Evaluating Food Safety Practices of Local Food Stall Vendors in PUP Cabiao: Influence on Students Preference for Choosing Food Vendors

Rosemarie F. Buenafrancisca[1], Aeron M. Delos Santos[2], Armil C. Roque[3]

Bachelor of Science in Business Administration Major in Marketing Management - Polytechnic University of the Philippines – Cabiao Campus, Nueva Ecija

DOI: https://doi.org/10.47772/IJRISS.2026.100400422

Received: 16 April 2026; Accepted: 22 April 2026; Published: 13 May 2026

ABSTRACT

Food vendors near the Polytechnic University of the Philippines (PUP) Cabiao provide affordable and convenient meals for students. The safety of these foods, nonetheless, is highly reliant on the practices of vendors who prepare and serve them. This study examined the food safety practices of these vendors and how such practices influence student preference in choosing where to buy food. In accordance with the FDA Food Code and Theory of Planned Behavior (TPB), the study focused on six key areas: food handling, personal hygiene, food storage and maintenance, sanitation and facility cleanliness, food waste disposal, and compliance with permits and licensing.

Using a descriptive-quantitative design, data were collected from 244 students through a validated survey. Findings indicated that vendors were mostly viewed as meeting basic food safety standards, with the highest ratings given to proper food handling. Personal hygiene and waste disposal, however, showed gaps needing attention. Correlational analysis confirmed that safer and more transparent vendor practices strongly shape student trust, attitudes, and buying behavior.

The study underscores that food safety extends beyond regulatory compliance; it is also a crucial factor in maintaining consumer confidence and upholding the livelihoods of vendors. Ensuring that vendors are equipped with enough knowledge, training, and accountability mechanisms is essential to protect public health while promoting the long-term viability of small food businesses. Additionally, enhancing cooperation among vendors, schools, and health authorities can build shared responsibility in establishing a culture of safe and responsible food practices around the campus.

INTRODUCTION

The Polytechnic University of the Philippines (PUP) – Cabiao Campus is an educational institution where students often rely on local food stalls for affordable and convenient meal options. For this reason, ensuring food safety is a crucial aspect that must be addressed and understood. Improper food safety practices can lead to foodborne illnesses, posing health risks to consumers. This study evaluated the food safety practices of local food stall vendors in PUP Cabiao and analyzed how these practices influenced the food preferences of students.

Numerous studies have emphasized the importance of food safety awareness for both vendors and consumers. A study conducted in Gondar, Ethiopia, found that attitudes and food safety practices among food stall vendors did not significantly correlate. This suggests that awareness alone, or simply knowing what is correct, does not necessarily translate into proper food-handling behavior. However, knowledge was found to have a significant relationship with vendors' food safety practices, highlighting that knowledge plays a more crucial role than attitude in shaping behavior (Azanaw et al., 2022).

Supporting this concern is a study conducted in the Fourth District of Iloilo, which evaluated the food safety practices of street food vendors. The findings indicated areas requiring improvement, particularly in personal

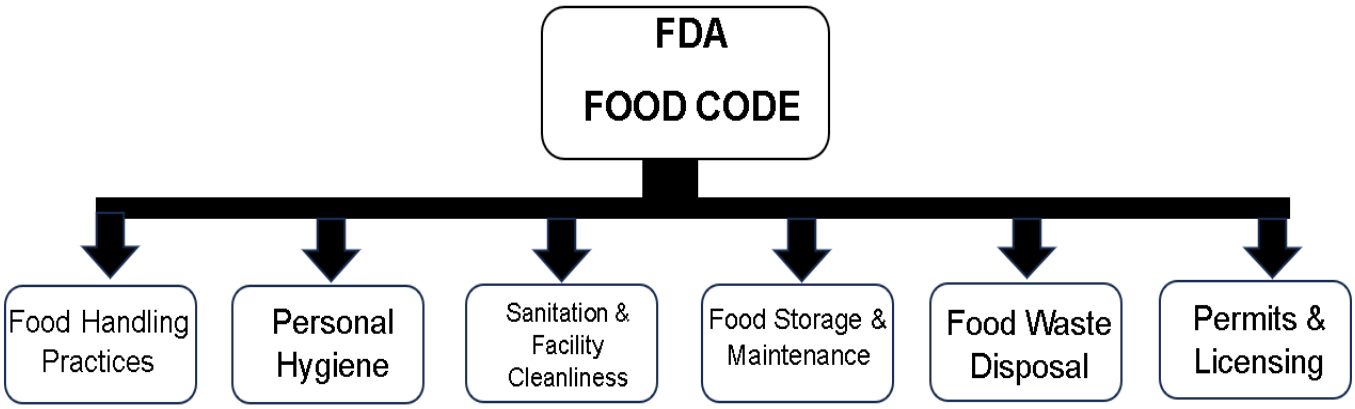
hygiene and food storage. The study recommended placing greater emphasis on food safety training, access to clean water, and the enforcement of regulations to enhance vendors' compliance with health standards. These measures are essential for building consumer trust and ensuring safe food handling (Bermejo, 2024).

In business, understanding customer preferences is a critical factor in attracting and retaining consumers. A study conducted in Zambales among senior high school students explored food habits and preferences, revealing that students' choices were significantly influenced by food variety, cooking methods, and affordability (Camus, 2024). As a result, the study suggested that canteens align their food offerings with students' preferences while also considering the nutritional value and health benefits of the meals. This approach promotes both a health-conscious environment and long-term business sustainability.

In conclusion, evaluating food safety practices among local food stalls is essential not only for protecting public health but also for understanding and influencing consumer behavior. By addressing gaps in food safety awareness and ensuring compliance with health standards, both students and vendors can benefit from improved practices and enhanced business performance.

THEORETICAL FRAMEWORK

Figure 1. Food Code Model (FDA, 2022)



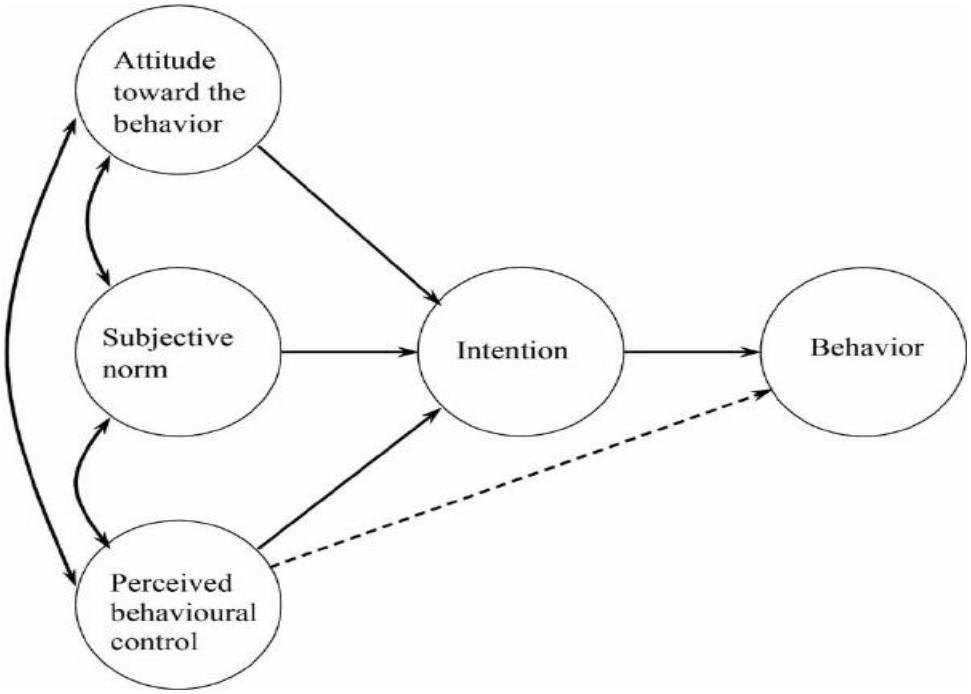
The Food Code is a model framework developed and recommended by the United States Food and Drug Administration (FDA) to safeguard public health by promoting consistent and science-based food safety practices. It establishes a uniform system to ensure that food provided to consumers is unadulterated, safe, and honestly presented, thereby fostering trust and accountability among food vendors (FDA, 2022).

In this study, the researchers adopted specific variables from the Food Code that were most applicable to evaluating students' perceptions of food safety practices among food stall vendors. These variables include:

- Food handling practices
- Personal hygiene
- Food storage and maintenance
- Sanitation and facility cleanliness
- Food waste disposal
- Permits and licensing

These components were used to assess how well food vendors comply with standard food safety protocols and how these practices influence consumer preferences within the university setting.

Figure 2. Theory of Planned Behavior (Ajzen, 1991)



The Theory of Planned Behavior (TPB), developed by Icek Ajzen (1975), posits that an individual's behavior is guided by three primary factors: attitude toward the behavior, subjective norms, and perceived behavioral control. These elements collectively shape behavioral intentions, which in turn predict actual behavior.

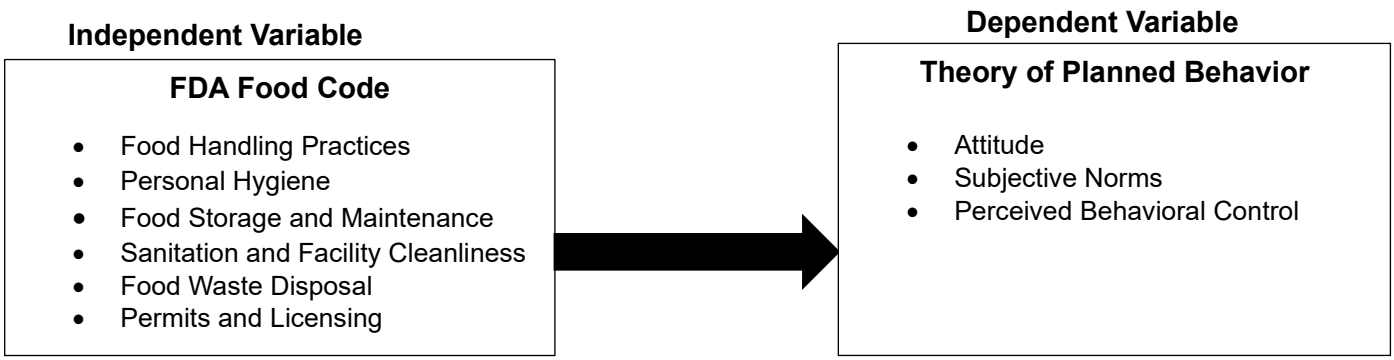
When applied to food safety, TPB suggests that students' decisions to patronize certain food vendors are influenced by their:

- Attitudes toward food safety and hygiene,
- Subjective norms or social influences from peers or community expectations, and
- Perceived behavioral control over choosing vendors that meet their standards of cleanliness and safety.

Randal et al. (2024) emphasized that these TPB components are among the most influential predictors of sustainable food consumption intentions. In the context of this study, TPB helps explain how food safety practices adopted by vendors impact student behavior and decision-making when selecting where to purchase meals.

CONCEPTUAL FRAMEWORK

Figure 3. Research Paradigm



Using the Independent Variable–Dependent Variable (IV-DV) model, this framework illustrates the relationship between the food safety practices of local food stalls (independent variable) and students' preferences when selecting food vendors (dependent variable). The Food Code by the FDA serves as the basis for identifying and

assessing the independent variables, while the Theory of Planned Behavior (TPB) explains how these practices influence student behavior and decision-making.

Statement of the Problem

This study aimed to evaluate the food safety practices of local food stalls at PUP Cabiao and examine how these practices influence students' preferences in choosing food vendors. Specifically, it sought to answer the following questions:

1. What is the respondents' level of agreement in evaluating the food safety practices of food stall vendors in terms of:
1.1 food handling practices;
1.2 personal hygiene;
1.3 food storage and maintenance;
1.4 sanitation and facility cleanliness;
1.5 food waste disposal; and
1.6 permits and licensing?

2. What is the respondents' level of agreement on the influence of the food safety practices on their preferences for choosing food stall vendors in terms of:

2.1 attitude;
2.2 subjective norms; and
2.3 perceived behavioral control?

3. Is there a significant relationship between food safety practices and students' preferences in choosing food stall vendors?

Hypothesis

There is no significant relationship between the food safety practices and students' preferences in choosing food stall vendors.

Scope and Limitations

The study entitled "Evaluating Food Safety Practices of Local Food Stalls in PUP Cabiao: Influence on Student Preference for Choosing Food Vendors" focused on assessing how food safety practices of local food stalls affect the preferences of students in choosing food vendors within the Polytechnic University of the Philippines (PUP) – Cabiao Campus.

The scope of the study included determining the demographic profile of the respondents in terms of age, gender, year level, and academic program. It aimed to evaluate students' perceptions of vendors' food safety practices and analyze how these perceptions influence their food vendor preferences using the Theory of Planned Behavior framework.

The study also aimed to identify any significant relationship between the food safety practices of vendors and the students' behavioral intentions and preferences when choosing food vendors within the campus.

The study was limited to students enrolled at PUP Cabiao Campus during the academic year in which the study was conducted. A quota sampling method was used to ensure proportional representation of each academic year and program. The total number of respondents was drawn solely from the student population of the said campus.

Data collection was carried out using a researcher-made online questionnaire. The instrument underwent expert validation to ensure its relevance and clarity. For data analysis, the researchers utilized the weighted mean and Spearman's rank-order correlation to assess the relationship between the independent and dependent variables.

Significance of the Study

This study may benefit the following stakeholders:

Health Authorities – The findings may serve as a reference for local health offices in formulating policies and programs aimed at enhancing food safety awareness among small-scale food vendors operating near academic institutions.

Food Stall Vendors – This research may help vendors better understand their current food safety practices, identify areas for improvement, and align their operations with established food safety standards, potentially improving customer trust and business sustainability.

Future Researchers – This study offers foundational insights and contextual data that may be useful for future research concerning food safety, consumer behavior, and public health in educational environments.

Students – The study may assist students in making more informed decisions when selecting food vendors, prioritizing hygiene and food safety over convenience or price.

School Administration – The results may help guide administrators in implementing initiatives, coordinating with health authorities, and promoting food safety awareness to protect students' health and well-being.

Definition of Terms

To ensure clarity and consistency, the following key terms are defined as they are used in this study:

Behavioral Intention – A person's motivation, willingness, or decision to perform a specific action or behavior in the near future.

Food Handling Practices – The methods used by food vendors in preparing, cooking, and serving food to customers.

Food Safety Practices – The alignment of a vendor's food handling procedures with established food safety standards and guidelines.

Food Safety Standards – Regulatory guidelines and protocols issued by authorized agencies to ensure food is safe, hygienic, and fit for consumption.

Foodborne Illnesses – Illnesses caused by consuming contaminated food or beverages, typically involving bacteria, viruses, or toxins.

Food Storage and Maintenance – The proper storing and preserving of food to maintain freshness, prevent contamination, and extend shelf life.

Food Waste Disposal – The process by which vendors identify spoiled or expired food and dispose of it in a safe and sanitary manner to prevent health risks.

Perceived Behavioral Control – An individual's perception of their ability to perform a specific behavior, influenced by past experiences and anticipated challenges.

Permits and Licensing – Official authorizations required for vendors to legally operate food stalls and conduct food-related business activities.

Personal Hygiene – The practice of maintaining cleanliness and proper self-care, particularly by food handlers, to ensure food safety.

Sanitation and Facility Cleanliness – The overall cleanliness of the food preparation area, equipment, and physical environment of the stall.

Subjective Norms – The perceived social pressure from peers, family, or society to perform or avoid a particular behavior.

Students' Preference – The criteria, interests, or choices of students in selecting food vendors, often influenced by safety, hygiene, price, and taste.

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents relevant literature and studies that serve as the foundation for evaluating the food safety practices of local food stalls in PUP Cabiao and their influence on students' preferences when choosing food vendors.

Food Handling Practices

The World Health Organization (n.d.) reports that one in every ten people falls ill annually due to the consumption of unsafe food, emphasizing the pivotal role of food handlers in maintaining food safety. A study conducted in Maseru, Lesotho, supported this claim by revealing that unhygienic practices among food vendors pose significant risks to consumer health (Letuka et al., 2021). Improper regulation and execution of safe food handling practices may turn food into a source of foodborne illnesses caused by pathogens that are not visible to consumers (Marutha et al., 2020).

Conversely, a study conducted in the Ejisu-Juaben Municipality in Ghana found that 85.2% of the 340 surveyed food vendors demonstrated good food-handling practices. The findings highlighted the importance of training in improving food safety knowledge and strengthening proper food-handling behavior (Addo-Tham et al., 2020).

However, studies show that knowledge does not always translate into practice. For example, in the Polokwane Central Business District, food handlers showed high levels of knowledge, yet unsafe practices persisted—such as smoking during food preparation and handling money while preparing food (Marutha et al., 2020). Similarly, in Shashemane, West Arsi Zone, Oromia, Ethiopia, 49.2% of food handlers demonstrated good knowledge of food handling, while only 27.5% applied good practices (Tesfaye et al., 2020). These findings underscore the existing gap between food safety knowledge and its actual implementation in practice.

Personal Hygiene

The Department of Health (DOH, 2020) stresses that proper personal hygiene is essential in preventing food poisoning and also builds consumer trust, as customers tend to favor vendors who visibly value cleanliness. Harmful bacteria may be present even in healthy individuals and can be transferred to food through simple actions such as touching the face, hair, or clothing. Furthermore, a lack of hygiene and insufficient food safety training are among the leading causes of foodborne illnesses (Umar et al., 2019).

Prabakaran (2024) emphasized the need to properly train food vendors in the prevention of foodborne illnesses and the importance of maintaining hygiene and standardized food handling practices. In Iloilo's Fourth District, findings from Bermejo (2024) indicated that many street food vendors fell short in practicing consistent hygiene, particularly in the use of protective gear like hairnets, face masks, and aprons.

Similarly, Adebayo et al. (2022) observed that many urban street vendors neglect the use of hairnets. In Sabon-Gari, Kaduna State, Nigeria, a study involving 109 street food vendors revealed that none had received formal training in personal hygiene. More than half (n = 55) were reported to exhibit poor hygiene practices, while only a small number (8.3%, or n = 9) demonstrated good hygiene (Umar et al., 2019). These findings highlight the urgent need for enhanced hygiene education and stricter enforcement of food safety regulations among street food vendors.

Food Storage and Maintenance

Guidelines from the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) emphasize the critical importance of maintaining dedicated and hygienic storage areas for food products,

ingredients, and packaging materials. These areas must be distinctly separated from non-food items such as cleaning agents, lubricants, and fuels to prevent contamination. Proper storage systems should clearly distinguish between raw and cooked foods, as well as allergenic and non-allergenic items, to reduce the risk of cross contamination. The primary objectives of proper food storage are to prevent pest intrusion, safeguard food from contamination, and preserve its quality by regulating environmental conditions like temperature and humidity (FAO & WHO, 2022).

Supporting this, Rakha et al. (2022) found that in many developing countries, unsafe practices—such as undercooking, improper storage, inadequate cooling, and frequent reheating—significantly contribute to food poisoning outbreaks. In Slovenia, Prevolšek et al. (2021) discovered that many street food vendors failed to adhere to recommended temperature controls for perishable foods, leading to widespread cases of cross-contamination.

One of the leading contributors to foodborne illness outbreaks is the lack of awareness and proper knowledge among both vendors and consumers. In Johannesburg, South Africa, a study involving 315 street food vendors revealed that only 40% were aware of the correct temperature for cold storage, and merely 39% knew the proper holding temperature for ready-to-eat foods (Oladipo-Adekeye, 2021). These findings indicate a significant knowledge gap.

Similarly, in Can Tho City, Vietnam, more than 60% of surveyed consumers held misconceptions about food safety. For instance, 62.5% believed that well-cooked food is completely free from microbial hazards, and 61.9% incorrectly thought that raw meat should be stored on the bottom shelf of the refrigerator—an unsafe practice that increases the risk of foodborne illness (Ngoc, 2020).

Sanitation and Facility Cleanliness

All surfaces and equipment in food establishments must be cleaned and sanitized regularly to reduce microbial contamination and ensure the safety of food (FoodSHAP, n.d.). Unfortunately, many vending sites fail to meet basic sanitation standards. Accumulated waste and unclean environments often serve as breeding grounds for pests and insects, increasing the risk of food contamination (Werkneh et al., 2023). Dirty surroundings allow pests to multiply and infest food storage and preparation areas, compromising food safety.

From a broader environmental health perspective, air- and waterborne diseases are often linked to poor sanitation, personal hygiene, improper waste management, and unsafe food handling. These hazards, combined with exposure to polluted air and water or harmful chemicals, can lead to numerous illnesses (Odipe et al., 2019).

Multiple studies report that many street food vendors underperform in maintaining a clean and sanitary working environment (Farhana et al., 2020; Tesfaye & Tegene, 2020; Mwove et al., 2020). For example, a study conducted at the University of Dhaka in Bangladesh revealed that 81.82% of the 44 vendors operated near open drainage systems, and 68.18% had visible garbage near their stalls (Farhana et al., 2020). In contrast, research in Can Tho City, Vietnam, showed more promising results, with 79% (n = 677) of street food vendors operating in clean environments, away from sources of pollution such as waste, wastewater, toilets, and open drains (Ngoc et al., 2020).

Food Waste Disposal

The Health and Safety Department (2023) emphasizes that poor food waste management can lead to serious health risks and disrupt business operations. Inadequate disposal practices can result in pest infestations, clogged sinks, and overflowing waste bins, all of which contribute to food safety hazards. These hazards include chemical (intentional or unintentional contamination), biological (transfer of pathogens from waste to fresh food), and physical risks (insect contact and contamination).

A study in Ecuador by Rosale et al. (2023) revealed that many street food vendors faced challenges with proper waste segregation due to the lack of separate bins for different types of refuse. As a result, all waste was discarded into a single container, which filled quickly and led vendors to place excess garbage around it. This practice

resulted in unpleasant odors and attracted flies and insects, thereby negatively affecting the cleanliness and safety of the surrounding environment.

In Johannesburg, South Africa, Oladipo-Adekeye et al. (2021) found that only 23.5% of 315 street food vendors were aware that perishable protein-rich foods should be discarded if left unrefrigerated for more than two hours. Similarly, in Slovenia, Prevolšek et al. (2021) discovered that 52% of food vending facilities failed to comply with basic waste separation protocols. Waste was often disposed of in polyethylene bags placed on the ground, near food preparation surfaces. Many waste containers could not be properly sealed, making it easier for pests to access and contaminate food.

A related study conducted in the Polokwane Central Business District identified garbage disposal as one of the major challenges. Of the 312 vendors surveyed, 11.8% left their trash at the vending site rather than using the municipal bins provided. The presence of uncollected waste at vending locations can attract flies and other insects, posing a direct threat to food safety and public health (Marutha et al., 2020).

Permits and Licensing

In the Philippines, the License to Operate (LTO) issued by the Food and Drug Administration (FDA) is the primary legal requirement for food vendors. The FDA regulates and oversees food safety, dietary supplements, and other consumer goods, ensuring that food products offered to the public are safe for human consumption (ISA, 2024). Possessing the appropriate permits and licenses serves as a guarantee that vendors are following minimum standards of food safety and hygiene.

Despite the importance of legal compliance, many vendors continue to operate without proper licenses, posing significant challenges for regulatory enforcement (Mujito et al., 2024). One of the common reasons for this non-compliance is the lack of clarity in existing government policies and regulations. Several studies have pointed to the ambiguity of laws as a major barrier for food vendors trying to legalize their operations (Chakunda, 2023; Solidum, 2023; Ojeda & Pino, 2019).

In a study conducted in Handan, China, Ma et al. (2019) reported that 60% of 100 surveyed street vendors did not hold valid health permits or certificates. Alarmingly, almost one-third of these vendors operated in highly populated areas. As a result, these vendors were frequently assessed as having poor food handling practices and operating in unsanitary environments. This lack of regulation not only undermines public trust but also exposes consumers to significant health risks.

Attitude

Attitude refers to an individual's feelings or opinions toward food safety, while practice involves the actual application of safe food handling procedures (Cambridge Dictionary). The attitudes of students significantly shape their behaviors; thus, understanding their perceptions provides valuable insights into whether current food safety policies—such as those implemented in school canteens—are effective (Czernyszewicz, 2023).

In a study by Tan et al. (2022), it was observed that students' attitudes toward food safety are often driven by environmental and public health concerns. Similarly, Hong (2021) emphasized that a student's perception of food safety has a positive influence on their behavioral intentions regarding food consumption. Numerous studies support the notion that individual attitudes toward food safety strongly affect their eating behaviors and food selection processes (Liu et al., 2021; Wongprawmas et al., 2021).

Moreover, students' behavior is shaped not only by internal attitudes but also by external environmental factors such as pollution, which can have a direct impact on human health and influence food safety concerns (Mohammed & Shehasen, 2020; Lin & Roberts, 2020). These findings underscore the importance of fostering positive attitudes toward food safety in order to guide responsible consumer behavior.

Subjective Norms

Subjective norms refer to the perceived social pressures or expectations from others—such as family, peers, or authority figures—that influence an individual's behavior. According to Francisco (2023) and Qu et al. (2022),

subjective norms, such as recommendations and shared experiences, strongly affect the food choices and consumption intentions of college students.

Supporting this, Asyrafi (2023) found that both subjective norms and perceptions of food safety significantly shape students' behavioral intentions. Interestingly, Troise et al. (2020) noted that among the factors in the Theory of Planned Behavior, subjective norms may have a stronger impact on behavioral intentions than even personal attitude or perception.

A study conducted in Sibu District, Malaysia, emphasized that family expectations and advice from close social circles are important determinants of food-handling and food-selection behavior (Ruby et al., 2019). These studies suggest that students rarely make food-related decisions in isolation; rather, their choices are often influenced by cultural, familial, and peer-related factors.

Recognizing the role of these social influences is critical in the development of more effective food safety interventions. By aligning educational campaigns and safety measures with prevailing social norms, institutions can promote safer and healthier food practices among students.

Perceived Behavioral Control

According to Ajzen (2020), Perceived Behavioral Control (PBC) refers to an individual's perception of their ability to perform a specific behavior. It represents how much control they believe they have over their actions, particularly in situations that require decision-making. PBC plays a vital role in shaping both behavioral intentions and actual actions.

Supporting this, Mucha (2024) and Purwanto et al. (2022) emphasized in their study conducted in Indonesia that perceived behavioral control significantly influences both the intention to act and the actual purchase behavior of consumers. Their findings indicate that consumers are more likely to follow through with food-related decisions when they feel empowered and knowledgeable.

Similarly, in a study conducted in Korea, Lim and An (2021) found that PBC was the most influential factor in determining consumers' intentions to purchase food items. This finding suggests that among all elements in the Theory of Planned Behavior, perceived control over food safety decisions plays a central role in motivating action.

Al-Amin (2021) also observed that consumers evaluate food safety risks based on their own level of concern for hygiene and safety. This means that the more control consumers feel they have over identifying or avoiding unsafe food, the more likely they are to act accordingly. These studies collectively suggest that when people feel confident and capable of managing their food choices, they are more inclined to transform their safety concerns into concrete behaviors.

Synthesis of the Reviewed Literature and Studies

The reviewed literature and studies offer a comprehensive understanding of the critical role of food safety practices, especially in environments such as schools where food stalls cater to large student populations. Food safety is essential in preventing foodborne illnesses, particularly among students who often rely on food vendors for daily meals due to affordability and convenience.

Across various international and local contexts, research consistently shows significant gaps between food safety knowledge and its actual implementation. While some vendors adhere to guidelines, a troubling number fail to comply with even the most basic standards. These lapses—such as improper food handling, poor sanitation, lack of licensing, and inadequate waste disposal—pose serious risks to public health. Moreover, regulatory enforcement often falls short, and many vendors continue to operate without proper permits.

Literature surrounding the Theory of Planned Behavior (TPB)—which includes the constructs of attitude, subjective norms, and perceived behavioral control—demonstrates how these variables shape consumer behavior and intentions toward food selection. Consumers' decisions are influenced by a complex interplay of personal

beliefs, social pressures, and confidence in their ability to make safe choices. This highlights that food safety is not only a matter of regulatory compliance but also a behavioral issue rooted in perception, education, and awareness.

Furthermore, the studies reviewed suggest practical solutions such as vendor training programs, clearer enforcement of policies, improvement of infrastructure, and enhanced public health education. Despite these recommendations, the persistence of food safety issues indicates a need for a collaborative approach. Effective solutions must go beyond rule enforcement to include understanding the challenges vendors face, such as limited access to clean water, insufficient training, and a lack of resources.

In conclusion, food safety remains a pressing public health concern. Students, as daily consumers, are particularly vulnerable to the risks associated with unsafe food practices. Addressing this issue requires an integrated effort among food vendors, consumers, school administrators, and health authorities. By combining education, infrastructure, behavioral insights, and regulatory mechanisms, a safer food environment can be created—one that not only protects health but also builds long-term consumer trust in the local food sector.

METHODOLOGY

This chapter outlines the research methodology utilized in the study, including the instruments employed, population and sampling technique, description of respondents, data-gathering procedure, and statistical treatment of data. These components were systematically designed to ensure the reliability and validity of the research process.

Method of Research

This study aimed to evaluate the food safety practices of local food stalls in PUP Cabiao and their influence on student preferences when choosing food vendors. The study adopted a quantitative research approach, specifically using the descriptive-survey method. This design was deemed appropriate for systematically measuring perceptions and determining the relationship between food safety practices and student vendor choice.

According to Ghanad (2023), quantitative research focuses on answering questions such as “how many” or “to what extent”, by collecting and analyzing numerical data that can be quantified to test hypotheses or relationships among variables. This method allows for objective measurement and statistical analysis of data.

The descriptive-survey design was selected to obtain accurate data regarding current practices and perceptions. Creswell (2017) explained that descriptive research is useful for portraying the characteristics of a population or phenomenon, typically involving the use of surveys, observations, or questionnaires. Aggarwal (2008) defines descriptive-survey research as “gathering information about prevailing conditions for the purpose of description and interpretation.

In this study, a Likert scale-based questionnaire was used to collect data on the evaluation of food safety practices and student preferences. This approach enabled the researchers to draw conclusions based on quantifiable responses. To analyze the results, statistical tools such as the Weighted Mean and Spearman’s Rank Correlation Coefficient (Spearman’s rho) were applied.

Population, Sample Size, and Sampling Technique

The study was conducted at Polytechnic University of the Philippines (PUP) Cabiao Campus, located in San Roque, Cabiao, Nueva Ecija. The target population comprised all enrolled students during the academic year in which the research was conducted, with a total population of 665 students.

To determine the appropriate sample size, the researchers employed Cochran’s formula, a well-established method for calculating sample size in survey-based research. This statistical approach ensures that the sample adequately represents the population with a desired level of confidence and precision (Singh & Masuku, 2014).

Using the standard Cochran's formula for infinite populations:

Formula:

$$n_0 = \frac{Z^2 \cdot p \cdot (1-p)}{e^2}$$

Cochran's infinite population

$n_0 = \frac{1.96^2 \cdot 0.5 \cdot (1-0.5)}{0.05^2}$

$n_0 = 384.16$

Where:

n_0 — initial sample size

Z — Z-score corresponding to the confidence level

p — Estimated proportion of population

e — Margin of error

Finite population correction

$$n_{adj} = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

$$n_{adj} = \frac{384.16}{1 + \frac{384.16 - 1}{665}}$$

n_{adj} = **243.73 or 244**

Where:

n_{adj} = adjusted sample size

n_0 = initial sample size

N = total population size

Table 1 Total Number of Population and Sample Size

Program and Year	Total Number	Sample Size
BSBAMM – 1st Year	101	37
BSBAMM – 2nd Year	64	24
BSBAMM – 3rd Year	74	27
BSBAMM – 4th Year	90	33
BEED – 1ST Year	84	31
BEED – 2nd Year	87	32
BEED – 3rd Year	69	25
BEED – 4th Year	96	35
Total	665	244

Table 1 presents the total population of each year and program and the proportionate distribution of the sample size. The table portrays that out of one hundred one (101) students in BSBAMM – 1st year, thirty-seven (37) students were identified as respondents. In BSBAMM – 2nd year, out of sixty-four students (64), twenty-four (24) were identified as respondents. In BSBAMM – 3rd year, out of seventy-four students (74), twenty-seven (27) were identified as respondents. In BSBAMM – 4th year, out of ninety students (90), thirty-three (33) were identified as respondents. In BEED – 1st year, out of eighty-four students (84), thirty-one (31) were identified as respondents. In BEED – 2nd year, out of eighty-seven students (87), thirty-two (32) were identified as respondents. In BEED – 3rd year, out of sixty-nine students (69), twenty-five (25) were identified as respondents. In BEED – 4th year, out of ninety-six students (96), thirty-five (35) were identified as respondents. The final sample size was 244 respondents.

The researchers employed quota sampling, a non-probability sampling technique where specific subgroups within the total population are proportionally represented based on their actual distribution. This method ensures balanced and adequate representation of the population, particularly when dealing with heterogeneous groups (Rukmana, 2024).

In this study, students were grouped according to year level and academic program, with each group allocated a predetermined number of respondents to maintain proportional representation. Although the respondents were organized by subgroup, they were not selected randomly. As Memon et al. (2020) note, for a population of approximately 700 individuals, a minimum of 240 respondents is considered sufficient to achieve statistically reliable results. Quota sampling also allows researchers to efficiently gather data from multiple subgroups while maintaining the desired level of diversity and representativeness across the sample.

Description of Respondents

The respondents of this study were students enrolled at the Polytechnic University of the Philippines – Cabiao Campus during the second semester of the academic year 2024–2025. The respondents were described using selected demographic variables, which included: Age, Sex, Year Level, and Academic Program. These classifications ensured proper subgrouping and proportional representation, supporting the study's reliability and generalizability.

Research Instrument

The primary research instrument used in this study was a researcher-made online survey questionnaire, developed to align with the study's objectives. The questionnaire was constructed based on two theoretical frameworks: the Food Code by the U.S. Food and Drug Administration (FDA) and the Theory of Planned Behavior (TPB) by Ajzen. It was administered via Google Forms, ensuring efficient data collection, real-time response monitoring, and the privacy and security of participant information. Prior to distribution, the instrument underwent validation and pilot testing to establish its clarity, reliability, and content validity.

The questionnaire consisted of three main parts, each designed to address specific aspects of the study:

Part I – Demographic Profile: This section collected baseline information on the respondents, including their sex, age, year level, and academic program. These data points were essential in organizing the participants according to the predetermined quota sampling scheme and ensuring that different student subgroups were adequately represented.

Part II – Evaluation of Food Safety Practices: This section assessed the respondents' level of agreement regarding the food safety practices observed among food stall vendors. The items were based on six variables derived from the FDA Food Code: These indicators were used to provide a comprehensive and standardized measure of compliance with established food safety standards.

1. food handling practices;
2. personal hygiene;
3. food storage and maintenance;
4. sanitation and facility cleanliness;

5. food waste disposal; and
6. permits and licensing.

A 5-point Likert scale was used to quantify responses, ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). This allowed for the conversion of students' subjective perceptions into measurable and analyzable data.

Part III – Influence on Student Preferences: This final section evaluated the extent to which food safety practices influenced the students' preferences in selecting food vendors, using the key components of the Theory of Planned Behavior:

1. attitude;
2. subjective norms; and
3. perceived behavioral control.

Like Part II, this section also employed the 5-point Likert scale to assess the respondents' level of agreement with various statements reflecting their food-related choices, social influences, and perceived ability to make safe decisions.

To ensure clarity, a concise instruction section was placed at the beginning of the questionnaire. It guided participants on how to respond to the items and emphasized that participation was voluntary and anonymous, with the assurance that all information would be used solely for academic purposes. This was intended to promote honest responses and reduce potential response bias.

Validation of Instrument

In this study, the instrument underwent a methodical process, as required by the university, to standardize the procedures and support the credibility of the data. Zamanzadeh et al. (2015) emphasized that the instrument validation is essential to ensure accuracy and relevance, build trust and reliability, and provide informational support to the content. The instrument was thoroughly examined and reviewed by the experts. Dr. Dina Grace T. Magnaye, Research Coordinator of PUP Bansud, evaluated each question and removed unrelated, unethical, and repetitive questions. Mr. Villie Andrei M. Vilanio, a statistician, suggested equalizing the number of questions per variable for its balance. Adding to the reliability and to ensure internal consistency, a pilot test was conducted among 30 non-participating students to evaluate the questionnaire's functionality. This step allowed the researchers to identify minor issues in wording and clarity that could affect how respondents interpreted the questions. The revisions helped refine the questionnaire to ensure that each item accurately captured the intended variable. Adjustments were made based on the feedback of the experts and pilot test results. The finalized instrument was then submitted to the University Research Ethics Committee (UREC) for review to guarantee compliance with research integrity and ethical standards. After completing the steps, the research was then approved and complied with the process, proving that it met the requirements for consistency, reliability, and ethical soundness.

Data-Gathering Procedure

To ensure safe, efficient, and timely data collection, the researchers employed an online survey method using Google Forms. A digital version of the validated questionnaire was created and disseminated through various online channels, including official class group chats and institutional email accounts of PUP Cabiao students. The form included clear instructions for participants, emphasizing the voluntary nature of participation, the importance of honest responses, and assurances regarding the confidentiality and academic purpose of the data.

The effectiveness of online surveys as a data collection tool is supported by Wright (2005), in his article titled "Use of Online Surveys in Research: Advantages and Limitations." He underscores that platforms such as Google Forms offer substantial benefits, particularly in academic research, due to their accessibility, low cost, and broad reach. Wright (2005) explains that "online surveys can be sent to hundreds or thousands of respondents in a matter of seconds, and responses can be automatically gathered," a feature highly applicable to this study, which targeted students across multiple year levels and programs within PUP Cabiao. This level of accessibility

was particularly advantageous for this study, as students were able to answer the questionnaire at their own convenience despite varying class schedules and academic workloads.

Further supporting this method, Zeleke et al. (2019) emphasize that online tools like Google Forms, when integrated with Google Sheets, enable real-time data capture and organization, significantly reducing the likelihood of human error. Moreover, Martinez-Gomez et al. (2017) concluded that when properly designed, online surveys yield data quality comparable to traditional survey methods, making them a reliable instrument for contemporary academic research.

All responses were automatically recorded and securely stored in a cloud-based database, accessible only to the research team. Upon completion of the data collection process, the dataset was forwarded to a professional statistician for data processing and statistical analysis using pre-identified statistical tools. This ensured the integrity of the data and minimized the risk of misinterpretation. The results of this analysis provided the basis for the discussion of findings, conclusions, and recommendations presented in subsequent chapters. In addition, this process strengthened the objectivity and methodological rigor of the study's quantitative analysis.

Statistical Treatment of Data

The following statistical tools were used to interpret the gathered data:

Weighted Mean

A weighted mean was calculated by assigning varying importance ratings to each of the responses, allowing Likert-scale data to be analyzed; thus, to assess students' preferences and identify how food safety procedures impact their vendor selection.

Formula:

$$WM=\frac{\sum fx}{N}$$

Where:

fx — Weighted frequency of response obtained by multiplying x or weight for each item in the choices.

$\sum fx$ — Summation of the obtained fx on each item

N — Number of respondents

Likert Scale

Scale	Weighted Mean Range	Verbal Interpretation
5	5.00 – 4.21	Strongly Agree
4	4.20 – 3.41	Agree
3	3.40 – 2.61	Slightly Agree
2	2.60 – 1.81	Disagree
1	1.80 – 1.00	Strongly Disagree

The Likert scale is a psychometric tool that is widely applied in research to assess attitudes, viewpoints, or perceptions by asking respondents to state their level of agreement or disagreement with a list of statements. It uses a 5-point or 7-point scale from "strongly disagree" to "strongly agree." This method enables researchers to make subjective data measurable and examine trends or patterns in human beliefs and behavior (Joshi et al., 2015).

Spearman's Rho Correlation

The Spearman's rho, or Spearman's rank correlation coefficient, is a non-parametric statistical tool used to assess how strongly and in what direction two variables are related when their values follow a ranked or monotonic order. In comparison to Pearson's r, it does not assume normality or linearity, making it suitable for ordinal data or datasets with outliers and non-normal distributions. It measures the extent to which the value of one variable's rank corresponds to the other. Its coefficient scores range from -1 (perfect negative correlation) up to +1 (perfect positive correlation), where 0 indicates no monotonic relationship (Laerd Statistics, n.d.).

Formula:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

Where:

ρ — Spearman's rank correlation coefficient (the result).

d — Difference between the ranks of each observation pair.

∑d² — Sum of squared rank differences.

n — Number of observation pairs.

6 — Fixed constant for scaling.

Decision Rule

- If $p < 0.05$ = Reject the null hypothesis
- If $p > 0.05$ = Accept or fail to reject the null hypothesis

Ethical Concerns

The researchers ensured adherence to ethical standards throughout the study. The participation was strictly voluntary, and respondents were informed of their right to withdraw at any time, particularly when questions involved sensitive personal or financial information. Clear communication regarding the purpose and nature of their involvement was provided, ensuring no coercion or undue pressure occurred during data collection. The questionnaires and interview questions were written using appropriate, formal language and maintained professionalism at all times.

The researchers also upheld confidentiality, assuring respondents that their information would remain private and be used solely for academic purposes. Proper acknowledgment and citation of scholarly sources were observed throughout the study. Finally, the discussion and analysis were grounded solely in the data gathered from respondents, ensuring that findings accurately reflected their perspectives and responses.

RESULTS AND DISCUSSION

This chapter summarizes and discusses the survey results from 244 student respondents of PUP Cabiao.

1. Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of: Food Handling Practices, Personal Hygiene, Food Storage and Maintenance, Sanitation and Facility Cleanliness, Food Waste Disposal, and Permits and Licensing.

Table 2 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Food Handling Practices

Food Handling Practices	Weighted Mean	Verbal Interpretation
1. The food stall vendors wear gloves when handling ready-to-eat food.	3.83	Agree
2. Vendors wear hairnets to maintain cleanliness while preparing food.	3.83	Agree
3. Vendors wash produce before using it, ensuring freshness and safety.	4.24	Strongly Agree
4. Raw food is kept separate from cooked food.	4.41	Strongly Agree
5. Vendors use separate utensils for raw and cooked food to prevent contamination.	4.23	Strongly Agree
6. Food is prepared in a clean and organized workspace.	4.27	Strongly Agree
7. Vendors use clean utensils and equipment, ensuring food safety.	4.30	Strongly Agree
8. Vendors check food for spoilage before serving, ensuring only fresh food is served.	4.24	Strongly Agree
9. Vendors use tongs or spoons to serve food.	4.43	Strongly Agree
10. Vendors cover food properly to protect it from contamination.	4.22	Strongly Agree
Overall	**4.20**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 2 below, food handling practices obtained an overall weighted mean of 4.20, indicating that students generally assessed vendors' practices as compliant with food safety standards. The use of tongs or spoons when serving food had the highest mean of 4.43; next, keeping raw and cooked foods separate had a mean of 4.41; and then using clean utensils and equipment had a mean of 4.30. Preparing food in a clean workspace received a mean of 4.27, while both washing produce before use and checking food for spoilage were rated 4.24. The use of separate utensils for raw and cooked food was rated 4.23, and properly covering food was rated 4.22. The lowest ratings were for wearing gloves and using hairnets, which both received a mean of 3.83. These evaluations suggest that visible hygiene practices strongly influence student preferences.

Based on the ranking, students highly value observable hygienic practices that avoid direct hand contact with foods; "Vendors use tongs and spoons when serving food" had the highest weighted mean of 4.43. This indicates that the use of utensils is viewed as an effective preventive strategy to avoid contamination; this action creates a sense of safety and cleanliness for the students. In Northwest Ethiopia, Bante et al. (2023) found that among 421 street food vendors, only 27.6% separated raw and cooked foods using different utensils, and most of them handled food with their bare hands. This result underscores the gap in food safety practices and encourages the view that the use of utensils plays a significant role in influencing students' assessment of vendor hygiene and adherence to food safety standards.

Practices like these provide students with a clear sense of assurance that vendors are working towards limiting direct hand contact with food, hence lower risks of microbial contamination. The value assigned by students to the use of utensils also reflects their increased consciousness with regard to basic food safety practices and demonstrates that their awareness contributes to how they assess a vendor's trustworthiness.

Table 3 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Personal Hygiene

Personal Hygiene	Weighted Mean	Verbal Interpretation
1. Hairnets or caps, and aprons to ensure food safety.	3.95	Agree
2. Vendors wear aprons during food preparation to maintain cleanliness.	4.05	Agree

3. Vendors avoid using their mobile phones or handling personal items while preparing food.	3.94	Agree
4. Vendors wash their hands regularly before and after handling food.	4.14	Agree
5. Vendors avoid touching their faces while working to maintain hygiene.	4.04	Agree
6. Food handlers keep their fingernails clean and well-trimmed.	4.10	Agree
7. Vendors wear minimal accessories to prevent food contamination.	4.08	Agree
8. Vendors avoid coughing or sneezing near food.	4.23	Strongly Agree
9. Open wounds or cuts are properly covered while preparing food.	4.16	Agree
10. Vendors practice good dental hygiene for a clean food prep environment.	4.09	Agree
Overall	**4.08**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 3, personal hygiene obtained an overall weighted mean of 4.08, indicating a generally favorable evaluation of vendors' hygiene practices. The avoidance of coughing or sneezing near food received the highest rating of 4.23. Next were covering wounds, which were rated 4.16; washing hands regularly, 4.14; and maintaining trimmed fingernails, 4.10. Good dental hygiene received a rating of 4.09, while wearing minimal accessories was rated 4.08. Wearing aprons and avoiding touching the face during work received ratings of 4.05 and 4.04, respectively. Wearing hairnets rated 3.95, and avoiding mobile phone use while handling food received the lowest rating of 3.94.

The highest weighted mean of 4.23 shows that students strongly agree that vendors should not cough or sneeze over food. A survey among food street vendors in Ghana by Nortey et al. (2024) found that "92.4% of the respondents also concurred that it is essential to cough or sneeze inside the elbow in case a towel is not present," citing the widespread recognition of proper respiratory etiquette among food handlers.

Table 4 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Food Storage and Maintenance

Food Storage and Maintenance	Weighted Mean	Verbal Interpretation
1. Food stalls have refrigerators to safely store perishable food.	3.92	Agree
2. Vendors ensure food storage areas are clean and well-maintained.	4.20	Agree
3. Perishable foods are stored in appropriate conditions to maintain freshness.	4.10	Agree
4. Vendors store dry goods in sealed containers to protect quality.	4.10	Agree
5. Food storage areas are kept pest-free to ensure safety.	4.17	Agree
6. Vendors check refrigerator temperatures regularly to ensure safe storage.	3.90	Agree
7. Food is stored away from cleaning chemicals to prevent contamination.	4.23	Strongly Agree
8. Vendors avoid overstocking food storage to maintain proper organization.	4.14	Agree

9. Vendors use food-safe packaging materials to protect food quality.	4.16	Agree
10. Storage areas are kept free from leaks or moisture to prevent spoilage.	4.20	Agree
Overall	**4.11**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 4, food storage and maintenance had an overall weighted mean of 4.11, which indicates that students generally agreed vendors practiced good storage habits. Storing food away from cleaning chemicals received the highest rating of 4.23. Next were maintaining clean and moisture-free storage areas, both at 4.20; keeping storage spaces pest-free at 4.17; use of food-safe packaging at 4.16; and avoiding overstocking for proper organization at 4.14. Proper storage of perishable items and the use of sealed containers were both rated 4.10. Refrigerator usage was rated 3.92, and regular temperature checks received the lowest rating of 3.90. These results suggest that students pay close attention to visible storage practices and connect them with how reliable they perceive vendors to be.

The highest weighted mean of 4.23 for the practice "Food is stored away from cleaning chemicals to prevent contamination" indicates that vendors are very conscious of chemical contamination that is related to health hazards and keep the food away from harmful substances for its food safety. This is in line with the advice issued by the Food and Agriculture Organization (FAO) that "cleaning chemicals should be handled and used carefully and in accordance with manufacturers' instructions and stored, where necessary, separated from food, in clearly identified containers to avoid the risk of contaminating food." These practices are important in reducing the risk of chemical contamination and thus ensuring food safety and protecting consumer confidence.

The students' strong agreement with this practice indicates that they are highly sensitive to the unseen threats posed by chemical residues in their food. It also indicates that compliance by food vendors with such measures does not go unnoticed, as proper storage is explicitly linked by students with a sense of safety and concern. When vendors consistently perform these safety practices, they protect students from potential hazards while fostering the assurance that keeps them coming back.

Table 5 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Sanitation and Facility Cleanliness

Sanitation and Facility Cleanliness	Weighted Mean	Verbal Interpretation
1. Food stalls are cleaned regularly to maintain a hygienic and pest-free environment.	4.22	Strongly Agree
2. Handwashing stations are conveniently located near stalls for easy access.	4.02	Agree
3. Vendors maintain a sanitary workspace, prioritizing cleanliness.	4.21	Strongly Agree
4. Food stalls have proper ventilation for a fresh and clean atmosphere.	4.08	Agree
5. Wastewater is properly drained to maintain hygiene and safety.	4.12	Agree
6. Garbage bins are emptied daily to ensure cleanliness.	4.25	Strongly Agree
7. Vendors use food-safe cleaning agents to ensure safe food handling.	4.23	Strongly Agree
8. Vendors wear gloves when handling cleaning agents for added protection.	4.00	Agree
9. Vendors keep trash bins covered to prevent contamination.	4.15	Agree

10. Vendors have restroom facilities available for consumers' convenience.	3.79	Agree
Overall	**4.11**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 5, sanitation and facility cleanliness had an overall weighted mean of 4.11, which indicates strong agreement on the importance of sanitation. The daily emptying of the garbage bin disposal received the highest rating of 4.25. Next were the use of food-safe cleaning agents at 4.23, regular stall cleaning at 4.22, and maintaining sanitary workspaces at 4.21. For covered trash bins, the rating was 4.15; wastewater drainage was rated 4.12; ventilation received 4.08; and the availability of nearby handwashing stations was rated 4.02. Wearing gloves while cleaning agents rated 4.00, while restroom availability received the lowest rating of 3.79.

The highest-rated statement, "Garbage bins are emptied daily to ensure cleanliness," had a weighted mean of 4.25. Regular garbage disposal reduces the incidence of odor, pests, and environmental contamination, all of which contribute to having a safe food environment. In Jose and Villanueva's (2023) research on Calapan City street food vendors, the authors highlighted the importance of regular sanitation and cleaning in ensuring food safety compliance.

Table 6 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Food Waste Disposal

Food Waste Disposal	Weighted Mean	Verbal Interpretation
1. Vendors separate biodegradable and non-biodegradable waste for proper disposal.	3.79	Agree
2. Leftover food is handled responsibly to minimize waste.	4.00	Agree
3. Vendors dispose of liquid waste properly, ensuring hygiene.	4.02	Agree
4. Food waste is collected and disposed of to comply with environmental responsibility.	4.12	Agree
5. Vendors use biodegradable packaging materials to reduce environmental impact.	3.91	Agree
6. Vendors ensure waste areas are kept pest-free.	4.08	Agree
7. Trash bins are lined with plastic bags for easy disposal.	4.21	Agree
8. Vendors store waste bins away from food areas to maintain cleanliness.	4.20	Agree
9. Vendors wash waste bins regularly to ensure hygiene.	4.00	Agree
10. Vendors avoid food waste through proper portion control.	4.12	Agree
Overall	**4.05**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 6, food waste disposal had an overall weighted mean of 4.05, indicating that vendors demonstrated acceptable food waste practices. The lining of trash bins with plastic bags received the highest rating of 4.21. Next was storing waste bins away from food areas at 4.20, while proper food waste collection and portion control were both rated 4.12. Pest-free waste areas received 4.08, and proper liquid disposal was rated 4.02. Responsible leftover handling and regular bin washing both rated 4.00. The use of biodegradable packaging was rated 3.91, while segregating biodegradable and non-biodegradable waste received the lowest rate of 3.79. The results show that vendors demonstrate a moderate awareness of sustainable disposal practices, which continues to develop.

The highest-rated statement, "Trash bins are lined with plastic bags for easy disposal," had a weighted mean of 4.21. It reflects vendors' practice of sanitary and convenient waste disposal. The practice is an indication of

vendors' commitment to sanitary disposal and avoiding cross-contamination. To validate this, a study by Maphanga and Madonsela (2024) analyzed street vendors' waste management in Sub-Saharan Africa. The study concluded that vendors who engaged in structured waste disposal practices, including lined bins, were indicative of improved sanitation and minimized environmental degradation. In the researchers' view, there is a need to include street vendors in formal waste management programs for improved hygiene standards. This emphasizes how even minor practices, such as lining bins, are valuable in ensuring cleanliness in food vending areas. It also generates a favorable impression among consumers, who are likely to connect such practices with overall food safety. Finally, long-term compliance with such measures not only contributes to public health but also enhances customer confidence and credibility when choosing the food establishments and vendors.

Table 7 Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Permits and Licensing

Permits and Licensing	Weighted Mean	Verbal Interpretation
1. Vendors display valid business permits and health certificates.	4.14	Agree
2. Vendors comply with local licensing and permit regulations.	4.20	Agree
3. Vendors have visible permits that are easily noticeable by customers.	4.12	Agree
4. Vendors undergo regular health and safety inspections.	4.05	Agree
5. Vendors with proper licensing follow better hygiene and sanitation practices.	4.12	Agree
6. Vendors renew their permits and licenses as required by regulations.	4.13	Agree
7. Vendors are transparent about their compliance with food safety regulations.	4.12	Agree
8. Vendors with valid permits are more knowledgeable about proper food storage and preparation.	4.24	Strongly Agree
9. There should be a feedback mechanism where students can report concerns about food vendor compliance.	4.30	Strongly Agree
10. Vendors operating near campus should be required to have a business permit for additional safety practices.	4.30	Strongly Agree
Overall	**4.17**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 7, permits and licensing had an overall weighted mean of 4.17, which indicates a generally favorable evaluation of vendors in terms of regulatory compliance. The presence of a feedback mechanism allowing students to report concerns about vendor compliance and the requirement for vendors operating near campus to have a business permit both received the highest rating of 4.30. Next, vendors with valid permits being more knowledgeable about proper food storage and preparation rated 4.24, and compliance with local licensing and permit regulations received a mean of 4.20. Then the students' positive evaluation of the display of valid business permits and health certificates, rated 4.14, as well as the timely renewal of permits and licenses, which scored 4.13. While items such as visible permits, proper licensing linked to better hygiene practices, and transparency in compliance with food safety regulations each received a rating of 4.12. The lowest-rated item was vendors undergoing regular health and safety inspections, with a mean of 4.05. These findings indicate that students place importance on both visible documentation and adherence to legal requirements when assessing the safety and credibility of food stall vendors.

The highest-rated statement, "There should be a feedback mechanism where students can report concerns about food vendor compliance," had a weighted mean of 4.30, indicating that students are not only interested in food safety but are also eager to participate in monitoring vendors' practices. This high level of willingness to participate and monitor practices indicates the need for formal means through which students can raise concerns and hold vendors accountable. To affirm this, Alsiwat et al. (2025) supported the contribution of feedback

mechanisms towards improving school-level compliance with canteen policy. Their research pointed out that formal reporting systems played a central role in ensuring improved compliance with canteen policies and health and safety standards, affirming that students' participation can lead to a safer food culture.

Table 8 Summary of Respondents' Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors in terms of Food Handling Practices, Personal Hygiene, Food Storage and Maintenance, Sanitation and Facility Cleanliness, Food Waste Disposal, and Permits and Licensing.

Respondent's Level of Agreement in Evaluating Food Safety Practices of Food Stall Vendors	Weighted Mean	Verbal Interpretation
1. Food Handling Practices	4.20	Agree
2. Personal Hygiene	4.08	Agree
3. Food Storage and Maintenance	4.11	Agree
4. Sanitation and Facility Cleanliness	4.11	Agree
5. Food Waste Disposal	4.05	Agree
6. Permits and Licensing	4.17	Agree
Overall	**4.12**	**Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

The result in Table 8 had an overall weighted mean of 4.12. indicates that food stall vendors demonstrated good compliance with the Food Code of the FDA. Among the variables, food handling practices ranked highest, receiving a 4.20 weighted mean. Followed by the compliance with permits and licensing, which received a 4.17 weighted mean. Both food storage and maintenance, as well as sanitation and facility cleanliness, shared a weighted mean of 4.11. Then personal hygiene received 4.08, and food waste disposal ranked as the lowest, receiving 4.05.

The findings align with the results in Alfonso Lista, Ifugao, where street food vendors are highly compliant, demonstrating strong knowledge and understanding of the procedures and protocols. These vendors recognize the importance of such measures and are consistently dedicated to promoting food safety (Carpio et al., 2025). In contrast, research conducted during the COVID-19 pandemic, under the micro food business operators by Milan et al. (2021), found notable gaps in crucial areas such as facility cleanliness, time and temperature control, and the overall sanitation operation. These gaps are also consistent with the weaknesses observed in the study.

2. Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences for Choosing Food Stall Vendors in terms of: Attitude, Subjective Norms, Perceived Behavioral Control

Table 9 Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences for Choosing Food Stall Vendors in terms of Attitude

Attitude	Weighted Mean	Verbal Interpretation
1. I feel more confident buying from food vendors who prioritize hygiene and food safety.	4.57	Strongly Agree
2. I prefer food vendors that follow proper sanitation practices over those that do not.	4.57	Strongly Agree
3. I believe that food safety directly impacts the quality of the food I consume.	4.51	Strongly Agree
4. I feel comfortable eating food that is prepared and served in a clean environment.	4.57	Strongly Agree
5. I am willing to pay more for food from vendors who maintain excellent hygiene.	4.44	Strongly Agree
6. I believe that vendors who follow proper food handling procedures provide better-tasting food.	4.52	Strongly Agree

7. I trust food vendors more when I see them following proper hygiene protocols.	4.55	Strongly Agree
8. I feel more satisfied with my food purchase when I know it was prepared in a clean environment.	4.56	Strongly Agree
9. I enjoy eating more when I am confident that the food was handled safely.	4.55	Strongly Agree
10. I feel more confident in the quality of food when I buy from vendors with proper permits.	4.49	Strongly Agree
Overall	**4.53**	**Strongly Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 9 below, attitude had an overall weighted mean of 4.53, which indicates that students highly value cleanliness and safe food handling when choosing where and what to eat. The FDA Food Code, with its strict guidelines on hygiene, handling, and facility maintenance, clearly influences these perceptions. When vendors visibly comply with these standards, students develop favorable attitudes, which increases their preference for these stalls. The feeling of confidence buying from vendors who prioritize hygiene, preferring vendors with proper sanitation, and feeling comfortable eating in clean environments each received the highest rating of 4.57. Next were feeling satisfied with clean food preparation at 4.56, trusting vendors who follow protocols at 4.55, and enjoying meals more when food is safely handled at 4.55. Then, the students also agreed that hygiene affects taste at 4.52 and that food safety impacts food quality at 4.51. The lowest ratings were confidence in vendors with permits at 4.49 and willingness to pay more for hygiene at 4.44.

The highest-rated statement, "I feel more confident buying from food vendors who prioritize hygiene and food safety," had a weighted mean of 4.57. The findings indicate that hygiene is a tangible aspect that builds consumer trust and exerts a strong influence on students' purchasing decisions. On university campuses, such as where there are numerous food stalls competing for consumers' attention, students become more keen observers of tangible hygiene practices—such as frequent washing, glove-wearing, and proper storage—to gauge vendor reliability. Consistent with this, a recent Mercadillo Intramuros study by Estapia et al. (2025) concluded that visible sanitation practices exerted a strong influence on consumers' trust. The study quoted, "Respondents trust food stalls more when the food handlers frequently sanitize and disinfect their area," which indicates that students associate cleanliness with food quality and safety. These beliefs do not only rely on actual hazards but are also influenced by visible signs and standards observed in food stalls. Aligned with the findings, this study highlights how hygiene influences psychological comfort, resulting in students becoming even more confident in purchasing decisions when they observe that food safety is clearly given importance. This validates the significance of regular and transparent sanitation practices among vendors, particularly when serving health-conscious and educated consumers such as students.

Table 10 Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences for Choosing Food Stall Vendors in terms of Subjective Norms

Subjective Norms	Weighted Mean	Verbal Interpretation
1. My friends encourage me to buy food from vendors who maintain proper hygiene.	4.37	Strongly Agree
2. I feel more comfortable eating at a food stall if my classmates also prefer it.	4.21	Strongly Agree
3. I am influenced by social media reviews or recommendations when selecting a food stall.	4.04	Agree
4. My family prefers that I buy food only from vendors who practice good sanitation.	4.39	Strongly Agree
5. I tend to avoid food stalls that have received negative feedback from other students.	4.26	Strongly Agree
6. I feel a sense of responsibility to choose food vendors that others perceive as clean.	4.34	Strongly Agree

7. I believe that the university community values food vendors with high sanitation standards.	4.35	Strongly Agree
8. I trust food stalls that are frequently visited by many students who care about cleanliness.	4.45	Strongly Agree
9. My friends and classmates encourage me to buy from vendors with proper licensing.	4.36	Strongly Agree
10. People I respect, such as teachers or family, believe it is important to buy from properly licensed vendors.	4.36	Strongly Agree
Overall	**4.31**	**Strongly Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 10, subjective norms had an overall weighted mean of 4.31, which indicates that peer and family influence play a key role in their food vendor selection. The FDA Food Code reinforces this indirectly by setting clear standards for cleanliness and safe food handling. Such vendors are more likely to be approved or recommended by peers, causing a ripple effect where individual perceptions of food safety mirror collective expectations and demonstrating how regulatory practices are supported through social norms. The students' trust in vendors who are frequently visited by peers who value cleanliness received the highest rating of 4.45. Next were family preferences for sanitary vendors at 4.39 and friends encouraging good hygiene choices at 4.37. Recommendations from respected individuals rated 4.36, and peer influence on licensed vendors was at 4.36, which also rated highly. Then, students acknowledged that university communities value sanitation, rated 4.35, and felt responsible for choosing clean vendors at 4.34. While avoiding negatively reviewed stalls at 4.26, following classmates' preferences at 4.21, and considering social media feedback at 4.04, followed.

The highest-rated statement, "I trust food stalls that are frequently visited by many students who care about cleanliness," had a weighted mean of 4.45. This indicates that social validation is a crucial factor in driving food-buying decisions among students. In situations related to health and cleanliness, students are more likely to imitate the behaviors of their peers. A recent study by Gligorić et al. (2023) on food choice mimicry shows that students often take cues from the buying habits of the people around them, highlighting how social influence plays a role in their decisions. The study cited that "purchasing mimicry occurs in every age, gender, and status subpopulation, but it is strongest for students and the youngest individuals," which showed that influence from peers is an impactful force in food selection. When students see people frequently visiting a particular food stall—especially those stalls that have a reputation for being clean—they are more inclined to believe and follow.

Table 11 Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences for Choosing Food Stall Vendors in terms of Perceived Behavioral Control

Perceived Behavioral Control	Weighted Mean	Verbal Interpretation
1. I find it easy to identify food stalls that follow proper food safety standards.	4.30	Strongly Agree
2. I have the confidence to ask food vendors about their hygiene and food handling practices.	3.96	Agree
3. I feel in control when deciding which food vendor to trust for cleanliness and safety.	4.37	Strongly Agree
4. I can easily avoid food stalls that appear unsanitary, regardless of convenience.	4.38	Strongly Agree
5. I believe I have enough knowledge to assess the safety of food vendors.	4.32	Strongly Agree
6. I am capable of making informed choices when selecting where to buy food.	4.41	Strongly Agree
7. I can recognize warning signs of poor food handling at food stalls.	4.34	Strongly Agree
8. I feel comfortable switching to a cleaner food vendor.	4.46	Strongly Agree

9. I believe I can influence my friends to choose food vendors with better hygiene.	4.44	Strongly Agree
10. I have no difficulty verifying if a vendor follows licensing and permit requirements before purchasing food.	4.22	Strongly Agree
Overall	**4.32**	**Strongly Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

As shown in Table 11, perceived behavioral control had an overall weighted mean of 4.32, which indicates that the students felt confident in identifying safe and hygienic vendors and switching away from unsafe ones. This sense of control is influenced by the clarity and visibility of FDA-mandated practices—such as the use of gloves, clean storage, or valid permits—which help students make informed decisions. When food safety standards are adhered to, students feel empowered and better equipped to judge vendor reliability. The students' ability to switch to cleaner vendors received the highest rating of 4.46. Next was influencing friends to choose hygienic stalls at 4.44 and making informed decisions at 4.41. Then, avoiding unsanitary stalls rated 4.38, feeling in control of choices at 4.37, and recognizing warning signs of poor hygiene at 4.34 followed. While the ability to assess safety rated 4.32, identify safe stalls at 4.30, and verify permit compliance at 4.22 were also strong. Lastly, asking vendors about related hygiene and food safety had the lowest ratings, yet it was still considered favorable at 3.96.

This result suggests that students believe they can make healthy food choices, reflected in the highest-rated statement, at a 4.46 weighted mean, "I feel comfortable switching to a cleaner food vendor." The result is a very high level of perceived behavioral control—students believe they have the ability and intelligence to act independently to provide for their food safety. They are not only driven by convenience and habit but are, in fact, making conscious decisions based on hygiene awareness. Supported by a study conducted by Ma et al. (2019) in Handan, a third-tier city in China, that examined consumer food hygiene awareness and behavior. The research established that "consumers have suitable levels of food safety knowledge and attitudes," meaning they are capable of judging the levels of cleanliness of food vendors and making informed decisions accordingly. This implies that students do not hesitate to stop patronizing vendors who do not satisfy their cleanliness expectations but instead turn to safer options. Consistent with the conclusion, students at university are not only knowledgeable about what defines proper food handling, but they also control their decisions by taking active action against unclean vendors.

Table 12 Summary of Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences in terms of Attitude, Subjective Norms, and Perceived Behavioral Control

Respondents' Level of Agreement on the Influence of Food Safety Practices on their Preferences for Choosing Food Stall Vendors	Weighted Mean	Verbal Interpretation
1. Attitude	4.53	Strongly Agree
2. Subjective Norms	4.31	Strongly Agree
3. Perceived Behavioral Control	4.32	Strongly Agree
Overall	**4.39**	**Strongly Agree**

Legend: 5.00 - 4.21 – Strongly Agree; 4.20 - 3.41 – Agree; 3.40 - 2.61 – Slightly Agree; 2.60 – 1.81 – Disagree; 1.80 -1.00 – Strongly Disagree

The results in Table 12 had an overall weighted mean of 4.39, indicating that based on the Theory of Planned Behavior (TPB) variables, students strongly agreed with the factors that influence their choice of food stall vendors. Among these variables, attitude ranked highest with a weighted mean of 4.53, followed by perceived behavioral control at 4.32, and subjective norms ranked lowest at 4.31.

The effectiveness and flexibility of the Theory of Planned Behavior (TPB) for investigating factors that affect food choices in academic settings have been proven by numerous studies. In the southeastern United States, a study was conducted among college students, where they applied the TPB to identify the intentions of the

students in choosing healthy snacks (Lambert et al., 2020). Similarly, a study conducted among high school students of Iran stated that TPB had been useful and helped them explain the intentions of the students' fast-food consumption (Sharifirad et al., 2013). These findings affirm that TPB is effective in capturing decision-making behavior across a wide range of contexts. It also shows the TPB's usefulness in understanding the food preferences of PUP Cabiao students.

3. Significant Relationship Between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors

Table 13 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Food Handling Practices

	Food Handling Practices			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.497	0.004	Reject Ho	Significant
Subjective Norms	0.757	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.774	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 13, food handling practices resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.497 and a p-value of 0.004; subjective norms had a Spearman's rho of 0.757 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.774 and a p-value of < .001. This indicates that students who value safe food handling, listen to the influence of peers and figures they look up to, and feel confident in assessing vendor cleanliness are more likely to consider food safety when choosing where to buy their meals. The strong correlation with perceived behavioral control shows that when students feel they can recognize good handling practices—like the use of tongs or separating raw from cooked foods—they are more confident in their vendor choices.

In the research of Mullan and Wong (2009), they underscore the value of interventions that are designed to support students' intentions towards safe food handling and should prioritize the influence of social expectations and the individual's perceived ability to manage their food handling situation. In other words, highlighting how peers, family, and institutional norms influence their choices, as well as increasing their confidence and mastery in applying safety practices, can effectively reinforce their intentions. On the other hand, where the aim is to translate these intentions into regular behavior, strategies must focus on building hygienic food handling as a habitual and automatic routine. Facilitating repetition, augmentation, and the creation of habits can help ensure that safe food handling becomes a conditioned part of common behavior instead of a deliberative choice every time.

Table 14 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Personal Hygiene

	Personal Hygiene			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.434	0.015	Reject Ho	Significant
Subjective Norms	0.701	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.723	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 14, personal hygiene resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.434 and a p-value of 0.015; subjective norms had a Spearman's rho of 0.701 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.723 and a p-value of < .001. This finding indicates that students who prioritize hygienic practices among food handlers—such as proper handwashing and the use of hairnets—are guided both by their personal beliefs and by the expectations of their peers and families. Thus,

the strong correlation with perceived behavioral control indicates that students who feel confident identifying hygienic vendors tend to avoid those who do not meet their standards, building their preference for safer food sources.

According to Prabakaran (2024), his study of food vendors, specifically their personal hygiene, in a South Indian city in Tamil Nadu, indicated that making food safety a top priority is essential in preventing foodborne diseases, safeguarding the health of both families and the wider community, and ensuring confidence in the quality and safety of the food being consumed. The study also emphasizes the importance of vendors understanding the basics of personal hygiene—like proper handwashing, wearing clean clothing, and avoiding unsafe habits—while also following safe methods of preparing, storing, and serving street food. As a result, when vendors are equipped with the right knowledge and skills, the chances of contamination are reduced, helping build consumer trust and supporting a healthier, more resilient community.

Table 15 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Food Storage and Maintenance

	Food Storage and Maintenance			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.439	0.014	Reject Ho	Significant
Subjective Norms	0.716	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.647	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 15, food storage and maintenance resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.439 and a p-value of 0.014; subjective norms had a Spearman's rho of 0.716 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.647 and a p-value of < .001. This finding indicates that students are more likely to choose food vendors who keep food properly, have refrigeration, and prevent contamination if they personally believe it is important, feel social pressure to do so, and perceive that they can recognize safe practices.

In the research of Wucher et al. (2020), their findings indicate that consumers show strong awareness of food safety by limiting storage of perishable items, yet most of them still lack knowledge of how refrigerator features impact food quality and safety. Although there is an evident need for solutions that extend shelf life and minimize waste, misuse of storage can undermine both safety and efficacy. Learning optimal storage habits is thus critical, and the incorporation of smart appliances that provide real-time guidance could provide an innovative way to improve food preservation, safety, and consumer confidence.

Table 16 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Sanitation and Facility Cleanliness

	Sanitation and Facility Cleanliness			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.494	0.005	Reject Ho	Significant
Subjective Norms	0.715	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.765	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 16, sanitation and facility cleanliness resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.494 and a p-value of 0.005; subjective norms had a Spearman's rho of 0.715 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.765 and a p-value < .001. This finding indicates that students are more likely to purchase from vendors who have a clean stall environment—

free from pests, with trash bins covered and proper drainage—because they are influenced by others to prioritize it, and feel they can detect sanitary conditions.

In the research of Vos et al. (2018), their findings indicate that environmental factors—such as the cleanliness of the space, staff behavior, odors, and the condition of the physical surroundings—establish people's perceptions of cleanliness and service quality by triggering immediate sensory impressions and social judgments. Similarly, factors that include litter, others' behavior, clutter, access to trash bins, and information available not only affect unethical behavior but also create perceptions of cleanliness, which then have a substantial impact on customer responses—increasing satisfaction, repeat visitations, and word-of-mouth, active involvement in activities, and fostering pro-social behaviors such as cooperation and respect. This research emphasizes that cleanliness is not only crucial for safety and health but also plays an important role in shaping how people think and act responsibly toward others.

Table 17 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Food Waste Disposal

	Food Waste Disposal			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.415	0.02	Reject Ho	Significant
Subjective Norms	0.653	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.749	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 17, food waste disposal resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.415 and a p-value of 0.02; subjective norms had a Spearman's rho of 0.653 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.749 and a p-value of < .001. This result indicates that students are more likely to choose vendors who apply responsible waste management—proper separation and disposal—when they believe it matters, are encouraged by others to care about it, and feel capable of spotting poor waste practices. The findings show that students' food choices are strongly influenced by their sense of environmental awareness, particularly when they see themselves as informed and mindful of how vendors manage waste.

In the study by Urbano et al. (2018), it was discovered that patrons of Malolos Food Court—students, employees, and employees of neighboring companies—had a positive view of the stalls' waste management, considering that vendors followed proper and sanitary waste disposal. This impression fostered trust and was reflected in their continued patronage even without air-conditioning and other contemporary facilities, indicating that cleanliness and proper waste management were more important to them than physical comforts. In the same manner, the current study also found a strong correlation between food waste disposal and students' preferences, indicating that PUP Cabiao students also consider proper waste disposal as a strong indicator of safety and reliability and are hence more willing to visit vendors who implement these practices.

Table 18 Spearman's Rho Correlation on the Significant Relationship between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Permits and Licensing

	Permits and Licensing			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.599	<.001	Reject Ho	Significant
Subjective Norms	0.745	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.828	<.001	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

As shown in Table 18, permits and licensing resulted in a significant positive correlation. Attitude had a Spearman's rho of 0.599 and a p-value of < .001; subjective norms had a Spearman's rho of 0.745 and a p-value of < .001; and perceived behavioral control had a Spearman's rho of 0.828 and a p-value of < .001. The finding indicates that students place a value on legal compliance, seeing valid permits not only as a formal requirement but also as a symbol of a vendor's dedication to food safety. The strong link with perceived behavioral control shows that students who can identify and verify licensing documentation are especially likely to avoid unlicensed vendors, making regulatory compliance a significant factor in their purchasing preferences.

In the study by Liu et al. (2021), it highlights that consumers often depend on visible assurances such as labels, certifications, and traceability systems to judge food safety and quality. In a similar way, the display of valid permits and licenses by food vendors provides a clear signal of compliance and accountability. Much like certifications on packaged products, these documents act as trust markers that reassure buyers, shaping their confidence, sense of control, and purchasing decisions.

Table 19 Significant Relationship Between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors in terms of Food Handling Practices, Personal Hygiene, Food Storage and Maintenance, Sanitation and Facility Cleanliness, Food Waste Disposal, Permits and Licensing

	Significant Relationship Between Food Safety Practices and Students' Preferences in Choosing Food Stall Vendors			
Indicators	**Spearman's rho (ρ)**	**p-value**	**Decision**	**Conclusion**
Attitude	0.480	0.010	Reject Ho	Significant
Subjective Norms	0.715	<.001	Reject Ho	Significant
Perceived Behavioral Control	0.748	<.001	Reject Ho	Significant
Overall	0.648	0.004	Reject Ho	Significant

Legend: Accept Ho if p-value > 0.05 = Not Significant; Reject Ho if p-value < 0.05 = Significant

The result in Table 19, with an overall Spearman's Rho of 0.648 and a 0.004 p-value, indicates a strong relationship between food safety practices and students' preferences in choosing food stall vendors. Among the TPB variables, perceived behavioral control and subjective norms both showed strong positive correlations, 0.748 and 0.715, respectively, with a highly significant p-value, which is <0.001. In contrast, attitude received a Spearman's rho of 0.480, a moderate positive correlation that was comparatively lower than the other two variables, but still has a significant p-value of 0.004.

The findings align with the research on healthy eating intention among Malaysian adults by Sharkawi et al. (2021), which also used the Theory of Planned Behavior (TPB) and had a finding that all three variables—attitude, subjective norms, and perceived behavioral control—had positive and significant relationships in food-related choice. Although that study primarily focused on healthy eating rather than food safety, both have the same emphasis on food consumption decisions.

Furthermore, a study in Yogyakarta, Indonesia, about the food safety behavior among beach food handlers, using the predictive model, had a similar hierarchical pattern. In that study, the strongest and most significant predictor was perceived behavioral control, followed by subjective norms, and attitude as the weakest influence (Rustiawan et al., 2024).

The consistency seen in these studies suggests that food behaviors, whether related to safety or health, are strongly shaped by how much control people feel they have over their choices and by the expectations of those around them. The weaker correlation of attitude shows that positive views alone may not be enough to drive students' decisions unless they are reinforced by social influence or by their actual ability to act on those choices. For the students of PUP Cabiao, this means that seeing vendors consistently follow safety measures and hearing approval or encouragement from their peers can have a greater impact on their choices than their own general beliefs about food safety.

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of the study's main findings and outlines the corresponding conclusions and recommendations drawn from the results discussed in the preceding chapter.

Summary of Findings

This section provides a summarization of findings based on the gathered data.

1. The students' level of agreement in evaluating the food safety practices of food stall vendors showed weighted means for the following variables: food handling practices (4.20), personal hygiene (4.08), food storage and maintenance (4.11), sanitation and facility cleanliness (4.11), food waste disposal (4.05), and permits and licensing (4.17), with an overall weighted mean of 4.12.
2. The students' level of agreement on the influence of the food safety practices on their preferences for choosing food stall vendors showed weighted means for the following variables: attitude (4.53), subjective norms (4.31), and perceived behavioral control (4.32), with an overall weighted mean of 4.39.
3. The significant relationship between food safety practices and students' preferences in choosing food stall vendors showed Spearman's rho for the following variables: attitude ($\rho = 0.480$, p-value = 0.010), subjective norms ($\rho = 0.715$, p-value < 0.001), perceived behavioral control ($\rho = 0.748$, p-value < 0.001), and an overall of $\rho = 0.648$ and p-value = 0.004.

Conclusions

This section presents conclusions which is based on and derived from the summary of findings mentioned above.

1. Students' agreement indicates that vendors demonstrate good compliance with the food safety standards outlined in the Food Code of the FDA.
2. Students' strong agreement indicates that food safety practices significantly influence their preference for choosing a food stall vendor.
3. Researchers' rejection of the null hypothesis indicates that there is a significant relationship between food safety practices and students' preferences in choosing food stall vendors.

Recommendations

This section offers suggestions based on the study's findings to help improve practices related to the research topic.

1. Local health authorities should frequently have regular monitoring and create solutions addressing the weaknesses and gaps observed in the compliance of food stall vendors. Specifically, the areas needing deeper attention are the inconsistent use of gloves and hairnets when handling ready-to-eat food, the absence of or limited access to refrigerated storage for perishable items, inadequate provisions of restroom facilities for consumers, poor segregation of waste, and the lack of regular health and safety inspections. Imposing stricter compliance while providing affordable, accessible, and effective training and awareness programs will help vendors consistently comply with food safety standards.
2. Food stall vendors should prioritize factors based on what the customers or students place the highest value on in their food choices. They feel most confident buying from vendors who prioritize hygiene, have proper sanitation practices, and have foods that are prepared and served in a clean environment. Students prefer food stalls that are frequently visited by their peers who are conscious about cleanliness, meaning that positive word-of-mouth about a business would inspire and build trust. Furthermore, students are willing to switch to a cleaner food vendor; thus, aligning practices to food safety standards—such as consistently and visibly displaying cleanliness at the stall—would sustain loyalty from them. Upholding these standards would strengthen the reputation and make the food stall a preferred choice for the students.
3. Future researchers should expand the geographic scope, including other schools to find out variations in students' demographics and vendors' practices. Since quota sampling is a non-probability sampling, researchers may consider applying probability or random sampling. Lastly, future researchers should explore other types of micros, small, and medium enterprises (MSMEs) other than food stalls, such as

bakeries, cafes, and mobile food vendors, to determine whether the relationships are observed across different food businesses.

REFERENCES

1. Addo-Tham, R., Appiah-Brempong, E., Vampere, H., Acquah-Gyan, E., & Gyimah Akwasi, A. (2020). Knowledge on food safety and food-handling practices of street food vendors in Ejisu-Juaben municipality of Ghana. Advances in Public Health, 2020(1), 4579573.
2. Adebayo, O. A., Abiola, O. J., & Olowolafe, J. O. (2022). Evaluation of hygiene practices among street food vendors in urban areas: Afocus on hairnet usage. Journal of Food Safety, 42(1), e12984. https://doi.org/10.1111/jfs.12984
3. Aggarwal, Y. P. (2008). Statistics of Education. (2nd Ed.) Delhi: Sterling.
4. Ahmed, S. K. (2024). How to choose a sampling technique and determine sample size for research: A simplified guide for researchers. Oral Oncology Reports, 12, 100662.
5. Ajzen, I. (2020) The theory of planned behavior: frequently asked questions. Hum Behav Emerg Technol 2:314–324. https://doi.org/10.1002/hbe2.195
6. Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.
7. Al Amin, M., Arefin, M. S., Alam, M. R., Ahammad, T., & Hoque, M. R. (2021). Using mobile food delivery applications during COVID-19 pandemic: An extended model of planned behavior. Journal of Food Production Marketing, 27, 105–126. https://doi.org/10.1080/10454446.2021.1906817
8. Asyrafi, F. H. (2023). The Influence Of Subjective Norms And Perception Food Safety Toward Behavioral Intention To Use And Continuance Behavior (Study Case On Mobile Food Delivery Applications During Covid-19 Pandemic In Indonesia).
9. Azanaw, J., Engdaw, G. T., Dejene, H., Bogale, S., & Degu, S. (2022). Food hygiene knowledge, and practices and their associated factors of street food vendors in Gondar city, Northwest Ethiopia, 2021: A cross-sectional study. Heliyon, 8(11).
10. Bermejo, R. (2024). Food Safety Practices of Street Food Vendors in the FourthDistrictofIloilo: Basis for Policy Review. International Journal of Research PublicationandReviews. https://doi.org/10.55248/gengpi.5.1124.3209
11. Cambridge Dictionary. Attitude. https://dictionary.cambridge.org/dictionary/english/attitude
12. Camus, K. (2024). Food habits and preferences of senior high school students of Zone II, Division of Zambales. International Journal of Advanced Multidisciplinary Studies, 4(6), 440-454.
13. Carpio, C. G., Lista, A. M., Oliveros, J. V., Gamiao, E. A., & Malinao, C. W. M. (2025). Food Safety Knowledge, Attitude, and Practices Among Street Food Vendors in Alfonso Lista, Ifugao, Philippines. Journal of Economics, Business, and Commerce, 2(1), 157-168.
14. Chakunda, V. (2023). A ‘war against livelihoods’: Contestations over the government of Zimbabwe's response to street vending in selected cities. City, Culture and Society, 34. https://doi.org/10.1016/j.ccs.2023.100536
15. Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
16. Czernyszewicz, E. (2023). Determinants of Polish young adults' attitudes toward food safety. British Food Journal, 125(9), 3389-3403.
17. DOH, Victoria. (2020). Personal hygiene for food handlers. https://www.health.vic.gov.au/food-safety/personal-hygiene-for-food-handlers
18. FAO & WHO. (2022). General Principles of Food Hygiene CXC 1-1969. Codex Alimentarius. p. 11, 9.2.7. https://www.fao.org/fao-who-codexalimentarius/sh-proxy/it/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXC%2B1-1969%252FCXC_001e.pdf
19. Farhana, Zeba & Sutradhar, Nibedita & Mustafa, Tonima & Naser, Niamul. (2020). Food Safety and Environmental Awareness of Street Food Vendors of the Dhaka University Campus, Bangladesh. Journal of zoology. 48. 171-178. 10.3329/bjz.v48i1.47886.
20. Food Code 2022. U.S. Food & Drug Administration. https://www.fda.gov/food/fda-food-code/food-code-2022

21. Food Safety & Hygiene Academy of the Philippines. Clean and Sanitize. https://foodshap.com/food-safety-philippines-clean-and-sanitize.php
22. Francisco, M. F. (2023). Street Foods: Factors Influencing its Popularity among College Students.
23. Ghanad, A. (2023). An overview of quantitative research methods. International journal of multidisciplinary research and analysis, 6(08), 3794-3803.
24. Golzar J., Herat University H., Noor S., University H., Tajik O., University H. (2022). Sampling Method | Descriptive Research Convenience Sampling. International Journal of Education Language studies. IJELS, 1 (2) .DOI:10.22034/ijels.2022.162981
25. Hong, C., Choi, H. H., Choi, E. K. C., & Joung, H. W. D. (2021). Factors affecting customer intention to use online food delivery services before and during the COVID-19 pandemic. Journal of Hospitality and Tourism Management, 48, 509-518.
26. Integrated Assessment Services. (n.d.). What is FDA Certification. https://www.iascertification.com/what-is-fda-certification/#:~:text=It%20signifies%20that%20a%20product,to%20rigorous%20quality%20control%20procedures.
27. Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. British journal of applied science & technology, 7(4), 396.
28. Laerd Statistics. (n.d.). Spearman's Rank-Order Correlation. https://statistics.laerd.com/statistical-guides/spearmans-rank-order-correlation-statistical-guide.php
29. Lambert, L. G., Chang, Y., & Mann, G. (2020). College students' intention to select healthy snacks: An application of the theory of planned behavior. American Journal of Health Education, 51(4), 215-224.
30. Letuka, P. O., Nkhebenyane, J., & Thekisoe, O. (2021). Street food handlers' food safety knowledge, attitudes and self-reported practices and consumers' perceptions about street food vending in Maseru, Lesotho. British Food Journal, 123(13), 302-316.
31. Lim HR, An S. Intention to purchase well-being food among Korean consumers: An application of the theory of planned behavior. Food Qual Prefer. (2021) 88:104101. doi:10.1016/j.foodqual.2020.104101
32. Lin, N., & Roberts, K. R. (2020). Using the theory of planned behavior to predict food safety behavioral intention: A systematic revi ew and meta-analysis. International Journal of Hospitality Management, 90, 102612.
33. Liu, Z., Mutukumira, A. N., & Shen, C. (2021). Food safety knowledge, attitudes, and eating behavior in the advent of the global coronavirus pandemic. PLoS ONE, 16(12), 1–14. doi : 10.1371/journal.pone.0261832
34. Ma, L., Chen, H., Yan, H., Wu, L., & Zhang, W. (2019). Food safety knowledge, attitudes, and behavior of street food vendors and consumers in Handan, a third tier city in China. BMC public health, 19, 1-13.
35. Martinez-Gomez, M., Marin-Garcia, J. A., & Giraldo-O'Meara, M. M. (2017). Testing invariance between web and paper students satisfaction surveys. A case study. Intangible Capital, 13(5), 879-902.
36. Marutha, K. J., & Chelule, P. K. (2020). Safe food handling knowledge and practices of street food vendors in Polokwane Central Business District. Foods, 9(11), 1560.
37. Mawar, R. S., & Adiati, M. P. (2024). Analysis of behavioral determinants preventing food waste in consumers based on the Theory of Planned Behavior (TPB) mediated by behavior intention. International Journal of Economics, Business and Social Science, 2(1), 1–10. https://ijebss.ph/index.php/ijebss/article/view/153
38. Memon M. A., Ting H., Cheah J., Thurasamy R., Chuah F. & Chan T. H. (2020). SAMPLE SIZE FOR SURVEY RESEARCH: REVIEW AND RECOMMENDATIONS. Journal of Applied Structural Equation Modeling: 4(2), i-xx. eISSN: 2590-4221. https://jasemjournal.com/wp-content/uploads/2020/08/Memon-et-al_JASEM_-Editorial_V4_Iss2_June2020.pdf
39. Milan, L. B., Feliciano, A. F., & Lusong, A. N. (2021). Food Safety Compliance and Challenges of Micro Food Business Operators: Implications to COVID-19 Pandemic. Recoletos Multidisciplinary Research Journal, 9(2), 89-102.
40. Mohammed, A. S., & Shehasen, M. Z. (2020). Street food consumption and associated health risk. International Journal of Research Studies in Agricultural Sciences, 6, 8-18.
41. Mucha, L. (2024). Applying the theory of planned behavior to examine the customer behavior towards craft bakery products: evidence from Hungary. Humanities and Social Sciences Communications, 11(1), 1-13.

42. Mullan, B. A., & Wong, C. L. (2009). Hygienic food handling behaviours. An application of the Theory of Planned Behaviour. Appetite, 52(3), 757-761.
43. Mwove, J., Imathiu, S., Orina, O., & Karanja, P. (2020). Food safety knowledge and practices of street food vendors in selected locations within Kiambu County, Kenya.
44. Ni'am, S., Mujito, M., Udjari, H., Darmawan, D., Rizky, M. C., Firmanto, R., & Purwanto, I. (2024). Supervision and Enforcement of Street Vendors. International Journal of Service Science, Management, Engineering, and Technology, 5(2), 7-10.
45. Ngoc, T. T. A., Hang, N. T. M., Thanh, D. K., & Hoa, L. V. (2020). Evaluation of microbial safety knowledge, attitude and practice of street food vendors and consumers in Can Tho City, Vietnam. Food Research, 4(5), 1802-1814.
46. Odipe, O. E., Raimi, M. O., Deinkuro, N. S., Funmilayo, A. A., innocent Edewor, O. P., Lateefat, H. M., & Fadeyibi, M. (2019). Assessment of environmental sanitation, food safety knowledge, handling practice among food handlers of Bukateria Complexes in Iju Town, Akure north of Ondo-State, Nigeria. Acta Scientific Nutritional Health, 3(6).
47. Ojeda, L. & Pino, A. (2019). Spatiality of street vendors and sociospatial disputes over public space: The case of Valparaíso, Chile. Cities. https://doi.org/10.1016/j.cities.2019.02.005.
48. Oladipo-Adekeye, O. T., & Tabit, F. T. (2021). The food safety knowledge of street food vendors and the sanitary compliance of their vending facilities, Johannesburg, South Africa. Journal of Food Safety, 41(4), e12908.
49. Prabakaran, B. (2024). A Community Study To Assess The Personal Hygiene Among Food Vendors. International Journal of Life Sciences, Biotechnology and Pharma Research, 13(2).
50. Prevolšek, V., Ovca, A., & Jevšnik, M. (2021). Fulfilment of technical and hygienic requirements among street food vendors in Slovenia. British Food Journal, 123(13), 105-123.
51. Purwanto, P., Abdullah, I., Ghofur, A., Abdullah, S., & Elizabeth, M. Z. (2022). Adoption of Islamic microfinance in Indonesia an empirical investigation: An extension of the theory of planned behaviour. Cogent Business & Management, 9(1), 2087466.
52. Qu, J., Sun, B., and Qu, G. (2022). How does the online shopping privacy disclosure behavior of college students occur? A study based on the fsqca method under the TPB framework. Inform. Sci. 40, 147–163. doi: 10.13833/j.issn.1007-7634.2022.10.019
53. R Core Team (2024). R: A Language and environment for statistical computing. (Version 4.4) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from CRAN snapshot 2024-08-07).
54. Rakha, A., Fatima, M., Bano, Y., Khan, M. A., Chaudhary, N., & Aadil, R. M. (2022). Safety and quality perspective of street vended foods in developing countries. Food Control, 138, 109001.
55. Rosales, A. P., Linnemann, A. R., & Luning, P. A. (2023). Food safety knowledge, self-reported hygiene practices, and street food vendors' perceptions of current hygiene facilities and services-An Ecuadorean case. Food Control, 144, 109377.
56. Roscoe, J. T. (1975). Fundamental research statistics for the behavioral sciences (Second ed.). New York: Holt Rinehart and Winston.
57. Ruby, G. E., Abidin, U. F. U. Z., Lihan, S., Jambari, N. N., & Radu, S. (2019). Predicting intention on safe food halndling among adult consumers: A cross sectional study in sibu district, Malaysia. Food Control, 106. https://doi.org/10.1016/j. foodcont.2019.06.022, 106696.
58. Rukmana, D. (2024). Quota Sampling. In Encyclopedia of Quality of Life and Well-Being Research (pp. 5805-5807). Cham: Springer International Publishing.
59. Rustiawan, A., Sulaeman, E. S., Suminah, S., & Mulyani, S. (2024). Predicting Intention for Food Safety Behavior among Food Handlers: A Cross-sectional Study in Indonesia's Beach Culinary Area. Current Nutrition & Food Science, 20(4), 513-519.
60. Sample Size Calculator. Social Science Statistics. https://www.socscistatistics.com/tests/samplesize/default.asp
61. Shang, W., Zhu, R., Liu, W., & Liu, Q. (2024). Understanding the influences on green purchase intention with moderation by sustainability awareness. Sustainability, 16(11), 4688.
62. Sharifirad, G., Yarmohammadi, P., Azadbakht, L., Morowatisharifabad, M. A., & Hassanzadeh, A. (2013). Determinants of fast food consumption among Iranian high school students based on planned behavior theory. Journal of obesity, 2013(1), 147589.

63. Sharkawi, I., Latip, M., & Mohamed, Z. A. (2021). Applying the Theory of Planned Behavior to Healthy Eating Intention among Malaysian Adults. International Journal of Academic Research in Business and Social Sciences, 11(17), 17-26.
64. Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. International Journal of Economics, Commerce and Management, 2(11), 1–22.
65. Solidum, G. M. (2023). Status and problems of the street vendors: Inputs for Local Government Unit planning. Sprin Journal of Arts, Humanities and Social Sciences, 2(4). https://doi.org/10.55559/sjahss.v2i04.102
66. Spearman, C. (1904). The proof and measurement of association between two things. The American Journal of Psychology, 15(1), 72–101. https://doi.org/10.2307/1412159
67. Tan, B. C., Lau, T. C., Sarwar, A., & Khan, N. (2022). The effects of consumer consciousness, food safety concern and healthy lifestyle on attitudes toward eating "green". British Food Journal, 124(4), 1187-1203.
68. Tesfaye, A., & Tegene, Y. (2020). Assessment of food hygiene and safety practices among street food vendors and its associated factors in urban areas of Shashemane, West Arsi Zone, Oromia Ethiopia, 2019. Sci. J. Immunol. Immunother, 4, 1-5.
69. Troise, C.; O'Driscoll, A.; Tani, M.; Prisco, A. Online food delivery services and behavioural intention—A test of an integrated TAM and TPB framework. Br. Food J. 2020, 123. [CrossRef]
70. The Health and Safety Department. (2023) .Which Food Safety Hazards Result From Poor Waste Control?. https://www.hsdept.co.uk/services/food-hygiene-safety-advice/which-food-safety-hazards-result-from-poor-waste-control/
71. The jamovi project (2024). jamovi. (Version 2.6) [Computer Software]. Retrieved from https://www.jamovi.org.
72. Umar, A. A., Sambo, M. N., Sabitu, K., Mande, A. T., & Umar, J. (2019). Personal hygiene of street-food vendors in Sabon-Gari local government area of Kaduna State, Nigeria. Nigerian Journal of Basic and Clinical Sciences, 16(2), 114-120.
73. Urbano, F. L., Angeles, R. M., & Bautista, J. L. (2018). The customer perception on waste management of the stalls at the Malolos Food Court. Bulacan State University. Retrieved from https://www.researchgate.net/publication/323310912_THE_CUSTOMER_PERCEPTION_ON_WASTE_MANAGEMENT_OF_THE_STALLS_AT_THE_MALOLOS_FOOD_COURT
74. Vos, M. C., Galetzka, M., Mobach, M. P., van Hagen, M., & Pruyn, A. T. (2018). Cleanliness unravelled: a review and integration of literature. Journal of Facilities Management, 16(4), 429-451.
75. Werkneh, A. A., Tewelde, M. A., Gebrehiwet, T. A., Islam, M. A., & Belew, M. T. (2023). Food safety knowledge, attitude and practices of street food vendors and associated factors in Mekelle city, Northern Ethiopia. Heliyon, 9(4).
76. WHO. (n.d.). https://www.who.int/activities/promoting-safe-food-handling
77. Wongprawmas, R., Mora, C., Pellegrini, N., Guiné, R. P. F., Carini, E., Sogari, G., & Vittadini, E. (2021). Food choice determinants and perceptions of a healthy diet among Italian consumers. Foods, 10(2). doi : 10.3390/foods10020318
78. Wright, K. B. (2005). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. Journal of Computer-Mediated Communication, 10(3). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5506389/
79. Wucher, H., Klingshirn, A., Brugger, L., Stamminger, R., Geppert, J., Kölzer, B., ... & Härlen, J. (2020). Tackling food waste: Impact of German consumer behaviour on food in chilled storage. Foods, 9(10), 1462.
80. Wu, W., Zhang, A., van Klinken, R. D., Schrobback, P., & Muller, J. M. (2021). Consumer trust in food and the food system: a critical review. Foods, 10(10), 2490.
81. Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A. R. (2015). Design and implementation content validity study: development of an instrument for measuring patient-centered communication. Journal of caring sciences, 4(2), 165.
82. Zeleke, A. A., Worku, A. G., Demissie, A., Otto-Sobotka, F., Wilken, M., Lipprandt, M., ... & Röhrig, R. (2019). Evaluation of electronic and paper-pen data capturing tools for data quality in a public health survey in a health and demographic surveillance site, Ethiopia: randomized controlled crossover health care information technology evaluation. JMIR mHealth and uHealth, 7(2), e10995.

APPENDICES

Appendix 1

Population

April 30, 2025

ENGR. FERNANDO F. ESTINGOR
Campus Director
Polytechnic University of the Philippines
Cabiao Campus
San Roque, Cabiao, Nueva Ecija

APPROVED
BY_____

Thru: **Ms. May M. Galang**
Registration officer

Subject: REQUEST FOR TOTAL STUDENT POPULATION DATA FOR SECOND SEMESTER S.Y 2024-2025

Dear Ma'am,

Good day,

I, the representative of the group, writing to respectfully request the total population of students who currently enrolled for the second semester at PUP Cabiao Campus in Bachelor of Science in Business Administration Major in Marketing Management program and Bachelor in Elementary Education program. This information is crucial to the research we are currently conducting, and we would greatly appreciate your assistance in providing this data.

Thank you for your time and consideration. We look forward to your prompt response.

Sincerely yours,

BEED - 336
BSBA - 359

Mr. Aeron Delos Santos
Group 5 Representative
Bachelor of Science in Business Administration (BSBA) 3-2

Noted by:

Mr. Erwin Matunan
Research Adviser

Continuation of Appendix 1

REPUBLIC OF THE PHILIPPINES
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
OFFICE OF THE VICE PRESIDENT FOR CAMPUSES
CABIAO CAMPUS

BAGONG PILIPINAS

PUP CABIAO CAMPUS
STATISTICS PER YEAR LEVEL (2ND SEM-24-25)

	1st Year	2nd Year	3rd Year	4th Year	TOTAL
BEED	84	87	69	96	336
BSBAMM	101	64	74	90	329

Prepared by:

AS NG

Noted by:

ENGR. ESTINGOR
Campus Director

PUP Cabiao Campus, San Roque, Cabiao, Nueva Ecija, 3107
Website: www.pup.edu.ph | Inquiries: https://bit.ly/PUPSINTA

THE COUNTRY'S 1ST POLYTECHNICU

Appendix 2

Survey Questionnaire

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

EVALUATING FOOD SAFETY PRACTICES OF LOCAL FOOD STALLS IN PUP CABIAO: INFLUENCE ON STUDENT PREFERENCE FOR CHOOSING FOOD VENDORS

A Thesis
Presented to the Faculty of
Polytechnic University of the Philippines - Cabiao Campus
San Roque, Cabiao, Nueva Ecija

In Partial Fulfilment of the Requirements for the Degree
Bachelor of Science in Business Administration
Major in Marketing Management

By:

Rosemarie F. Buenafrancisca
Aeron M. Delos Santos
Armil C. Roque

2025

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

SURVEY QUESTIONNAIRE

Dear Respondent,

Good day, we, 3rd year student of Polytechnic University of the Philippines, Cabiao Campus under the Bachelor of Science in Business Administration Major in Marketing Management program are conducting a research entitled "**Evaluating Food Safety Practices of Local Food Stalls in PUP Cabiao: Influence on Student Preference for choosing Food Vendors**". We kindly ask for your responses. Your participation will be a grateful help to accomplish this research. Thank you.

Researchers,

Rosemarie F.Buenafrancisca

Aeron M. Delos Santos

Armil C. Roque

Noted by:

Mr. Erwin M. Matunan
Adviser

Data Privacy Act of 2012 R.A. 1073

An Act protecting individual personal information in Information and Communications Systems in the government and the private sector, creating for this purpose a National Privacy Commission, and for other purposes.

Direction: Please provide the necessary information or put a check mark (✓) opposite the item that corresponds to your response.

PART I. Respondent Profile

1.1 Age: _____

1.2 Sex

☐ Male

☐ Female

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

1.3 Year Level

☐ 1st Year

☐ 2nd Year

☐ 3rd Year

☐ 4th Year

1.4 Program

☐ Bachelor of Science in Business Administration Major in Marketing Management

☐ Bachelor in Elementary Education

PART II: Food Safety Practices According to FDA Food Code

Direction: Use a check mark (✓) in the box for your response base from the scale.

5 – Strongly Agree

4 – Agree

3 – Slightly Agree

2 – Disagree

1 – Strongly Disagree

A. Food Handling Practices	**5**	**4**	**3**	**2**	**1**
1. The food stall vendors wear gloves when handling ready-to-eat food. *(Nagsusuot ng guwantes ang mga nagtitinda ng pagkain kapag humahawak ng pagkaing handa nang kainin.)*					
2. Vendors wear hairnets to maintain cleanliness while preparing food. *(Nagsusuot ng hairnet ang mga nagtitinda upang mapanatili ang kalinisan habang naghahanda ng pagkain.)*					
3. Vendors wash produce before using it, ensuring freshness and safety.					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

(Hinuhugasan ng mga nagtitinda ang mga gulay at prutas bago gamitin upang matiyak ang pagiging sariwa at ligtas.)					
4. Raw food is kept separate from cooked food. *(Ibinubukod ang hilaw na pagkain mula sa nalutong pagkain.)*					
5. Vendors use separate utensils for raw and cooked food to prevent contamination. *(Gumagamit ang mga nagtitinda ng magkahiwalay na kagamitan para sa hilaw at lutong pagkain upang maiwasan ang kontaminasyon.)*					
6. Food is prepared in a clean and organized workspace. *(Inihahanda ang pagkain sa isang malinis at maayos na lugar.)*					
7. Vendors use clean utensils and equipment, ensuring food safety. *(Gumagamit ang mga nagtitinda ng malinis na kagamitan at kasangkapan upang matiyak ang kaligtasan ng pagkain.)*					
8. Vendors check food for spoilage before serving, ensuring only fresh food is served. *(Sinusuri ng mga nagtitinda kung sira na ang pagkain bago ito ihain upang matiyak na sariwa ito.)*					
9. Vendors use tongs or spoons on serving food. *(Gumagamit ang mga nagtitinda ng tongs o kutsara sa paghahain ng pagkain.)*					
10. Vendors cover food properly to protect it from contamination. *(Maayos na tinatakpan ng mga nagtitinda ang pagkain upang maprotektahan ito laban sa kontaminasyon.)*					

B.) Personal Hygiene	**5**	**4**	**3**	**2**	**1**
1. Hairnets or caps are worn to ensure food safety. *(Nagsusuot ng hairnet o takip sa ulo upang matiyak ang kaligtasan ng pagkain.)*					
2. Vendors wear aprons during food preparation to maintain cleanliness.					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

	(Nagsusuot ng apron ang mga nagtitinda habang naghahanda ng pagkain upang mapanatili ang kalinisan.)					
3.	Vendors avoid using their mobile phones or handling personal items while preparing food. *(Iniiwasan ng mga nagtitinda and paggamit ng kanilang mobile phone o paghawak ng personal na gamit habang naghahanda ng pagkain.)*					
4.	Vendors wash their hands regularly before and after handling food. *(Regular na naghuhugas ng kamay ang mga nagtitinda bago at pagkatapos humawak ng pagkain.)*					
5.	Vendors avoid touching their faces while working to maintain hygiene. *(Iniiwasan ng mga nagtitinda ang paghawak sa kanilang mukha habang nagtatrabaho upang mapanatili ang kalinisan.)*					
6.	Food handlers keep their fingernails clean and well-trimmed. *(Pinapanatili ng mga nagtitinda ang kanilang mga kuko na malinis at maayos ang pagkakaputol.)*					
7.	Vendors wear minimal accessories to prevent food contamination. *(Hindi nagsusuot ng maraming alahas ang mga nagtitinda upang maiwasan ang kontaminasyon sa pagkain.)*					
8.	Vendors avoid coughing or sneezing near food. *(Iniiwasan ng mga nagtitinda ang pag-ubo o pagbahing malapit sa pagkain.)*					
9.	Open wounds or cuts are properly covered while preparing food. *(Maayos na tinatakpan ang anumang sugat o hiwa habang naghahanda ng pagkain.)*					
10.	Vendors practice good dental hygiene for a clean food prep environment. *(Pinananatili ng mga nagtitinda ang mabuting pangangalaga sa kanilang bibig upang mapanatili ang kalinisan sa paghahanda ng pagkain.)*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

C.) Food Storage & Maintenance	5	4	3	2	1
1. Food stalls have refrigerators to safely store perishable food. *(May refrigerator ang mga tindahan ng pagkain upang ligtas na maiimbak ang mga nasisirang pagkain.)*					
2. Vendors ensure food storage areas are clean and well-maintained. *(Tinitiyak ng mga nagtitinda na malinis at maayos ang mga lugar ng imbakan ng pagkain.)*					
3. Perishable foods are stored in appropriate conditions to maintain freshness. *(Iniimbak ang nabubulok na pagkain sa tamang kondisyon upang mapanatili ang pagiging sariwa nito.)*					
4. Vendors store dry goods in sealed containers to protect quality. *(Iniimbak ng mga nagtitinda ang mga tuyong produkto sa mga selyadong lalagyan upang mapanatili ang kalidad nito.)*					
5. Food storage areas are kept pest-free to ensure safety. *(Pinananatiling walang peste ang mga lugar ng imbakan ng pagkain upang matiyak ang kaligtasan.)*					
6. Vendors check refrigerator temperatures regularly to ensure safe storage. *(Regular na sinusuri ng mga nagtitinda ang temperatura ng refrigerator upang matiyak ang ligtas na imbakan.)*					
7. Food is stored away from cleaning chemicals to prevent contamination. *(Iniiwasang ilagay ang pagkain malapit sa mga kemikal na panlinis upang maiwasan ang kontaminasyon.)*					
8. Vendors avoid overstocking food storage to maintain proper organization. *(Iniiwasan ng mga nagtitinda ang sobrang pag-iimbak ng pagkain upang mapanatili ang kaayusan.)*					
9. Vendors use food-safe packaging materials to protect food quality. *(Gumagamit ang mga nagtitinda ng food-safe*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

packaging materials upang maprotektahan ang kalidad ng pagkain.)					
10. Storage areas are kept free from leaks or moisture to prevent spoilage. *(Pinananatiling tuyo at walang tagas ang mga lugar ng imbakan upang maiwasan ang pagkasira ng pagkain.)*					

D. Sanitation and Facility Cleanliness	**5**	**4**	**3**	**2**	**1**
1. Food stalls are cleaned regularly to maintain a hygienic and pest-free environment. *(Regular na nililinis ang mga tindahan ng pagkain upang mapanatili ang kalinisan at pest-free na kapaligiran.)*					
2. Handwashing stations are conveniently located near stalls for easy access. *(May madaling ma-access na lababo para sa paghuhugas ng kamay malapit sa mga tindahan.)*					
3. Vendors maintain a sanitary workspace, prioritizing cleanliness. *(Pinananatili ng mga nagtitinda ang isang malinis na lugar ng trabaho.)*					
4. Food stalls have proper ventilation for a fresh and clean atmosphere. *(May maayos na bentilasyon ang mga tindahan ng pagkain para sa isang malinis na kapaligiran.)*					
5. Wastewater is properly drained to maintain hygiene and safety. *(Maayos na dinidrain ang wastewater upang mapanatili ang kalinisan.)*					
6. Garbage bins are emptied daily to ensure cleanliness. *(Araw-araw na itinapon ang basura upang mapanatili ang kalinisan.)*					
7. Vendors use food-safe cleaning agents to ensure safe food handling. *(Gumagamit ang mga nagtitinda ng panlinis na ligtas para sa pagkain.)*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

8. Vendors wear gloves when handling cleaning agents for added protection. *(Nagsusuot ng guwantes ang mga nagtitinda kapag humahawak ng mga panlinis na kemikal.)*					
9. Vendors keep trash bins covered to prevent contamination. *(May takip ang basurahan upang maiwasan ang kontaminasyon.)*					
10. Vendors have restroom facilities available for consumers' convenience. *(May maayos na palikuran na para sa mga mamimili.)*					

E.) Food Waste Disposal	**5**	**4**	**3**	**2**	**1**
1. Vendors separate biodegradable and non-biodegradable waste for proper disposal. *(Pinaghihiwalay ng mga nagtitinda ang nabubulok at di-nabubulok na basura para sa tamang pagtatapon.)*					
2. Leftover food is handled responsibly to minimize waste. *(Ang mga natirang pagkain ay ina-asikaso ng maayos upang mabawasan ang basura.)*					
3. Vendors dispose of liquid waste properly, ensuring hygiene. *(Maayos na itinatapon ang mga liquid waste upang mapanatili ang kalinisan.)*					
4. Food waste is collected and disposed to comply on environmental responsibility. *(Maayos na kinokolekta at itinatapon ang basura na pagkain upang mapangalagaan ang kalikasan.)*					
5. Vendors use biodegradable packaging materials to reduce environmental impact. *(Gumagamit ng mga biogredable packaging materials upang mabawasan ang epekto sa kapaligiran.)*					
6. Vendors ensure waste areas are kept pest-free. *(Pinananatiling walang peste ang mga lugar ng tinatapunan ng basura.)*					
7. Trash bins are lined with plastic bags for easy disposal.					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

	(Nilalagyan ng plastic bags ang basurahan para sa madaling pagtatapon.)					
8.	Vendors store waste bins away from food areas to maintain cleanliness. *(Inilalayo ng mga nagtitinda ang basurahan mula sa pagkain upang mapanatili ang kalinisan.)*					
9.	Vendors wash waste bins regularly to ensure hygiene. *(Regular na hinuhugasan ang mga basurahan upang mapanatili ang kalinisan.)*					
10.	Vendors avoid food waste through proper portion control. *(Iniiwasan ang sobrang basura sa pamamagitan ng tamang pag-aayos ng pagkain.)*					
F.) Permits and Licensing		**5**	**4**	**3**	**2**	**1**
1.	Vendors display valid business permits and health certificates. *(Ipinapakita ng mga nagtitinda ang kanilang permit sa negosyo at sertipiko sa kalusugan.)*					
2.	Vendors comply with local licensing and permit regulations. *(Sumusunod ang mga nagtitinda sa mga lokal na regulasyon sa pagpapahintulot at paglilisensya.)*					
3.	Vendors have visible permits that are easily noticeable by customers. *(Malinaw na nakikita at madaling mapansin ng mga mamimili ang mga permit ng mga nagtitinda.)*					
4.	Vendors undergo regular health and safety inspections. *(Sumusailalim ang mga nagtitinda sa regular na inspeksyon sa kalusugan at kaligtasan.)*					
5.	Vendors with proper licensing follow better hygiene and sanitation practices. *(Ang mga nagtitindang may wastong lisensya ay mas sumusunod sa mabuting kalinisan at sanitasyon.)*					
6.	Vendors renew their permits and licenses as required by regulations. *(Regular na nire-renew ng mga nagtitinda ang kanilang mga permit at lisensya alinsunod sa mga regulasyon.)*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

7. Vendors are transparent about their compliance with food safety regulations. *(Bukas ang mga nagtitinda sa pagpapakita ng kanilang pagsunod sa mga regulasyon sa kaligtasan ng pagkain.)*					
8. Vendors with valid permits are more knowledgeable about proper food storage and preparation. *(Ang mga vendor na may permit ay mas may kaalaman sa tamang pag-iimbak at paghahanda ng pagkain.)*					
9. There should be a feedback mechanism where students can report concerns about food vendor compliance. *(Dapat may feedback mechanism kung saan maaaring i-report ng mga estudyante ang kanilang mga hinaing tungkol sa pagsunod ng mga food vendor sa regulayon.)*					
10. Vendors operating near campus should be required to have a business permit for additional safety practices. *(Dapat obligahin ang mga vendor na nag-ooperate malapit sa campus na magkaroon ng business permit para sa karagdaang kalinisan.)*					

PART III. Student Agreement on the Influence of Food Safety Practices

Direction: Use a check mark (✓) in the box for your response base from the scale.

A. Attitude	5	4	3	2	1
1. I feel more confident buying from food vendors who prioritize hygiene and food safety. *(Mas kampante akong bumili sa mga nagtitinda ng pagkain na inuuna ang kalinisan at kaligtasan.)*					
2. I prefer food vendors that follow proper sanitation practices over those that do not. *(Mas pinipili ko ang mga nagtitinda na sumusunod sa wastong sanitasyon kaysa sa hindi.)*					
3. I believe that food safety directly impacts the quality of the food I consume. *(Naniniwala ako na ang kaligtasan ng pagkain ay direktang nakakaapekto sa kalidad ng kinakain ko.)*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

4. I feel comfortable eating food that is prepared and served in a clean environment. *(Komportable akong kumain ng pagkain na inihanda at inihain sa isang malinis na kapaligiran.)*					
5. I am willing to pay more for food from vendors who maintain excellent hygiene. *(Handa akong magbayad nang higit pa para sa pagkain mula sa mga nagtitinda na may mahusay na kalinisan.)*					
6. I believe that vendors who follow proper food handling procedures provide better-tasting food. *(Naniniwala ako na mas masarap ang pagkain mula sa mga nagtitinda na sumusunod sa tamang paghawak ng pagkain.)*					
7. I trust food vendors more when I see them following proper hygiene protocols. *(Mas pinagkakatiwalaan ko ang mga nagtitinda kapag nakikita kong sinusunod nila ang wastong hygiene protocols.)*					
8. I feel more satisfied with my food purchase when I know it was prepared in a clean environment. *(Mas nasisiyahan ako sa aking biniling pagkain kung alam kong ito ay malinis na inihanda.)*					
9. I enjoy eating more when I am confident that the food was handled safely. *(Mas nag-e-enjoy akong kumain kapag alam kong ligtas ang paghahanda ng pagkain.)*					
10. I feel more confident in the quality of food when I buy from vendors with proper permits. *(Mas kampante ako sa kalidad ng pagkain kapag ito ay binili mula sa mga nagtitinda na may wastong permit.)*					

B. Subjective Norms	**5**	**4**	**3**	**2**	**1**
1. My friends encourage me to buy food from vendors who maintain proper hygiene. (Hinikayat ako ng aking mga kaibigan na bumili sa mga nagtitinda ng pagkain na may tamang kalinisan.)					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

2.	I feel more comfortable eating at a food stall if my classmates also prefer it. (Mas komportable akong kumain sa isang tindahan ng pagkain kung ito rin ang pinipili ng aking mga kaklase.)					
3.	I am influenced by social media reviews or recommendations when selecting a food stall. *(Naiimpluwensyahan ako ng mga review o rekomendasyon sa social media sa pagpili ng tindahan ng pagkain.)*					
4.	My family prefers that I buy food only from vendors who practice good sanitation. *(Mas gusto ng aking pamilya na bumili lamang ako ng pagkain mula sa mga nagtitinda na may maayos na sanitasyon.)*					
5.	I tend to avoid food stalls that have received negative feedback from other students. *(Iniiwasan ko ang mga tindahan ng pagkain na nakatanggap ng negatibong feedback mula sa ibang estudyante.)*					
6.	I feel a sense of responsibility to choose food vendors that others perceive as clean. *(Pakiramdam ko ay responsibilidad kong pumili ng mga tindahan ng pagkain na itinuturing na malinis ng iba.)*					
7.	I believe that the university community values food vendors with high sanitation standards. *(Naniniwala ako na pinahahalagahan ng unibersidad ang mga tindahan ng pagkain na may mataas na pamantayan sa sanitasyon.)*					
8.	I trust food stalls that are frequently visited by many students who care about cleanliness. *(Mas pinagkakatiwalaan ko ang mga tindahan ng pagkain na madalas puntahan ng mga estudyanteng pinapahalagahan ang kalinisan.)*					
9.	My friends and classmates encourage me to buy from vendors with proper licensing. *(Hinihikayat ako ng aking mga kaibigan at kaklase na bumili mula sa mga nagtitinda na may wastong lisensya.)*					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

10. People I respect, such as teachers or family, believe it is important to buy from properly licensed vendors. *(Ang mga taong iginagalang ko, tulad ng mga guro o pamilya, ay naniniwalang mahalagang bumili mula sa mga nagtitinda na may wastong lisensya.)*					

C. Perceived Behavioral Control	5	4	3	2	1
1. I find it easy to identify food stalls that follow proper food safety standards. *(Madali kong matukoy ang mga tindahan ng pagkain na sumusunod sa tamang mga pamantayan sa kaligtasan ng pagkain.)*					
2. I have the confidence to ask food vendors about their hygiene and food handling practices. *(May kakayahan akong magtanong sa mga nagtitinda tungkol sa kanilang kalinisan at mga kasanayan sa paghawak ng pagkain.)*					
3. I feel in control when deciding which food vendor to trust for cleanliness and safety. *(Pakiramdam ko ay may kontrol ako sa pagpili kung aling nagtitinda ng pagkain ang aking pagkakatiwalaan para sa kalinisan at kaligtasan.)*					
4. I can easily avoid food stalls that appear unsanitary, regardless of convenience. *(Madali kong maiwasan ang mga tindahan ng pagkain na mukhang hindi malinis, kahit na mas maginhawa itong puntahan.)*					
5. I believe I have enough knowledge to assess the safety of food vendors. *(Naniniwala ako na may sapat akong kaalaman upang suriin ang kaligtasan ng mga nagtitinda ng pagkain.)*					
6. I am capable of making informed choices when selecting where to buy food. *(Kayang-kaya kong gumawa ng matalinong desisyon sa pagpili kung saan bibili ng pagkain.)*					
7. I can recognize warning signs of poor food handling at food stalls. *(Kayang-kaya kong suriin ang hindi tamang paghawak ng pagkain sa mga tindahan.)*					
8. I feel comfortable switching to a cleaner food vendor					

Continuation of Appendix 2

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

	if I notice unsanitary conditions. *(Komportable akong lumipat sa isang mas malinis na tindahan ng pagkain kung mapapansin kong hindi malinis ang kasalukuyan kong binibilhan.)*					
9.	I believe I can influence my friends to choose food vendors with better hygiene. *(Naniniwala ako na maaari kong hikayatin ang aking mga kaibigan na pumili ng mga nagtitinda ng pagkain na may mas mahusay na kalinisan.)*					
10.	I have no difficulty verifying if a vendor follows licensing and permit requirements before purchasing food. *(Wala akong kahirapan sa pag-verify kung ang isang nagtitinda ay sumusunod sa mga regulasyon sa lisensya at permit bago bumili ng pagkain.)*					

Appendix 3

Certificate of Instrument Validation

Certificate of Instrument Validation

This is to certify that the research instrument of the study entitled **EVALUATING FOOD SAFETY PRACTICES OF LOCAL FOOD STALLS IN PUP CABIAO: INFLUENCE ON STUDENT PREFERENCE FOR CHOOSING FOOD VENDORS,** authored by Aeron M. Delos Santos, Armil C. Roque, and Rosemarie F. Buenafrancisca, had undergone the process of validation.

Mr. Ville Andrei M. Vilano, a Master in Applied Statistics, conducted this validation process. The Instrument demonstrated a high level of reliability and validity in the assessment of the researcher's variables.

This certification is issued on the 28th day of May 2025. This is also upon the request of the researchers for any research-related purposes it may serve.

Mr. Ville Andrei M. Vilano
Instrument Validator

Continuation of Appendix 3

Certificate of Instrument Validation

This is to certify that the research instrument of the study entitled **EVALUATING FOOD SAFETY PRACTICES OF LOCAL FOOD STALLS IN PUP CABIAO: INFLUENCE ON STUDENT PREFERENCE FOR CHOOSING FOOD VENDORS,** authored by Aeron M. Delos Santos, Armil C. Roque, and Rosemarie F. Buenafrancisca, had undergone the process of validation.

Dina Grace T. Magnaye, Head of Academic Programs – PUP Bansud Campus, conducted this validation process. The Instrument demonstrated a high level of reliability and validity in the assessment of the researcher's variables.

This certification is issued on the 28th day of May 2025. This is also upon the request of the researchers for any research-related purposes it may serve.

Dina Grace T. Magnaye
Instrument Validator

Appendix 4

Grammarian's Certificate

GRAMMARIAN'S CERTIFICATE

This is to certify that the undersigned has thoroughly examined and reviewed the contents of the research manuscript entitled: **"EVALUATING FOOD SAFETY PRACTICES OF LOCAL FOOD STALL VENDORS IN PUP CABIAO: INFLUENCE ON STUDENTS PREFERENCE FOR CHOOSING FOOD VENDORS,"** submitted by **Rosemarie F. Buenafrancisca, Aeron M. Delos Santos,** and **Armil C. Roque**. The manuscript has been checked for grammatical correctness, clarity of expression, sentence structure, punctuation, word usage, and overall language coherence.

The undersigned hereby affirms that the manuscript is grammatically sound, adheres to academic writing standards, and is deemed suitable for submission in partial fulfillment of the requirements for the degree program under which it is submitted.

Signed this 26th day of September, 2025.

LORIEJANE S. JOSE, PhD, LPT
Grammarian

Appendix 5

RMO's Certification

REPUBLIC OF THE PHILIPPINES
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
OFFICE OF THE VICE PRESIDENT FOR RESEARCH, EXTENSION AND DEVELOPMENT
RESEARCH MANAGEMENT AND INTELLECTUAL PROPERTY OFFICE

BAGONG PILIPINAS

CERTIFICATION

This is to certify that the research output conducted from **3/4/2024** to **7/5/2025**, titled **Evaluating Food Safety Practices of Local Food Stall Vendors in PUP Cabiao: Influence on Student Preference for Choosing Food Vendors** conducted by **Rosemarie F. Buenafrancisca, Aeron M. Delos Santos, Armil C. Roque** of the **PUP Cabiao, Nueva Ecija Campus** has been recorded in the RMO Database with complete information and required documentary evidence/s.

This certification is issued upon request of the faculty as part of the requirements for paper presentation/publication/citation incentive/s per **Executive Order No. 25, series of 2020.**

JACKIE D. URRUTIA
Director

4th Flr., South Wing Rm. 423-424, PUP A. Mabini Campus, Anonas Street, Sta. Mesa, Manila
Direct Line: 335-1752 | Trunk Line: 335-1787 or 335-1777 local 235
Website: www.pup.edu.ph | Email: rmo@pup.edu.ph
THE COUNTRY'S 1ST POLYTECHNICU

Appendix 5

Turnitin's Certificate

turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	a a
Assignment title:	O83
Submission title:	GROUP 5 EVALUATING FOOD SAFETY PRACTICES OF LOCAL FO...
File name:	GROUP_5_EVALUATING_FOOD_SAFETY_PRACTICES_OF_LOCAL...
File size:	8.6M
Page count:	106
Word count:	18,840
Character count:	109,759
Submission date:	05-Oct-2025 03:42PM (UTC+0300)
Submission ID:	2771247688

EVALUATING FOOD SAFETY PRACTICES OF LOCAL FOOD STALL VENDORS IN PUP CABUU: INFLUENCE ON STUDENTS PREFERENCE FOR CHOOSING FOOD VENDORS

Polytechnic University of the Philippines
Cabuu Campus

Appendix 6

Reliability Test

Food Handling Practices Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.795

Item Reliability Statistics

	If item dropped Cronbach's α
A	0.808
B	0.781
C	0.764
D	0.774
E	0.774
F	0.776
G	0.778
H	0.761
I	0.781
J	0.777

Personal Hygiene Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.815

Item Reliability Statistics

	If item dropped Cronbach's α
A	0.831
K	0.804
L	0.803
M	0.791
N	0.791
O	0.783
P	0.800
Q	0.807
R	0.812
S	0.781e
T	0.793

Sanitation & Facility Cleanliness Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.888

Item Reliability Statistics

	If item dropped Cronbach's α
AE	0.879
AG	0.879
AF	0.874
AH	0.873
AI	0.871
AJ	0.877
AK	0.883
AL	0.875
AM	0.874
AN	0.886

Food Storage & Maintenance Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.908

Item Reliability Statistics

	If item dropped Cronbach's α
U	0.906
V	0.898
W	0.896
X	0.899
Y	0.900
Z	0.898
AA	0.897
AB	0.897
AC	0.906
AD	0.901

Food Waste Disposal Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.928

Item Reliability Statistics

	If item dropped Cronbach's α
AO	0.927
AP	0.920
AQ	0.923
AR	0.920
AS	0.926
AT	0.918
AU	0.920
AV	0.920
AW	0.918
AX	0.918

Permits & Licensing Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.945

Item Reliability Statistics

	If item dropped Cronbach's α
AY	0.935
AZ	0.937
BA	0.936
BB	0.939
BC	0.937
BD	0.936
BE	0.942
BF	0.944
BG	0.945
BH	0.945

Continuation of Appendix 6

Attitude

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.817

Item Reliability Statistics

	If item dropped Cronbach's α
BI	0.794
BJ	0.794
BK	0.796
BL	0.815
BM	0.850
BN	0.773
BO	0.800
BP	0.794
BQ	0.793
BR	0.798

Subjective Norms

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.891

Item Reliability Statistics

	If item dropped Cronbach's α
BS	0.893
BT	0.879
BU	0.876
BV	0.870
BW	0.887
BX	0.876
BY	0.880
BZ	0.882
CA	0.880
CB	0.880

Perceived Behavioral Control

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.876

Item Reliability Statistics

	If item dropped Cronbach's α
CC	0.866
CD	0.880
CE	0.847
CF	0.879
CG	0.859
CH	0.849
CI	0.845
CJ	0.880
CK	0.860
CL	0.867