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Market Acceptability of Dim Sum Among College Students in Iligan City

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ABSTRACT

This study examined the market acceptability of siomai, siopao, and xiao long bao among college students in Iligan City. The research aimed to identify students' preferences, consumption patterns, and the factors influencing their acceptance of dim sum products in terms of affordability, accessibility, taste, aroma, texture, and visual appearance. The study utilized a quantitative-descriptive and inferential research design with survey questionnaires adapted from the Usage, Attitude, and Image (UAI) framework. A total of 224 college students from different colleges in Iligan City were selected through stratified random sampling. Data were analyzed using descriptive statistics, correlation analysis, and Independent Samples t-test through Jamovi software. Findings revealed that most respondents were female, aged 19 years old, and had weekly food allowances ranging from P 500– P 1,000. Among the three dim sum products, siopao emerged as the most preferred, while xiao long bao was the least preferred. Most students consumed dim sum two to three times a week, with three to four pieces being the common serving size. In terms of acceptability, taste received the highest positive evaluation, followed by texture, smell, and visual appearance. Correlation analysis showed significant positive relationships among sensory attributes, indicating that students who highly rated one attribute also tended to rate the others positively. Furthermore, the Independent Samples t-test revealed that male and female respondents differed significantly only in their evaluations of smell and visual appearance, while affordability, accessibility, taste, and texture showed no significant differences. The study concludes that dim sum products, particularly siopao, have high market acceptability among college students in Iligan City. Sensory attributes, especially taste, play an important role in influencing students' preferences and purchasing behavior. The findings also suggest the potential for introducing healthier and affordable dim sum alternatives that meet students' demands for convenience, accessibility, and nutritional value.

INTRODUCTION

Dim sum is a traditional Cantonese meal that features a wide variety of seafood, meat, and vegetable dishes prepared through steaming, frying, or baking. Historical accounts trace its origins to Guangdong, Southern China more than 2,500 years ago. In the Philippines, its market acceptability is remarkably high. According to (Abeabe *et al.*, 2025), dishes such as siopao and siomai have become staples among students, largely due to their affordability and convenience. These snacks are budget-friendly and widely embraced as part of Filipino food culture. Over time, they have been localized to the point that many students perceive them as everyday Filipino cuisine. Their accessibility further adds to their popularity, as vendors frequently sell them just outside school premises, making them easy to grab between classes or on the way home. Pop-up stalls and temporary food booths also help sellers test their products before committing to long-term retailing (Tan, Gabrielle, *et al.*, 2025). This combination of low cost, cultural familiarity, and availability has cemented their place as a preferred affordable food option for the student population. This research focuses on college students in Iligan City, who have diverse food preferences. Eating out has become part of the

modern lifestyle, combining food with social and leisure experiences, but Iligan City college students often rely on weekly allowances, prompting them to choose meals that are affordable. While dim sum is popular for its affordability and convenience, most options available to students are low in nutritional value. This highlights the need to explore healthier alternatives, such as plant-based, low-carb dim sum, that can maintain cultural familiarity while promoting better student health. In the evolving landscape of the Philippine food industry, dim sum has transitioned from a niche culinary specialty into a ubiquitous staple of the “grab-and-go” dining sector (Tacardon *et al.*, 2023). This literature review evaluates the market acceptability and consumer usage of siomai, siopao, and xiao long bao within the specific context of the Iligan City Colleges campus. The scope of this review encompasses global and local research published between 2019 and 2026, focusing on the shifting dietary habits of university students and the logistical factors that influence food choice in a high-pressure academic environment. In the study of (Stone *et al.*, 2020) humans are naturally born with senses that allow us to see, smell, taste, and feel, unless affected by certain genetic conditions. Because of this, identifying the sensory and chemical

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factors that strongly influence consumer preferences and buying intentions can provide major advantages for a company and its brands. According to (Ueda *et al.*, 2020), many people consider that taste is the most important sensory factor influencing food consumption. The taste of food determines satisfaction and enjoyment, while its appearance creates the first impression that attracts consumers and affects their expectations. Consumers often use color and appearance as the first basis for judging the quality of fruits and vegetables, and these factors can greatly influence their food choices and purchasing decisions (Carneiro *et al.*, 2022). In the food industry, appealing presentation and delicious flavor play a significant role in gaining customer acceptance and preference. Consumers are more likely to purchase and recommend food products that look appetizing. Beyond the influence of flavor and visual appeal, aroma serves as a fundamental sensory pillar that shapes dietary selections and triggers specific cravings by engaging the olfactory receptors (Chen *et al.*, 2023; Forde & de Graaf, 2022). Additionally, the physical mouthfeel of a product is instrumental in determining student preferences and ultimate buying intentions, providing a foundation for oral engagement, satiety, and immediate consumer anticipation (Baingana, 2024; Forde & de Graaf, 2022). Within the competitive culinary sector, an attractive aesthetic and savory profile are vital for securing widespread market approval and favor. (Caivano & Lopez, 2021) stated that each of these attributes changes differently over time and during processing, and together they shape our overall expectations and perception of the food we consume. This study evaluates the market acceptability of siomai, siopao, and xiao long bao among the student population of Iligan City Colleges. The research aims to identify which specific dim sum product is most desired and what features would make it successful within the campus market. Specifically, the study seeks to answer the following:

What is the demographic profile of Iligan City College students in terms of:

- Age
- Sex assigned at birth
- Weekly food allowance

What are the current preferences and consumption patterns regarding the three dim sum varieties in terms of:

- Product preference: Which specific product (siomai, siopao, or xiao long bao) is most preferred by the students?
- Frequency and quantity: How often and in what amount (e.g., pieces per serving) is the preferred product consumed?
- Motivations: Primary reasons for choosing one variety over the others

How acceptable are these dim sum varieties based on the following attributes

- Sensory attributes: taste, aroma, texture, and visual

appearance

What are the students' specific feedback and sentiments regarding current dim sum offerings near the campus in terms of:

- Likes and dislikes: specific features they appreciate or find unappealing
- Common complaints: frequent issues with product quality, availability, or service
- Desired features: specific fillings, sauces, or improvements they want to see

Based on the findings, which specific dim sum product should be prioritized, and what are the ideal features required to meet the demands of the Iligan City College student market?

Majority of college students relocate near the university to save on transportation costs, as many live far from campus. However, most of these students lack the ability to cook for themselves and have limited access to cooking facilities. This often prompts them to rely on easily accessible food options available on or near campus, such as fast food, fried meals, and street foods, as noted by (Ascencio-López *et al.*, 2025). According to (Engström *et al.*, 2021), food accessibility is an important factor in consumer behavior because people's purchases are shaped not only by preference, but also by whether food is physically available, affordable, and convenient to obtain. Food accessibility affects what consumers can realistically buy and eat. One study found that perceived accessibility was a key factor in choosing food from small local shops. (Haynes-Maslow *et al.*, 2020). Consumer behavior is influenced by practical constraints such as budget, time, habit, and the surrounding environment, not just taste or awareness. A lack of nearby healthy options can shift buying patterns toward more available convenience foods, while better access can support healthier choices. In other words, accessibility can shape both what people buy and how often they buy it, as understood in the study of (Lee, D. E., & Kim, K., 2022). In Iligan City, food options vary, with some being healthy and nutritious while many others are not. The majority of meals sold in food courts, canteens, and street stalls are fried and fatty, which raises concerns about student health. Access to affordable, nutritious, and good-quality food should be the norm in every university, as it supports both physical well-being and mental health. Affordability plays a major role in influencing the food choices of college students. Since many college students manage their financial expenses with limited weekly allowances, they tend to prioritize meals that are low in protein and affordable but can satisfy their hunger. Dim sum products such as siomai, siopao, and xiao long bao have gained popularity among students due to their affordability, convenience, and ability to satiate hunger for a much lower price than typical fast-food meals. Their low price allows students to maximize their budget while still enjoying affordable but delicious meals. In addition, these products are readily available near school premises.

According to (Racine *et al.*, 2022), students' food choices in college are greatly influenced by the campus food environment, where affordability, accessibility, and limited time encourage the consumption of fast and ready-to-eat meals. Students often purchase food that is both affordable and worth the cost, which highlights the importance of affordability in consumption behavior. Furthermore, product promotion plays an important role in marketing because it helps attract target customers and build relationships with consumers (Tan *et al.*, 2025). Therefore, offering affordable but healthier dim sum alternatives may increase acceptance among college students while addressing concerns about their nutrition and well-being.

MATERIALS AND METHODS

Research Design

The study adopted an inferential analysis and quantitative-descriptive research design using a survey questionnaire as the primary data collection tool. It aims to evaluate the market acceptability of dimsum among the students of Iligan City Colleges. The descriptive method was used to describe and summarize the students' opinions, attitude, and preferences regarding dim sum products. It also helped identify the trends and patterns in their consumption behavior. Meanwhile the inferential method was used to analyze relationships and determine significant findings based on the data collected. Through this research design, the researchers were able to assess the level of market acceptability of dimsum products such as Siomai, Siopai and Xiao Long Bao among college students in Iligan City. By examining the differences in students' demographic profile, such as; age, sex assigned at birth, and weekly food allowance. This study was able to determine how these factors influence their preferences and purchasing behavior toward dim sum products. The design also allowed the researchers to identify whether affordability, accessibility, and sensory attributes (taste, aroma, texture, and appearance) significantly affect the level of acceptability. Furthermore, the combination of descriptive and inferential approaches provided both a comprehensive overview of consumption trends and a statistical basis for drawing meaningful conclusions. This methodological framework ensured that the study did not merely describe the popularity of dim sum among Iligan City college students but also established correlations and differences between groups, thereby offering insights into the potential success of introducing or expanding dim sum products within the market in Iligan City.

Participants and Sampling Technique

The participants of this study were students enrolled in various colleges within Iligan City. To ensure representativeness, the researchers employed stratified random sampling, wherein the population was divided into strata based on college affiliation. From each stratum, students were randomly selected, giving all individuals an

equal chance of inclusion regardless of their program or department. This approach minimized sampling bias and ensured that the perspectives of students across different colleges were adequately represented. By using this technique, the study was able to capture a more reliable and generalizable picture of the student body's preferences toward dim sum products. The researchers targeted approximately 224 respondents, a sample size determined using a 95% confidence level and a 2.83% margin of error, thereby strengthening the validity of the findings and supporting accurate statistical analysis.

Research Instrument

This study employed a structured survey questionnaire adapted from the Usage, Attitude, and Image (UAI) framework. The questionnaire consisted of both open-ended and close-ended questions designed to assess the students' awareness, preferences, and perceptions regarding dim sum products. The questionnaire included sections about the respondents demographic profile, consumption behavior, product preferences, and overall product image. Likert-scale questions were also used to measure the respondents level of agreement and attitude toward different aspects of dim sum products. The questionnaire mainly specified products such as siomai, siopao and xiao long bao. Before the actual distribution of the questionnaire, a pilot study was carried out with a small group of participants to evaluate the effectiveness of the research instrument in a practical setting. This preliminary testing allowed the researchers to identify potential problems and refine the questionnaire, ensuring its clarity, relevance, and suitability before proceeding with the full-scale data collection. This process ensured that the research instrument was understandable, reliable and appropriate for the actual respondents of the study. The researchers also employed Inferential statistics analysis to interpret the gathered data. Correlation and regression was used to predict consumer preferences and market trends through surveys. Correlation measures the strength and direction of the relationship between two variables, while regression models the relationship between a dependent variable and one or more independent variables to make predictions. (Yadav, R. S., 2025). And the Independent Samples t-test to examine whether the respondents' demographic profiles served as significant factors influencing their perceptions and acceptability of dim sum products. This test was particularly useful in comparing the mean responses between independent groups, such as male and female students. (Mohammad, R. A., 2016). By applying the t-test, the researchers were able to determine if observed differences in attitudes, preferences, or consumption behavior across demographic categories were statistically significant rather than due to chance. The use of the t-test strengthened the inferential aspect of the study by providing evidence on whether demographic variables meaningfully affected the level of market acceptability of

products such as siomai, siopao, and xiao long bao. This allowed the researchers to draw more precise conclusions about the role of student characteristics in shaping food preferences and purchasing decisions. This study also used Jamovi as a tool in interpreting data. According to (Calle, Alejandro *et al.*, 2024; Şahin and Aybek, 2020), students using Jamovi showed better performance compared to those using MS Excel, supported by descriptive analysis and hypothesis testing. Jamovi facilitated the teaching and learning process of statistics that helps researchers analyze data fast. Apart from those, this study also employed Descriptive Statistics in determining the preferences of targeted customers. Previous studies used this analysis to identify the behaviors of customers. For instance, in the study of (Mohammad, Abdelkhair, *et al.*, 2024) explored the significance of descriptive statistics in behavior analysis by pinpointing the primary factors influencing consumer choices and assessing how consumer behavior shapes market dynamics. The research methodology involved primary data collection through a structured survey spanning followed by thorough data analysis using descriptive statistics including mean, median, mode, standard deviation, and frequency distributions. This study contributes to a deeper understanding of consumer behavior and emphasizes the actionable nature of descriptive statistics in shaping effective marketing strategies. This current study builds upon these established methodologies by applying the same techniques and approaches to interpret gathered data and draw conclusions about the customer preferences in the dimsum products.

Data Gathering Procedure

The researchers gathered the data through both online and face-to-face survey distribution. Online questionnaires were distributed using Google forms, while printed questionnaires were personally distributed using pen-and-paper to random students throughout different colleges in Iligan City. Students were briefed on the study's purpose and assured of the confidentiality and anonymity of their responses. Participants were instructed to answer honestly based on a Likert scale, ranging from "Strongly Disagree" to "Strongly Agree" for each factor. The completed questionnaires were collected and subsequently reviewed to determine whether respondents had answered "No" to the screening question: "Do you eat or have you tried dim sum (e.g., siopao, siomai, xiaolongbao)?" Using both methods allowed the researchers to gather more respondents and made data collection more efficient and accessible.

Data Analysis Procedure

After gathering the data, the researchers encoded and organized the data using Microsoft Excel. The data were then transferred to Jamovi for further statistical analysis. Both descriptive and inferential statistical tools were used in interpreting the collected data. Descriptive statistics

such as frequency counts, percentages weighted mean, and ranking were utilized to summarize and describe the students' responses regarding the market acceptability of dim sum products. Inferential statistics were also applied to determine significant relationships and finding within the gathered data. The statistical methods helped the researchers better understand the students preferences, attitudes, and overall acceptance of dim sum products. Inferential statistics were applied to determine significant relationships and differences within the data. Specifically, the Independent Samples t-test was used to examine whether demographic variables, such as sex, influenced students' perceptions and acceptability of dim sum products. This test enabled the researchers to compare the mean responses between independent groups (male and female students) and to evaluate whether the observed differences in affordability, accessibility, and sensory attributes (taste, aroma, texture, and appearance) were statistically significant rather than attributable to random variation. The use of both descriptive and inferential methods ensured that the study did not merely describe the popularity of dim sum but also provided a statistical basis for conclusions. This approach made the results more reliable and provided useful understanding into how affordability, accessibility, and sensory attributes (taste, aroma, texture, and appearance) shaped the overall market acceptability of products

Ethical Considerations

The researchers ensured that ethical standards were observed throughout the duration of the study. Participation in the survey was voluntary and respondents were informed about the objectives and purpose of the research before answering the questionnaire. The researchers also assured the respondents that their identities and personal information would remain confidential. All information gathered from the respondents was treated with privacy and used strictly for academic purposes only.

Hypothesis of the Study

H1: Affordability significantly affects the level of acceptability of dim sum products among college students.

H2: Accessibility significantly affects the level of acceptability of dim sum products among college students.

H3: Taste significantly affects the level of acceptability of dim sum products among college students.

H4: Aroma significantly affects the level of acceptability of dim sum products among college students.

H5: Texture significantly affects the level of acceptability of dim sum products among college students.

H6: Appearance significantly affects the level of acceptability of dim sum products among college students.

Table 1: Summary of Hypotheses and Corresponding Paths

Hypothesis	Path
H1	Affordability does not significantly affect the level of acceptability of dim sum products among college students.
H2	Accessibility does not significantly affect the level of acceptability of dim sum products among college students.
H3	Taste does not significantly affect the level of acceptability of dim sum products among college students.
H4	Aroma does not significantly affect the level of acceptability of dim sum products among college students.
H5	Texture significantly affects the level of acceptability of dim sum products among college students.
H6	Appearance significantly affects the level of acceptability of dim sum products among college students.

RESULTS AND DISCUSSION

Descriptive Results

This section of the paper presents the results and discussions answering the study's statement of the

problem. The demographic characteristics and statistics, how often and how many pieces consumed, preference towards dimsum products, acceptable in terms of (smell, taste, texture, visual appearance), desired feature.

Table 2: Demographics Characteristics and Statistics (N=225)

Characteristics	Category	Frequency	Percent
Sex	Male	94	41.96%
	Female	130	58.04%
Age	18	46	20.54%
	19	94	41.96%
	20	26	11.61%
	21	33	14.73%
	22	14	6.25%
	23	4	1.79%
	24	5	2.22%
	25	1	0.45%
	27	1	0.45%
Weekly Food allowance	Less than P 500	81.0	36.2%
	P 500– P 1,000	86.0	38.4%
	P 1,001– P 1,500	31.0	13.8%
	P 1,501– P 2,000	13.0	5.8%
	More than P 2,000	13.0	5.8%

Table 2 presents the demographic profile of the respondents in terms of sex, age, and weekly food allowance. In terms of sex, the majority of the respondents were female with 137 or 58.3%, while 98 or 41.7% were male. This indicates that more female students participated in the study compared to male students. For age, 95 of the respondents were 19 years old or 40.4%, followed by 47 being 18 years old or 20.0%, and 39 respondents who were 21 years old or 16.6%. The least represented ages were 25 and 27 years old with only 1 respondent each or 0.4%. This shows that

the respondents were mostly within the typical college-age range. In terms of weekly food allowance, the largest group of respondents had a weekly allowance of P 500– P 1,000 with 86 respondents or 38.4%, followed closely by those with less than P 500 with 81 respondents or 36.2%. Meanwhile, 31 respondents or 13.8% had P 1,001– P 1,500 allowance, while only 13 respondents or 5.8% each had P 1,501– P 2,000 and more than P 2,000. This suggests that most students have a limited weekly food budget, which may affect their food purchasing decisions.

Table 3: Students Preference Towards DimSum Products

Rate	1 (Least Preferred)	2 (Neutral)	3 (Most Preferred)
Siopao	12.0	52.0	160.0
Siomai	29.0	98.0	97.0
Xiaolongbao	56.0	97.0	71.0

Table 3 presents the students' preferences toward different dim sum products, namely siopao, siomai, and xiaolongbao, using a rating scale where 1 represents least preferred, 2 represents neutral, and 3 represents most preferred. Among the three products, siopao emerged as the most preferred dim sum item, with 160 students rating it as "most preferred" and only 12 students rating it as "least preferred." This indicates that siopao is highly favored by the respondents. Siomai received a more

balanced response, with 98 students rating it as neutral and 97 students rating it as most preferred, suggesting that students generally like the product but with less strong preference compared to siopao. Meanwhile, xiaolongbao received the highest number of "least preferred" responses at 56, although some students still rated it as most preferred. Overall, the results indicate that siopao is the most popular dim sum product among students, while xiaolongbao is the least preferred.

Table 4: How often and how many pieces the product consumed

Characteristics	Category	Frequency	Percent
How often	Daily	3.00	1.3%
	2-3 Times a week	68.00	30.4%
	Once a Week	36.00	16.1%
	2 - 3 Times a month	55.00	24.6%
	Rarely	62.00	27.7%
Pieces	1 - 2 Pieces	54.00	24.1%
	3 - 4 Pieces	120.00	53.6%
	5 -6 Pieces	44.00	19.6%
	More than 6 Pieces	6.00	2.7%

Table 4 shows how often students consume dim sum products and how many pieces they usually consume. In terms of frequency, the largest percentage of respondents (30.4%) consume dim sum products two to three times a week, followed by those who rarely consume them (27.7%) and those who consume them two to three times a month (24.6%). Only a small percentage of students (1.3%) reported consuming dim sum daily. These findings suggest that students generally consume dim

sum occasionally or moderately rather than on a daily basis. In terms of quantity consumed, more than half of the respondents (53.6%) usually eat three to four pieces per serving, while 24.1% consume one to two pieces and 19.6% consume five to six pieces. Only 2.7% consume more than six pieces. This indicates that students typically consume dim sum in moderate portions, with three to four pieces being the most common serving size.

Table 5: How acceptable the DimSum Products in terms of (smell,, taste, texture, visual appearance)

Characteristics	Category	Frequency	Percent
Taste	1 Strongly Disagree	2.00	0.9%
	2 Disagree	3.00	1.3%
	3 Agree	32.00	14.3%
	4 Strongly Agree	187.00	83.5%
Smell	1 Strongly Disagree	5.00	2.2%
	2 Disagree	14.00	6.3%
	3 Agree	69.00	30.8%
	4 Strongly Agree	136.00	60.7%
Texture	1 Strongly Disagree	5.00	2.2%
	2 Disagree	19.00	8.5%
	3 Agree	53.00	23.7%
	4 Strongly Agree	147.00	65.6%
Visual Appearance	1 Strongly Disagree	5.00	2.2%
	2 Disagree	25.00	11.2%
	3 Agree	60.00	26.8%
	4 Strongly Agree	134.00	59.8%

Table 5 presents the acceptability of the dim sum products in terms of sensory attribute taste in terms of smell, texture, and visual appearance using a four-point scale ranging from strongly disagree to strongly agree. The results show that the dim sum products were generally well accepted by the respondents in all evaluated characteristics. In terms of taste, the majority of students (83.5%) strongly agreed that the products were acceptable, while only a very small percentage disagreed or strongly disagreed. This indicates that taste is the most highly appreciated characteristic of the dim sum products. For smell, most respondents also gave positive evaluations, with 60.7% strongly agreeing and 30.8% agreeing that the products had an acceptable aroma. Only a few students expressed disagreement, suggesting that the smell of the dim sum products was generally pleasing to the respondents. In terms of texture, 65.6% of the students strongly agreed and 23.7% agreed that the products had an acceptable texture. This implies that the texture of the dim sum products met the expectations and preferences

of most students. For taste, combination flavor received 74 responses, suggesting that some students also favor sauces that blend different tastes. Slightly sweet sauce was preferred by 41 respondents, showing moderate acceptance among the students. On the other hand, only one respondent preferred a slightly sour sauce and another preferred an umami taste, indicating that these flavors are the least desired among the respondents. Overall, the findings suggest that students favor savory and spicy sauce flavors the most, highlighting their preference for rich and strongly seasoned tastes in dim sum sauces. Lastly, for visual appearance, the majority of respondents positively evaluated the products, with 59.8% strongly agreeing and 26.8% agreeing that the dim sum products were visually appealing. Although a small number of respondents disagreed, the findings still indicate that the products were attractive in appearance. Overall, the results reveal that the dim sum products were highly acceptable to the students, particularly in terms of taste, followed by texture, smell, and visual appearance.

Table 6 : Independent sample t-test

		Statistic	df	p	Mean difference	SE difference
B1	Student's t	-1.7234a	222	0.086	-0.11522	0.0669
B2	Student's t	0.5202	222	0.603	0.03290	0.0632
B3	Student's t	-0.0887	222	0.929	-0.00573	0.0646
B4	Student's t	-0.4325	222	0.666	-0.00949	0.0219
Q17	Student's t	0.5025	222	0.616	0.04975	0.0990
Q18	Student's t	1.0040	222	0.316	0.10998	0.1095
Q19	Student's t	-0.1920	222	0.848	-0.02471	0.1287
Q14 (Texture)	Student's t	-1.1853	222	0.237	-0.11948	0.1008
Q14 (Taste)	Student's t	-1.8183a	222	0.070	-0.11980	0.0659
Q14 (Visual Appearance)	Student's t	-2.5599a	222	0.011	-0.26661	0.1041
Q14 (Smell)	Student's t	-2.2939	222	0.023	-0.21997	0.0959

Note. $H_0: \mu_1 = \mu_2$

^aLevene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

Table 6 presents the results of the Independent Samples t-test used to determine whether there is a significant difference between male and female respondents' evaluations of accessibility, affordability, and sensory attributes. Specifically, B1–B4 correspond to four statements under Section B of the questionnaire that measure Accessibility, Q17–Q19 correspond to questions 17 to 19 that measure Affordability, and Q14 corresponds to question 14 that measures Sensory Attributes. Based on the results, variables B1, B2, B3, B4, Q17, Q18, Q19, Q14 (Texture), and Q14 (Taste) have p-values greater than 0.05, which indicates that there is no significant difference between male and female respondents' assessments of these variables. However, Q14 (Visual Appearance) with $p = 0.011$ and Q14 (Smell) with $p =$

0.023 have p-values less than 0.05, indicating a significant difference between male and female respondents' evaluations of these sensory attributes. Therefore, male and female respondents differ significantly only in terms of visual appearance and smell, while their evaluations of accessibility, affordability, texture, and taste are generally similar. Using the Independent Samples t-test, the result shows that sex does not significantly affect buyers' evaluations in B1–B4 and Q17–Q19, including texture and taste, since their p-values are greater than 0.05. However, visual appearance and smell show a significant difference between male and female respondents, indicating that they have different evaluations regarding these sensory attributes.

Table 7: Correlational Results

	B1	B2	B3	B4	Q17	Q18	Q19	Q14 Texture	Q14 Smell	Q14 Visual Appearance	Q14 Taste
B1	—										
B2	0.996 ***	—									
B3	0.993 ***	0.993 ***	—								
B4	0.921 ***	0.924 ***	0.925 ***	—							
Q17	0.048	-0.060	0.129	0.168 *	—						
Q18	-0.078	-0.024	0.151 *	0.103	0.319 ***	—					
Q19	-0.116	0.068	0.029	0.047	0.368 ***	0.543 ***	—				
Q4 (Texture)	0.054	0.005	-0.032	0.031	-0.071	-0.045	-0.031	—			
Q14 (Smell)	0.076	-0.020	-0.033	0.039	-0.086	0.047	-0.030	0.522 ***	—		
Q14 (Visual Appearance)	-0.017	0.005	-0.049	0.084	-0.027	0.064	0.050	0.555 ***	0.511 ***	—	
Q14 (Taste)	0.127	-0.019	0.156 *	-0.103	-0.065	-0.091	-0.150 *	0.347 ***	0.269 ***	0.335 ***	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7 presents the correlation analysis among variables B1–B4, Q17–Q19, and sensory evaluation dimensions of Q14 (Texture, Smell, Visual Appearance, and Taste). The results indicate several statistically significant relationships. The variables B1, B2, B3, and B4 demonstrated very strong positive correlations with one another, with correlation coefficients ranging from $r = .92$ to $r = .99$ ($p < .001$). This suggests that these variables are highly related and may measure closely associated constructs. Among the behavioral or questionnaire variables, Q17 showed a moderate positive correlation with Q18 ($r = .31$, $p < .001$) and Q19 ($r = .36$, $p < .001$), indicating that increases in Q17 are associated with increases in Q18 and Q19. Likewise, Q18 and Q19 were also moderately positively correlated ($r = .54$, $p < .001$). For the sensory evaluation variables under Q14, several significant positive relationships were observed

- Texture was positively correlated with Smell ($r = .52$, $p < .001$) and Visual Appearance ($r = .55$, $p < .001$)
- Smell also showed a significant positive correlation with Visual Appearance ($r = .51$, $p < .001$)
- Taste had significant positive correlations with
 - Texture ($r = .34$, $p < .001$)
 - Smell ($r = .26$, $p < .001$)
 - Visual Appearance ($r = .335$, $p < .001$)

These findings suggest that respondents who rated one sensory attribute highly also tended to rate the other sensory attributes highly, indicating consistency in overall sensory perception. Most other correlations were weak

and non-significant, suggesting limited relationships among those variables. Overall, the analysis reveals strong interrelationships among the B variables and meaningful associations among the sensory evaluation dimensions, particularly between texture, smell, visual appearance, and taste.

CONCLUSION

This study evaluated consumer preferences and sensory acceptability of dim sum among Iligan City College students. The demographic profile is predominantly female (58.3%) and concentrated at 19 years old (40.4%), with 74.9% operating on a restricted weekly budget of $\leq P 1,000$ (37.9% living on $< P 500/\text{week}$). Behaviorally, most students consume dim sum two to three times weekly in portions of three to four pieces. Siopao emerged as the premier choice over Siomai and Xiaolongbao, serving as a convenient, cost-effective meal replacement for students balancing tight schedules and limited spending power. Individual motivations reveal taste as the primary determinant of selection (83.5% strong agreement), paired with an intense preference for spicy, savory, and combination sauces. This prioritization of sensory qualities over structural barriers aligns with research identifying sensory appeal (taste, appearance, smell, texture) as the key driver of convenience food choices in academic environments (Imtiyaz *et al.*, 2021). Correlational analysis shows deeply interconnected sensory attributes: taste maintains a significant positive

correlation with texture ($r = 0.34$, $p < .001$), smell ($r = 0.26$, $p < .001$), and visual appearance ($r = 0.335$, $p < .01$). Consequently, hypotheses stating that Taste (H3), Aroma (H4), Texture (H5), and Appearance (H6) significantly affect acceptability are fully supported. Conversely, Accessibility (H1) and Affordability (H2) are not supported as direct influencers of sensory appreciation, acting instead as external economic constraints bounding purchasing frequency. While independent samples t-tests show male and female students share identical views on affordability, accessibility, taste, and texture, a significant gender difference exists regarding Visual Appearance ($p = 0.011$) and Smell ($p = 0.023$). Supported by Feraco *et al.* (2024), this sensory gap reflects higher female sensitivity to food color and aroma variations. Finally, the strong preference for rich sauce pairings is backed by Siebert *et al.* (2022), noting that regular exposure to savory seasonings structures taste preference acquisition across Asian youth demographics.

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