Faculty of Law Campus
- Moxa Complex
- ARCCA Vitan Village Campus
- ARCCA Pajura Garden Campus
- ARCCA Titan Garden Campus
- I live in a house/apartment/studio by myself
- I live in a house/apartment/studio with others
- Other (please specify):

What are your eating habits? Most often, I...

- Cook for myself
- Receive food packages from my family
- Eat out at fast-food restaurants
- Eat out at a canteen
- Eat out at a restaurant
- Other (please specify):

If you receive food from your family, have you ever gone to pick up the package...

- At the train station
- At the bus station
- Both
- Other (please specify):
- Friends coming to Bucharest who bring me packages

Do you usually order food online?

- Never
- 1-2 times a month
- 3 times a month or more

If yes, where do you order from most often?

Specify a restaurant or platform

What is your current status?

- Student only
- Student and part-time/flexi-time employee
- Student and full-time employee

- Other (please specify):
- Student and Entrepreneur

How much do you spend on food weekly?

- Up to 100 lei
- 101-200 lei
- 201-300 lei
- Over 300 lei

What is your average monthly income, including money received from family and other sources?

- Up to 500 lei
- 501-1000 lei
- 1001-1500 lei
- 1501-2000 lei
- 2001-2500 lei
- 2501-3000 lei
- 3001-3500 lei
- 3500-4500 lei
- Over 4500 lei
- Other (please specify):

How old are you?

Specify your age

Gender?

- F
- M

Would you like to receive the results of this study via email? If yes, please leave your email address. Thank you!