

Effect of COVID-19 Global Pandemic on the Food Preferences of De La Salle University - Dasmariñas Students

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Abstract: The COVID-19 pandemic has impacted agri-food systems at multiple levels, ranging from growers to processors to consumers, resulting in a scope of impacts on food consumption and purchasing habits. The researchers would like to determine the perception of students as an Effect of the COVID-19 Global Pandemic based on Appetite, Hunger, Availability, Income, Access, Education, Skill, Culture, Family, and Meal Pattern. The study is quantitative and utilizes quota sampling. The researchers distributed survey questionnaires to 100 respondents, with both the results revealing that most of the respondents who responded to online reviews are male and female between the ages of 19 to 25. According to the researcher's findings, several respondents claimed that COVID-19 changed their eating habits based on food accessibility and availability. Most of them claimed that it was challenging for them to cook meals because there were no supplies accessible in shops or food stalls due to shortages or shortages in supplies brought on by the COVID-19 pandemic outbreak. The COVID-19 pandemic outbreak resulted in a lack of desire or a production shortfall, which led some establishments to be required to close. It nonetheless causes problems for people who want to eat out at restaurants because there aren't many options in the area. The researchers suggested that eating nutritious foods be practiced and even more strongly advocated for, especially during this time when health risks are increasing due to the pandemic.

Keywords: COVID-19, pandemic, outbreak.

1. INTRODUCTION

COVID-19 has already become showcased to influence people's overall food preferences, which is also an important economic sector. The COVID-19 pandemic catastrophe has wreaked havoc on our physical and social settings, and our food preferences will likely suffer as a result. Celik and Dane (2020) discovered a significant change in food choices for intake too during the COVID-19 epidemic spread. Increased worry, despair, and psychological stress produced by the COVID-19 pandemic can result in a range of impacts on food consumption and purchasing habits. Before the outbreak, the first and second reasons of preference are cost and health, respectively, while the first and second reasons of recommendation are value and health. The knowledge and idea that particular fruits and vegetables have more vitamins to resist infections may be the source of this trend. Pandemics are viewed for their tremendous negative implications for the global economy. Due to the outbreak, meat and pastry items were the first and second food intake options, yet vegetables and fruit were also the first and second choices following the pandemic. According to Beckerman et al. (2017), food preferences are the most

significant determinants of dietary intake and behavior, and they may be traced back to childhood. As a result, a person's bias, and preference for a particular food product grows, influencing the majority of their eating decisions and habits over time. There was a trend toward a healthy lifestyle during the COVID-19 outbreak. Each country has its strategy for preventing the spread of COVID-19, but the Qatari government has taken severe containment measures, including social isolation and the shutdown of businesses and organizations. COVID-19 already affected agri-food systems at multiple levels, ranging from growers to processors to consumers, resulting in an ongoing crisis. COVID-19 has revealed the susceptibility of the global food systems to disruptions and calamities. While these precautions are necessary to prevent the virus from spreading, some people are concerned about their possible impact on the agri-food chain, which may influence consumer behavior (Hassen, Bilali, & Allahyari, 2020). Hassen, Bilali, and Allahyari (2020) discovered a massive change in people's attitudes and behaviors toward food and health when people spend more time at home and dining out becomes less convenient. In Qatar, more than 83% of people did not meet the needs for vegetables, fruits, whole grains, legumes, and a high-fiber diet, 70% were overweight and obese, 50%–72% typically characterized sugary beverages and sweets, and 47% commonly purchased fast food. Fast meals, unhealthy snacks, candy, cookies, cakes, and pastries were all completely avoided. Delivery and pick-up services have grown in popularity (Chenarides et al, 2020). Price, quality, satisfaction, trends, and convenience are all important factors influencing their eating habits (Victorino et al., 2016). The COVID-19 pandemic urged a lot in terms of business and human mobility alterations to stop the disease from spreading throughout the country. College students in the Philippines are known to consider a variety of factors when purchasing meals. As a result of the epidemic and changes in their living situation, many purchase patterns have transformed. People preferred to obtain items that could be stored for an extended time and avoided those that couldn't be cleaned or washed before consumption. Restaurants also were restricted since they can only handle half of their seating capacity. Furthermore, during the COVID-19 pandemic, the Department of Trade and Industry enacted Republic Act No. 7581, or the Price Act, to freeze the prices of necessities and food supplies. People hurried to processed goods and frozen commodities to stock up in anticipation of neighborhood lockdowns, causing demand and supply to fluctuate.

BACKGROUND OF THE STUDY

The goal of this study is to find out how the COVID-19 outbreak has changed the way students at De La Salle University - Dasmariñas eat. According to Celik and Dane's (2020) research, during COVID-19 pandemic outbreaks, increased anxiety, despondency, and psychological stress might lead to a lot of changes in food consumption. In addition to raising the question of why someone's eating habits change, loneliness is a prevalent condition that can result in tension and, in the worst case scenario, depression. These were the most common reasons people changed their eating patterns, even before the pandemic. Great food has become a stress-reliever and comfort food, so when someone is anxious they can't control how much they eat. According to Ashby (2020), many obese people experience disordered eating, which is partially motivated by emotions. The COVID-19 epidemic has reportedly caused fear and anxiety. So, the COVID-19 pandemic is likely to lead to different amounts of unhealthy foods being eaten in places with higher obesity rates.

The researchers' research study was conducted at Dasmariñas, the institution of choice for the researchers' research. The school is located at DBB-B, 4115 West Ave, Dasmariñas, Cavite. Although classes are being held online due to the epidemic, the studies will still be carried out online rather than on a campus. Celik and Dane (2020) claim that the COVID 19 epidemic has a major impact on food consumption preferences. The people who fill out the survey will be third-year college students from seven different departments at De La Salle University in Dasmariñas, Cavite. It is based on a copy of the enrolled students in the De La Salle University Registrar. There will be both men and women who are taking different classes.

The impact of COVID-19 on students at De La Salle University - Dasmariñas food preferences was one of the topics the researcher aimed to look into. This study aims to support and benefit the restaurant industry. Those that have college students as their target audience, particularly those at De La Salle University - Dasmariñas. These universities will be able to innovate and develop tactics that cater to student preferences because they'll be more informed of current market trends. The researchers plan to use a questionnaire and an online survey to tie the current study together and make it useful as a foundation or starting point for more research.

RESEARCH PARADIGM

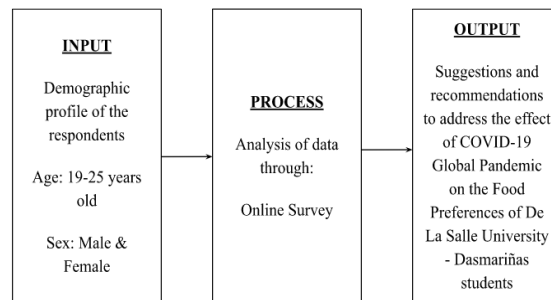


Figure 1.

The independent variable was used as the study's input, and it was used to determine the demographic profile of the respondents, as well as the characteristics that may influence their food preferences in the given choices. Furthermore, the findings' output revealed the benefits of the dependent variable and respondents in this study. However, the procedure reveals that to establish a meaningful finding, the survey questionnaire, as well as data treatment and analysis, are required in this study to answer the hypothesis.

STATEMENT OF THE PROBLEM

The researchers aim to address the following questions with regards to the Effect of the COVID-19 Global Pandemic on the Food Preferences of De La Salle University - Dasmariñas students.

1. What is the demographic profile of the respondents in terms of:

1.1. Age

1.2. Gender

1.3. Civil Status

1.4. Budget/Allowance

2. How do the respondents assess the Food Preferences of De La Salle University - Dasmariñas students as an Effect of the COVID-19 Global Pandemic in terms of the following?

2.1. Hungry, Appetite

2.2. Income, Availability

2.3. Access, Education, Skill

2.4. Culture, Family, and Meal Patterns

3. Is there a significant difference between the respondents' assessment of the Effect of the COVID-19 Global Pandemic on Food Preferences on their demographic profile when grouped?

4. Based on the results of the study, what suggestions and recommendations can be proposed to address the level of Effect of COVID-19 Global Pandemic on the Food Preferences of De La Salle University - Dasmariñas students?

STATEMENT OF HYPOTHESIS

The null hypothesis states that there is no significant difference in the level of Effect of COVID-19 Global Pandemic on the Food Preferences of De La Salle University - Dasmariñas Students when grouped according to their demographic profile.

2. LITERATURE REVIEW

According to the study by Beckerman et al. (2017), food preferences are a primary determinant of dietary intake and behaviors, and they persist from early childhood into later life. As such, establishing preferences for healthy foods from a young age is a promising approach to improving diet quality, a leading contributor to cardiometabolic health. A proper diet

can be a big help for nutritional support in this situation. Food preferences are influenced by a variety of factors, including taste, appetite, income, and access. Sergi et al. (2017) talk about how weight and age affect food preferences, sensitivity to food cues, and self-control, which are all important parts of making food decisions.

According to Ryan Raman, MS, RD (2017) aging is linked to changes that can make you prone to deficiencies in calcium, vitamin D, vitamin B12, iron, magnesium and several other important nutrients. It may also reduce your ability to recognize sensations like hunger and thirst. According to Harris Gillian (2008) was thought to be less open to the effect of social cues at a younger age than at an older age. According to D Guido(2016) multiple factors contribute to this age-related smell loss (20,68) as shown for the food preferences, we have demonstrated an effect of age on the choice of food. According to I Printezis (2020) We find that, on average, college-age millennials are willing to pay a premium for local food, premiums for local food that is sold.

Women consume more fruit and vegetables, legumes, and whole food, but also more sweets and cakes, with respect to men. Men tend to have food rich in fats and proteins, to drink more wine, beer, spirits, and sweet carbonated drinks; in general they show dietary behaviors potentially favoring overweight and obesity. Choi, J. (2020) studies suggest that among university students, females are particularly more prone to adopt the low-calorie diet than males, while males are more likely to adopt a westernized and vegetarian diet. College students, particularly those in their first year of university, are prone to gaining weight. Transitioning from high school to college may increase perceived stress levels, which can affect food patterns and metabolism, leading to obesity and being overweight (Manippa et al., 2017). Also, Meer et al. (2016) found that men are more likely to be masculine and eat more high-calorie foods than women, who tend to be more feminine. According to Lívya Alves Oliveiraa (2022) Factors associated with food craving varied between men and women, being more present among women. These differences can be related to hormonal differences, way of working, daily tasks, and food preferences.

Narukawa et al. (2021). The study of taste perception and its relationship to dieting and healthy aging is gaining popularity. Another thing that was found was that unmarried men's households spend a lot more of their food budget on ready-made foods than married men's households. According to Sarah Snuggs (2021) The COVID-19 lockdown resulted in all but essential shops closing in many countries, with inevitable and immediate impact on food availability and choice. Reasons for specific food choices influence diet and mealtimes and can affect psychological and physical well-being, families in the UK have changed their food choice motivations over lockdown and second to identify sub-groups in particular need of support in the event of future lockdowns. According to B Celik (2020) the effects of COVID-19 pandemic is a significant decrease in family incomes and a significant increase in family expenditures.

According to Y Li - (2022) The transition from living with family to living independently brings life changes that can impact the health of young adults in college. Recently, college students may experience more life changes than usual due to the COVID-19 pandemic. Due to being independent college students may have limited money that can leave them with a limited budget for purchasing food. According to S Sami (2022), budget household members attend to reduce their food intakes and limit their nutrition choices so that they can at least last their budget. According to Kristine Beck (2020), mostly low-income upperclassmen at a large public institution, we focus on the perspective of young adults regarding financial decision-making during the COVID-19 pandemic. We find that lower-income college students are weathering the pandemic by decreasing discretionary spending and increasing savings.

Hunger, appetite, might influence consumer food preferences, according to Gracia et al, (2017). Humans require energy and nutrients to thrive and will respond to hunger. As a result, taste attributes rather than dietary macronutrient information appear to stimulate appetite. According to Alexander Teymour Zadeh Baboli Høier (2020), this study was to investigate the subjective strategies for maintaining appetite applied by patients recovering from COVID-19, focusing on patients suffering from long-term effects of COVID-19. It was found that factors before, during, and after food intake, as well as the context, could influence the desire to eat and pleasure related to food intake. As ageusia and anosmia make characterization of food difficult, being able to recognize and memorize its flavor was important to engage in consumption. According to Marcus VLdos Santos Quaresma, Ph.D. Student (2021) low craving control and increased intake of high energy-dense sweet and savory foods during COVID-19 social isolation. However, the association of dietary practices with other potential influencing factors has been little explored in the COVID-19 home confinement context, especially in countries such as Brazil, a multicultural country with profound social inequalities.

In the study by Cranfield (2020), economic determinants such as income, and availability show that the price of food and an individual's ability to acquire specific meals (connected to income) are the primary determinants of food choice and that low-income people have imbalanced diets. According to Patricia Kamanga (2022) the travel bans and border closures have shown to negatively affect availability, accessibility, and affordability of basic needs such as food, especially for populations in the low- to middle-income countries. This is so since a good percentage of the population in low- to middle-income countries live hand to mouth, and cannot afford adequate food stock to sustain them for a long period of time. Unaffordability of healthy diets affected 3 billion people before the COVID-19 pandemic, 2.5 billion of whom lived in 63 low- and middle-income countries. In these 63 countries, income losses due to the pandemic have markedly worsened the affordability gap.

Access, education, skills, and time suggest that policies and regulations affect the supply or prices of food products, their safety, and nutritional composition, or the information consumers receive about food, all influence consumer food choices, according to Ralston (2020). This study of alissa Dezanetti (2022) aimed to analyze meal preparation and the place of its consumption by university students before and during the COVID-19 pandemic, according to their individual characteristics and cooking skills. Most of participants reported a high level of cooking skills (70.7%). Also, they reported a decrease in ordering delivery of take-away food and eating fast-food, while increasing homemade meals with fresh ingredients, ultra-processed food or both during the pandemic compared to the period before the quarantine. According to Zarmina Islam (2022) Food security occurs when people continuously have physical and economic access to adequate, safe, and nutritious food to meet their dietary requirements and food preferences for a functional and healthy life. Amid the pandemic, Afghanistan has witnessed a large increase in food shortages due to its dependence on neighboring countries. In light of current circumstances, food insecurity, coupled with political instability and the third wave of the COVID-19, have made it extremely hard for people to access daily provisions. Hence, people are left to navigate the COVID-19 pandemic with economic recession and poverty as the backdrop of the other health crises.

In the study of Higgs et al. (2016), culture, family, friends, and meal habits reveal that the standards of appropriate eating are determined by other people's behavior, as well as shared cultural expectations and environmental signals. Different social classes have different eating habits, resulting in both under- and over-nutrition. According to Patricia K. Powell (2021) We found food availability and household roles to be powerful factors influencing food choices. Most students had returned to family homes with many students taking a passive role in activities that shape food choices. Parents usually purchased groceries and prepared meals with students eating foods made available to them. Increased free time contributed to boredom and snacking for some students, while for a few students with increased skills and/or agency, additional free time was used to plan and prepare meals. According to Ali B. Mahmoud (2021) While they indirectly and negatively impact healthy eating behavior mediated by triggering negative experiences during the pandemic, COVID-19 perceptions, however, directly get parents, especially fathers, more engaged into healthy eating behavior – making COVID-19 perceptions total effects positive on healthy eating behavior. This explorative model is novel in the sense that it is the first of its kind to cast light on how parental healthy eating behavior can be shaped in pandemic time.

COVID-19's global effect had an effect on these students, as some of their taxes and income increased. As a result, when the pandemic occurred, there was considerable variation in their food preferences. According to Hale (2016), we have advancements based on consumer experience, and as COVID-19 rises, this experience has generated several healthy and inexpensive options for their dietary preferences. This epidemic had a huge effect on the market since panic-buying has become a habit among people worried about how they will provide for their families daily, which is why the pandemic is one of the reasons our food preferences continue to evolve over time.

3. METHODOLOGY

The research method and procedure, the population and sample, the research tools used, and the statistical methods that will be used in the data analysis and interpretation are all presented in this area of the study.

RESEARCH DESIGN

The study will be of quantitative research design, wherein it focuses on statistical information that will be appropriate for the research paper. It will focus on the perceived relationship regarding the effects of the COVID-19 global pandemic on the food preferences of De La Salle University - Dasmariñas students. A 4-point Likert Scale will be used to rate from low to high the severity of change and influence affected by the pandemic on the respondents' consumption choices. The data

which will be collected from the respondents can determine the effects of the pandemic and whether such relationships between the two variables exist. The findings will then be used as a basis for further suggestions and recommendations.

RESEARCH LOCALE

This study will be conducted at De La Salle University - Dasmariñas. The university is home to over 4,955 students from college and graduate programs. The school is located at 4115 West Ave, DBB-B, Dasmariñas, Cavite. However, due to the pandemic, classes are held online. Hence, the study will not be done within the campus itself but through online means. The researchers chose this university as the research locale as it best encapsulates the diversity of students that live in Dasmariñas City. The population is inclusive, and students from the said university are observed to be fond of consuming food items and eating at restaurants. Thus, it is interesting to examine what behavioral changes took place for De La Salle University - Dasmariñas students as a result of the global pandemic.

Participants of the Study and Research Sampling

The participants of the study will be students from the undergraduate programs of De La Salle University - Dasmariñas. They were chosen because they often face decisions on what to eat or which food products to buy. Most college students at the university are independent and live away from family and relatives. Others are students who must wisely budget their money, while others can afford to eat at expensive restaurants. The attributes and motivations of each college student at De La Salle University - Dasmariñas are unique, and these ultimately influence and dictate their consumption behavior and food preferences.

With seven (7) colleges and fifty (50) degree programs, the population of college students is approximately four thousand nine hundred fifty-five (4,955) people. Thus, to calculate the appropriate sample size for the study, the Slovine Formula is used. The solution and computation are as follows:

$$n = N / (1 + Ne^2)$$

Where: n = sample size

N = population size

e = margin of error

Solution:

$$n = 4,955 / [1 + (4,955) (0.072)^2]$$

$$n = 4,955 / [1 + (4,955) (0.0049)]$$

$$n = 4,955 / [1 + 49]$$

$$n = 4,955 / 50$$

$$n = 99.1$$

Therefore, the study will have a sample of 99 respondents with a confidence level of 93% for the results. The sampling technique to be used is voluntary response sampling under the non-probability sampling technique. Because the pandemic restricts mobility and on-site procedures, the gathering of data will be solely done through an online survey that college students from De La Salle University - Dasmariñas can willingly answer at their comfort and time. Furthermore, to ensure that the data will encompass the food preferences of all the undergraduate students from all colleges, the researchers will set a quota as to how many students from a particular college are allowed. This will make the results more reliable as it is not concentrated on one college or degree program only but safely represents the student body as a whole. The categorization of colleges will be as follows: twenty-two (22) respondents from the College of Business Administration and Accountancy, twenty-two (22) from College of Science and Computer Studies, another twenty-two (22) from the Colleges of Liberal Arts and Communication and Education, and the last twenty-two (22) will be from the Colleges of Criminal Justice Education, Engineering, Architecture and Technology, and Tourism and Hospitality Management. Some colleges were merged since their number of students is fewer compared to the rest. Inversely, the College of Business Administration and Accountancy and College of Science and Computer Studies are large enough to be stand-alone categories.

Research Instrument

The primary research instrument to be used in this study is a survey questionnaire that will be accessible through Google Forms. The questions and statements are to be formulated by the researchers and adapted from previous research papers conducted. The questionnaire will be composed of three parts. The first one constitutes the socio-demographic profile of the respondents. They will be asked about their age, high price, household income, gender, supply of food, and health conditions. The second part is for their current food preferences, which will be patterned on the survey questions formulated by Andrea Smith from the University College London. The questions and items will be revised to become appropriate to the current situation and inclusive of the recent innovations in the food industry. The respondents will rate their preference for the said food item through a 4-point Likert Scale, ranging between dislike a lot, dislike, like, and like a lot.

The third section will then determine what changes in food preferences have occurred compared to their lifestyle before the pandemic. The statements will be taken from Kumari et al's short questionnaire, which helped assess changes in lifestyle-related behavior during the COVID-19 pandemic as published by the Elsevier Public Health Emergency Collection. The said survey was validated by conducting a dry run among people whose attributes are closely similar to the actual respondents. Additionally, items deemed necessary by the researchers that can generate relevant information will be added to the questionnaire. This section will also be rated through a 4-point Likert Scale of how much the respondent related to the statement. They will select among strongly disagree, somewhat disagree, somewhat agree, and strongly agree.

The survey questionnaire will be prepared through Google Forms as it is a more convenient way of generating answers from students online. The researchers will ensure that all data supplied will be treated with the utmost confidentiality.

Data gathering procedure

The researchers will be crowdsourcing across colleges and degree programs by disseminating the link of the survey questionnaire on various social media platforms and online groups for De La Salle University - Dasmariñas students. Through this, the questionnaire will be accessible throughout the day to those who would want to participate in the study, enabling them the privilege to respond at their own pace and convenience. The respondents will be briefed on the study's purpose, questionnaire instructions, and data privacy before they could proceed in answering the survey. The data gathering procedure will run from the first week of October until the first week of November 2021.

Data Treatment and Analysis

In analyzing the data, the following statistical analysis will be employed:

The frequency counts and percentages will be used to analyze the socio-demographic profile of the respondents. The formula to be used is:

$$P = F/N \times 100$$

where:

P = Percentage

F = Frequency

N = Total Number of Respondents

Then, weighted averages will be used for the remaining sections of the questionnaire that utilize the 4-point Likert Scale. It will be interpreted through the table of ranges shown below. The results will determine the current food preferences of the De La Salle University - Dasmariñas students and what has been the determining factor behind the change in consumer behavior when it comes to food.

POINT	SCALE RANGE	EXPLANATION
4	4.00 - 3.00	Strongly Agree
3	2.99 - 2.00	Agree
2	1.99 - 1.00	Disagree
1	1.00 - 0.99	Strongly Disagree

Figure 2.

Figure 2 Table of Ranges for Likert Scale (Nee et al, 2020) As for the comparative analysis of the respondents' food preferences then and as of the moment, the Analysis of Variance (ANOVA) statistical technique will be used. This is to ascertain whether or not there has been a significant difference between their choices before the pandemic and now. Moreover, to test whether a relationship between the independent and dependent variables exists, Pearson's Chi-square test will be used. This will determine whether the two variables are independent of each other and if the null hypotheses are to be rejected. Meanwhile, the T-test statistic will be used to identify the similarities and differences among the demographic profile of the respondents and whether or not they are related to the changes that happened to their food preferences. Lastly, an extensive narrative will be made to describe the findings of the study.

4. RESULTS AND DISCUSSION

This chapter deals with the presentation of data, the analysis, and interpretation of data that will answer the main purpose of the research which is to demonstrate a significant difference in the level of Effect of the COVID-19 Global Pandemic on the Food Preferences of De La Salle University - Dasmariñas students when grouped according to their demographic profile.

The part of the questionnaire used a 4-point Likert Scale that will be used to rate from low to high the severity of change and influence affected by the pandemic on the respondents' consumption choices. Table 1 Demographic Profile below presents the data gathered of 88 respondents concerning the perceived relationship regarding the effects of the COVID-19 global pandemic on the food preferences of De La Salle University – Dasmariñas students.

1. What is the demographic profile of the respondents in terms of:

TABLE 1.1 Age

Levels	Counts	% of Total	Cumulative %	Rank
18 yrs. old and below	5	5.7 %	5.7 %	3
19-24 yrs old	76	87.4 %	93.1 %	1
25-28 above	6	6.9 %	100.0 %	2

Most of the respondents provided by the researchers are between the ages of 19 and 24, 87.4%. On the other hand, the least is between 18 yrs. old and below and 25-28 above correspond to one respondent each which means that the millennials make up the most of respondents.

The food for college students is a stress reliever since they are more likely to be affected by rapid adjustments as a result of the epidemic, however, since the pandemic many restaurants have closed and altered the foods they eat. This age group has different food preferences; their food preferences may change depending on their mood or trend, but when the pandemic hit, food products and establishments became scarce.

According to the study by Beckerman et al. (2017), establishing preferences for healthy foods from a young age is a promising approach to improving diet quality, a leading contributor to cardio metabolic health.

TABLE 1.2 Gender

Levels	Counts	% of Total	Cumulative %	Rank
FEMALE	51	58.6 %	58.6 %	1
MALE	36	41.4 %	100.0 %	2

Most of the respondents, 41.4% are male, and 58.6% are female.

according to the gendered study which means that females are more conscious of their food preferences. Women have consistently higher intakes of fruits and vegetables, higher intakes of dietary fiber, and lower intakes of fat. Women typically place a higher value on healthy eating following their healthier food choices.

As cited by Linnea Bärebring, Women tend to report a healthier diet than men which could in part explain why mortality rates are lower among women. A national Swedish survey from 2011.

TABLE 1.3. Civil Status

Levels	Counts	% of Total	Cumulative %	Rank
MARRIED	2	2.3 %	2.3 %	2
SINGLE	85	97.7 %	100.0 %	1

Most of the respondents in civil status are single (97.7% out of 88) and the rest are married.

College students are still single because they are still in the stage where the priority is to study, but we will meet married people in college because they are the ones who return to study.

Narukawa et al. (2021) The study of taste perception and its relationship to dieting and healthy aging is gaining popularity. Another thing that was found was that unmarried men's households spend a lot more of their food budget on ready-made foods than married men's households.

TABLE 1.4. Allowance/Budget per month

Levels	Counts	% of Total	Cumulative %	Rank
10,001 & ABOVE	9	10.3 %	10.3 %	3
5,000 & BELOW	60	69.0 %	79.3 %	1
5,001 - 10,000	18	20.7 %	100.0 %	2

According to the allowance/budget of responders within a month, the majority of those who replied 10,001 has 10.3% out of 88, 5,000 below have 69.0% while 5,001 to 10,000 has 20.7%.

Students who live in dorms or rental homes are more likely to receive their allowance from their parents, and because it may only occasionally cover their essential expenses, they must budget.

According to Matthew Stollak, College students are in a unique situation because they have restricted incomes and high expenses; therefore, they manage money differently.

2. How do the respondents assess The Food Preferences of De La Salle University - Dasmariñas students as an Effect of the COVID-19 Global Pandemic in terms of the following?

TABLE 2.1 Appetite, Hunger

	Mean	SD	VI	R
When I eat food products, I'm influenced by my mood.	3.437	0.773	High	3
When I'm hungry, I prefer to deliver food than to cook.	3.046	1.011	High	5
When buying a food product, I'm influenced by hunger.	3.506	0.805	High	2
The flavor of food is influenced by my food preferences.	3.701	0.573	High	1
The pandemic changed my food choices.	2.782	0.799	Low	5

As for table 2.1 the highest rank is 3.701, indicating that most of the respondents the flavor of the food influenced by their food preferences when buying foods and the lowest rank is 2.782, indicating that their food choices were still the same before the pandemic.

The researchers noticed that while many people concur that flavor influences human food preferences, flavor may have the biggest influence on a dish's acceptance and willingness to be consumed. While some of the respondents agree that the pandemic changed their food preferences, they have become more conscious of health and choosing healthy foods since the pandemic.

According to Gracia et al. (2017) taste attributes rather than dietary macronutrient information appear to stimulate appetite. According to Wageningen (2021) most people did not change their diets at all during the coronavirus pandemic, but there were certainly a few unusual trends that were revealed.

TABLE 2.2. Income, Availability

	Mean	SD	VI	R
I buy food depending on what is available in the market.	3.414	0.756	High	4
My food depends on what is available at home.	3.471	0.679	High	2
It's crucial that the food you eat remains affordable.	3.425	0.757	High	3
My earnings are sufficient to meet my everyday requirements.	3.402	0.706	High	5
I can buy lots of healthy foods depending on what I can afford.	3.563	0.582	High	1

According to table 2.2, the highest rank is 3.563, meaning that most respondents believe they can buy a variety of healthy foods depending on their budget, and the lowest rank is 3.502, meaning that some respondents believe their income is sufficient to cover their daily needs.

Because the majority of the respondents were college students living alone and only receiving an allowance, the researchers discovered that respondents relied on their budget to make healthy food purchases. However due to the frequent needs of college students, their budget occasionally cannot cover these necessities.

In the study by Cranfield (2020), economic determinants such as income, and availability show that the price of food and an individual's ability to acquire specific meals (connected to income) are the primary determinants of food choice and that low-income people have imbalanced diets.

TABLE 2.3. Access, Education, Skill

	Mean	SD	VI	R
I buy food products at the local market.	3.299	0.593	High	2
Since the pandemic, I have often eaten fruits and vegetables.	3.218	0.754	High	5
During the COVID-19 pandemic, I'm the one who mostly prepared nutritious foods.	3.471	0.662	High	1
. I often cook at home rather than eating at another restaurant or fast food.	3.241	0.664	High	4
I pay close attention to the health implications of a product.	3.287	0.608	High	3

As for table 2.3 the highest rank is 3.471 means during COVID-19 respondents mostly prepared nutritious food and the lowest rank is 3.218 means since pandemic, they have often eaten fruits and vegetables.

The researchers noticed that The majority of responders place a higher premium on eating well to preserve their robust resistance. However, based on the response they prepare healthy dishes in advance of the epidemic and not just because of it.

According to the study by Beckerman et al. (2017), food preferences are a primary determinant of dietary intake and behaviors, and they persist from early childhood into later life. As such, establishing preferences for healthy foods from a young age is a promising approach to improving diet quality.

TABLE 2.4. Culture, Family, and Meal Patterns

	Mean	SD	VI	R
When buying a food product, I'm influenced by religion.	2.724	1.217	Low	3
The foods I eat are a local tradition where I grew up.	2.851	0.856	Low	2
During the epidemic, my family continued to patronize favorite restaurants.	3.345	0.86	High	1
When I eat meals with my family, I tend to eat healthier foods.	2.402	1.083	Low	4
I'm eating by the behavior of other people	2.126	1.149	Low	5

Regarding table 2.4, the highest rank is 3.345, which indicates that the family continued to frequent favored restaurants during the pandemic, and the lowest rank is 2.126, which indicates that their eating habits are determined by people.

The researchers observed that the majority of respondents continued to dine at their favorite restaurants despite the pandemic and that only a small number of them took the risk to only eat at that particular restaurant. However due to the fact that everyone has varied tastes, other responders eat according to their own preferences.

In the study of Higgs et al. (2016), culture, family, friends, and meal habits reveal that the standards of appropriate eating are determined by other people's behavior, as well as shared cultural expectations and environmental signals. Different social classes have different eating habits, resulting in both under- and over-nutrition.

3. Is there a significant difference between the respondents' assessment of the Effect of the COVID-19 Global Pandemic on Food Preferences on their demographic profile when grouped?

TABLE 3.1 Age

	x²	DF	P	FINDINGS
APPETITE	1.798	2	0.407	NS
HUNGER	9.596	2	0.0082	SIG
AVAILABILITY	2.412	2	0.2995	NS
INCOME	2.906	2	0.2338	NS
ACCESS	5.21	2	0.0739	NS
EDUCATION	3.549	2	0.1696	NS
SKILLS	2.034	2	0.3618	NS
CULTURE	5.98	2	0.0503	NS
FAMILY	4.863	2	0.0879	NS
MEAL PATTERN	0.296	2	0.8624	NS

Since the x^2 of 9.596 has a P-value of 0.0082, there is a significant difference in the respondents' ratings of students' food choices when they are grouped by age. It further demonstrated that respondents who were teens assessed their state of hunger as higher than respondents who were adults.

However, there is no significant difference in the assessment of the respondents on food preferences in terms of appetite, availability, income, access, education, skills, culture, family, and meal pattern, when grouped by age, since the X^2 of 1.798, 2.412, 2.906, 5.210, 3.549, 2.034, 5.980, 4.863 and 0.296, and have P-value greater than 0.05. It showed that adolescents and adults had similar opinions on their appetites, availability, income, access, education, skills, culture, families, and meal patterns.

Additionally, it showed that compared to adults, teenagers scored hunger higher than they did. Students who are teens (ages 19 to 24) are allegedly those whose eating habits have been most affected by the COVID-19 outbreak. Due to their busy schedules, adolescents, who are frequently college students, may not have time to eat. This aids in the researchers' understanding of the respondents' age-based dietary preferences, and the results show that adolescents are more affected by the pandemic eating trends than adults.

According to Ryan Raman, MS, RD (2017), changes brought on by aging can increase your risk of not getting enough calcium, vitamin D, vitamin B12, iron, magnesium, and other vital minerals. Additionally, it might make it harder for you to detect bodily feelings like thirst and hunger.

TABLE 3.2 Gender

		STAT	P	FINDINGS
APPETITE	M-WU	83	0.9615	NS
HUNGER	M-WU	33.5	0.1418	NS
AVAILABILITY	M-WU	12.5	0.0338	SIG
INCOME	M-WU	55.5	0.3866	NS
ACCESS	M-WU	30	0.0788	NS
EDUCATION	M-WU	60.5	0.4774	NS
SKILLS	M-WU	55.5	0.3848	NS
CULTURE	M-WU	75	0.7803	NS
FAMILY	M-WU	33	0.1183	NS
MEAL PATTERN	M-WU	42	0.2073	NS

The respondents' assessments of the students' food preferences in terms of availability differ significantly, with a P value of 0.0338. It demonstrated that respondents who identified as female gave the availability a higher rating.

When a group by gender has a P-value greater than 0.05, there seems to be no significant difference in the respondents' assessments of the students' food preferences in terms of appetite, hunger, income, access, education, skills, culture, family,

and meal pattern. The result shows that males and females rate their hunger, appetite, access to resources, education, skills, culture, families, and eating habits at the same level.

It revealed that female respondents rate their overall judgment of food choices during the epidemic higher than male respondents. The COVID-19 outbreak, according to researchers, had a significant effect on female students' eating habits.

Choi, J. (2020) studies suggest that among university students, females are particularly more prone to adopt the low-calorie diet than males, while males are more likely to adopt a westernized and vegetarian diet.

TABLE 3.3 Civil Status

	x²	DF	P	FINDINGS
APPETITE	11.198	2	0.0037	SIG
HUNGER	12.018	2	0.0025	SIG
AVAILABILITY	2.835	2	0.2423	NS
INCOME	1.836	2	0.3994	NS
ACCESS	2.73	2	0.2554	NS
EDUCATION	2.684	2	0.2613	NS
SKILLS	1.357	2	0.5074	NS
CULTURE	1.177	2	0.5552	NS
FAMILY	2.881	2	0.2369	NS
MEAL PATTERN	1.249	2	0.5354	NS

The respondents' opinions of the food choices made among the students shift once they are categorized on civil status, as evidenced by the fact that the χ^2 of 12.018 has a P-value of 0.0025. It also showed that respondents who were teenagers gave their perception of their level of hunger a higher score than respondents who were adults.

In contrast, there is a substantial difference in the respondents' assessments of their appetite and hunger when the respondents are categorized according to their civil status, as shown by the fact that the P-values for the χ^2 of 11.198 and 12.018 is less than 0.55. It showed that opinions about availability, income, access, education, skills, culture, families, and mealtimes were similar among teenagers and adults.

It turned out that respondents who were currently single gave a better overall evaluation of the foods they chose during the pandemic than those who were married. Researchers found that the COVID-19 pandemic had a major impact on single students' eating behaviors.

Based on Narukawa et al (2021), growing interest is the research of sense of taste and how it relates to health behaviors and management. Another finding showed that, compared to married men's households, unmarried men's families spend a lot more overall food expenditures on prepared foods.

TABLE 3.4 Allowance/Budget within a month

	F	DF1	DF2	P	FINDINGS
APPETITE	4.33	2	6.434	0.0644	NS
HUNGER	7.422	2	7.016	0.0186	SIG
AVAILABILITY	1.013	2	6.523	0.4137	NS
INCOME	0.659	2	6.655	0.5479	NS
ACCESS	1.296	2	6.754	0.334	NS
EDUCATION	0.81	2	7.041	0.4823	NS
SKILLS	0.758	2	8.609	0.4975	NS
CULTURE	0.995	2	6.926	0.4171	NS
FAMILY	1.812	2	6.829	0.2337	NS
MEAL PATTERN	0.834	2	7.632	0.4702	NS

Since the F-values of 1.013, 0.659, 1.296, 0.810, 0.758, 0.995, 1.812, and 0.834 have P-values greater than 0.05, there is no huge discrepancy between the respondents' assessments of availability, income, access, education, skills, culture, family, and meal patterns when grouped by allowance/budget within a month. We do not reject the null hypothesis that there is no meaningful difference. This showed that respondents, irrespective of their allowance/budget, had the same opinion.

This showed that respondents' opinions on purchase decisions are almost always similar, whether of their allowance/budget. It is stated that almost everyone, regardless of class, views customers' purchasing decisions the very same thing when it comes to allowance/budget. It aids the researchers in determining if the allowance/budget affects customers' purchasing choices at fast-food restaurants. It indicates everyone else has the same choices about allowance/budget whenever it comes to consumer purchasing decisions.

Allowance/budget are significant influences on people's purchasing decisions and purchasing behaviors, according to Pratap (2019). Whatever kind of things somebody routinely buys depends on their financial level. A customer with a little more money will purchase more costly products.

5. CONCLUSION

Based on the gathered data collected from the crowdsourcing process implemented through surveying, the researchers managed to assess different outcomes which correspond to the Effects of the COVID-19 Pandemic on the Food Preferences of De La Salle University - Dasmariñas students. To further internalize these conceptual ideas, researchers listed these descriptors involved in chronological order based on their overall ranking.

Women made up 58.6% of responders for Table 1.2, while males made up 41.4%, as per the gender analysis, suggesting that women are more aware of their dietary choices. Compared to men, women generally consume more dietary fiber, more fruits and vegetables, and less fat. Additionally, they eat more produce than men do. Women frequently place a greater focus on eating healthy since they tend to choose nutritious foods.

The majority of respondents (97.7% out of 88) are single, and the remaining respondents are married, according to their civil status, as shown in Table 1.3. Since they are the ones that return to school, we will encounter married people there. As a result of constantly focusing on their studies, college students are still single.

As per the respondents' budget/allowance per month for Table 1.4, 10,001 respondents had 10.3% of the 88 overall respondents, 5,000 respondents had 69.0%, and 5,001 to 10,000 respondents had 20.7 percent. Students who live in dorms or rental homes are more likely to receive their allowance from their parents, and since it might only infrequently cover their vital needs, they must budget.

In Table 2.1, appetite and hunger have the greatest rank at 3.701, indicating that most respondents' food choices affect the flavor of the food they buy, while the lowest ranking is 2.782, showing that their pre-pandemic food preferences remained intact. Our findings revealed that although some individuals concur as flavor affects human food preferences, the taste may have a major influence on a dish's acceptance and readiness to be consumed. Although some respondents admit that the epidemic changed their eating preferences, they now have a stronger understanding of the connection between eating right and maintaining good health.

According to Table 2.2, the highest rank, 3.563, suggests that most respondents believe they can buy a variety of healthy foods depending on their budget, and the lowest rank, 3.502, indicates that some respondents believe their income is sufficient to meet their daily needs.

As per Table 2.3, the highest rank of 3.471 suggests that respondents typically prepared nutrient-dense meals during the COVID-19 epidemic, while the lowest rank of 3.218 reveals that respondents have consumed a lot of fruits and vegetables since the pandemic. According to the study, the percent of the respondents consider eating properly a higher priority to keep a good resistance. But depending on the response, they develop healthy foods before the pandemic, not just as a result of it.

With the highest rank being 3.345 and the lowest rank being 2.126, Table 2.4 demonstrates that the family continued to frequent their favorite restaurants throughout the epidemic, demonstrating that their eating habits are influenced by others. According to the researchers, the majority of the respondents continued to eat at their preferred restaurants amid the pandemic, and only a small minority decided to limit their eating to those establishments. All people, however, have various preferences since other responders decide to eat following their preferences.

When students are grouped by age, as shown in Table 3.1, there is a significant difference in the respondents' ratings of the students' food preferences, as indicated by the χ^2 of 9.596's P-value of 0.0082. Additional data revealed that teenage respondents reported being more hungry than adult respondents.

The perspective of the respondents regarding the availability of the student's food choices varied significantly for Table 3.2 by a P-value of 0.0338. It was evident that more female respondents gave availability a higher rating.

The fact that the χ^2 of 12.018 for Table 3.3 has a P-value of 0.0025 shows that the respondents' perceptions of the youngsters' dietary preferences alter once they are classified according to civil status. Furthermore, it was found that respondents who identified as teenagers rated their level of hunger higher than respondents who categorized themselves as adults.

As per Table 3.4, since the P-values for the F-values of 1.013, 0.659, 1.296, 0.810, 0.758, 0.995, 1.812, and 0.834 are higher than 0.05, there seems to be no statistically significant difference between the respondents' assessments of availability, income, access, education, skills, culture, family, and meal patterns when grouped by allowance/budget within a month. The null hypothesis, that there is no substantial change, is not disproved. It showed that respondents' opinions were unaffected by their allowance or spending cap.

6. RECOMMENDATION

Based on the findings and conclusions presented in this overall research, the following recommendations are presented about descriptors that received a verbal interpretation of low ranking.

With 2.851 as its mean value which associates with 0.856 as its standard deviation, the researchers recommend that food preferences based on local traditions should therefore be more implemented, with the significance of this descriptor, the effects of COVID-19 with regards to the food preferences of De La Salle University - Dasmariñas students will therefore increase positively despite the existence of the said pandemic.

Next in line, garnering a 2.782 as mean value and a standard deviation of 0.799. The researchers suggest that since there is a percentage of respondents whose food choices became affected due to the pandemic, therefore, a variety of specific nutritious products must be advocated, produced, and purchased. Specifically in these times when health is considered wealth.

Furthermore, with regards to being influenced by religion in terms of buying products, with a mean value of 2.724 and a corresponding standard deviation of 1.217, researchers suggested that whichever these preferences may be must be accepted and respected despite the present differences. This is to form inclusivity despite the existing effects of the pandemic concerning food choices and what influences these preferences.

Moreover, families' significance to eating healthier foods as part of De La Salle University - Dasmariñas student's preferences, garnered a mean value of 2.402 and a standard deviation of 1.083. The researchers proposed that the idea of eating healthier foods should be practiced and even more advocated specifically in these times when health risk is arising due to the pandemic.

With eating habits influenced by the other behavior, with a mean value of 2.126 and an associating standard deviation of 1.149. The researchers advise impeding these practices as this holds much significance to the De La Salle University - Dasmariñas student's food preferences. Moreover, implementation and dependency on being influenced by other behavior may produce negative outcomes that can worsen the health risk arising during the pandemic.

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