

Consumer Behaviour of Generation Y and Z during the Pandemic: Attitude Change towards Restaurants and Delivery

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ABSTRACT: With the appearance of the coronavirus, companies across several industries were required to alter their business models in order to avoid going bankrupt. Hospitality is commonly considered as one of the most vulnerable industries for pandemics, therefore the decline on a global scale was inevitable. The occupancy rate of European hotels experienced an overall significant decline in 2020 and reached the lowest peak in May at 13.3%. Compared to the data from May 2019, this meant a drop of 82.3%. Restaurants also felt the negative effect of the pandemic: compared to the data of 2019, at the end of February, European restaurants started to experience declines on a daily basis. With the additional unfortunate events and governmental restrictions, not even in a single month were restaurants able to achieve the number of customers served that they reported in 2019. Even though restaurants on a global scale were seriously impacted by the COVID-19 pandemic, the role of delivery services and food delivery applications (FDAs) has significantly grown and the number of global customers is still increasing. The market size of the global online food delivery sector was 107.44 billion US Dollars in 2019 and expected to reach 154.34 by the end of 2023. There is a wide range of factors that influence consumer behaviour such as quality of information, the design and accessibility, reduction on waiting time and experiences regarding online orders. This research aims to uncover the significance of these dimensions with the support of a primary research conducted in Hungary in order to discover whether the international trends are also applicable in the country.

KEYWORDS: COVID-19, pandemic, consumer behaviour, customer satisfaction, food delivery

JEL Codes: D12, D91, E21

Introduction

The short-, medium- and long-term socio-economic consequences of the new coronavirus epidemic in COVID-19 in 2020, as well as their territorial

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implications, are still difficult to assess. The crisis accompanying the epidemic has led to new life situations in almost every area of life. The effects are profound and complex, and the direct and indirect correlations suggest changes in the future functioning of society and the economy. As a result of the crisis, solutions that help decrease the spreading of the virus by reducing the number of face-to-face encounters have suddenly emerged and become commonplace in several areas. The solutions such as home office or home education have become commonly used, their rapid expansion and wider acceptance is remarkable (Lennert, 2020). There is still a need for effective policy interventions and the development of different solutions (Gombos et al., 2020). Detailed and interdisciplinary researches are required in order to assess the mechanisms through which the pandemic and the ensuing economic crisis affect territorial inequalities and territorial processes. It is also an important task to explore the extent to which industrially differentiated intervention is needed in the policy responses and measures given to the economic effects of the epidemic and whether these actions are reflected in economic protection measures.

The new coronavirus infectious disease caused an outbreak in the world for the first time in the world in the Chinese city of Wuhan in December 2019. After the first case, the disease spread worldwide within a few months, leading the World Health Organization (WHO) to declare a pandemic on 11 March 2020. The first two diseases were registered in Hungary on 4 March 2020, and then on 11 March the government declared an epidemic emergency in the country.

The epidemic has caused radical changes in everyday life and led to the development of novel social phenomena that may even persist in the long run. During the emergency, due to the restrictions, people were forced into quarantine, their work was done remotely and in digital distance education, students studied at home. The technological advances of the digital world and the role of broadband internet access have significantly increased. In this connection, however, it is a domestic problem that the opportunity is given through digital platforms, but they are not available everywhere and for everyone. In many cases, access to and use of the Internet and the toolkit are also lacking.

Digital services that minimize face-to-face encounters have also become increasingly popular, the epidemic forced the digital divide in Hungary to quickly decrease. In only a few months the use of digital services, purchasing tickets, booking appointments or ordering food through digital channels have become a common practise for a wider range of people. At

the same time, the conditions for adaptation are provided in a territorially differentiated way. In the more favourable, typically urbanized areas of the country (metropolitan agglomeration, county capitals and their catchment areas), the digital switchover posed little difficulty for the general public, as conditions were provided (infocommunication tools, internet access, digital competencies). In contrast, in less developed, rural areas of the country, especially those belonging to the external and internal peripheries, broad social groups may have faced the usual inaccessibility of various public and private services due to lacking of tools or digital competences. Supermarkets has started to offer the online grocery shopping for additional regions, therefore the less developed areas also had the opportunity to narrow the digital divide in the country in case having the required technological and digital tools.

With the appearance of the coronavirus, companies across several industries were required to alter their business models in order to avoid going bankrupt. Hospitality is commonly considered as one the most vulnerable industry for pandemics, therefore the decline on a global scale was inevitable.

In addition to traditional services and grocery shopping, restaurants also felt the urge to introduce changes and offer options for the customers who wished to purchase from them. Businesses were forced to close their units therefore started to offer their products for take-away, either with pre-orders through a phone call or their social media platforms and when the owners realised that their lockdown will have to last longer, some introduced delivery services either through their own employees or by joining food delivery applications. Governmental restrictions towards eating on the spot have been widely introduced on a global scale, therefore restaurants who did not offer the takeaway or delivery options were forced to shut down.

Literature review

The new coronavirus, an infectious disease caused by SARS-CoV-2, officially appeared in the world for the first time in the world in the Chinese city of Wuhan in December 2019. At that time, many patients showed signs of pneumonia of unknown origin, which several doctors tried to draw attention to, but were forced to stay silent in that matter by the Chinese authorities (Radó, 2020). The virus began spreading to other parts of

the world in early January 2020, with the first time appearing in Thailand, Japan, South Korea and the United States.

In Europe, the first case of COVID-19 was reported in France on 24 January 2020 (ECDC, 2020). The WHO Emergency Committee ordered a public health emergency on 30 January. On February 11, the committee officially named the new virus COVID-19, based on the English term, disease abbreviation for coronavirus (Radó, 2020). From February 20, the virus began to spread spectacularly in northern Italy, and by March 20, Italy had the second highest number of cases after China (Livingston et al., 2020).

The COVID-19 epidemic is expected to be the most significant social and economic event in recent decades. Fear of the spread of the epidemic has drastically pushed back world trade, causing serious problems in the global economy and production chains in the first half of 2020, with permanent shutdowns in several places. Restricting social encounters resulted for in letting employees go for many businesses. Most of the office workers have been able to work remotely, public education and higher education institutions have switched to digital education, and parents supervising undergraduate students have been forced to stay away from work. Restrictions have led to a sudden recession in the world economy. National economies with a significant global exposure to the crisis have suffered a particularly severe loss in this area, with areas particularly affected by domestic and international tourism. The epidemic had also a significant economic effect in Hungary.

According to Dube et al. (2020), hospitality industry on a global scale had to suffer the most significantly due to the COVID-19 outbreak. The authors suggest that due to the close connection between hospitality and restaurants, the lockdown and the decline in tourism affected the different establishments even more significantly (Dube et al., 2020).

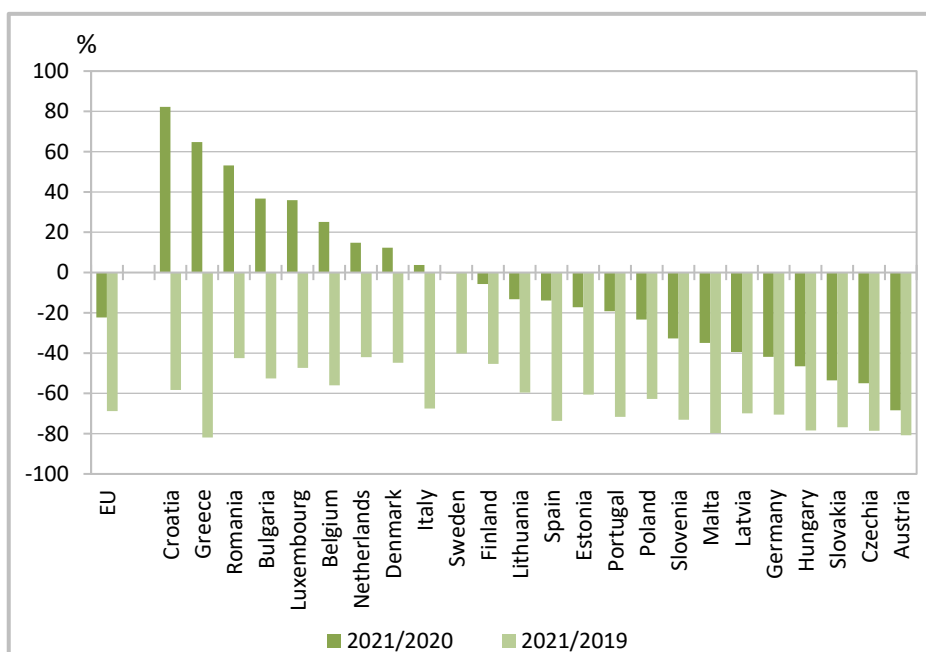
Before the global lockdown in April 2020, almost 2.8 billion guest nights were reported at accommodation establishments by the EU member states between April 2019 and March 2020. During the first year of the pandemic between Aprils 2020 and March 2021, this number did not manage to exceed 1.2 billion nights. The highest absolute decrease in the sector was recorded in Spain: a decline of 352 million nights in total.

Table 1: Nights spent at tourist accommodation establishments

Date	Country (in million)															
	EU	AT	BE	BG	CZ	HR	DE	IT	HU	MT	RO	SI	SK	ES	SE	NO
April 2019 – March 2020	2794	123	41	27	55	91	424	419	32	9,5	29	15	17	454	62	34
April 2020 – March 2021	1162	48	17	11	23	40	215	176	11	1,9	14	8	6,8	102	36	21

Source: Eurostat (2021), own editing

The EU average annual declines between the calendar year of 2021 and 2020 and 2021 and 2019 were reported by Eurostat, exceeding 22% and 68% respectively. Among all the EU Member States with available data, the most significant declines were reported from Malta (-80%) and Spain (-78%), followed by Greece (-75%), Portugal (-70%) and Hungary (-66%). Unfortunately there is no recent data available from Cyprus, France and Ireland.

**Figure 1: Annual change in nights spent at tourist accommodation establishments**

Source: Eurostat (2021), own editing

Tourism is one of the most spectacularly developing and expanding sectors in the world. In Hungary, not only the tourist traffic, but also the revenues from tourism have increased compared to recent years. In comparison, as a result of the pandemic, according to Poór et al. (2020), the largest redundancies can be observed in the hotel and catering sector. The redundancies affected workers working as waiters and cooks particularly hard. 18% of the hospitality organizations participating in the research reported that full-time jobs had been eliminated. According to the study of the CSO (2020), the year 2020 promised to be positive for accommodation services and hospitality, as the turnover of accommodation establishments in January and February exceeded the level a year earlier. The turnover of accommodation establishments in the period from March to September 2020 never reached the level of the previous year. The reason for this was the lack of foreign guests, which resulted in a drastic drop in the number of guest nights. Between January and September 2020, commercial accommodation establishments achieved a gross sales revenue of HUF 202 billion, 52% less than a year earlier. (CSO, 2020: 32) The COVID-19 epidemic has had an unprecedented effect on the Hungarian tourism industry (Végi et al., 2020). As a result of the restrictions, travel has become nearly impossible, therefore people have opted for private transport instead of public transport. Air traffic decreased drastically, and Budapest Liszt Ferenc Airport experienced a 99% decline in the spring of 2020 compared to the same period last year (Raffay, 2020). According to an article in Forbes from 2020, tourism accounts for 8.5% of Hungary's GDP (Forbes, 2020), while according to IMF research, Hungary's service exports may have shrunk by 3.4% of GDP in 2020, the ninth most severe decline in the country experienced in its lifetime (Rebillard, 2020).

According to the data of the CSO (KSH), the number of guest nights spent in commercial accommodation establishments was 97% in April 2020 and 85% in November, compared to the same period of the previous year (CSO, 2021). In hospitality, due to the close connection to tourism, the damage is also significant (Csapó–Töröcsik, 2020). According to the data of the CSO (2020), compared to the reports from previous years, hospitality in the year 2020 expected to experience an annual growth, as the combined turnover of businesses in the industry in January and February exceeded the levels of 2017, 2018 and 2019.

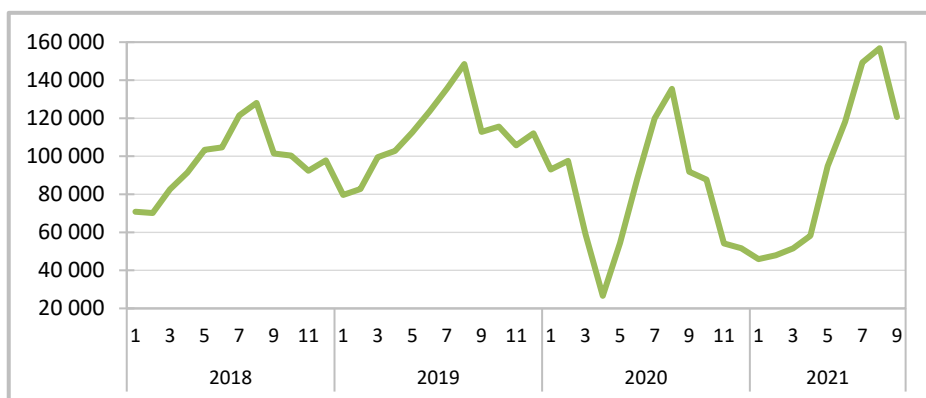
Table 2: Hospitality turnover in million HUF and annual change at commercial accommodation establishments

	2017 (base year, M HUF)	2018 (M HUF)	Year-on-year change (%)	2019 (M HUF)	Year-on-year change (%)	2020 (M HUF)	Year-on-year change (%)
January	60 030	70 822	+ 17,98	79 630	+ 12,44	93 074	+ 16,88
February	62 401	70 121	+ 12,37	82 737	+ 17,99	97 547	+ 17,90

Source: CSO/KSH (2020, 2021), own editing

It can be seen, that based on the data of CSO, in case of both January and February Hungarian commercial businesses in the hospitality industry experienced a positive tendency in terms of their monthly turnover between 2017 and 2020.

However, due the unexpected events and the governmental restriction the positive tendency of the first two months had to take a sharp downturn and the national turnover in the case of commercial businesses had started to significantly decline in March 2020. The Hungarian government announced the national curfew on 27 March for the first time. The regulation was in force for more than a months and had a nationwide expiration date, ending on 18 May. The restrictions led to a serious drop and turnover reached the lowest point in April at 26 609 million HUF. Compared to the data of 2019 with 102 803 million HUF, this meant a year-on-year decline of more than 74%.

**Figure 2: Hospitality turnover in million HUF at commercial accommodation establishments**

Source: CSO/KSH (2021), own editing

Due to the overall decline in hospitality with the additional governmental restrictions such as the lockdown, restaurants also experiences significant losses in revenue. Taking 2019 as the base year, on a global scale, according to the data of Statista (2021), the year-on-year change in terms of the daily diners in the establishments turned into negative in March 2020. This tendency had remained unchanged through the whole year and only with the mitigation of restrictions during the summer of 2021 when diners managed to slightly exceed the numbers of 2019 (Statista, 2021).

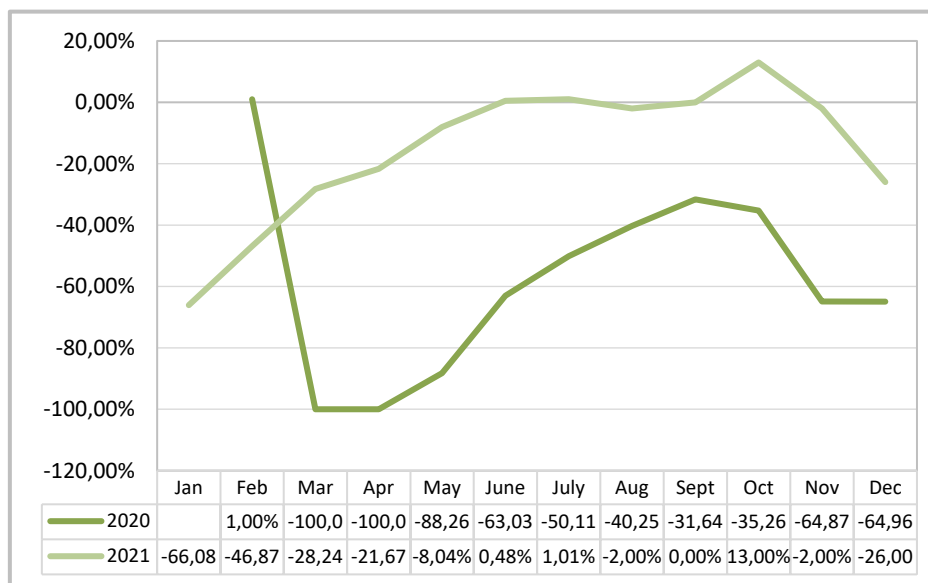


Figure 3: Year-over-year change in number of visitors of seated restaurant diners in 2020 and 2021

Source: Statista (2021), own editing

Restaurants remained closed for longer periods of time. Business owners started to introduce delivery in order to moderate the financial loss. (HVG, 2020).

Food delivery applications – also known as FDAs – are considered as platforms that enable users to order food from a wide selection of restaurants (Ray et al., 2019). The pandemic had a huge influence on the success of these platforms, therefore the accumulated revenue is expected to increase globally, with an annual rate 8.2% between 2020 and 2024. The growing revenue is also paired with the gradually increasing number of users: the 9.5% annual growth of 2020 is expected to increase up to 12.5%

until 2024 (Statista, 2020). Based on these positive tendencies, the platforms offer business in the industry a great opportunity to reach even more customers. There are two main platforms in Hungary: Foodpanda (formerly known as Netpincér) and Wolt, both of which having an on-going rapid expansion in order to achieve an ever growing national availability.

There are several researches on the topic of FDAs, focusing on the technological background of the applications. In addition, researchers have also aimed to uncover the different factors influencing consumer behaviour such as: quality of information, design and accessibility, reduction on waiting time and experiences regarding online orders. Researchers suggested positive changes in the overall intentions and attitudes of consumers towards the use of food delivery applications. In order to see whether customers of specific regions in Hungary have also altered their ways of food and drink consumption, a primary research with several questions had been conducted. In addition to the comparison of the pre-pandemic era with the current situation in terms of online purchasing behaviour, respondents were asked to answer questions regarding their expected attitudes once the COVID-19 epidemic ends (Alalwan, 2020).

This expanding user base offers immense growth opportunities to FDA service providers worldwide. Furthermore, the growing media conversation around FDAs and their popularity among consumers has attracted scholarly interest as well. Prior research on FDAs, however, has largely focused on the theoretical lens of technology acceptance theories (Alalwan, 2020; Lee et al., 2017; Kang–Namkung, 2019). In addition, there are also studies on the examination of different factors such as design and convenience (Cho et al., 2019), online purchase experience (Yeo et al., 2017), ease of ordering food from the available restaurants (Cho et al., 2019) and reduction in waiting time (Ray et al., 2019).

The accumulated findings are comprehensive and offer deep insights into various aspects of FDA usage and adoption. However, a review of this literature reveals that certain research gaps persist: there are no studies on consumer behaviour toward FDAs in the backdrop of a health crisis like the ongoing COVID-19 pandemic, especially in Hungary. It could be possibly contended that the usage of FDAs has increased with the implementation of the pandemic control measures of lockdown and social distancing, which have all but eliminated out-of-home dining. In addition, various factors associated with health and safety concerns during the pandemic could also have impacted the attitude of consumers toward FDAs; these need to be

diagnosed to help service providers ensure continued usage of their apps for the delivery of food. There is an over-emphasis on technology acceptance theories, with limited consumer behaviour insights. Accordingly, the available findings are skewed toward the positivist agenda of adoption, thus remaining deficient in the resistance perspective. As recent consumer behaviour literature has underscored the importance of examining behavioural reasoning (Sahu et al., 2020), which considers the valence of consumer behaviour as driven by both enablers and barriers (Talwar et al., 2020) this gap should be addressed to provide a multi-dimensional perspective on consumers' behaviour toward using FDAs.

Methodology

The different purchase intentions and behaviours of two generations will be examined in this study. The aim of this article is to uncover the underlying motives behind the online orders of the participants. In addition, participants were also asked different questions regarding the channels they are using for their orders. Based on the secondary sources available, the following research questions had been formulated:

1. Since the COVID-19 epidemic has started, do generation Y and Z order more frequently than they used to before?
2. Have food delivery applications become the primary means when it comes to ordering food?
3. Do generation Y and Z have different motives either when eating on the spot or when ordering food?
4. Is social media considered as the main source of information for both generation Y and Z in the case of introducing changes in conditions?

In order to examine these topics, online questionnaires were used in the primary research. The majority of the responses were collected from people from the cities of Sopron and Győr, and their agglomerations, however there are a number of answers collected from participants who live in different parts in Hungary. There was a great variety regarding the ages of the respondents, however based on the sizes of the different age groups, the following two generations were selected for further analyses. Participants in the study were divided into two categories according to their year of birth (Törőcsik, 2017):

- Generation Y: born between 1980-1995,
- Generation Z: born between 1996-2010.

This generational classification is important because generational affiliation can influence consumer behaviour through shared cohort experiences and similar environmental impacts (Töröcsik, 2017).

For the selected two groups a total of 815 complete questionnaires were collected, out of which 332 people are classified into generation Y and the rest, 483 are into generation Z.

There were five questions in the survey used to uncover the feelings of the participants and additionally to either support or reject the hypotheses. The statistical data was examined and analysed in SPSS version 22.

4. Results of the questionnaire

The first question in this topic aimed to discover how the purchase behaviour in general has changed due to the pandemic:

“Almost every location has started to provide the opportunity for takeaway consumption since the coronavirus epidemic started. How frequently do you generally choose this option compared to the pre-COVID era?”

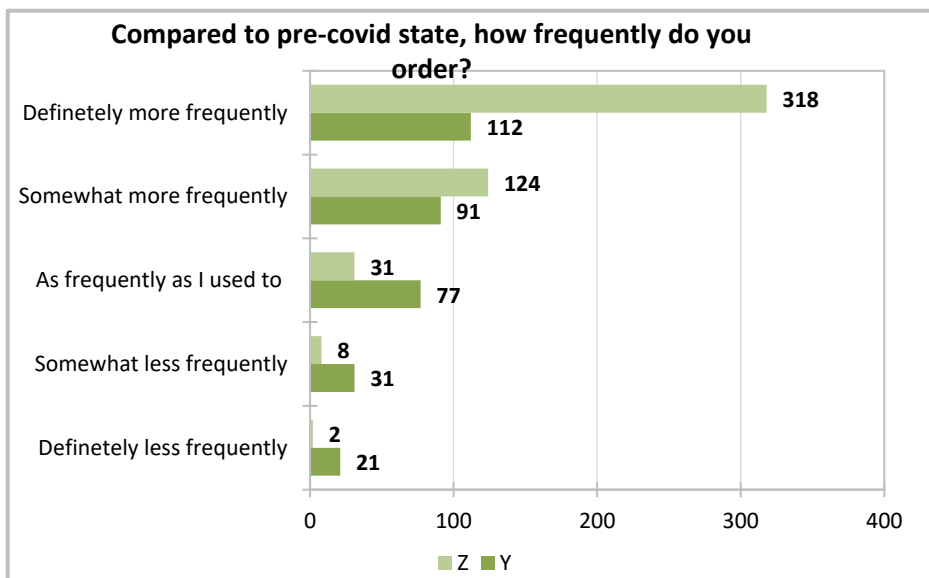


Figure 4: Frequency of orders compared to the pre-COVID state for generation Y and Z

Source: Own questionnaire data and editing

The respondents had five options to choose from. It is clearly seen that “definitely more frequently” was the most commonly chosen answer for generation Z with 65.84%. As for generation Y, “definitely more frequently” and “somewhat more frequently” were the most popular options with 33.73% and 27.41% respectively.

The third option, namely “as frequently as I used to” proved to be significantly more popular among the older respondents: compared to the pre-COVID era, 77 participants order with the same frequency, while only 31 of generation Z picked this answer. However, these 77 answers only account for less than the quarter – 23.2% – of all the representatives of generation Y.

The next question was used to find an answer to the second hypothesis, more specifically to see how popular food delivery applications are compared to the traditional methods when it comes to ordering food.

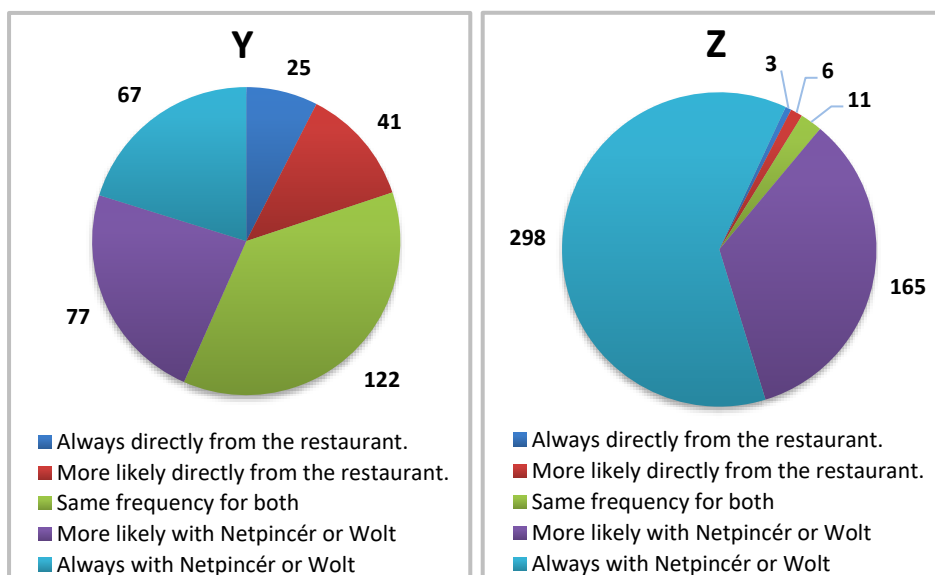


Figure 5: Means of orders from local commercial food and beverage businesses

Source: Own questionnaire data and editing

In the next question, participants were asked to share their practices when it comes to ordering food. They had the opportunity to choose from

5 possible answers. Even though food delivery applications such as Netpincér (now Foodpanda) and Wolt are widely available in the country, the 2 generations have different habits.

FDA's have an utmost importance in the purchasing behaviour of generation Z. The majority, 298 of the respondents (61.7%) always order through either Netpincér or Wolt. The second most popular answer was "more likely with Netpincér or Wolt" with 165 answers. There were only 9 people who prefer the more traditional, direct ways.

Ordering directly from restaurants proved to be as popular as using FDA's for more than the third of generation Y: 37% (122) of the respondents picked this answer. However, there were 144 people who prefer the platforms over the traditional ways, accounting for 43.4% of the participants of gen Y.

The following two questions aimed to uncover the motives behind the purchasing habits: both in case of eating out, on-the-spot and in case of ordering. For these questions, participants were able to choose multiple answers.

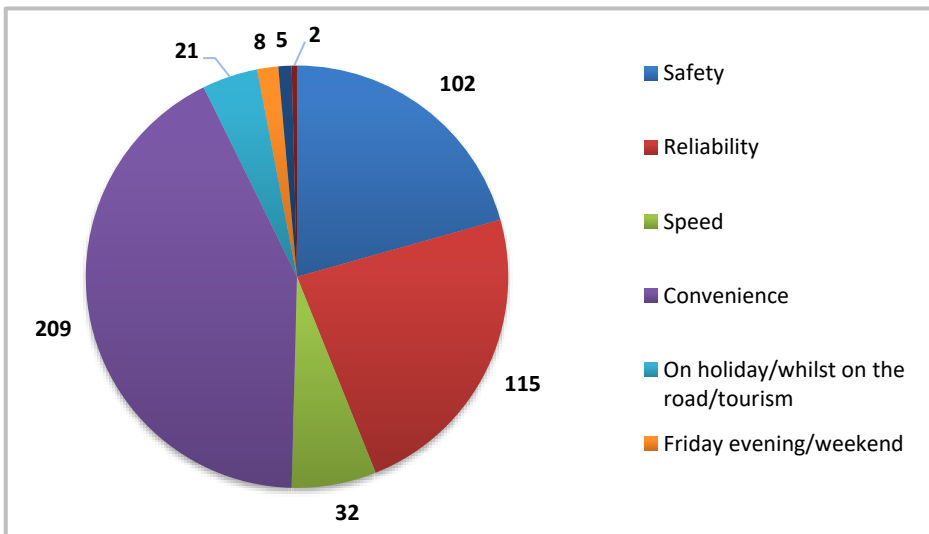


Figure 6: Reasons for ordering food in case of generation Y

Source: Own questionnaire data and editing

When it comes to ordering food, the main motivation for generation Y is clearly the convenience factor: 209 participants chose it. In the three most frequently chosen reasons "reliability" (115) and "safety" (102) can

be found along with convenience. Based on the answers it can be seen that gen Y is not likely to order food only because they are bored, when watching a movie, on Friday evening or during the weekend.

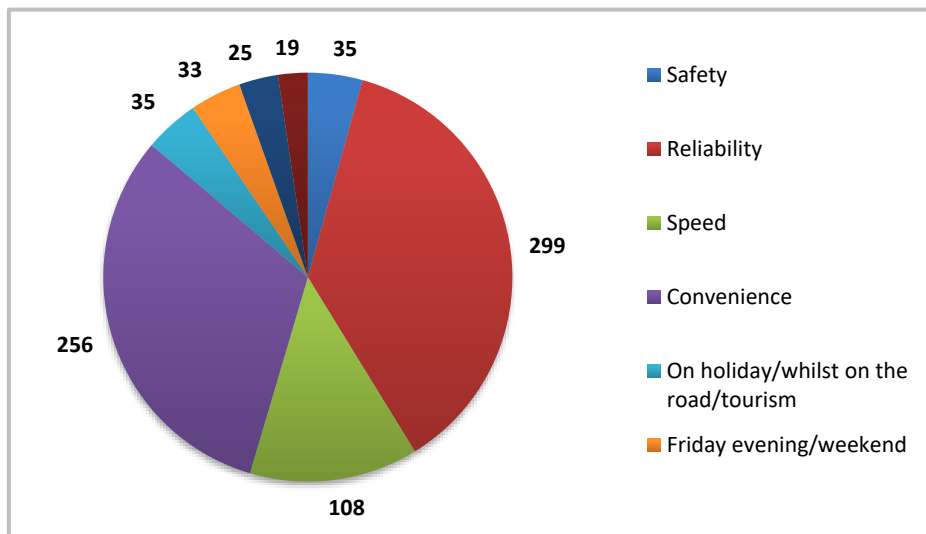


Figure 7: Reasons for ordering food in case of generation Z

Source: Own questionnaire data and editing

In contrast, for generation Z, reliability with 299 marks was the main motivation when it comes to ordering food. However, convenience is still considered as one of the main factors: 256 people picked this option. Even though the order was reversed, the first two most popular answers were the same for both generation. While safety had a relative importance in the case of generation Y, based on the answers of the younger respondents, only 35 of them considers it as a significant factor. The third most popular motivational factor for generation Z was speed with 108 picks.

The questionnaire also aimed to discover the motivational factors for both generations when it comes to eating out, on the spot.

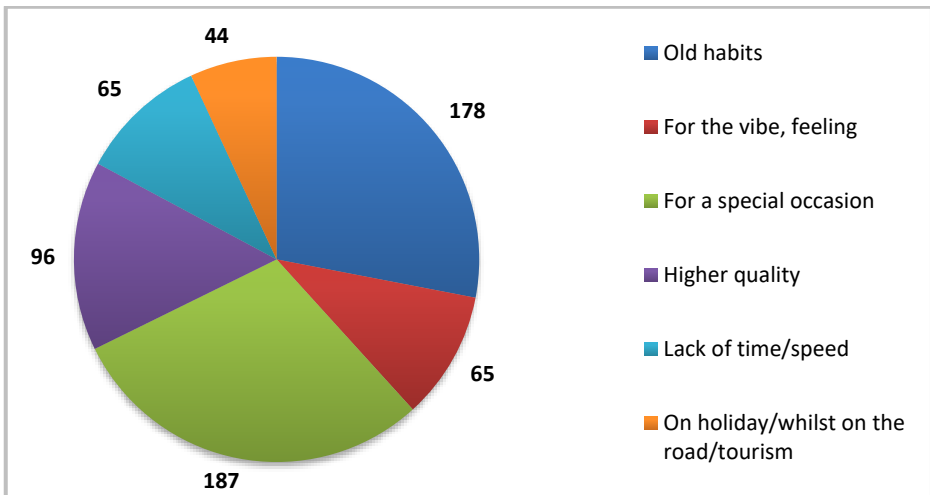


Figure 8: Reasons for eating out, on the spot in case of generation Y

Source: Own questionnaire data and editing

For generation Y, “for a special occasion” and “old habits” are the most popular answers with 187 and 178 picks respectively. Even though, compared to these answers around only the half of them believe that this type of consumptions is paired with a higher quality, it is still considered as the third most commonly chosen motivational factor.

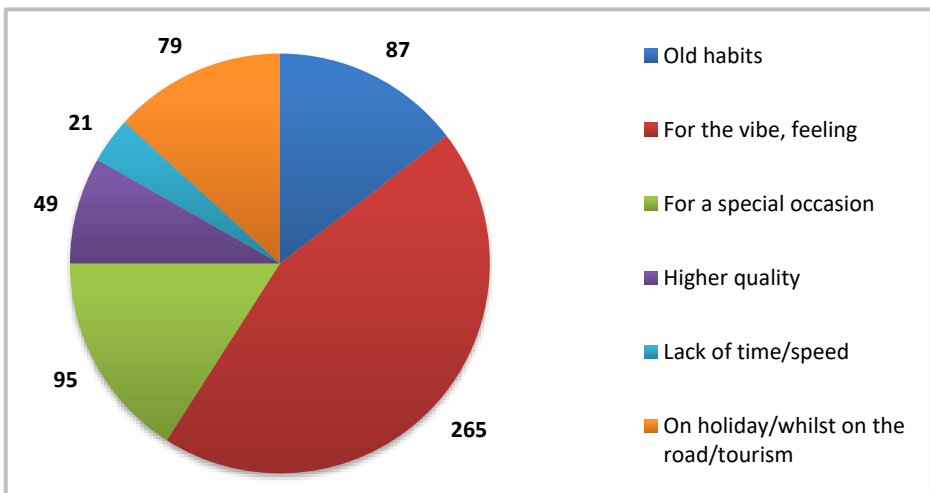


Figure 9: Reasons for eating out, on the spot in case of generation Z

Source: Own questionnaire data and editing

In contrast, generation Z, in general, has a different motivational factor behind their consumption habit: 265 people said that eating on the spot has a distinctive feeling and vibe associated with it and this is why they are likely to choose it over ordering. Special occasions (95) and old habits (87) are still considered as popular motives. In addition, 79 people said that in case of being on holiday, on the road or gastroturism they enjoy eating out.

The objective of the last questions was to uncover how the participants were informed when the local places started to promote their take-away option and introduced delivery due to the governmental restriction. The number of responses to the available options were converted into relative frequencies and the two generations are displayed on the same chart.

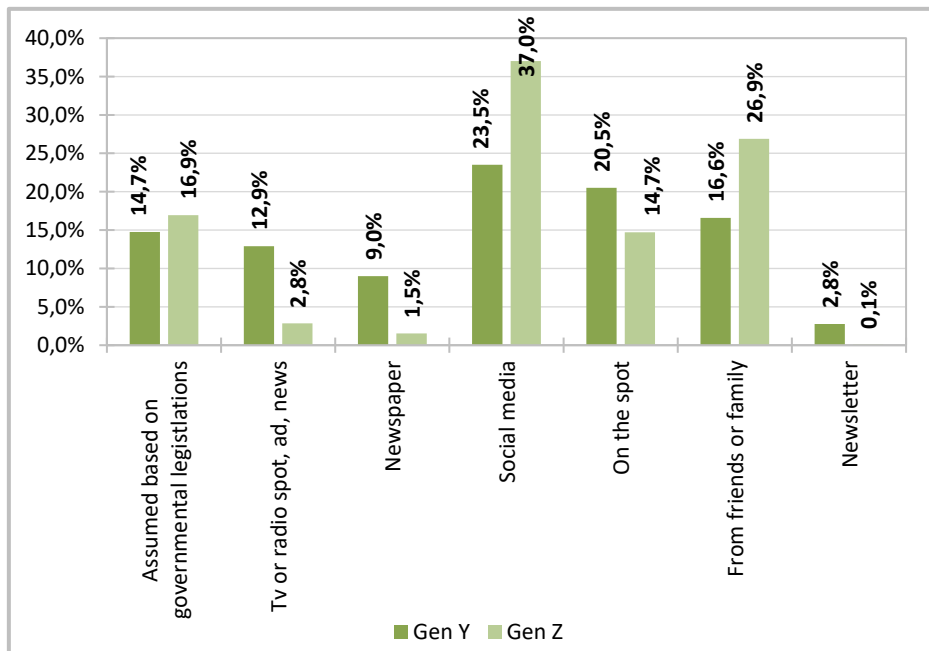


Figure 10: Source of information on the recently introduced consumption options

Source: Own questionnaire data and editing

Based on the relative frequencies, it can be said that social media was the main source of information for both generations when the businesses in the food and beverage industry were forced to shut down their premises.

It is also important to notice that a significant amount of the older participants was informed on the spot, at the store about the new options (20.5%). However, this answer was inferior was the younger participants: only 14.7% chose it in the questionnaire. On the contrary, a more significant number of people (16.9%) from generation Z automatically assumed, that based on the governmental restrictions, businesses will all introduce more options of consumption for the customers.

Friends and family members are considered as valuable sources of information for a significant portion of both generation Y and Z: with 16.6% and 26.9% respectively, this answer is among the three most frequently chosen alternatives for both categories.

Conclusion

Hospitality industry in general is still suffering from the economical effects of the COVID-19 epidemic. Based on various data it can be seen that unfortunately Hungary is no exception. Commercial businesses were forced to adapt: along with the governmental restrictions, new options for consumers had to be introduced. Local establishments in Hungarian cities and towns started to offer take-away options on a wider scale and some even introduced delivery options – either through their own services or by using food delivery applications.

Based on the literature and secondary data available, a questionnaire was created and responses were started to be gathered on a national scale. The aim of this study was to uncover the underlying motives behind the online orders of the participants. In addition, participants were also asked different questions regarding the means they are using for their orders.

In general, both generations order more frequently, even though businesses in Hungary have been open now for a longer period of time and customers are able to visit them. Food delivery applications such as Foodpanda (formerly known as Netpincér) and Wolt are both very popular, however it is essential for restaurants to keep their direct delivery services, since a significant portion of respondents from generation Y reported that they using both FDA's and direct orders with the same frequencies.

The generations have different motives for both on the spot consumption and food orders. Safety is one of the main reasons for generation Y when ordering is considered. Deliveries in general are considered as fast ways of receiving food, therefore a motivational factor for generation Z.

However, it must be noted that convenience and reliability were both reported by the majority of respondents as important factors.

When it comes to special occasions, both generations enjoy eating out, however, in addition to this factor, they chose different reasons for eating on the spot: for the older participants, it was only part of their old habitual activities, while younger respondents enjoy the atmosphere and assign a special experience to this form of consumption.

Based on the responses, it can be confidently said that social media was the main information source for both generations when businesses were forced to shut down. However, it must also be noted that it is always important to inform customers on the premises about the new services. Friends and family members are considered valuable sources of information for a significant amount of all the participants. Due to the fact that a great proportion of the respondents of generation Z reported that they automatically assumed that takeaway and delivery options will be available at the local businesses, it is necessary for company owners to be up-to-date with the recent news and governmental statements and act accordingly as soon as possible in order to please their guests.

Future outlook

Based on the number of respondents the sample unfortunately cannot be considered representative for the category populations due to time limitations. There are constantly new responses registered to the questionnaire, therefore it might be interesting to have an additional analysis once the sample reached a higher number. Introducing additional questions to an even broader audience, including more participants from other regions in Hungary and also from other generation would result in a more valuable and representative research.

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