
A PILOT STUDY ON CONSUMERS' BEHAVIOR TOWARDS OF PURCHASING AND CONSUMPTION OF FAST-FOODS IN GALAȚI CITY, ROMANIA

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ABSTRACT

Since the consumers' eating behavior changed over the years, the increased consumption of fast foods became obvious worldwide. Although prior studies on fast foods indicated there are some national and international similarities, the particularities for each national region are to be researched to explain this trend. The pilot study aims to identify among the potential major influence factors involved in the increment of the consumption of fast foods, and to correlate their influence with the current consumers' behavior towards fast foods consumption in Galați city, Romania. The data collection instrument was the online questionnaire, which was administered to 156 randomly selected respondents, within the age range of 25 to 64 years old (with an average age of 37.14 years). The questionnaire was designed to: a) carry out, in the first phase, a segmentation of the interviewed group into fast food consumers and non-consumers together with a subsequent socio-demographic characterization of fast-food consumers, and b) identify factors that act on the consumers' food choices. The obtained results revealed several major consumption patterns: a) the majority of interviewed individuals, namely 84.62%, are buying and eating fast-foods; b) females and younger individuals (namely, the age range of 25 to 35 years old) constituted the main group of consumers; c) eating choices were made under the influence of multiple factors which could exert a different intensity on consumers' final decision; d) craving, and eating pleasure respectively, were identified as main factors which can exert an influence on consumers' eating choices.

Key Words: Fast-foods, pilot study, consumers' eating choices, eating practices.

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1. INTRODUCTION

Over almost three decades, the various newly appeared socio-economic factors influenced the consumers' lifestyle which, in turn, is directly reflected in the consumers' food choices regardless how nutritious or healthy are these food choices. These changes in the populace lifestyle led to the increment of the request for foods which can satisfy not only hunger - a basic, metabolic feeling - but also to a certain degree of distancing from traditionally home prepared foods in the favor of convenience, speed of procuring the food and speed of food preparation and consumption due to lack of time, social trends, seductive and aggressive promotion via mass-media of certain groups of foods etc. [G. Leng, *et al.*, 2017; M. Macht, 2008; E. Leigh Gibson, 2006; J. L. Locher, *et*

al, 2005]. As a result, the fast foods production sector and distribution markets constantly grew and gained more and more customers [Mark A Pereira *et al.*, 2005].

Aside from the aforementioned factors which are favoring the consumption of fast foods, the popularity and consumption of this type of foods increased globally, under the direct connection and pressure of the globalization phenomenon. Apart from the tangible, direct effect of globalization on the consumers' behavior towards fast foods, other factors were identified to influence the decision of the consumption of these products. [Adamczyk, G., 2005; Dave JM, *et al.*, 2009; Gupta, N., 2011]. For example, a large collection of studies indicated that fast foods are preferred by the consumers due to several reasons such as desire to save both money and time;

increased affordability (i.e.: reasonable pricing which are affordable to wider groups of consumers); predictable, standardized offer; fast preparation and fast serving; continued improvement in pleasant taste; accessibility; social trends or social pressure coupled with the human psychology. [Persaud, Donald, 2013; Sharifirad G, et al., 2013].

Due to the current trend of steadily increasing fast-food consumption around the world, other studies have focused on the age and sex of the consumer, socio-economic status, social environment, education level and personality traits of the consumer (i.e.: health and emotional status), and have indicated that the selection of certain foods for purchase and consumption by the population is a very complex phenomenon that manifests itself as a result of the simultaneous action of these factors [Arganini C., et al., 2012; A. Asma, et al., 2010; J. Nmor, et al., 2014; Wadolowska, L., et al., 2008; Prescott, J., et al., 2002].

According to several other studies, “pleasure” and “persuasion” were identified as additional factors involved in the process of individual, daily food choice. While pleasure (also known as “eating pleasure”) seems to be related to indicators such as the individual’s health and emotional status, motivation, craving and preferences, the persuasion is related to providing to consumers persuasive information or messages related to a product. In this context, persuasion is more a psychological and marketing tool which, apart from other specific tools, could also exploit the existing social trends and/or social norms for determining an individual to make their eating choices [Chance, Z., et al., 2014; Elena Bartkiene, et al., 2019].

Regarding the Romanian urban and rural areas, nowadays, the fast-food market segments, regardless of their status and size (corporate or non-corporate), are knowing a rapid growth and diversification due to the high demand for this type of foods. Therefore, at national level, from quantitative standpoint the consumption of fast-food products is closely following the

international trends [Gabriela Popescu, 2008; Bîlbîie, A., et al., 2021]. To identify the multitude of factors which led to this consumers’ behavior at national level, as well as to establish the interaction between those factors, ample and costly survey studies are required.

Given the above, the objective is to conduct a pilot urban study, in Galați city, on consumer behavior towards fast-food consumption. This research option was chosen because it represents a more realistic, and generally recommended first approach which could be used as an important tool for subsequently designing a more ample, detailed survey that will allow gathering richer data. In this instance, beginning with a pilot study as a research method presents several advantages. First, it has the advantage of identifying and avoiding possible future unforeseen research problems that could exert a negative interference on the collection and subsequent interpretation of data using a larger study. Second, the information resulting from this pilot study could provide useful input for conducting research that will include more detailed questions and more participants to better identify and quantify both the factors that motivate consumers to change their eating habits and choices. Third, the pilot study could help to better explain the consumer decision-making processes that determine the increase in fast-food consumption in Galați city, and whether these processes are like those across national level.

2. MATERIALS AND METHODS

The pilot study took place in March 2023, in the city of Galați, Romania to identifying the respondents’ attitudes towards the consumption of fast-food products.

The quantitative research method was a questionnaire survey. The questionnaire was distributed through social media platforms to 156 randomly selected respondents who gave their consent by carrying on with this study.

The age of respondents targeted by this study ranged from 25 to 64 years old (the average age of the respondent group being 37.14 years). The data collected from those who responded negatively to the filter question “*Are you a fast-food products consumer?*” or did not complete in full the questionnaire was excluded, and only the data resulting from 132 participants was retained for the study.

The questionnaire containing closed-ended questions - with a single or with multiple answers - was distributed online. The questions had as preliminary purpose the characterization of consumers (by using socio-demographic variables), determining the purchasing and consumption habits of respondents. At a later stage, the questions focused on the use of selected indicators based on which respondents made their food choices [Iacob Cătoiu, 2002]. The socio-demographic characterization of the respondents was based on filter questions (using the dichotomous scale) and closed questions with predefined answers (using the nominal scale) [Cristache Nicoleta, 2010]. An ordinal scale has been used to characterize the behavior of fast-food consumers, and respondents were asked to: a) rank the reasons that led them to consume these products, and b) indicate the time of the day, namely breakfast, lunch, dinner, or snack, when they prefer to consume these products. [Smith S. Stevens, 1946]

For determining the influence degree of the pre-selected factors on the respondents’ eating choices, following variables were used: physical and economic (i.e. price, brand, fast food quality, portion size), and social and cultural (i.e. promotions, group of friends, advertising), a 5-point scale has been used [Ching-Chan Cheng, et al., 2021].

3. RESULTS AND DISCUSSIONS

Initially gathered responses to the questionnaire helped to identify and segregate the fast foods consumers from those who do not consume at all fast foods. Those who responded negatively to the filter question “*Are you a fast-food products consumer?*”, or did not respond to the whole questionnaire, represented only 15.38%, while the declared as fast foods consumers, representing 84.62%, were considered the target group of this pilot study. Questions related to gender and age, personal perception (i.e.: motivation, and frequency of expenses), frequency of fast foods consumption, daily quantity of fast foods consumption were used to profiling the consumers in correlation to their eating choices and fast foods intake. The data collected from this first filter question indicated that fast foods consumption is prevalent among interviewed individuals, regardless of their age and gender (Figure 1).

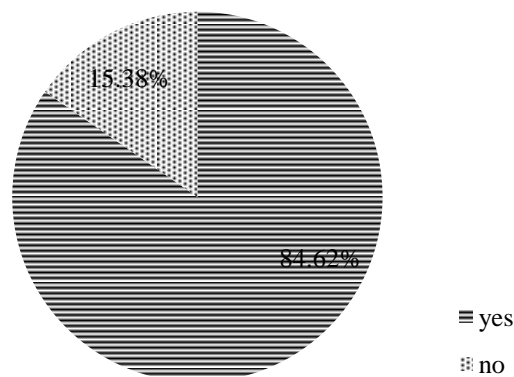


Figure 1. Participants’ response regarding the consumption of fast foods*

*The participants to the pilot study were selected based on the filter question: “*Are you a consumer of fast-food products?*”

Since the answers gathered during this early stage of the questionnaire correlate with other studies made among the Romanian fast foods consumers it leads to the conclusion that the regional behavior is not different from the national trends [Ovidiu Neagoe, 2022].

A. Gender and age criteria

As noted from the results presented in Figures 2 and 3, there are socio-demographic differences, stemming from both gender and age, which could influence the fast foods consumption trends. Females represented 54.55 % of fast foods consumers, while 45.45 % were males. The fact that females are more frequent fast foods consumers than males can be explained by the gender-related factors such as emotional status, craving for certain foods, and responses to stress [Ingrid Kiefer, et al., 2005; Elena Bartkiene, et al., 2019]. The fact that more females than men are consuming fast foods is not a surprising finding since several studies indicated the fact that females could be more prone than males to use foods as a comfort mean to coping with environmental stressors [Elena Bartkiene, et al., 2019; Fuente González, C. E., et al., 2022]. In addition, females' eating choices could be influenced by the modern societal changes in lifestyle - like lower income than men, lack of time for food preparation at home, eating at fast-food restaurants for socializing with friends-, or under the pressure of persuasion [Ayse Özfer Özcelik, et al., 2007; Maginsh Dahal, et al., 2022; Kayışoğlu, Serap and A. İçöz, 2014; Arganini, C., et al., 2012].

The group age to which the respondents belong (Figure 3) may play a major role in the regional consumption of fast-food products. The respondents, belonging to the age range of 25 to 35 are the major consumers, representing 58.33 %, in contrast with the age ranges of 36 to 45 (21.21 %), 46 to 55 (12.88 %), and 56 to 64 (7.58 %). These results indicate that the younger consumers prefer fast foods based on a wide variety of factors which are mostly related

to: low incomes, personal rapid changes in needs and expectations, personal needs for entertainment and socializing, and lack of time [Fryar, C. D., et al., 2018; Untaru, E. and Ispas, A., 2013; Brown, K., et al., 2000]. Although the chosen age range for this pilot study, namely between 25 to 64 years old individuals, covers the adult, and productive segment of population, from the obtained responses it can be noted that the percentage of adults who consumed fast-food decreases with the age increment. Regarding the respondents' age ranges, it appears that the "roots" of this eating behavior based on the consumers age segmentation, namely 25 to 35 years old towards 36 to 64 years old, could be associated with the fact that, while ageing, population is eating lesser and still retained food preferences for traditional, home-made foods. In addition, older individuals might have ingrained in their personality stronger beliefs related to food-choices behavior, and other expectations related to the food choices - expectations which can be a result of their childhood era education and/or education towards traditional eating choices [Fryar CD, et al., 2018; Dunneram, Yashvee & Jeewon, Rajesh, 2015; Drewnowski A, Shultz JM., 2001; B. Galobardes, et al., 2001].

B. Accessibility and convenience

Since from the social and economic standpoints, the price is viewed as an important factor in food choices, the accessibility to fast-food products has been assessed using consumers' attitudes towards the price of fast-food products using the axiom: lower prices are making the food products more accessible to consumers. Subsequently, when the price is positively correlated with the consumer-perceived quality of the fast-food products, the consumers will be more likely than not inclined to consume these products more frequently. Additionally, the purchased quantity of fast-

food products will increase. In this context, the accessibility factor was studied using the correlation between the consumers' responses regarding the satisfaction related to the price-quality ratio (Figure 4) with the responses related on how often the respondents purchased for consumption the fast-food products (Figure 5), how much money was allocated for purchasing one fast-food meal (Figure 6), and

the number of fast-food items were ordered as a one single meal (Figure 7).

A high percent of respondents to the questionnaire (69.70 %) considered the price-quality ratio as "excellent", and 21.21 % as "pretty good" whereas only a very small percent of respondents (9.09 %) found the pricing does not match the expected quality or the actual offered quality (Figure 4).

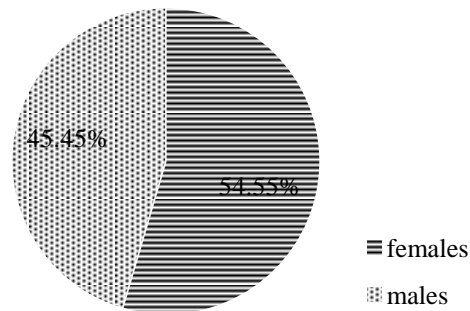


Figure 2. The influence of gender on the consumption of fast-food products

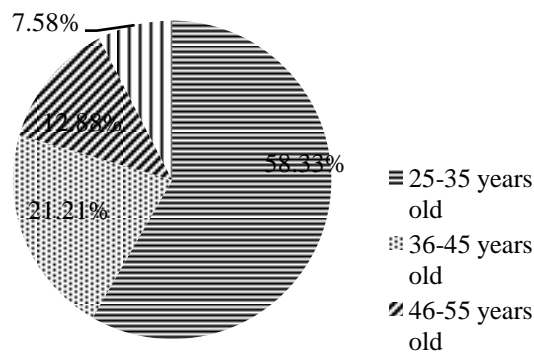


Figure 3. The influence of age on the consumption of fast-food products

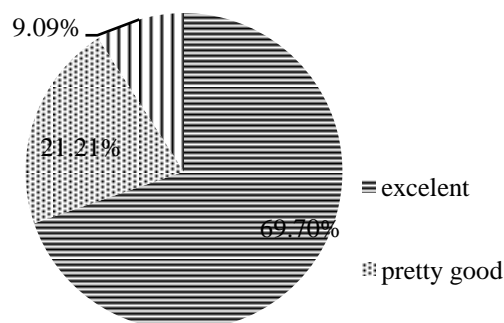


Figure 4. Respondents' perception on price-quality ratio of the fast-food products

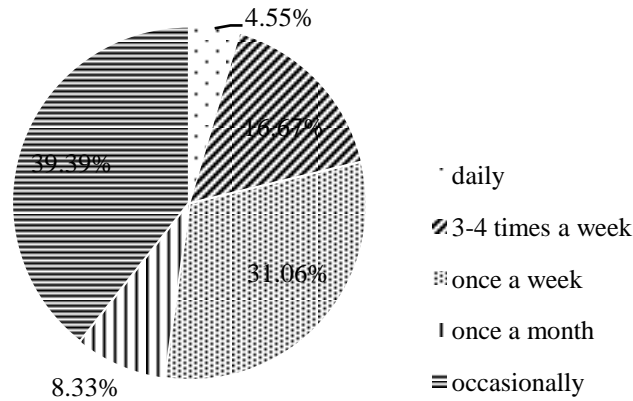


Figure 5. Consumption frequency of fast-food products

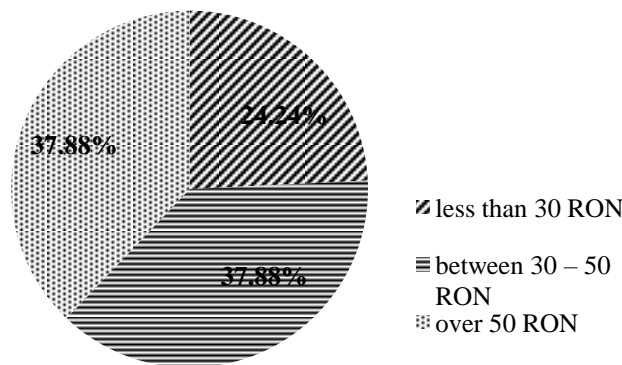


Figure 6. The overall amount of money spent for purchasing a fast-food meal*
 (*prices expressed in RON; RON- New Romanian Leu)

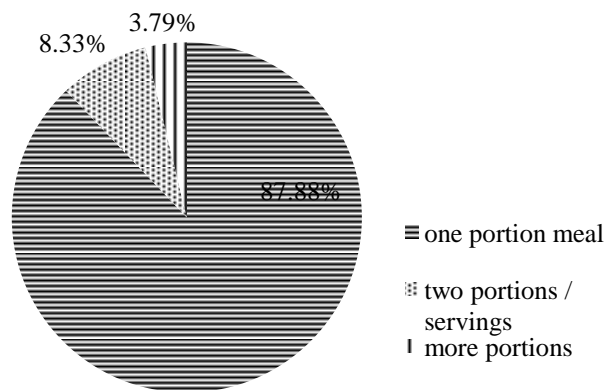


Figure 7. The number of fast-food items that were ordered as a one single meal.

Furthermore, based on the received answers to the questionnaire, the respondents' perception on the price-quality ratio positively correlates with:

- how often the respondents purchased for consumption the fast-food products over a short period of time, such as: daily, several times per week, once in a week (Figure 5), and

- the overall amount of money spent on purchasing one fast-food meal (Figure 6). However, despite the high percent of respondents (69.70 %, and 21.21 %, respectively) who considered the price-quality ratio as “excellent” and “pretty good”, these responses do not correlate with the number of fast-food items ordered as a one single meal (Figure 7). In this regard, only a small percentage of consumers indicated that they order more than two fast-food items as one meal, while the majority, namely 87.88 % of the respondents, indicated that they ordered as one meal only one fast-food item. These differences in consumers’ eating choices could be rather explained based on the individual’s preferences, namely non-food factors such as consumer’s perception of a particular fast-food item, or the fast-food-related sensory intrinsic characteristics (i.e.: color, aroma, texture etc.) than based on price and price-quality ratio.

C. Motivation

Behind the consumers’ eating choices may be different factors which can affect their motivation to make these choices. For example, several studies revealed that the price, convenience, sensory experiences (i.e.: craving, eating for pleasure etc.), individual beliefs and

attitudes towards the consumption of certain type of foods, social and cultural norms and trends etc. represented important factors that influenced the final motivation for choosing certain types of foods [Scheibehenne, B., et al., 2007; Steptoe, A., et al., 1995; Fernqvist, F. and Ekelund, L., 2014; Johannes Brug, 2008]. It is worth to mentioning the fact that consumers’ motivation could be manipulated by persuasion interventions such as marketing strategies and marketing channels, and social trends and norms [Chance, Z., et al., 2014].

In this pilot study, the consumers were asked to indicate in their responses the factors which motivated them to take the decision of eating fast-food products (Figure 8.a.), about what is attracting them to eat fast-food products (Figure 8.b.), and which category of daily meal is replaced with a fast-food meal (Figure 9).

The higher scored motives as indicated by the consumers were: craving (up to 60.61% of respondents) and eating pleasure (53.03 % of respondents) whereas hunger - a metabolic motive- was indicated by 43.94% of respondents. Consumers put a lesser importance in making their eating choices on factors such: consumption due to convenience and persuasion by promotions (Figure 8.a.).

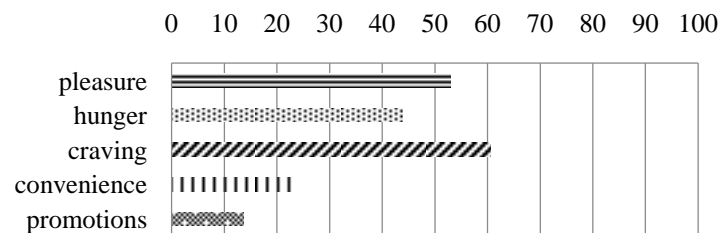


Figure 8.a. Respondents’ motives for fast-food consumption.

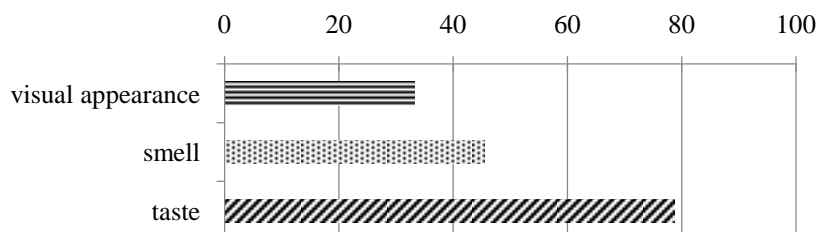


Figure 8.b. Sensory characteristics that determined the fast foods consumption.

When asked about which sensory characteristic of fast foods motivated them, the respondents indicated as top ranked factors the taste and smell of fast foods, whereas the food appearance (mainly perceived as the visual contact) was indicated only by 33.33 % of respondents (Figure 8.b). Based on the consumers' responses, both processes of food choices and food consumption are influenced by the sensory experience where smell and taste are key-role players (Figures 8.a. and 8.b.). This pilot study results are in line with previously reported surveys which discussed the correlation between smell, taste, and craving or appetite increment. The smell and taste are indicated as initiators of sensory-induced craving sensation, with smell as a prime mediator. Through the smell of a food and subsequently the taste of the food, consumers are exposed to sensory experiences that will increase food appetite based on the anticipation mechanism. [Sashie Abeywickrema, et al., 2022; Boesveldt S, de

Graaf K. 2017; Sørensen LB, et al., 2003]. Although at individual level craving intensity and frequency could be a fluctuant experience, the installation of food craving feeling could be experienced by all individuals, on a daily basis, and indicates the onset of an intense desire to consume a specific food. Craving is strongly associated with more consumption of a particular food [Uyen T.X. Phan, Edgar Chambers, 2016; Reichenberger J, et al., 2018]. Regarding the type of meals replaced by fast foods, most respondents (59.09 %) prefer to eat fast-food as a lunch, and 48.48% of respondents, as a dinner. Only a smaller percentage of respondents replaced the traditional breakfast with fast foods or are consuming fast foods, as a snack, in addition to the main meals (Figure 9).

This trend is consistent with other studies findings which indicated that during the daytime, craving and hunger feelings displayed two peaks which corresponded to lunch and dinner times [Reichenberger J, et al., 2018].

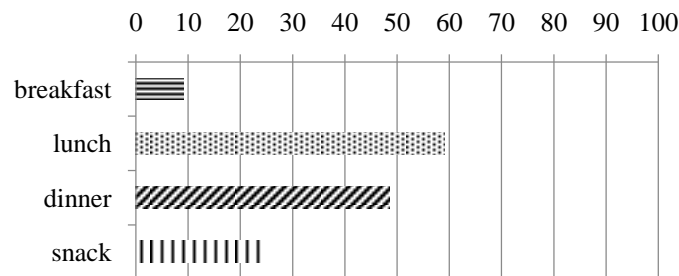


Figure 9. Type of daily meals replaced with fast-foods meals.

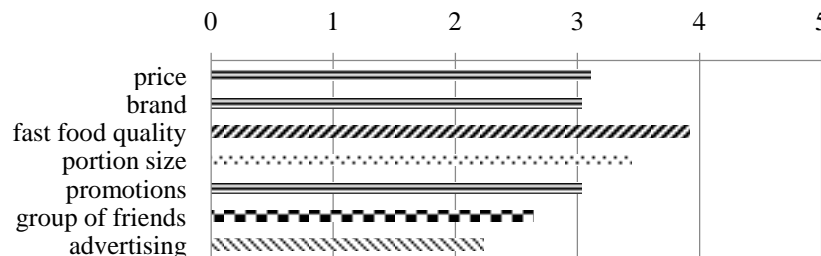


Figure 10. The degree to which selected factors could influence the consumers' food choices.

The degree in which some selected factors, namely fast foods-related characteristics (non-sensory characteristics), and consumers' decision-making mechanisms, could influence the food choices are shown in Figure 10. Overall, from consumers' perspective it can be noted that their eating choices were made based on a complex mix of multiple factors which are intertwined but do not act with the same intensity. Based on the consumers' responses, the hierarchy of influence factors was the following: fast-food quality > portion size > price > fast-food brand/promotions/group of friends/advertising. The results indicated that the consumers are more oriented towards making eating choices based on the perceived quality of what they eat (fast-food quality), the portion size, and price, rather than by being pressured by social trends and marketing tactics.

3. CONCLUSIONS

Although food choices -in this particular case translated into the increment of fast foods consumption - may be influenced by common factors at the national level, other factors, with regional significance could play a significant role in the final choice made by consumers. Therefore, to understand the consumer decision-making system and profile consumers living in a particular region or city, conducting a pilot study is a better choice to avoid interference with the "noise" that may eventually be introduced by local characteristics.

This research indicated that although the majority of Galați city residents are fast-food consumers, both gender and age played a decisive role in food choices. Many of the consumers eat these products occasionally, based mostly on other reasons than hunger, namely based on craving and pleasure, while promotions and trends are playing a lesser influence. It was also found that the consumers are choosing fast foods due to their sensory qualities, such as taste and smell, and due to

price-quality ratio. The most replaced meal of the day is lunch, followed closely by dinner; this fact may indicate that the choice of fast-food products was made by consumers mainly based on their sensory experience (craving). However, the choice of fast foods can also be made under the influence of other factors which should not be overlooked or underestimated in a subsequent research (i.e.: short lunch breaks, lack of time for cooking at home, lost traditions, etc.).

Nevertheless, even this pilot study provided answers related to several major factors with potential in influencing food choices, due to its limitations derived from the sampling size and the fixed duration of time, the obtained results can be used only as a starting point in analyzing the regional fast-food consumers. Further studies using a larger number of respondents and covering more areas of interest such as socio-economic status (i.e.: income, marital status), level of education, body weight status, and why they prefer fast foods instead of healthy foods or traditional, home-made foods are needed for characterizing the target population with regard to their eating choices and practices.

4. REFERENCES

- [1] Leng G., *et al.*, "The determinants of food choice," *Proceedings of the Nutrition Society*, vol. 76, no. 03, pp. 316–327, 2017
- [2] Macht M., "How emotions affect eating: A five-way model", *Appetite*, vol. 50, no. 1, pp. 1–11, 2008
- [3] Leigh Gibson E., "Emotional influences on food choice: sensory, physiological and psychological pathways," *Physiology & Behavior*, vol. 89, no. 1, pp. 53–61, 2006
- [4] Locher J. L., W. C. Yoels, D. Maurer, and J. van Ells, "Comfort Foods: An Exploratory Journey Into The Social and Emotional Significance of Food," *Food and Foodways*, vol. 13, no. 4, pp. 273–297, 2005
- [5] Mark A Pereira, Alex I Kartashov, Cara B Ebbeling, Linda Van Horn, Martha L Slattery, David R Jacobs, David S Ludwig, Fast-food habits, weight gain, and insulin resistance (the CARDIA study):

- 15-year prospective analysis, *The Lancet*, Volume 365, Issue 9453, 2005, Pages 36-42, ISSN 0140-6736, [https://doi.org/10.1016/S0140-6736\(04\)17663-0](https://doi.org/10.1016/S0140-6736(04)17663-0)
- [6] Adamczyk, G. (2005). Popularity of fast-food bars among Poznań inhabitants, *Association of Agricultural and Agribusiness Economists*, VII/3, 133-145;
- [7] Dave JM, An LC, Jeffery RW, Ahluwalia JS., Relationship of attitudes toward fast-food and frequency of fast-food intake in adults. *Obesity (Silver Spring)*. 2009;17(6):1164–70. doi: 10.1038/oby.2009.26;
- [8] Gupta, N. (2011). Globalization does lead to change in consumer behavior: an empirical evidence of impact of globalization on changing materialistic values in Indian consumers and its aftereffects. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 251-269
- [9] Persaud, Donald, "Gender Differences And Fast-food Preferences Among U.S. College Students" (2013). *Electronic Theses and Dissertations*. 2776. <https://stars.library.ucf.edu/etd/2776>
- [10] Sharifirad G, Yarmohammadi P, Azadbakht L, Morowatisharifabad MA, Hassanzadeh A., Determinants of fast-food consumption among Iranian high school students based on planned behavior theory. *J Obes*. 2013;2013:147589. doi: 10.1155/2013/147589. Epub 2013 Jul 11. PMID: 23936635; PMCID: PMC3723084
- [11] Arganini C., A. Saba, R. Comitato, F. Virgili, and A. Turrini, "Gender differences in food choice and dietary intake in modern western societies," *Public health-social and behavioral health*, vol. 4, pp. 83–102, 2012;
- [12] Asma A., A. G. Nawalyah, M. Y. Rokiah, and M. T. Mohd Nasir, "Comparison of food choice motives between Malay husbands and wives in an urban community," *Malaysian journal of nutrition*, vol. 16, no. 1, pp. 69–81, 2010;
- [13] Nmor J., K. H. Nwaka, and J. C. Nmor, "Eating behaviours of university students in Southern Nigeria: an evaluation of sex differences," *Science Journal of Public Health*, vol. 2, no. 1, pp. 23–37, 2014
- [14] Wadolowska, L., Babicz-Zielinska, E., Czarnocinska, J. (2008): Food choice models and their relation with food preferences and eating frequency in the Polish population: POFPRES study. *Food Policy* 33, 122-134;
- [15] Prescott, J., Young, O., O'Neill, L., Yau, N.J.N. and Stevens, R., 2002. Motives for food choice: a comparison of consumers from Japan, Taiwan, Malaysia and New Zealand. *Food quality and preference*, 13(7-8), pp.489-495
- [16] Chance, Z., Gorlin, M. & Dhar, R., Why Choosing Healthy Foods is Hard, and How to Help: Presenting the 4Ps Framework for Behavior Change. *Cust. Need. and Solut.* 1, 253–262 (2014). <https://doi.org/10.1007/s40547-014-0025-9>;
- [17] Bartkiene Elena, Vesta Steibliene, Virginija Adomaitiene, Grazina Juodeikiene, Darius Cernauskas, Vita Lele, Dovile Klupsaite, Daiva Zadeike, Laura Jarutiene, and Raquel P. F. Guiné. 2019. Factors Affecting Consumer Food Preferences: Food Taste and Depression-Based Evoked Emotional Expressions with the Use of Face Reading Technology. *Hindawi BioMed Research International* Volume 2019, Article ID 2097415, <https://doi.org/10.1155/2019/2097415>
- [18] Gabriela Popescu, 2008, Food consumption trends in Romania, *Lucrări Științifice – vol. 51, seria Agronomie, Universitatea de Științe Agricole și Medicină Veterinară Iași*, p. 375-378
- [19] Bilbâie, A., Druică, E., Dumitrescu, R., Aducovschi, D., Sakizlian, R., & Sakizlian, M. (2021). Determinants of Fast-Food Consumption in Romania: An Application of the Theory of Planned Behavior. *Foods (Basel, Switzerland)*, 10(8), 1877. <https://doi.org/10.3390/foods10081877>
- [20] Iacob Cătoiu, *Cercetări de marketing*, cap.11. Proiectare chestionarului, pag 311-330, Editura Uranus, București, 2002, ISBN 973-9021-76-X.
- [21] Cristache Nicoleta, *Comportamentul consumatorului*, Ed. Europlus, Galați, 2010, ISBN 978-606-8216-08-9.
- [22] Smith S. Stevens, On the Theory of Scales of Measurement, *Science*, 1946 Jun 7; 103(2684):677-680, published by: American Association for the Advancement of Science <https://doi.org/10.1126/science.103.2684.677>
- [23] Ching-Chan Cheng, Ya-Yuan Chang, Cheng-Ta Chen (2021), Construction of a service quality scale for the online food delivery industry, *International Journal of Hospitality Management*, 95, 102938, ISSN 0278-4319, <https://doi.org/10.1016/j.ijhm.2021.102938>.
- [24] Ovidiu Neagoe, "Peste 50% dintre români consumă fast-food o dată pe săptămână sau mai des", In: *Revista Biz*, 14 apr. 2022.
- [25] Ingrid Kiefer, Theres Rathmanner, Michael Kunze, Eating and dieting differences in men and women, *The Journal of Men's Health & Gender*, Volume 2,

- Issue 2, 2005, Pages 194-201, ISSN 1571-8913, <https://doi.org/10.1016/j.jmhg.2005.04.010>
- [26] Fuente González, C. E., Chávez-Servín, J. L., de la Torre-Carbot, K., Ronquillo González, D., Aguilera Barreiro, M. L. Á., & Ojeda Navarro, L. R. (2022). Relationship between Emotional Eating, Consumption of Hyperpalatable Energy-Dense Foods, and Indicators of Nutritional Status: A Systematic Review. *Journal of obesity*, 2022, 4243868. <https://doi.org/10.1155/2022/4243868>.
- [27] Ayse ÖzferÖzcelik, LaleSariye Akan and MetinSaipSürücüoğlu. An Evaluation of Fast-Food Preferences According to Gender. *Humanity & Social Sciences Journal* 2 (1): 43-50, 2007 ISSN 1818-4960;
- [28] Maginsh Dahal, Alisha Basnet, Sudip Khanal, Kushalata Baral, and Smriti Dhakal, Gender Difference in Food Choice and Eating Practice and Their Association with Health among Students of Kathmandu, Nepal. *Journal of Obesity* Volume 2022, Article ID 2340809, <https://doi.org/10.1155/2022/2340809>
- [29] Kayışoğlu, Serap and A. İçöz, Effect of gender on fast-food consumption habits of high school and university students in Tekirdag, Turkey. *Acta Alimentaria*, 43 (2014): 53-60
- [30] Fryar CD, Hughes JP, Herrick KA, Ahluwalia N., Fast-food consumption among adults in the United States, 2013–2016. NCHS Data Brief, no 322. Hyattsville, MD: National Center for Health Statistics. 2018;
- [31] Untaru, E. and Ispas, A., (2013). Why do Young People Prefer Fast-Food Restaurants? An Exploratory Study. *Journal of Tourism -Studies and Research in Tourism*, Issue 15, pp. 27-34
- [32] Brown, K., Mc Ilveen, H., Strugnell, C., (2000) Nutritional awareness and food preferences of young consumers, *Nutrition & Food Science*, 30(5), pp. 230-235
- [33] Dunneram, Yashvee&Jeewon, Rajesh. (2015). Determinants of eating habits among older adults. *Progress in Nutrition*. 17. 274-283
- [34] Drewnowski A, Shultz JM. Impact of aging on eating behaviors, food choices, nutrition, and health status. *J Nutr Health Aging*. 2001;5(2):75-9. PMID: 11426286
- [35] Galobardes B., A. Morabia, and M.S. Bernstein. Diet and socioeconomic position: does the use of different indicators matter?. *Int. J. Epidemiol*. 2001, 30(2): 334-340
- [36] Scheibehenne, B., Miesler, L. and Todd, P.M. (2007) Fast and Frugal Food Choices: Uncovering Individual Decision Heuristics. *Appetite*, 49, 578-589. <http://dx.doi.org/10.1016/j.appet.2007.03.224>;
- [37] Steptoe, A., Pollard, T.M. and Wardle, J. (1995) Development of a Measure of the Motives Underlying the Selection of Food: The Food Choice Questionnaire. *Appetite*, 25, 267-284. <http://dx.doi.org/10.1006/appe.1995.0061>
- [38] Fernqvist F. and Ekelund L., (2014) Credence and the Effect on Consumer Liking on Food—A Review. *Food Quality and Preference*, 32, 340-353. <http://dx.doi.org/10.1016/j.foodqual.2013.10.005>
- [39] Johannes Brug, Determinants of healthy eating: motivation, abilities and environmental opportunities, *Family Practice*, Volume 25, Issue suppl_1, December 2008, Pages i50–i55, <https://doi.org/10.1093/fampra/cmn0063>
- [40] Chance, Z., Gorlin, M. & Dhar, R. Why Choosing Healthy Foods is Hard, and How to Help: Presenting the 4Ps Framework for Behavior Change. *Cust. Need. and Solut.* 1, 253–262 (2014). <https://doi.org/10.1007/s40547-014-0025-9>
- [41] Sashie Abeywickrema, Indrawati Oey, Mei Peng, Sensory specific satiety or appetite? Investigating effects of retronasally-introduced aroma and taste cues on subsequent real-life snack intake, *Food Quality and Preference*, Volume 100, 2022, 104612, ISSN 0950-3293, <https://doi.org/10.1016/j.foodqual.2022.104612>
- [42] Boesveldt S, de Graaf K. The Differential Role of Smell and Taste For Eating Behavior. *Perception*. 2017 Mar-Apr;46(3-4):307-319. doi: 10.1177/0301006616685576. Epub 2017 Jan 6. PMID: 28056650;
- [43] Sørensen LB, Møller P, Flint A, Martens M, Raben A., Effect of sensory perception of foods on appetite and food intake: a review of studies on humans. *Int J Obes Relat Metab Disord*. 2003 Oct;27(10):1152-66. doi: 10.1038/sj.ijo.0802391. PMID: 14513063
- [44] Uyen T.X. Phan, Edgar Chambers, Motivations for choosing various food groups based on individual foods, *Appetite*, Volume 105, 2016, Pages 204-211, ISSN 0195-6663, <https://doi.org/10.1016/j.appet.2016.05.031>
- [45] Reichenberger J, Richard A, Smyth JM, Fischer D, Pollatos O, Blechert J., It's craving time: time of day effects on momentary hunger and food craving in daily life. *Nutrition*. 2018 Nov; 55-56:15-20. doi: 10.1016/j.nut.2018.03.048. Epub 2018 Apr 6. PMID: 29960151