UNIVERSITI
MALAYA

EIE2001 Survey and Sampling Methods

Individual Assignment Semester 2 2022/2023

The Burger Preference Among Students in Universiti Malaya

MUHAMAD AFNAN DARWISY BIN HAMZAH

EIA190086 / 17124877

INTRODUCTION

Burgers are one of the most popular fast-food particulars around the world, and Universiti Malaya scholars are no exception. The preference of scholars in Universiti Malaya for burgers is an intriguing content to explore, as it can give insight into the productive habits and life practices of university students in Malaysia. This study aims to explore the burger preferences of students at Universiti Malaya, with the objective of gaining a deeper understanding of their taste preferences and factors influencing their choices.

The student population at Universiti Malaya represents a diverse group, encompassing various ages, genders, ethnicities, faculties, and years of study. By investigating their burger preferences, we can gain insights into the preferences and demands of this specific demographic, which can have implications for food service providers both on-campus and in the surrounding area.

The study will examine several key aspects of burger preferences among Universiti Malaya students. These aspects include the frequency of burger consumption, the choice of patty (e.g., beef, chicken, fish, vegetarian), preferred sauces and vegetables, price considerations, and factors influencing their decisions when selecting burgers from fast-food chains. By exploring these dimensions, we aim to identify the key factors that drive their preferences and shape their dining choices.

This paper will begin by reviewing the literature on the burger preference of university scholars in Malaysia, and the factors that impact their choice of burgers. It will also describe the methodology used to conduct the study, including the sample size, data collection styles, and data analysis ways. The results of the study will be presented, followed by a discussion of the findings and finally, the paper will conclude with conclusions for promoting healthy eating habits among university students in Malaysia.

LITERATURE REVIEW

Fast food consumption, including burgers, has been associated with unhealthy dietary behaviors and lifestyle practices, particularly among adolescents and young adults around the world. This literature review aims to describe the previous studies conducted from 2013 to 2023 on burger and fast-food chain around the world and Malaysia.

In Saudi Arabia, fast food has become an important component of the dietary pattern for adolescents and young adults, particularly girls, and it is associated with lower intakes of fruits, vegetables, and milk (Nora Abdullah AlFaris et al., 2015). Another study in Tehran discovered that fast food intake is a habit for some teenagers and young adults, and it is frequently related to socialization and entertainment (Hesamedin Askari Majabadi et al., 2016).

Generally, fast food consumption is a global phenomenon that is increasing in low- and middle-income countries, and it is linked to poor dietary habits, such as a higher intake of carbonated soft-drinks and sweets and a lower intake of fruits and vegetables (Li et al., 2020). In United States, fast food is a staple of the American diet, and it has been linked to high calorie intake and poor diet quality (Fryar et al., 2018).

A study conducted in Malaysia found that fast-food consumption is a problem among adolescents, as it increases the risk of diet-related chronic diseases (Cheong Siew Man et al., 2021). Another study conducted in Universiti Brunei Darussalam found that fast food is a quick and cheap choice for university students, especially when the time is limited and there is a large university workload (Tok Chen Yun et al., 2018). Most of the respondents preferred cheap food to healthy food, and this trend was observed among the overweight/obese population (Tok Chen Yun et al., 2018).

The outcomes of these studies give useful insights for industry practitioners, policymakers, and scholars. This review, by analysing existing material, lays the groundwork for future research in the realm of burgers and fast-food chains, highlighting knowledge gaps and prospective areas for exploration.

PROBLEM STATEMENT

The Malaysian burger market has grown significantly in recent years, owing to the increasing popularity of fast-food chains and the growing need for convenient, quick-service dining options. However, various obstacles and issues have surfaced in the burger business that require further investigation. This section tries to identify and discuss the major issues confronting Malaysia's burger sector.

- What are the key problems and challenges faced by the burger market in Malaysia?
- The burger market in Malaysia is highly competitive, but what factors contribute to this intense competition?
- How are changing consumer preferences impacting the burger market in Malaysia?
- In the face of price sensitivity, how do burger businesses balance affordability with maintaining quality?

RESEARCH DESIGN

This research study aims to examine the burger preference among students in Universiti Malaya. The study focuses on various factors influencing their burger choices, including patty selection, sauce preferences, vegetable choices, price considerations, and factors when considering burgers in fast-food chains. By investigating these aspects, the research aims to gain insights into the factors that shape students' burger preferences and provide valuable information for the development of targeted strategies to meet their needs and preferences. This study will utilize a quantitative research design, employing a structured questionnaire to collect data from the participants. The questionnaire will be designed based on the responses obtained from the Google Form survey administered to the students. The research will focus solely on quantitative data analysis without the inclusion of qualitative interviews.

A representative sample of students from Universiti Malaya will be recruited to participate in the study. The sample will be diverse in terms of gender, age, ethnicity, and faculty representation to ensure a comprehensive understanding of the burger preferences among students. The data will be collected through the administration of the structured questionnaire to the selected sample of students. The questionnaire will include sections on demographic background (age, gender, ethnicity, faculty), burger consumption frequency, choice of patty, sauce preferences, vegetable choices, price considerations, and factors when considering burgers in fast-food chains. The participants will be asked to provide their responses based on their preferences and experiences. Descriptive statistics, such as frequencies, percentages, means, and standard deviations, will be used to analyze the collected data. This analysis will provide insights into the distribution, central tendency, and variation of the variables related to burger preferences. Additionally, inferential statistics, such as chi-square tests or ANOVA, will be conducted to explore potential differences in burger preferences based on gender, age group, ethnicity, and faculty.

The research will adhere to ethical guidelines, ensuring confidentiality and anonymity of the participants. Informed consent will be obtained from all participants, and data will be handled and stored securely.

DATA ANALYSIS

Descriptive statistics offer a brief overview of a dataset's attributes. When examining characteristics such as age, gender, ethnicity, faculty, and years of study, descriptive statistics can be used to analyze the distribution and central tendency of each variable. This involves calculating metrics like frequency, percentage, and cumulative percentage.

For demographic background variables, descriptive statistics can be generated to better comprehend how participants are distributed across various categories. This enables us to recognize the most frequent categories and determine the relative proportions of each category in the sample.

Analyzing the descriptive statistics can yield valuable insights about the respondents' demographic composition. For instance, we can identify the most prevalent age group, the gender distribution, the ethnic representation, the distribution among different faculties, and the distribution among various years of study.

Crosstabulation allows us to examine the relationships between variables. For example, we can use crosstabulation to analyze the relationship between placetogetburger and different demographic variables such as agegroup, gender, ethnicity, and faculty. This helps us understand the preferences for burger places among different groups and identify any significant associations between these variables.

The chi-square test can be used to assess the significance of relationships between categorical variables. In the analysis, we can perform chi-square tests between variables like placetogetburger and agegroup, gender, or ethnicity. This helps determine if there is a significant association between these variables, indicating whether certain demographic groups have different preferences for burger places.

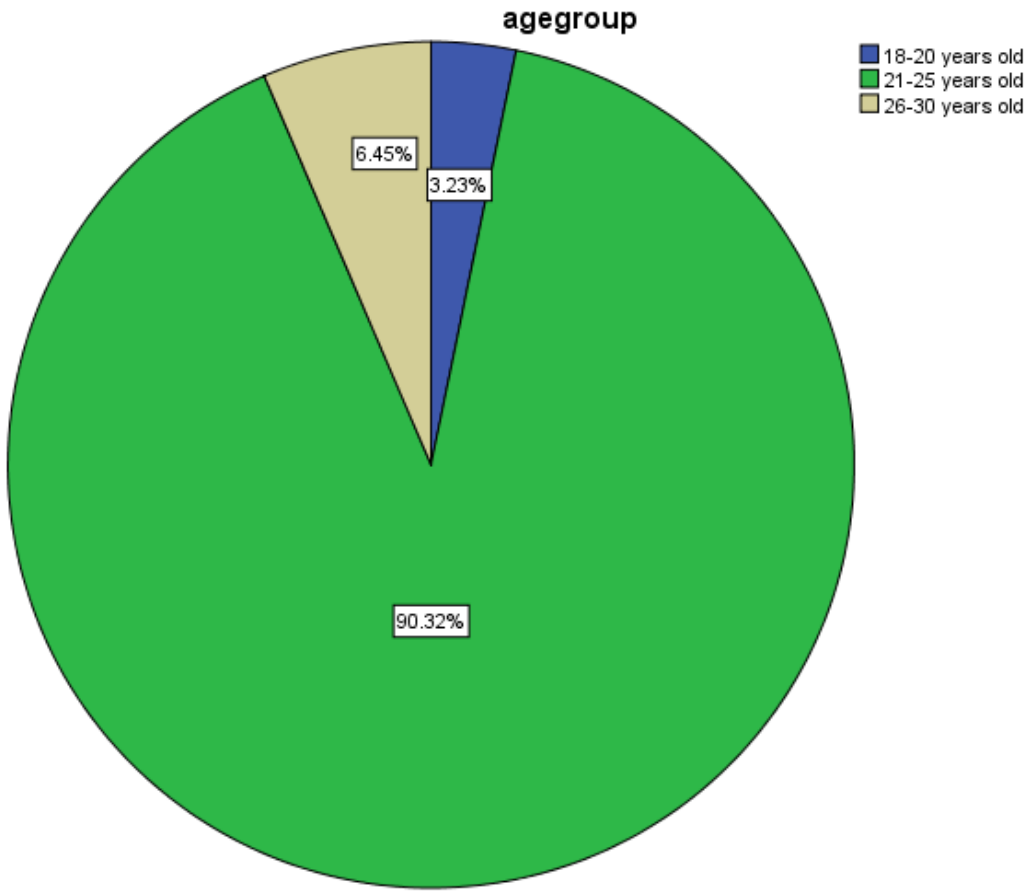
For factor analysis, specifically Kendall's W test, can be applied to assess the agreement or concordance among the ranked factors related to burger preferences. The analysis of factors like taste, price, nutrition, waiting time, distance from location, and availability of discounts/coupons can be examined using Kendall's W test. This helps identify the

underlying dimensions or factors that play a significant role in influencing individuals' preferences for burgers.

agegroup

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20 years old	1	3.2	3.2	3.2
	21-25 years old	28	90.3	90.3	93.5
	26-30 years old	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

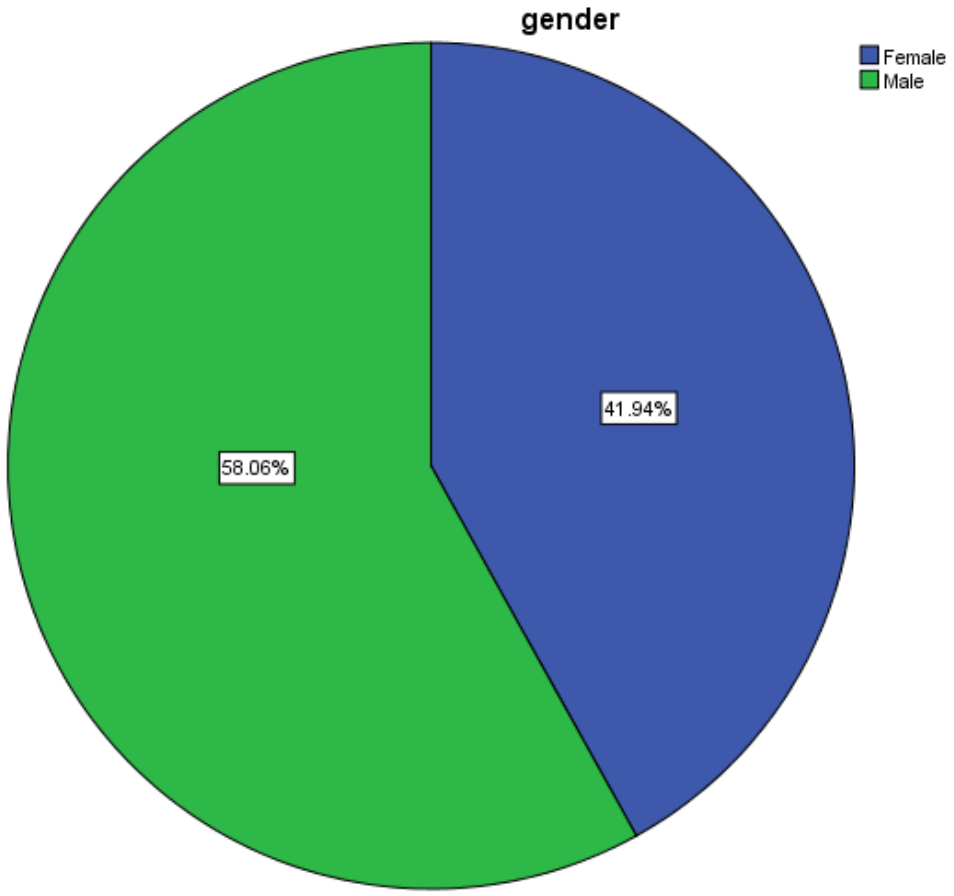
The age group distribution of participants in the study is as follows: 18-20 years old (3.2%), 21-25 years old (90.3%), and 26-30 years old (6.5%). The majority of respondents are in the 21-25 years old category, comprising 90.3% of the sample. The smallest percentage is for the 18-20 years old category, with only 3.2% representation.



gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	13	41.9	41.9	41.9
	Male	18	58.1	58.1	100.0
	Total	31	100.0	100.0	

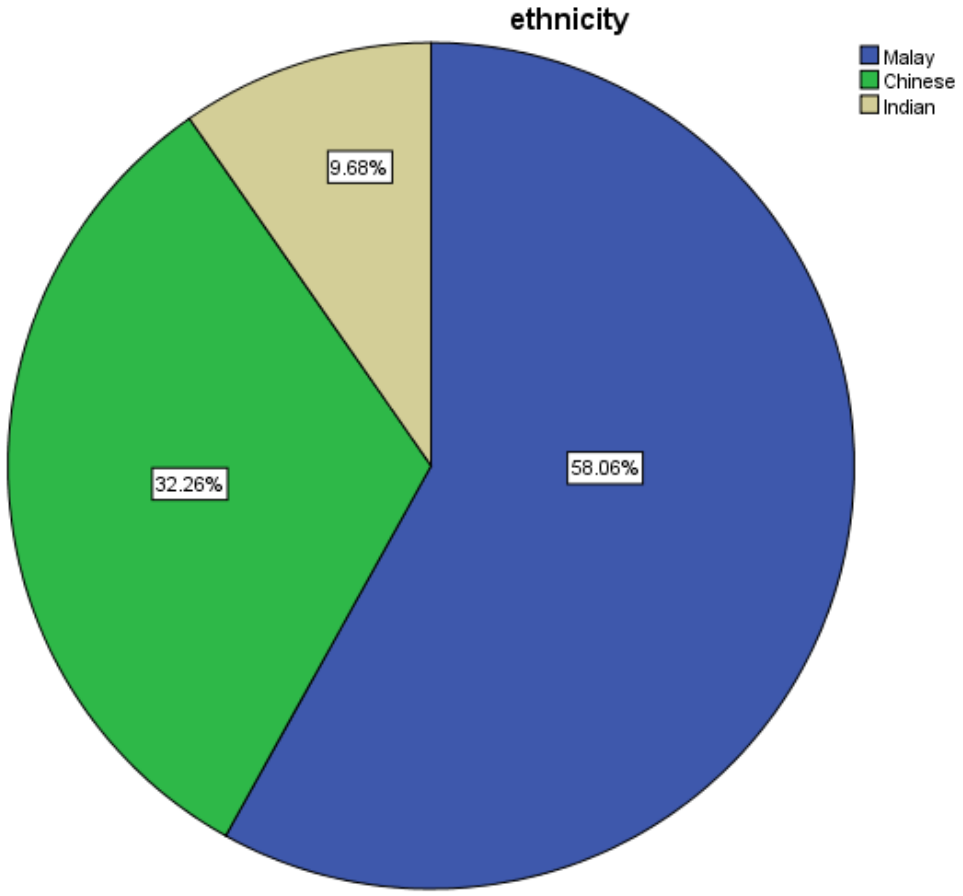
The gender distribution of participants in the study is as follows: 41.9% female and 58.1% male. The majority of respondents are male, accounting for 58.1% of the sample, while females represent 41.9% of the participants.



ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	18	58.1	58.1	58.1
	Chinese	10	32.3	32.3	90.3
	Indian	3	9.7	9.7	100.0
	Total	31	100.0	100.0	

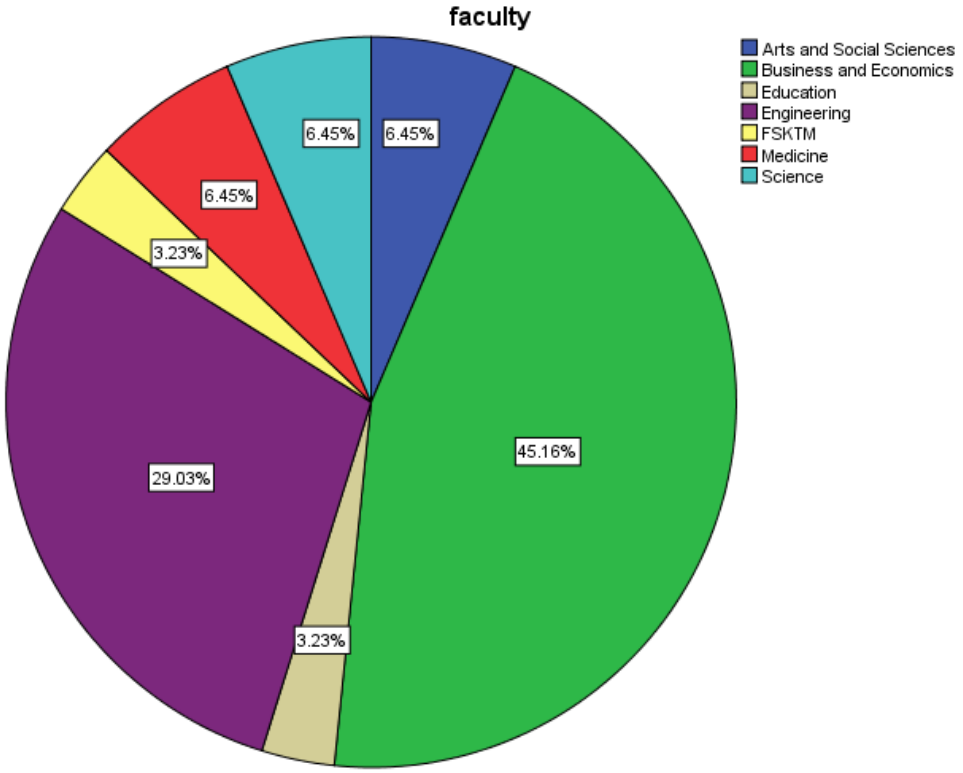
The ethnicity distribution of participants in the study is as follows: 58.1% Malay, 32.3% Chinese, and 9.7% Indian. The majority of respondents are Malay, comprising 58.1% of the sample, followed by Chinese participants at 32.3%. The Indian ethnicity represents the least with 9.7% of the participants in the study.



faculty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Arts and Social Sciences	2	6.5	6.5	6.5
	Business and Economics	14	45.2	45.2	51.6
	Education	1	3.2	3.2	54.8
	Engineering	9	29.0	29.0	83.9
	FSKTM	1	3.2	3.2	87.1
	Medicine	2	6.5	6.5	93.5
	Science	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

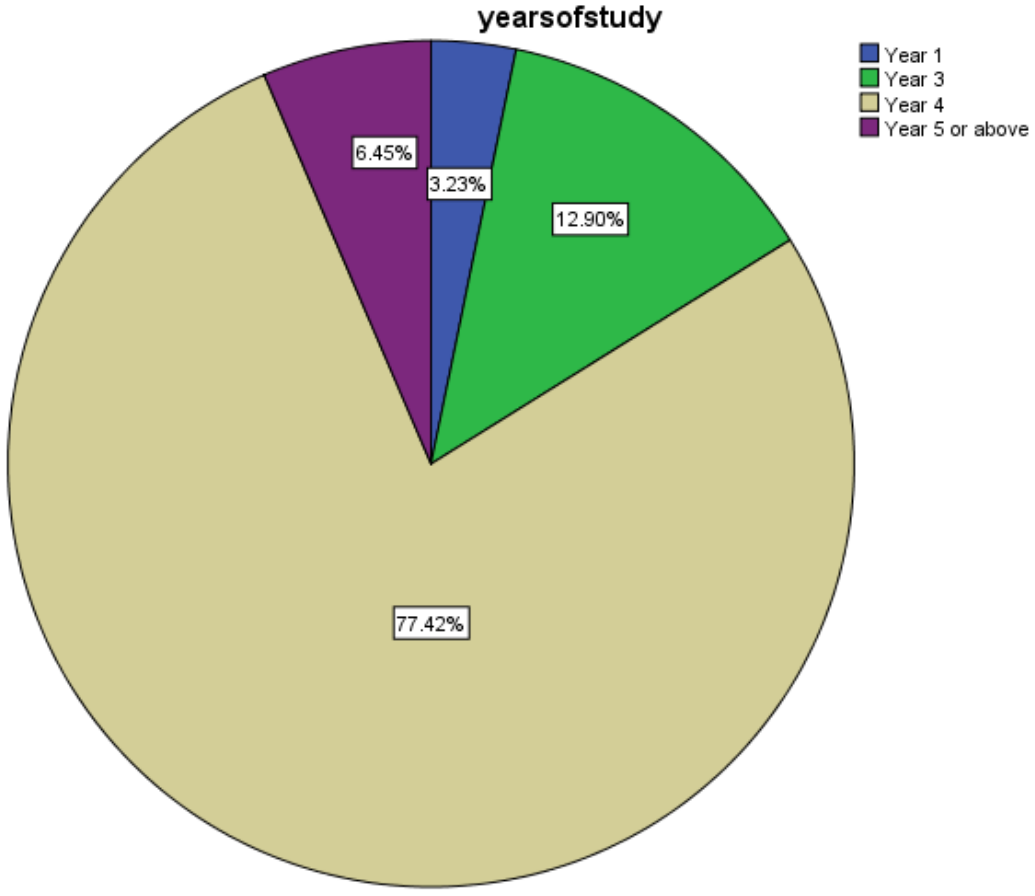
The distribution of participants across faculties in the study is as follows: Business and Economics (45.2%), Engineering (29.0%), Arts and Social Sciences (6.5%), Medicine (6.5%), Science (6.5%), Education (3.2%), and FSKTM (3.2%). The Business and Economics faculty has the highest representation, followed by Engineering, while the remaining faculties have smaller percentages in the sample.



yearsofstudy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 1	1	3.2	3.2	3.2
	Year 3	4	12.9	12.9	16.1
	Year 4	24	77.4	77.4	93.5
	Year 5 or above	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

The distribution of participants based on their years of study is as follows: Year 4 has the highest representation with 77.4%, followed by Year 3 with 12.9%. Year 5 or above and Year 1 have smaller percentages of 6.5% and 3.2% respectively. The majority of participants in the study are in their fourth year of study.



Crosstabs between burger preferences and demographic background.

i. Burgers per month

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
burgerspermonth * agegroup	31	100.0%	0	0.0%	31	100.0%
burgerspermonth * gender	31	100.0%	0	0.0%	31	100.0%
burgerspermonth * ethnicity	31	100.0%	0	0.0%	31	100.0%
burgerspermonth * faculty	31	100.0%	0	0.0%	31	100.0%
burgerspermonth * yearsofstudy	31	100.0%	0	0.0%	31	100.0%

burgerspermonth * gender Crosstabulation

			gender		Total
			Female	Male	
burgerspermonth	Rarely (1-3 times)	Count	10	10	20
		% within gender	76.9%	55.6%	64.5%
	Occasionally (4-6 times)	Count	3	8	11
		% within gender	23.1%	44.4%	35.5%
Total		Count	13	18	31
		% within gender	100.0%	100.0%	100.0%

burgerspermonth * agegroup Crosstabulation

			agegroup			Total
			18-20 years old	21-25 years old	26-30 years old	
burgerspermonth	Rarely (1-3 times)	Count	0	19	1	20
		% within agegroup	0.0%	67.9%	50.0%	64.5%
	Occasionally (4-6 times)	Count	1	9	1	11
		% within agegroup	100.0%	32.1%	50.0%	35.5%
Total		Count	1	28	2	31
		% within agegroup	100.0%	100.0%	100.0%	100.0%

burgerspermonth * ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
burgerspermonth	Rarely (1-3 times)	Count	12	5	3	20
		% within ethnicity	66.7%	50.0%	100.0%	64.5%
	Occasionally (4-6 times)	Count	6	5	0	11
		% within ethnicity	33.3%	50.0%	0.0%	35.5%
Total		Count	18	10	3	31
		% within ethnicity	100.0%	100.0%	100.0%	100.0%

burgerspermonth * faculty Crosstabulation

			faculty							Total
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	
burgerspermonth	Rarely (1-3 times)	Count	2	8	6	2	0	1	1	20
		% within faculty	100.0%	57.1%	66.7%	100.0%	0.0%	100.0%	100.0%	64.5%
	Occasionally (4-6 times)	Count	0	6	3	0	2	0	0	11
		% within faculty	0.0%	42.9%	33.3%	0.0%	100.0%	0.0%	0.0%	35.5%
Total		Count	2	14	9	2	2	1	1	31
		% within faculty	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The crosstabulations between "Burgers per Month" and the demographic variables of age group, gender, ethnicity, and faculty provide insights into the relationship between burger consumption and these demographic factors.

Participants aged 21-25 years old reported consuming burgers rarely (1-3 times) for the majority (67.9%), indicating that this age group has a lower frequency of burger consumption while occasional consumption (4-6 times) was reported by 32.1% of participants in this age group.

Males reported consuming burgers rarely more frequently (58.1%) than females (41.9%). This suggests that there may be a gender difference in burger preferences, with males showing a slightly higher tendency to consume burgers less frequently.

Malays were the largest ethnic group (58.1%) and had the highest frequency of consuming burgers rarely, followed by the Chinese (32.3%). Indian participants reported consuming burgers rarely the most (100.0%), though their sample size was relatively small.

The Business and Economics faculty had the highest frequency of consuming burgers rarely (45.2%), followed by Engineering (29.0%). The faculty of Science had the highest percentage (100.0%) of participants who consumed burgers occasionally.

ii. Patty choices

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
pattychoice * agegroup	31	100.0%	0	0.0%	31	100.0%
pattychoice * gender	31	100.0%	0	0.0%	31	100.0%
pattychoice * ethnicity	31	100.0%	0	0.0%	31	100.0%
pattychoice * faculty	31	100.0%	0	0.0%	31	100.0%
pattychoice * yearsofstudy	31	100.0%	0	0.0%	31	100.0%

pattychoice * gender Crosstabulation

			gender		
			Female	Male	Total
pattychoice	Beef	Count	3	11	14
		% within gender	23.1%	61.1%	45.2%
	Chicken	Count	9	5	14
		% within gender	69.2%	27.8%	45.2%
	Vegetarian	Count	1	2	3
		% within gender	7.7%	11.1%	9.7%
Total		Count	13	18	31
		% within gender	100.0%	100.0%	100.0%

pattychoice * agegroup Crosstabulation

			agegroup			
			18-20 years old	21-25 years old	26-30 years old	Total
pattychoice	Beef	Count	0	13	1	14
		% within agegroup	0.0%	46.4%	50.0%	45.2%
	Chicken	Count	1	12	1	14
		% within agegroup	100.0%	42.9%	50.0%	45.2%
	Vegetarian	Count	0	3	0	3
		% within agegroup	0.0%	10.7%	0.0%	9.7%
Total		Count	1	28	2	31
		% within agegroup	100.0%	100.0%	100.0%	100.0%

pattychoice * ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
pattychoice	Beef	Count	12	1	1	14
		% within ethnicity	66.7%	10.0%	33.3%	45.2%
	Chicken	Count	4	8	2	14
		% within ethnicity	22.2%	80.0%	66.7%	45.2%
	Vegetarian	Count	2	1	0	3
		% within ethnicity	11.1%	10.0%	0.0%	9.7%
Total		Count	18	10	3	31
		% within ethnicity	100.0%	100.0%	100.0%	100.0%

pattychoice * faculty Crosstabulation

			faculty							
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	Total
pattychoice	Beef	Count	1	2	7	2	2	0	0	14
		% within faculty	50.0%	14.3%	77.8%	100.0%	100.0%	0.0%	0.0%	45.2%
	Chicken	Count	0	11	1	0	0	1	1	14
		% within faculty	0.0%	78.6%	11.1%	0.0%	0.0%	100.0%	100.0%	45.2%
	Vegetarian	Count	1	1	1	0	0	0	0	3
		% within faculty	50.0%	7.1%	11.1%	0.0%	0.0%	0.0%	0.0%	9.7%
Total		Count	2	14	9	2	2	1	1	31
		% within faculty	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The crosstabulations that analyze the relationship between patty choice and demographic variables such as age group, gender, ethnicity, and faculty can reveal the preferences of participants in each category.

As for age group, participants aged 21-25 years old showed a considerable liking for both beef and chicken patties, with around 46.4% and 42.9% respectively choosing either option. Participants aged 18-20 years old and 26-30 years old also showed some preference for beef and chicken patties but to a lesser extent. The least preferred option among all age groups was the vegetarian patty.

In terms of gender, males exhibited a stronger inclination towards beef patties (61.1%), whereas females tended to prefer chicken patties (69.2%). The preference for vegetarian patties was relatively low for both genders.

Regarding ethnicity, Malays indicated the highest preference for beef patties (66.7%), while Chinese participants showed a greater fondness for chicken patties (80.0%). Indian participants had a relatively equal distribution between beef and chicken patties, but the

overall sample size was smaller. The preference for vegetarian patties was relatively low across all ethnicities.

Faculty-wise, engineering students displayed a distinct liking for beef patties (77.8%), whereas business and economics students favored chicken patties (78.6%). Students studying arts and social sciences demonstrated a diverse range of patty preferences, including beef, chicken, and vegetarian options.

iii. Sauce choices

$sauce Frequencies

		Responses		Percent of Cases
		N	Percent	
saucechoice[a]	chilli	22	27.8%	71.0%
	mayonnaise	23	29.1%	74.2%
	mustard	5	6.3%	16.1%
	cheesesauce	11	13.9%	35.5%
	ketchup	16	20.3%	51.6%
	bbq	1	1.3%	3.2%
	blackpepper	1	1.3%	3.2%
Total		79	100.0%	254.8%

a. Dichotomy group tabulated at value 1.

$sauce*gender Crosstabulation

			gender		Total
			Female	Male	
saucechoice[a]	chilli	Count	6	16	22
		% within gender	46.2%	88.9%	
	mayonnaise	Count	11	12	23
		% within gender	84.6%	66.7%	
	mustard	Count	1	4	5
		% within gender	7.7%	22.2%	
	cheesesauce	Count	3	8	11
		% within gender	23.1%	44.4%	
	ketchup	Count	8	8	16
		% within gender	61.5%	44.4%	
	bbq	Count	0	1	1
		% within gender	0.0%	5.6%	
	blackpepper	Count	0	1	1
		% within gender	0.0%	5.6%	
Total		Count	13	18	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$sauce*agegroup Crosstabulation

			agegroup			Total
			18-20 years old	21-25 years old	26-30 years old	
saucechoice[a]	chilli	Count	1	19	2	22
		% within agegroup	100.0%	67.9%	100.0%	
	mayonnaise	Count	1	21	1	23
		% within agegroup	100.0%	75.0%	50.0%	
	mustard	Count	0	4	1	5
		% within agegroup	0.0%	14.3%	50.0%	
	cheesesauce	Count	0	10	1	11
		% within agegroup	0.0%	35.7%	50.0%	
	ketchup	Count	1	15	0	16
		% within agegroup	100.0%	53.6%	0.0%	
	bbq	Count	0	1	0	1
		% within agegroup	0.0%	3.6%	0.0%	
	blackpepper	Count	0	1	0	1
		% within agegroup	0.0%	3.6%	0.0%	
Total		Count	1	28	2	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$sauce*ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
saucechoice[a]	chilli	Count	16	3	3	22
		% within ethnicity	88.9%	30.0%	100.0%	
	mayonnaise	Count	14	7	2	23
		% within ethnicity	77.8%	70.0%	66.7%	
	mustard	Count	4	1	0	5
		% within ethnicity	22.2%	10.0%	0.0%	
	cheesesauce	Count	7	2	2	11
		% within ethnicity	38.9%	20.0%	66.7%	
	ketchup	Count	9	6	1	16
		% within ethnicity	50.0%	60.0%	33.3%	
	bbq	Count	1	0	0	1
		% within ethnicity	5.6%	0.0%	0.0%	
	blackpepper	Count	1	0	0	1
		% within ethnicity	5.6%	0.0%	0.0%	
Total		Count	18	10	3	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$sauce*faculty Crosstabulation

			faculty							
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	Total
saucechoice[a]	chilli	Count	1	7	9	2	2	1	0	22
		% within faculty	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
	mayonnaise	Count	2	10	6	2	1	1	1	23
		% within faculty	100.0%	71.4%	66.7%	100.0%	50.0%	100.0%	100.0%	
	mustard	Count	1	1	2	0	0	1	0	5
		% within faculty	50.0%	7.1%	22.2%	0.0%	0.0%	100.0%	0.0%	
	cheesesauce	Count	1	2	5	1	1	1	0	11
		% within faculty	50.0%	14.3%	55.6%	50.0%	50.0%	100.0%	0.0%	
	ketchup	Count	1	9	2	2	1	0	1	16
		% within faculty	50.0%	64.3%	22.2%	100.0%	50.0%	0.0%	100.0%	
	bbq	Count	0	0	1	0	0	0	0	1
		% within faculty	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	
	blackpepper	Count	0	0	1	0	0	0	0	1
		% within faculty	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	
Total		Count	2	14	9	2	2	1	1	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

The crosstabulation table above comparing sauce selection and four variables - age, gender, ethnicity, and faculty - yield valuable insights into the preferences of various groups.

In terms of gender, females tended to prefer mayonnaise (84.6%), whereas males had a stronger inclination towards most sauces especially chilli sauce (88.9%), including mayonnaise (66.7%) while cheese sauce and ketchup (44.4%) respectively.

Across all age groups, mayonnaise (75%) was the most popular, with chilli sauce (67.9%) and ketchup (53.6%) being particularly favored by 21-25-year-olds.

Ethnicity also played a role, with Malays (88.9%) and Indians (100%) had a high preference for chilli sauce, while Chinese (30%) showed a relatively lower preference, while Chinese participants had a lower preference for chilli sauce, they had highest preferences for mayonnaise (70%).

Faculty of engineering and medicine students had a 100% pronounced liking for chilli sauce, while Business and Economics (71.4%) and FSKTM (100%) had the highest preferences for mayonnaise, respectively.

iv. Vegetables choices

$vegetablechoice Frequencies

		Responses		Percent of Cases
		N	Percent	
$vegetablechoice[a]	lettuce	23	30.7%	74.2%
	cucumber	9	12.0%	29.0%
	onion	14	18.7%	45.2%
	tomato	17	22.7%	54.8%
	pickles	8	10.7%	25.8%
	preferwithoutvegetables	4	5.3%	12.9%
Total		75	100.0%	241.9%

a. Dichotomy group tabulated at value 1.

$vegetablechoice*gender Crosstabulation

			gender		Total
			Female	Male	
$vegetablechoice[a]	lettuce	Count	9	14	23
		% within gender	69.2%	77.8%	
	cucumber	Count	4	5	9
		% within gender	30.8%	27.8%	
	onion	Count	4	10	14
		% within gender	30.8%	55.6%	
	tomato	Count	6	11	17
		% within gender	46.2%	61.1%	
	pickles	Count	3	5	8
		% within gender	23.1%	27.8%	
	preferwithoutvegetables	Count	2	2	4
		% within gender	15.4%	11.1%	
Total		Count	13	18	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$vegetablechoice*agegroup Crosstabulation

			agegroup			Total
			18-20 years old	21-25 years old	26-30 years old	
$vegetablechoice[a]	lettuce	Count	0	21	2	23
		% within agegroup	0.0%	75.0%	100.0%	
	cucumber	Count	0	8	1	9
		% within agegroup	0.0%	28.6%	50.0%	
	onion	Count	0	12	2	14
		% within agegroup	0.0%	42.9%	100.0%	
	tomato	Count	0	16	1	17
		% within agegroup	0.0%	57.1%	50.0%	
	pickles	Count	0	8	0	8
		% within agegroup	0.0%	28.6%	0.0%	
	preferwithoutvegetables	Count	1	3	0	4
		% within agegroup	100.0%	10.7%	0.0%	
Total		Count	1	28	2	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$vegetablechoice*ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
$vegetablechoice[a]	lettuce	Count	13	7	3	23
		% within ethnicity	72.2%	70.0%	100.0%	
	cucumber	Count	5	3	1	9
		% within ethnicity	27.8%	30.0%	33.3%	
	onion	Count	11	1	2	14
		% within ethnicity	61.1%	10.0%	66.7%	
	tomato	Count	7	7	3	17
		% within ethnicity	38.9%	70.0%	100.0%	
	pickles	Count	6	2	0	8
		% within ethnicity	33.3%	20.0%	0.0%	
	preferwithoutvegetables	Count	2	2	0	4
		% within ethnicity	11.1%	20.0%	0.0%	
Total		Count	18	10	3	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

$vegetablechoice*faculty Crosstabulation

			faculty							
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	Total
$vegetablechoice[a]	lettuce	Count	2	10	8	1	1	1	0	23
		% within faculty	100.0%	71.4%	88.9%	50.0%	50.0%	100.0%	0.0%	
	cucumber	Count	2	3	4	0	0	0	0	9
		% within faculty	100.0%	21.4%	44.4%	0.0%	0.0%	0.0%	0.0%	
	onion	Count	1	3	8	1	1	0	0	14
		% within faculty	50.0%	21.4%	88.9%	50.0%	50.0%	0.0%	0.0%	
	tomato	Count	0	8	6	0	2	1	0	17
		% within faculty	0.0%	57.1%	66.7%	0.0%	100.0%	100.0%	0.0%	
	pickles	Count	1	3	2	0	2	0	0	8
		% within faculty	50.0%	21.4%	22.2%	0.0%	100.0%	0.0%	0.0%	
	preferwithoutvegetables	Count	0	2	0	1	0	0	1	4
		% within faculty	0.0%	14.3%	0.0%	50.0%	0.0%	0.0%	100.0%	
Total		Count	2	14	9	2	2	1	1	31

Percentages and totals are based on respondents.

a. Dichotomy group tabulated at value 1.

The crosstabulations between vegetable choice and the four variables (age group, gender, ethnicity, and faculty) provide insights into the preferences of respondents in different demographic and academic categories.

When examining age groups, lettuce was the most popular choice among respondents aged 21-25 years old and 26-30 years old with 75% and 100% respectively, while other vegetables had varying levels of preference.

Regarding gender, both females (69.2%) and males (77.8%) showed a high preference for lettuce, with onion and tomato also being popular choices.

Ethnicity-wise, lettuce was preferred by respondents across all ethnic groups among Malay, Chinese and Indian with 72.2%, 70% and 100% respectively, while tomato coming in second choice among them with variations in the popularity of other vegetables.

Faculty-wise, lettuce was consistently favored among Arts and Social Sciences, Engineering, and Business and Economics respondents with 100%, 88.9% and 71.4%, respectively while other vegetables had varying levels of preference across different faculties.

v. Price for burgers

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
payforburger * agegroup	31	100.0%	0	0.0%	31	100.0%
payforburger * gender	31	100.0%	0	0.0%	31	100.0%
payforburger * ethnicity	31	100.0%	0	0.0%	31	100.0%
payforburger * faculty	31	100.0%	0	0.0%	31	100.0%
payforburger * yearsofstudy	31	100.0%	0	0.0%	31	100.0%

payforburger * gender Crosstabulation

			gender		Total
			Female	Male	
payforburger	Less than RM10	Count	7	5	12
		% within gender	53.8%	27.8%	38.7%
	RM10-20	Count	5	12	17
		% within gender	38.5%	66.7%	54.8%
	RM20-30	Count	0	1	1
		% within gender	0.0%	5.6%	3.2%
	More than RM40	Count	1	0	1
		% within gender	7.7%	0.0%	3.2%
Total		Count	13	18	31
		% within gender	100.0%	100.0%	100.0%

payforburger * agegroup Crosstabulation

			agegroup			Total
			18-20 years old	21-25 years old	26-30 years old	
payforburger	Less than RM10	Count	0	12	0	12
		% within agegroup	0.0%	42.9%	0.0%	38.7%
	RM10-20	Count	1	14	2	17
		% within agegroup	100.0%	50.0%	100.0%	54.8%
	RM20-30	Count	0	1	0	1
		% within agegroup	0.0%	3.6%	0.0%	3.2%
	More than RM40	Count	0	1	0	1
		% within agegroup	0.0%	3.6%	0.0%	3.2%
Total		Count	1	28	2	31
		% within agegroup	100.0%	100.0%	100.0%	100.0%

payforburger * ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
payforburger	Less than RM10	Count	6	5	1	12
		% within ethnicity	33.3%	50.0%	33.3%	38.7%
	RM10-20	Count	10	5	2	17
		% within ethnicity	55.6%	50.0%	66.7%	54.8%
	RM20-30	Count	1	0	0	1
		% within ethnicity	5.6%	0.0%	0.0%	3.2%
	More than RM40	Count	1	0	0	1
		% within ethnicity	5.6%	0.0%	0.0%	3.2%
Total		Count	18	10	3	31
		% within ethnicity	100.0%	100.0%	100.0%	100.0%

payforburger * faculty Crosstabulation

			faculty							Total
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	
payforburger	Less than RM10	Count	1	7	2	1	0	1	0	12
		% within faculty	50.0%	50.0%	22.2%	50.0%	0.0%	100.0%	0.0%	38.7%
	RM10-20	Count	1	6	6	1	2	0	1	17
		% within faculty	50.0%	42.9%	66.7%	50.0%	100.0%	0.0%	100.0%	54.8%
	RM20-30	Count	0	0	1	0	0	0	0	1
		% within faculty	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	3.2%
	More than RM40	Count	0	1	0	0	0	0	0	1
		% within faculty	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%
Total		Count	2	14	9	2	2	1	1	31
		% within faculty	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The crosstabulations of pay for burgers with age group, gender, ethnicity, and faculty provide useful insights into the spending habits of respondents in different demographic and academic categories when it comes to burgers.

In terms of age group, most respondents who were between 21-25 years old (50%) were willing to pay between RM10-20 for a burger, while a few of them willingly to pay less than RM10 (42.9%). Respondents in the 18-20 years old and 26-30 years old age group had varied spending preferences, and no one in these age group were willing to pay less than RM10.

When looking at gender, a higher percentage of male respondents (66.7%) preferred spending between RM10-20 on a burger compared to female respondents (38.5%). Most female respondents expressed a willingness to pay less than RM10 (53.8%) for a burger.

When analyzing the crosstabulation between pay for burgers and ethnicity, the distribution of spending preferences varied among different ethnic groups. Malay respondents showed a relatively balanced distribution across different spending ranges where they were willingly to pay between RM10-20 (55.6%), while Chinese respondents had a higher count in the "Less than RM10" and "RM10-20" with 50% in respective categories. Indian respondents had a higher count in the "RM10-20" category (66.7%). These findings indicate diverse spending preferences based on ethnicity.

While the crosstabulation between pay for burger and faculty, respondents from the Business and Economics faculty had a willingness to pay "Less than RM10" (50%), followed by "RM10-20" categories (42.9%), while respondents from the Engineering faculty had a higher count in the "RM10-20" range (66.7%). Other faculties exhibited varied distributions, with some showing a preference towards spending between RM 10-20 and others distributed across different price ranges.

Overall, the results suggest that most respondents were willing to pay between RM10-20 for a burger. However, there were variations in spending preferences based on age group, gender, ethnicity, and faculty.

vi. Place to get burgers.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
placetogetburger * agegroup	31	100.0%	0	0.0%	31	100.0%
placetogetburger * gender	31	100.0%	0	0.0%	31	100.0%
placetogetburger * ethnicity	31	100.0%	0	0.0%	31	100.0%
placetogetburger * faculty	31	100.0%	0	0.0%	31	100.0%
placetogetburger * yearsofstudy	31	100.0%	0	0.0%	31	100.0%

placetogetburger * gender Crosstabulation

			gender		
			Female	Male	Total
placetogetburger	Hawker stalls	Count	5	6	11
		% within gender	38.5%	33.3%	35.5%
	Fast-food chains	Count	6	8	14
		% within gender	46.2%	44.4%	45.2%
	Cafes and restaurants	Count	2	4	6
		% within gender	15.4%	22.2%	19.4%
Total		Count	13	18	31
		% within gender	100.0%	100.0%	100.0%

placetogetburger * agegroup Crosstabulation

			agegroup			
			18-20 years old	21-25 years old	26-30 years old	Total
placetogetburger	Hawker stalls	Count	0	11	0	11
		% within agegroup	0.0%	39.3%	0.0%	35.5%
	Fast-food chains	Count	1	11	2	14
		% within agegroup	100.0%	39.3%	100.0%	45.2%
	Cafes and restaurants	Count	0	6	0	6
		% within agegroup	0.0%	21.4%	0.0%	19.4%
Total		Count	1	28	2	31
		% within agegroup	100.0%	100.0%	100.0%	100.0%

placetogetburger * ethnicity Crosstabulation

			ethnicity			Total
			Malay	Chinese	Indian	
placetogetburger	Hawker stalls	Count	7	3	1	11
		% within ethnicity	38.9%	30.0%	33.3%	35.5%
	Fast-food chains	Count	7	6	1	14
		% within ethnicity	38.9%	60.0%	33.3%	45.2%
	Cafes and restaurants	Count	4	1	1	6
		% within ethnicity	22.2%	10.0%	33.3%	19.4%
Total		Count	18	10	3	31
		% within ethnicity	100.0%	100.0%	100.0%	100.0%

placetogetburger * faculty Crosstabulation

			faculty							
			Arts and Social Sciences	Business and Economics	Engineering	Medicine	Science	FSKTM	Education	Total
placetogetburger	Hawker stalls	Count	1	5	3	1	1	0	0	11
		% within faculty	50.0%	35.7%	33.3%	50.0%	50.0%	0.0%	0.0%	35.5%
	Fast-food chains	Count	0	7	3	1	1	1	1	14
		% within faculty	0.0%	50.0%	33.3%	50.0%	50.0%	100.0%	100.0%	45.2%
	Cafes and restaurants	Count	1	2	3	0	0	0	0	6
		% within faculty	50.0%	14.3%	33.3%	0.0%	0.0%	0.0%	0.0%	19.4%
Total		Count	2	14	9	2	2	1	1	31
		% within faculty	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The crosstabulation analyzing the place people go to get burgers and demographic variables such as age group, gender, ethnicity, and faculty can provide valuable insights into the preferences of different groups regarding burger options.

Looking at age groups, the data shows that most respondents across all age groups preferred fast-food chains. However, 35.5% of students across the age group favored hawker stalls, while only 19.4% preferred cafes and restaurants.

Regarding gender, both males and females showed a preference for fast-food chains with 44.4% and 46.2% respectively, but a higher percentage of females (38.5%) chose hawker stalls than males (33.3%). Cafes and restaurants were not as popular among either gender with just 19.4%.

Examining preferences by ethnicity, Malays has equal preferences of hawker stalls and fast-food chains with 38.9%, while 60% of Chinese respondents favored fast-food chains. Cafes and restaurants were chosen by a small percentage of respondents across all ethnicities.

However, by faculty, respondents from Business and Economics (50%), Medicine (50%), and FSKTM (100%) faculties preferred fast-food chains, while those from Arts and Social Sciences (50%), Engineering (33.3%), and Science (50%) faculties favored hawker stalls. Cafes and restaurants were chosen by some respondents from Arts and Social Sciences (50%) and Engineering (33.3%) faculties, while other respondents among other faculties did not show a strong preference for any particular option and have varied preferences of place to get their burgers.

Analysis on ordinal data: Factors are most important when considering a burger from a fast-food chain? (Rank from 1 to 6, with 1 being the most important and 6 being the least important)

factor_1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	taste	14	45.2	45.2	45.2
	price	8	25.8	25.8	71.0
	nutrition	1	3.2	3.2	74.2
	waiting time	3	9.7	9.7	83.9
	distance from your location	3	9.7	9.7	93.5
	availability of discounts/coupons	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

factor_2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	taste	8	25.8	25.8	25.8
	price	12	38.7	38.7	64.5
	nutrition	1	3.2	3.2	67.7
	waiting time	7	22.6	22.6	90.3
	distance from your location	3	9.7	9.7	100.0
	Total	31	100.0	100.0	

factor_3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	taste	2	6.5	6.5	6.5
	price	8	25.8	25.8	32.3
	nutrition	4	12.9	12.9	45.2
	waiting time	7	22.6	22.6	67.7
	distance from your location	8	25.8	25.8	93.5
	availability of discounts/coupons	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

factor_4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	taste	5	16.1	16.1	16.1
	price	2	6.5	6.5	22.6
	nutrition	5	16.1	16.1	38.7
	waiting time	12	38.7	38.7	77.4
	distance from your location	5	16.1	16.1	93.5
	availability of discounts/coupons	2	6.5	6.5	100.0
	Total	31	100.0	100.0	

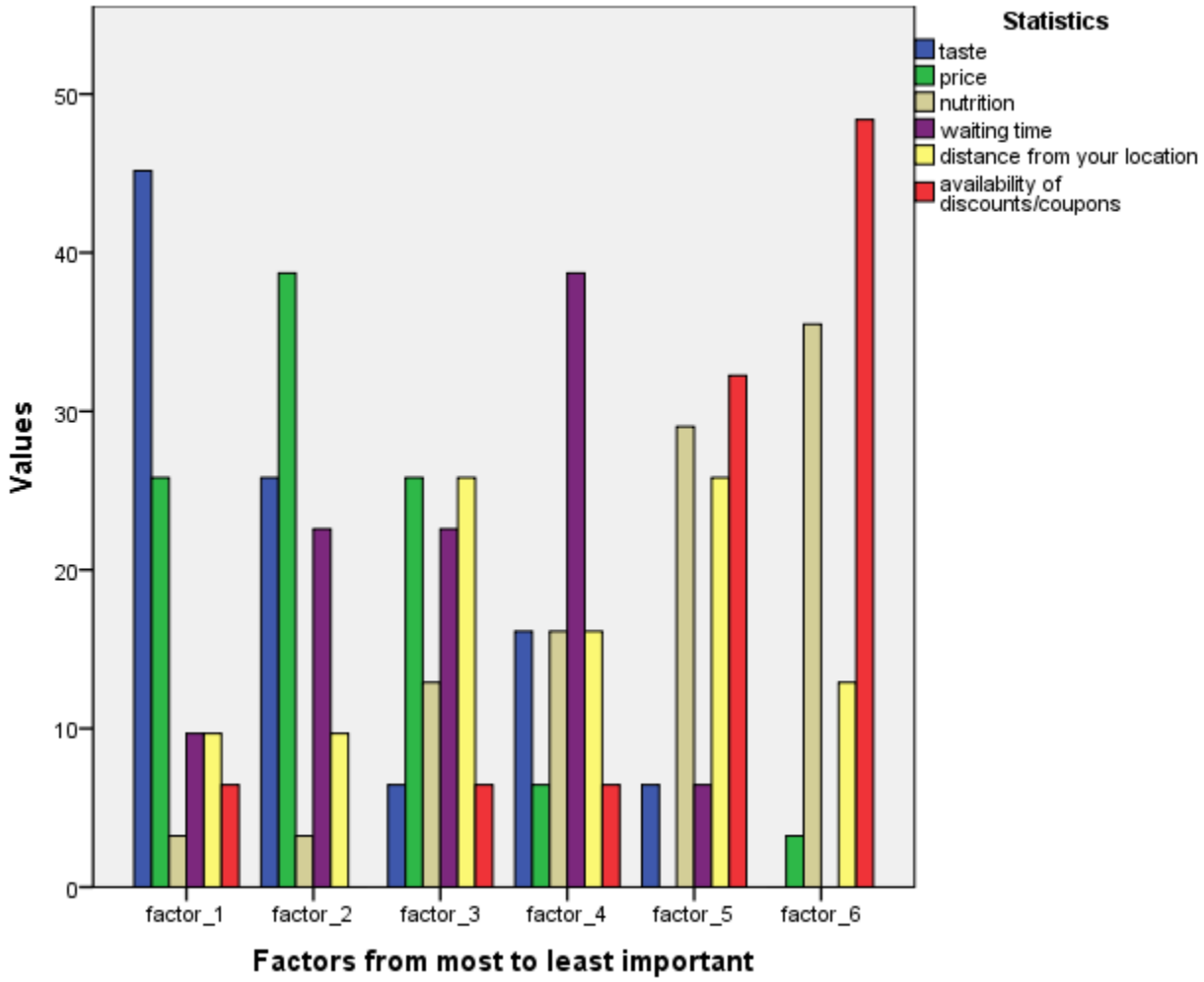
factor_5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	taste	2	6.5	6.5	6.5
	nutrition	9	29.0	29.0	35.5
	waiting time	2	6.5	6.5	41.9
	distance from your location	8	25.8	25.8	67.7
	availability of discounts/coupons	10	32.3	32.3	100.0
	Total	31	100.0	100.0	

factor_6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	1	3.2	3.2	3.2
	nutrition	11	35.5	35.5	38.7
	distance from your location	4	12.9	12.9	51.6
	availability of discounts/coupons	15	48.4	48.4	100.0
	Total	31	100.0	100.0	

	factor_1	factor_2	factor_3	factor_4	factor_5	factor_6
taste	45.2%	25.8%	6.5%	16.1%	6.5%	0.0%
price	25.8%	38.7%	25.8%	6.5%	0.0%	3.2%
nutrition	3.2%	3.2%	12.9%	16.1%	29.0%	35.5%
waiting time	9.7%	22.6%	22.6%	38.7%	6.5%	0.0%
distance from your location	9.7%	9.7%	25.8%	16.1%	25.8%	12.9%
availability of discounts/coupons	6.5%	0.0%	6.5%	6.5%	32.3%	48.4%



The table and bar chart presents the distribution of respondents' preferences for various factors when considering where to get a burger. The factors, labeled as factor_1 to factor_6, are ranked in order of importance, with factor_1 being the most important and factor_6 being the least important.

Analyzing the table by factor, we can gain valuable insights into the factors that influence respondents' decision-making process when choosing a place to get a burger.

Factor_1, representing the most important factor, stands out with the highest percentage in most rows. For instance, in the “taste” row, factor_1 has a percentage of 45.2%. This indicates that taste is of utmost importance to respondents when deciding where to get a burger. The high percentage in this category emphasizes that the quality and flavor of the burger play a significant role in their decision-making process.

Factor_2, which represents the second most important factor, “price” holds the highest percentage in most rows with 38.7%. This suggests that factors closely related to price, such as the price of the burger and the value for money are significant considerations for respondents.

Factor_3, ranking as the third most important factor, “price” and “distance” from respondents’ location have relatively higher percentages with 25.8% compared to the other factors. This indicates that factors related to distance particularly, where people often seek out options that are easily accessible and nearby, have moderate influence on respondents' decision-making process when it comes to getting a burger.

Factor_4, representing the fourth most important factor, with 38.7% holds moderate percentages across the rows which is waiting time to get a burger. This suggests that waiting time is moderately influential in respondents' decision-making process. Waiting time becomes particularly important for individuals who are constrained by time, mostly students with tight schedules.

Factor_5, the fifth most important factor, shows varying percentages across the rows. Notably, it has the highest percentage in the “nutrition” and “availability of discounts” row with 29% and 32.3%, indicating that for some respondents, factors related to the nutritional

value of the burger, such as the use of organic ingredients or healthier cooking methods, play a more significant role in their decision-making process.

Lastly, factor_6, the least important factor, goes to “availability of discounts” rows with 48.4%. This implies that factors related to factor_6, such as the availability of discounts, promotional offers, or loyalty programs, have the least impact on respondents' decision when choosing where to get a burger.

CORRELATION ANALYSIS BETWEEN AGE, GENDER AND FREQUENCY BURGERS EAT PER MONTH.

burgerspermonth * agegroup Crosstabulation

			agegroup			
			18-20 years old	21-25 years old	26-30 years old	Total
burgerspermonth	Rarely (1-3 times)	Count	0	19	1	20
		% within agegroup	0.0%	67.9%	50.0%	64.5%
	Occasionally (4-6 times)	Count	1	9	1	11
		% within agegroup	100.0%	32.1%	50.0%	35.5%
Total		Count	1	28	2	31
		% within agegroup	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.139[a]	2	.343
Likelihood Ratio	2.387	2	.303
Linear-by-Linear Association	.179	1	.672
N of Valid Cases	31		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .35.

Crosstabulation between the variable “burgerspermonth” and “agegroup” provides information on the frequency of burger consumption in different age groups. The table shows the number and percentage distribution within each age group. Of those aged 18-20, no one reported consuming burgers rarely (1-3 times) per month. However, one person (100% within the age group) reported consuming burgers occasionally (4-6 times) per month. In the 21-25 age group, 19 individuals (67.9% within the age group) reported rarely eating burgers, while 9 individuals (32.1% within the age group) reported occasionally

eating burgers. In the 26-to 30-year- old age group, one person (50.0% in the age group) reported rarely eating burgers, and one person (50.0% in the age group) reported occasionally eating burgers. Overall, of the total sample of 31, one person (3.2% of the total) reported eating burgers occasionally, and 20 people (64.5% of the total) reported eating burgers infrequently. It is important to note that the percentages within each age group add up to 100%, indicating the distribution of frequency of burger consumption within each age group. These results indicate that most individuals in the sample, regardless of age group, reported consuming burgers infrequently, with a higher prevalence in the younger age groups (18-20 years and 21-25 years).

The chi-square tests were conducted to examine the association between the variables “burgerspermonth” and “agegroup”. The table contains the test statistics, degrees of freedom (df) and the asymptotic significance values for each test. The Pearson Chi-Square test yielded a value of 2.139 with 2 degrees of freedom, resulting in an asymptotic significance value of 0.343. The likelihood ratio test yielded a value of 2.387 with 2 degrees of freedom, leading to an asymptotic significance value of 0.303. Finally, the linear-by-linear association test yielded a value of 0.179 with 1 degree of freedom, leading to an asymptotic significance value of 0.672. Based on the significance values, none of the chi-square tests produced a statistically significant result at the usual significance level ($\alpha = 0.05$). The significance value (p-value) for the Pearson Chi-Square is greater than 0.05, indicating that the associations observed between the variables “burgerspermonth” and “agegroup” are not statistically significant at the 0.05 level. This indicates that there is not enough evidence to conclude a significant relationship between the variables “burgerspermonth” and “agegroup”.

burgerspermonth * gender Crosstabulation

			gender		
			Female	Male	Total
burgerspermonth	Rarely (1-3 times)	Count	10	10	20
		% within gender	76.9%	55.6%	64.5%
	Occasionally (4-6 times)	Count	3	8	11
		% within gender	23.1%	44.4%	35.5%
Total		Count	13	18	31
		% within gender	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.505[a]	1	.220		
Continuity Correction[b]	.717	1	.397		
Likelihood Ratio	1.548	1	.213		
Fisher's Exact Test				.275	.200
Linear-by-Linear Association	1.457	1	.227		
N of Valid Cases	31				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.61.

b. Computed only for a 2x2 table

To analyze the relationship between “burgerspermonth” and “gender”, we can refer to the crosstabulation table. The table displays the frequency and percentage distribution of burger consumption categories ("Rarely" and "Occasionally") based on gender. In the “Rarely (1-3 times)” category, there were a total of 20 respondents. Among them, 10 were female, representing 76.9% of the female respondents, and 10 were male, representing 55.6% of the male respondents. In the “Occasionally (4-6 times)” category, there were a total of 11 respondents. Among them, 3 were female, accounting for 23.1% of the female respondents, and 8 were male, accounting for 44.4% of the male respondents. Examining the overall distribution, out of the total 31 respondents, the “Rarely” category accounted for 64.5% of the total respondents. The “Occasionally” category constituted 35.5% of the total respondents.

A chi-square test can be used to determine the statistical significance of the association between “burgerspermonth” and “gender”. The chi-square test determines whether a significant association exists between categorical variables. The test findings provide a p-

value, which reflects the likelihood of the observed data assuming no association between the variables. The table includes statistical information such as the test statistic, degrees of freedom (df), and asymptotic significance level. The Pearson Chi-Square test statistic is 1.505 with 1 degree of freedom. The p-value for asymptotic significance is 0.220. The likelihood ratio test, on the other hand, yields a test statistic of 1.548 and a p-value of 0.213. The p-values show the likelihood of seeing the data or more severe outcomes if there was no correlation between the variables. The p-values in this instance (0.220 and 0.213) are higher than the usual 0.05 level of significance. Based on the data given, we could make the conclusion that the chi-square tests did not provide any statistically significant evidence that “burgerspermonth” and “gender” are correlated.

KENDALL’S W TEST FOR FACTORS’ RANK

Ranks

	Mean Rank
factor_1	2.32
factor_2	2.52
factor_3	3.55
factor_4	3.52
factor_5	4.42
factor_6	4.68

Test Statistics

N	31
Kendall's W[a]	.262
Chi-Square	40.641
df	5
Asymp. Sig.	.000

a. Kendall's Coefficient of Concordance

The ranking of the factors, based on their importance in determining burger preferences, was determined by Kendall's Coefficient of Concordance Test. The mean ranks for the factors were as follows: factor_1 (2.32), factor_2 (2.52), factor_3 (3.55), factor_4 (3.52), factor_5 (4.42) and factor_6 (4.68). These rankings indicate the observed importance of each factor, with a lower mean indicating higher importance.

Kendall's Coefficient of Concordance (Kendall's W) measures the degree of agreement between the rankings. The calculated value of Kendall's W test is 0.262. This indicates moderate agreement between the rankings, which means that there is some agreement on the relative importance of the factors.

To assess the statistical significance of the observed agreement, a Chi-Square test was performed. The Chi-Square test statistic was calculated as 40.641, with 5 degrees of freedom. The associated p-value was determined to be 0.000, which is below the statistical significance level of 0.05. This indicates strong evidence against the null hypothesis and suggests that the observed agreement among the rankings is statistically significant.

The results of the analysis indicate that there is significant agreement between respondents on the importance of the factors in determining burger preferences. The probability of such an agreement being due to chance alone is very low. Therefore, we can have confidence in the reliability and validity of the rankings.

The rankings provide valuable insights for decision-making processes. Factor_1 turns out to be the most important factor, followed by factor_2, factor_3, factor_4, factor_5, and finally factor_6. These results suggest that factors related to taste, price, nutrition, waiting time, distance from the location and availability of discounts/coupons respectively, play a different role in influencing burger preferences.

CONCLUSION

In conclusion, the analysis of the data provided has produced insightful conclusions regarding the factors that influence burger preferences among the surveyed individuals. The findings shed light on various aspects, including age group, gender, faculty relationship, and the ranking of factors influencing burger preferences. These insights can be valuable for businesses and marketers in the burger industry, helping them understand consumer behavior and make informed decisions to cater to their target audience effectively.

The analysis revealed that age group plays a role in burger consumption patterns, with the 21-25 years old age group reporting the highest frequency of burger consumption. Gender also showed some differences, with females having a higher percentage of respondents consuming burgers rarely, while males had a higher percentage of occasional consumers. These findings suggest that age and gender can influence burger consumption habits to some extent.

The crosstabulation between burger place preference and faculty affiliation indicated variations in preferences among different faculties. Fast-food chains were the preferred choice among the Business and Economics, Engineering, and Medicine faculties. On the other hand, hawker stalls were popular among the Arts and Social Sciences, Science, and FSKTM faculties. These findings indicate that faculty relationships may play a role in shaping the choice of burger place.

The analysis ranked the factors influencing burger preferences based on their importance. Taste emerged as the most crucial factor, followed by price, nutrition, waiting time, distance from location, and availability of discounts/coupons. This suggests that the sensory experience of taste holds significant importance in determining burger preferences. Businesses in the burger industry can prioritize enhancing the taste of their offerings to attract and retain customers.

The statistical significance of the observed relationships was assessed through Chi-Square tests and Kendall's Coefficient of Concordance test. While no significant associations were found between age group, gender, and faculty affiliation, the Kendall's Coefficient of

Concordance test revealed a moderate level of agreement among the ranks of factors. The associated chi-square test confirmed the statistical significance of this agreement.

Finally, this analysis provides valuable insights for businesses and sellers operating in the burger industry. By understanding the factors that influence consumer preferences, businesses can develop targeted marketing strategies, improve product offerings, and enhance customer satisfaction. Emphasizing taste, addressing price concerns, and considering factors like nutrition, waiting time, distance from location, and availability of discounts/coupons can help businesses tailor their offerings to meet consumer demands effectively.

REFERENCES

Cheong Siew Man, Lim Kuang Hock, Chan Ying Ying, Kee Cheok Cheong, Lim Kuang Kuay, Teh Chien Huey, Azli Baharudin, & Nur. (2021). *Is fast-food consumption a problem among adolescents in Malaysia? An analysis of the National School-Based Nutrition Survey, 2012*. *40*(1). https://doi.org/10.1186/s41043-021-00254-x

Cheong Siew Man, Lim Kuang Hock, Chan Ying Ying, Kee Cheok Cheong, Lim Kuang Kuay, Teh Chien Huey, Azli Baharudin, & Nur. (2021). *Is fast-food consumption a problem among adolescents in Malaysia? An analysis of the National School-Based Nutrition Survey, 2012*. *40*(1). https://doi.org/10.1186/s41043-021-00254-x

Fryar, C., Hughes, J., Herrick, K., & Ahluwalia, N. (2018). Fast Food Consumption Among Adults in the Key findings Data from the National Health and Nutrition Examination Survey. *NCHS Data Brief* ■, *322*. https://www.cdc.gov/nchs/data/databriefs/db322-h.pdf

Hesamedin Askari Majabadi, Mahnaz Solhi, Montazeri, A., Davoud Shojaeizadeh, Nejat, S., Farideh Khalajabadi Farahani, & Abolghasem Djazayeri. (2016). *Factors Influencing Fast-Food Consumption Among Adolescents in Tehran: A Qualitative Study*. *18*(3). https://doi.org/10.5812/ircmj.23890

Li, L., Sun, N., Zhang, L., Xu, G., Liu, J., Hu, J., Zhang, Z., Lou, J., Deng, H., Shen, Z., & Han, L. (2020). *Fast food consumption among young adolescents aged 12–15 years in 54 low- and middle-income countries*. *13*(1), 1795438–1795438. https://doi.org/10.1080/16549716.2020.1795438

Nora Abdullah AlFaris, Jozaa Zaidan ALTamimi, Aljobair, M. O., & Al-Shwaiyat, N. M. (2015). *Trends of fast food consumption among adolescent and young adult Saudi girls living in Riyadh*. *59*(1), 26488–26488. https://doi.org/10.3402/fnr.v59.26488

Tok Chen Yun, Siti Aqlima Ahmad, & Koh, D. (2018). *Dietary Habits and Lifestyle Practices among University Students in Universiti Brunei Darussalam*. *25*(3), 56–66. https://doi.org/10.21315/mjms2018.25.3.6

Tok Chen Yun, Siti Aqlima Ahmad, & Koh, D. (2018). *Dietary Habits and Lifestyle Practices among University Students in Universiti Brunei Darussalam*. *25*(3), 56–66. https://doi.org/10.21315/mjms2018.25.3.6