

**CHALLENGES OF FOOD SAFETY TRAINING AND PRACTICES OF
SELECTED CASUAL DINING RESTAURANT EMPLOYEES IN LUCENA CITY**

A Research

**Presented to the Faculty of
Tourism and Hospitality Management
STI College Lucena**

**In Partial Fulfilment
Of the Requirements of the Degree
Bachelor of Science in Culinary Management**

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ABSTRACT

Title of research: **Challenges of Food Safety Training and Practices of Selected Casual Dining Restaurant Employees in Lucena City**

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This study investigated the challenges of food safety training and practices among casual dining restaurant employees in Lucena City. It examined the level of training provided and the effectiveness of its application in daily practices. A quantitative approach was employed, combining surveys and interviews to gather data from selected casual dining restaurants. The study included the skills and awareness imparted to employees to ensure that food was handled and served in compliance with safety standards. The findings were based on data gathered from respondents' assessments to determine the challenges encountered by selected casual dining restaurant employees in consistently implementing the food safety training and practices learned during training in their daily responsibilities. Recommendations were provided for enhancing food safety training through seminars and workshops, fostering open communication to report food safety issues without fear, and improving restaurant environments.

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LIST OF ABBREVIATIONS

Abbreviations		Page
1. FS	Food Safety	10
1. HACCP	Hazard Analysis Critical Control Points	12
2.FBDO's	Foodborne Disease Outbreaks	13
3.WHO	World Health Organization	17
4.SDG's	Sustainable Development Goals	18
5. FSK	Food Safety Knowledge	23
6.FSP	Food Safety Practices	23
7.FSA	Food Safety Attitudes	23
8.IV	Independent Variables	29
9.DV	Dependent Variables	29
10. MV	Moderating Variables	29
11. CDC	Center for Disease Control	25
12. WM	Weighted Mean	34
13. SD	Standard Deviation	35

CHAPTER I

INTRODUCTION

In today's ever-evolving food industry, ensuring the safety of consumers remains an absolute priority. It is essential for restaurants and food businesses to train their employees on safe food handling. Teaching employees about food safety goes beyond merely following rules. It also involves ensuring that the food customers eat is safe from preparation to serving. This training allows employees to learn how to handle, cook, and serve food in a clean and safe manner.

As the food industry changes, businesses must ensure that their employees are always updated on the latest safety regulations. Food safety training benefits everyone: it helps protect customers from foodborne illnesses and safeguards businesses from legal and reputational risks. When employees are well-trained in food safety, it reduces the chances of food contamination and demonstrates a business's commitment to customer health, thereby building trust and encouraging repeat patronage (Selander, 2024).

According to the Food Standards Code (2024), it is the duty of food businesses to ensure that food handlers are trained and knowledgeable in food safety and hygiene. Businesses must take all necessary steps to prevent the likelihood of food contamination. The recently updated standard, which took effect in December 2023, requires that all food businesses operating as food service establishments, caterers, or related retailers ensure all food handlers have proper training and possess adequate knowledge and skills before preparing high-risk foods.

Implementing food safety training and practices helps employees prevent food contamination and foodborne illnesses. Having comprehensive knowledge of food safety is essential to ensure that the food served to customers is safe for human consumption. In the present time, food safety training is not only crucial for employees in the food industry, but also for the overall success and reputation of the business. Proper training enables employees to understand potential risks in food handling and preparation, such as

cross-contamination, improper cooking temperatures, and inadequate hygiene. It also educates them on the importance of adhering to safety procedures to prevent foodborne illnesses and maintain high standards of cleanliness and sanitation.

According to the World Health Organization (WHO), 1.8 million deaths in 2005 were caused by diarrheal diseases, most of which were attributed to contaminated food and drinking water. Additionally, the U.S. Centers for Disease Control and Prevention (CDC) reported that 59% of foodborne disease outbreaks involved food service establishments. Improper food handling practices, such as cross-contamination and inadequate cooking, remain common contributors to these illnesses. These statistics underscore the urgent need for proper training to improve food safety practices, particularly in food establishments.

In this context, food safety training is not only necessary—it also equips employees with more extensive and in-depth knowledge of proper food handling. Through this, potential health risks to customers can be avoided, particularly foodborne illnesses that result from improper handling of food.

The researcher aimed to investigate the challenges of food safety training and practices among selected casual dining restaurant employees in Lucena City. By evaluating the level of knowledge and adherence to food safety protocols among employees, the researcher sought to determine how training programs influence the safety and well-being of customers. The study also aimed to assess the level of training provided by employers and how effectively employees apply safety practices in their work environments.

A. Background of the Study

According to Intiar (2024), in the world of food and beverages, ensuring the safety of food products is critically important. Knowledge of Hazard Analysis and Critical Control Points (HACCP) for hotels and restaurants plays a vital role in efforts to

ensure food safety. HACCP is a food safety management system based on a preventive approach, identifying, evaluating, and controlling hazards that are significant to food safety. This means that it is crucial for every restaurant and hotel to implement HACCP, as it helps ensure that the food served is safe to eat, thereby minimizing risks such as foodborne illnesses. Furthermore, HACCP enables the identification of bacteria and chemicals during the entire food production process, making it easier to determine possible causes of contamination.

Surgasri (2019) emphasized that HACCP focuses on staff training and management to ensure that employees understand food safety practices. This is crucial for preventing hazards and maintaining hygiene throughout the production process. HACCP is not only about identifying food contamination but also about maintaining proper hygiene. Trained employees understand the importance of regularly cleaning and sanitizing equipment, surfaces, and work areas.

King (2020), in her article *Training to Enable Food Safety Management Systems*, stated that post-training, employees should demonstrate knowledge of food safety risks and controls. This ensures the effective implementation of Food Safety Management Systems tailored to specific roles and establishment types. The researchers aim to determine whether the training and practices of selected restaurant employees in Lucena City are appropriate for their job roles and whether food safety is properly implemented. It is essential that employees receive the most relevant information for their positions.

Castro (2024) noted that inadequate application of food safety training can result in increased microbiological contamination, compromising food safety and posing health risks for consumers, which could lead to legal liabilities for restaurants. Martínez (2024) reported that a significant portion of food handlers (44%) in casual dining establishments have received formal food safety training, yet many still lack comprehensive knowledge about proper food handling practices.

A study by Krohn (2022) on food safety knowledge among 360 restaurant employees in Bangladesh revealed an average correct score of 53.32%. This highlighted

significant knowledge gaps, particularly regarding Good Hygiene Practices and HACCP, and underscored the need for improved education and training. This suggests that while some training is provided, major deficiencies in food safety standards persist.

Wen-fang (2024), in her article on new employee orientation training, emphasized the importance of helping workers adapt to their roles, increase efficiency, and reduce turnover. This highlights the need for food safety training, especially for new employees, in creating a safer workplace environment.

Aranza (2019) reported 209 foodborne disease outbreaks (FBDOs) in the Philippines during the period studied. Multiple implicated foods were associated with these outbreaks, with meat-containing dishes being the most common culprits. Food service establishments and households were found to be more prone to outbreak occurrences. This information can be used to develop specific training programs tailored to the needs and challenges of casual dining environments. It is not just about implementing food safety practices, but also about recognizing the importance of consumer health.

According to Ocampo (2019), limited research has focused on occupational safety and health in the food industry, with even fewer studies conducted in developing countries such as the Philippines. Ocampo's work aimed to promote awareness of occupational safety and health in the Philippine food services sector, particularly in fast casual dining restaurants.

This study was conducted to identify the requirements necessary to produce effective training outcomes that reduce risks associated with foodborne diseases. It aimed to enhance food safety practices in casual dining restaurants in Lucena City. By understanding the challenges faced by employees, the researchers sought to gain valuable insights and promote the importance of food safety awareness. The study also recognized that improving food safety not only reduces the risk of disease but also builds trust and confidence in the dining environment.

B. Research Questions

The main objective of this study was to determine the challenges encountered by selected casual dining restaurant employees in implementing the food safety training and practices they learned during training in their daily responsibilities.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1. Sex;
 - 1.2. Age;
 - 1.3. Educational attainment; and
 - 1.4. Length of time in the workplace?
2. What are the challenges in food safety training and practices of selected casual dining restaurant employees in terms of:
 - 2.1. Work environment;
 - 2.2. Food safety practices; and
 - 2.3. Equipment and resources?
3. Is there a significant difference in the challenges in food safety training and practices of selected casual dining restaurant employees when grouped according to their profile?

Hypothesis

There is no significant difference in the challenges in food safety training and practices of selected casual dining restaurant employees when grouped according to their profile.

C. Significance of the Study

This study aimed to identify the challenges encountered by selected casual dining restaurant employees in Lucena City in implementing food safety training and practices.

- **Employees:** This study may improve employees' proficiency in handling food and preventing contamination. It will help identify areas where employees lack understanding or need clarification regarding food safety.
- **Business Owners:** This study may help restaurant owners avoid risks and potential conflicts related to food safety, which could negatively impact the restaurant's reputation. It may also assist in avoiding legal consequences.
- **Managers:** The findings of this study may assist managers in implementing better food safety practices and procedures and in supporting employees with broader knowledge of proper food handling methods.
- **Restaurants:** This study may contribute to building a strong food safety culture among casual dining restaurants in Lucena City.
- **Schools:** This study could serve as a reference for students, especially those studying culinary arts or hospitality management, to better understand food safety principles.
- **Students:** The researchers may benefit by increasing public understanding of food safety awareness and its impact on health.
- **Future Research:** This study may provide data and insights that could assist future researchers conducting similar studies in food safety training and practices.

Objectives

- To identify the gap between employees' food safety knowledge and its application in their job roles.
- To increase employees' level of knowledge in food safety practices.
- To examine the kind and effectiveness of food safety training employees receive.

D. Review of Related Literature

FOREIGN

Food safety has been recognized globally as a crucial public health issue aimed at preventing foodborne illnesses, according to the World Health Organization (WHO). It encompasses the necessary conditions and measures throughout food production, processing, storage, distribution, and preparation to ensure that food is safe for consumption. Food handlers play a vital role in this process, as they may inadvertently spread pathogens from contaminated sources, which can harbor foodborne diseases during or after their active phases. Having a solid understanding of food safety, including the transmission of foodborne diseases, sources of contamination, proper food storage techniques, food processing methods, safe handling practices, personal hygiene, environmental health, and the use of clean utensils, can significantly improve practices to ensure safer food in the community.

According to some studies, restaurants serve as a significant pathway for the transmission of foodborne diseases and are often linked to outbreaks. Studies examining the knowledge, attitudes, and practices of food handlers in restaurants have yielded varied results. Some research identified gaps in food safety knowledge and practices among these handlers, while other studies found that many possessed good knowledge and demonstrated adequate compliance with food safety standards (Rabori et al., 2022).

The study highlighted the critical role of food safety knowledge, attitudes, and practices among restaurant food handlers in preventing foodborne illnesses. It revealed that while some handlers demonstrated good knowledge and compliance with safety standards, others showed significant gaps. This inconsistency suggested the need for targeted training programs to enhance food safety practices across the industry. The positive correlation between knowledge and attitudes indicated that improving education could lead to better food handling practices. Furthermore, the findings emphasized the

importance of ongoing training and support for food handlers to ensure safer food environments in restaurants.

Hotel restaurants have been regarded as the premier category of food service establishments. Consequently, to mitigate the significant impact of foodborne illnesses, it has been essential to provide ongoing training for food handlers in these facilities to enhance their knowledge. Such training can lead to the implementation of safe food handling practices that safeguard both customers and the broader community. Furthermore, adopting suitable and sustainable food safety management practices has been vital for achieving Sustainable Development Goals (SDGs) 2 and 3. SDG 2 aims to eliminate hunger and enhance nutrition, while SDG 3 ensures health and well-being for everyone. The study emphasized that to prevent people from getting sick, hotel staff need regular training on how to handle food safely. This training helped them learn the best ways to keep everyone healthy.

Another study by Tamiru et al. (2022) explained that food safety refers to the conditions and controls necessary to ensure that food is safe, wholesome, and suitable for consumption throughout its production and consumption. It has been considered a major public health issue for many nations, crucial for preventing foodborne illnesses and promoting human health. Currently, food safety and hygiene are global health challenges, especially in developing countries, due to rising foodborne diseases and related fatalities. These issues have also persisted in developed nations, affecting individuals, food companies, and regulatory authorities alike. The study emphasized the importance of food safety as a fundamental public health issue that ensures food is safe and suitable for consumption. It highlighted the growing global challenges of food safety and hygiene, particularly in developing countries, where foodborne diseases are on the rise, leading to increased mortality rates. These concerns have also affected developed nations, impacting individuals, food businesses, and regulatory bodies alike. The study underscored the need for comprehensive strategies to address these challenges and improve food safety standards worldwide.

In the study of Rivarola et al. (2020), it was stated that the implementation of the Hazard Analysis and Critical Control Point (HACCP) system could enhance food safety, but its effectiveness in preventing foodborne illnesses relied on proper application, a sanitary infrastructure, and adherence to good hygiene practices. Evidence indicated that many foodborne illnesses stemmed from inadequate food handling by workers. Contamination occurred at various stages, including unsafe farming practices, manufacturing, packaging, distribution, and retail. Additionally, factors such as purchasing from unsafe sources, improper cooking or reheating, holding food at room temperature, cross-contamination, poor personal hygiene, and inadequate handling practices often contributed to these illnesses.

Poor food safety practices have remained a leading cause of foodborne illnesses worldwide. Key factors in maintaining food safety include preventing contamination and cross-contamination, ensuring personal hygiene, and controlling food temperatures. Food handlers play a crucial role in introducing pathogens to consumers, particularly when they engage in unsafe practices or work while ill. Knowledge of food safety among handlers is essential for safe food preparation and for protecting customers. Despite the widespread nature of foodborne illnesses, only a small percentage of cases have been reported. Nevertheless, these illnesses have significantly impacted public health and economic development (Oumer, 2019).

Food safety has been a method to ensure that food is safe for consumption, free from physical, chemical, and biological hazards by exercising control over the entire food chain. It is important for food handlers to follow proper food handling methods before serving food to customers. These practices include washing hands, using food-safe gloves, maintaining clean workspaces, cooking food to appropriate temperatures, and preventing cross-contamination. By following these guidelines, food handlers can help ensure the safety and health of their customers. Eating unsafe food carries the risk of causing illness, often called foodborne disease. It has been estimated that there are 600 million cases of foodborne disease worldwide every year, more than half of which result in death (WHO, 2022).

The practice of safe food has been closely related to the role of food handlers in selecting food ingredients and during its cooking. Food handlers have the potential to cause food contamination that results in foodborne disease (Fooladvand et al., 2019). Their practices in handling food must be controlled to reduce this risk. To effectively adjust food safety practices, it is important to first identify the different influencing factors. The food safety practices of food handlers have been affected by many interrelated factors, such as knowledge and attitude towards food safety (da Vitória et al., 2021).

The World Health Organization (WHO) defined food safety as the conditions and precautions required during food production, processing, storage, distribution, and preparation to guarantee that the food is safe, sound, wholesome, and fit for human consumption. Food safety is crucial to prevent foodborne illness and improve human health. Globally, foodborne illnesses have become more common and have negatively impacted health and economic well-being in many developing and developed nations. A major public health issue persists in many parts of the world due to a lack of food safety precautions (Alemayehu, Aderaw, Giza, & Diress).

Multiple studies have investigated the factors influencing food safety practices in restaurants. Shrestha et al. (2019) found that food handlers' knowledge and attitude towards food safety significantly impacted the implementation of food safety practices. Similarly, Gakuya et al. (2019) identified lack of training, inadequate resources, and poor personal hygiene as crucial factors affecting food safety. Reis et al. (2019), through a systematic review, demonstrated that food safety management systems, such as HACCP, significantly improved the implementation of food safety practices. Kim et al. (2020) further emphasized the importance of management commitment and support in influencing food handlers' adherence to food safety practices.

The findings highlighted the critical role of food handlers' knowledge, attitude, and behavior in ensuring food safety. It is important for food establishments to invest in continuous training and education programs to equip food handlers with the necessary skills and understanding of proper food safety protocols. Moreover, addressing issues

such as inadequate resources, lack of training, and poor personal hygiene is crucial for improving food safety standards in food handling environments. Establishments should prioritize providing necessary resources, implementing effective training programs, and promoting good hygiene practices among food handlers to reduce the risks of foodborne illnesses.

The implementation of food safety management systems, such as HACCP, has had a significant positive impact on food safety practices. Structured systems help identify and control potential hazards throughout the food handling process, leading to safer food products for consumers. Selander (2024) emphasized the necessity of implementing HACCP to identify and mitigate potential hazards in food production. This systematic approach to food safety allows businesses to manage risks effectively and maintain the quality of their products. By following HACCP principles, employees can be educated to identify risks, take necessary actions, and uphold a workplace environment that prioritizes food safety and quality.

Guranlioglu et al. (2019) emphasized the importance of communication and collaboration among food handlers, restaurant management, and regulatory authorities for the effective implementation of food safety measures. Parreño et al. (2017) conducted a study in the Philippines, identifying knowledge, attitude, and training as significant predictors of food safety practices among food handlers. The study also highlighted the positive influence of food safety management systems on food safety practices.

Fajardo et al. (2019) revealed that the availability of essential hygiene facilities, such as handwashing stations, and the use of protective gear like gloves and hairnets, were crucial for maintaining food safety in restaurants. The study also found that proper temperature monitoring of food using thermometers was essential. Furthermore, the lack of adequate waste disposal systems and poor ventilation were identified as significant factors negatively impacting food safety practices.

Food hygiene refers to the encompassing conditions and measures that prevent food contamination from production to consumption. Poor hygiene practices along the

food chain, from slaughtering or harvesting, processing, storage, and distribution to transportation and preparation, can expose consumers to foodborne infections that may be fatal. Proper food hygiene practices center on cleanliness, separating raw meat from other raw or cooked foods, cooking at correct temperatures, and chilling (storing) foods before and after cooking. A study conducted by Ehuwa et al. (2021) in their research entitled *Salmonella, Food Safety and Food Handling Practices*, emphasized this concept. According to Fung et al. (2018) in their study *Food Safety in the 21st Century*, millions of people become ill annually from food-related illnesses. Food safety has been considered a fundamental human right by the World Health Organization. In the past, both deliberate or unintentional behaviors and state failures have resulted in documented human tragedies and economic disasters.

Ahmed et al. (2021) conducted a study that found a direct correlation between food safety and foodborne diseases, making it imperative to enhance food safety standards to prevent disease transmission. The consumption of contaminated food items has been the primary cause of foodborne illnesses. In developing nations, over 2 million individuals die from foodborne diseases annually—a figure expected to rise as food safety continues to emerge as a global public health concern. This issue has become particularly critical in developing countries. Effective food safety requires foundational knowledge, referred to as Food Safety Knowledge (FSK), which is essential for improving the quality of Food Safety Practices (FSP). Furthermore, food safety knowledge significantly influences Food Safety Attitudes (FSA) and the behavior of food handlers. Enhancing the food safety knowledge of these individuals can lead to the adoption of better food safety practices.

The study emphasized that improving food safety is not just a matter of implementing regulations but also involves empowering individuals with the knowledge and skills necessary to maintain high food safety standards. This approach is particularly crucial in developing countries, where resources may be limited and the consequences of unsafe food practices can be dire. Investing in food safety education can lead to a significant reduction in foodborne illnesses and contribute to better public health outcomes globally.

The Food Safety Knowledge (FSK) and Food Safety Attitudes (FSA) of food handlers are crucial in shaping their food safety practices. Poor practices during food preparation and unsanitary conditions in food preparation areas can lead to outbreaks of foodborne illnesses. Previous research has focused on the knowledge, attitudes, and practices (KAP) related to food safety among food handlers to evaluate the current state of food safety in various regions. Numerous studies have identified correlations between FSK, FSA, and Food Safety Practices (FSP) among food handlers and their demographic attributes, such as age, gender, and educational background. A study conducted by Cempaka et al. (2019) concluded that there was a significant correlation between the level of education and food safety practices.

LOCAL

Restaurants are not only providers of food but also influence well-being and lifestyle choices, making food safety and sanitation critical in casual dining settings. They shape how individuals perceive and choose food, thereby impacting dietary habits. Restaurants also serve as communal dining spaces, particularly in urban areas. However, questions arise regarding their reliability in delivering safe, quality meals and adhering to sanitation mandates. Effective food sanitation encompasses all measures designed to protect food from contamination and harmful bacteria, including proper cooking and handling practices. Ensuring these standards is vital for public health (Briscoe & Tripp, 2015; Feldman, 2015; Borbon & Tolentino, 2020). The study highlights that restaurant management and employees must prioritize sanitation to foster a safe dining experience for customers.

According to Choi et al. (2019), the main objective of food safety is to protect consumers from foodborne diseases or injuries related to food consumption. Foodborne illnesses pose a major threat to food businesses and affect populations globally due to inadequate food safety practices. In other words, food safety refers to any food that is safe for human consumption, free from hazards—biological, chemical, or physical—that have the potential to cause adverse health effects (Nandi et al., 2020). Food safety

involves proper food handling. According to Safety Culture (2023), food handling is the process of preparing food that is safe for public consumption. Essential to safe food handling is the training of food handlers in personal hygiene and sanitation, cooking and storing food at appropriate temperatures, and other safe practices. As an integral part of food safety, food handling must always be a priority.

Bihag et al. (2021), in their study *Food Safety Practices Among Restaurants in the Municipality of Buenavista, Agusan del Norte*, stated that while food is essential to life, safety must always be prioritized when consuming it. Their study aimed to determine how restaurants in Buenavista, Agusan del Norte, managed food safety. Findings revealed that the restaurants in the municipality implemented food safety practices, suggesting that restaurant managers and staff successfully adopted or collaborated in the enforcement of such practices. It was recommended that food safety and sanitation should remain the primary priorities in all food service operations.

Foodborne Disease in the Philippines

Food service facilities in the Philippines have played a significant role in the spread of foodborne diseases (FBDs) (da Cunha, 2021). Data from 2005 to 2018 indicated that 74 FBD outbreaks occurred in these establishments, with 16 of these incidents taking place in restaurants (Azanza et al., 2019). The Centers for Disease Control and Prevention (CDC) reported that food prepared in restaurants was responsible for 64 of the total FBD outbreaks in 2017, affecting approximately 5,000 individuals. The study noted that inadequate food handling practices, poor personal and environmental hygiene, insufficient infrastructure, poor sanitation, and a lack of food safety knowledge among food handlers were key risk factors contributing to the spread of foodborne illnesses (Abdi et al., 2020).

This study emphasized the importance of food safety for public health and well-being. It is crucial for individuals working in food service to receive proper training and education on safe food handling to prevent the spread of foodborne illnesses. Without

adequate training, employees may unknowingly mishandle food, potentially causing illness among consumers and harming the establishment's reputation. Foodborne illnesses can lead to outcomes ranging from mild discomfort to severe health complications. According to Selander (2024), prioritizing comprehensive food safety training programs can significantly reduce these risks and safeguard customer health.

While the high number of outbreaks in restaurants is concerning, the implementation of proper food safety protocols and ensuring that food handlers possess the necessary knowledge and skills can contribute to reducing such occurrences and protecting consumers. The identification of risk factors such as poor hygiene, lack of sanitation, and knowledge gaps among food handlers underscores the need for stricter regulations and enforcement in food service establishments.

According to the World Health Organization (2020), food safety ensures that food does not pose any harm to consumers when prepared and consumed as intended. Globally, approximately 2.2 million people die from foodborne illnesses each year, with the majority being children (WHO, 2017). Food handlers may cause contamination due to a lack of knowledge in areas such as personal hygiene, proper cooking and storage temperatures, and the prevention of cross-contamination (Hardstaff et al., 2018). Training programs for food handlers are widely used to improve food safety knowledge (Addo-Tham et al., 2020) and are recognized as key interventions for reducing outbreaks (WHO, 2020). These studies highlight the essential role of food safety in public health and emphasize the importance of continuous education and training for food handlers in maintaining high standards of food safety. Individuals and organizations involved in the food industry must prioritize food safety practices, implement appropriate training programs, and adhere to stringent guidelines to protect consumers and prevent foodborne illnesses.

The CDC emphasized the importance of developing new strategies and communications aimed at reducing food safety risks from farm to table. An evaluation was conducted on food safety information sheets, which are innovative resources designed to encourage individuals to handle food safely and adjust their behaviors

accordingly. Inadequate food safety practices in food service settings may promote the growth of pathogens or serve as points of origin. Therefore, specific procedures must be carefully considered when managing waste in various establishments (Allimar, 2018).

To ensure food safety and quality, retail chains require their suppliers to comply with specific food safety standards, which serve as gatekeepers to access various markets. Among the services provided by city governments to residents, the food safety practices of food service establishments are of paramount importance, although the quality of this service, along with its environmental impact and cost, may vary significantly. As a result, solid waste management emerges as the most essential municipal service and serves as the foundation for all other local initiatives. Participants in training programs will gain knowledge regarding improper time and temperature management, cross-contamination, personal hygiene, and various biological, chemical, and physical hazards. They will also learn about proper cleaning and sanitizing techniques, effective waste management, pest control, and the core principles of Hazard Analysis Critical Control Points (HACCP).

This study emphasizes the critical need for effective food safety practices in food service establishments. It highlights the role of training and adherence to protocols in preventing foodborne illnesses and identifies poor food handling as a significant risk factor for pathogen transmission. The importance of comprehensive waste management and sanitation procedures is also underscored. The findings suggest that enhancing food safety training, improving infrastructure, and ensuring proper supervision can significantly mitigate risks. Overall, the study advocates for a multi-faceted approach to food safety that includes education, regulatory compliance, and continuous monitoring to safeguard public health.

E. Theoretical Framework

This study employed the *Theory of Transfer of Training* by Baldwin and Ford (1988) to better understand and address the challenges associated with food safety training and practices among employees in selected casual dining restaurants in Lucena City.

According to Baldwin and Ford (1988), the *Theory of Transfer of Training* explains how various factors influence training outcomes and highlights the challenges in ensuring that training is effectively transferred to practical work settings. The theory identified three critical factors influencing the transfer of training: trainee characteristics, training design, and work environment. These factors significantly enhance training programs when properly addressed.

The theory of transfer of training guided the researchers in determining whether employees in selected casual dining restaurants in Lucena City struggled to apply what they learned during training. It allowed the identification of whether such challenges stemmed from the personal characteristics of the employees, the structure of the training program, or a lack of support in the workplace. By understanding the root causes of these challenges, both employees and organizations can work toward overcoming obstacles to performance and achieving greater success.

Conceptual Framework

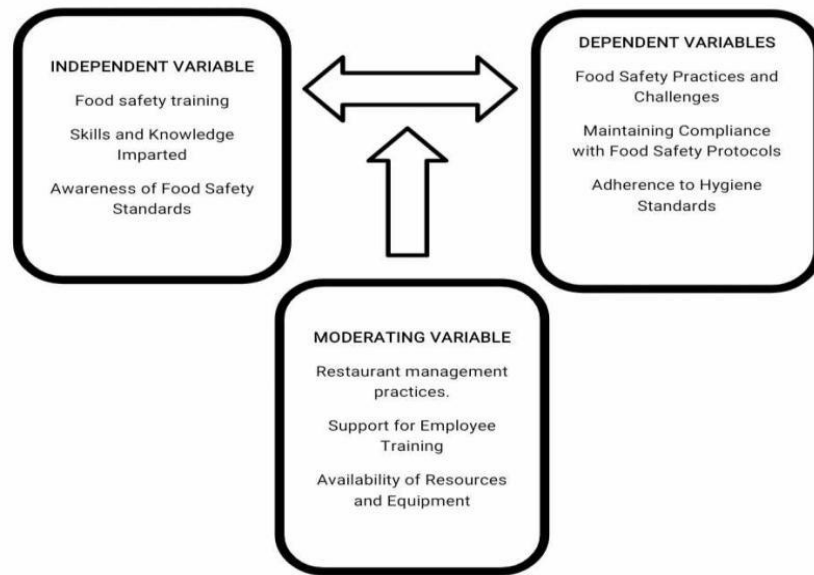


Figure 1. Conceptual Framework of Challenges of Food Safety Training and Practices of Selected Casual Dining Restaurant Employees in Lucena City

The framework highlighted the key variables and their interrelationships, providing a structured approach to examining the factors that influence the effectiveness of food safety practices in casual dining restaurants. The research employed a survey questionnaire to assess the effectiveness of food safety training, identify the specific challenges employees faced, and evaluate the influence of management practices on these outcomes.

Independent Variable (IV): Food safety training. The independent variable represents the training programs provided to employees in casual dining restaurants in Lucena City. This includes the skills and awareness imparted to employees, ensuring that food is handled and served in compliance with safety standards. The research examines how food safety training can serve as a potential factor in addressing the challenges employees face in effectively implementing food safety practices.

Dependent Variable (DV): Challenges faced by employees: The dependent variable refers to the actions and challenges employees face in maintaining food safety. By examining employees' food safety practices and the challenges they encounter, such as Maintaining Compliance with Food Safety Protocols, Adherence to Hygiene Standards and Difficulty in Implementing Best Practices. The study aims to provide a comprehensive understanding of the factors that influence the effectiveness of food safety practices in casual dining restaurants in Lucena City.

Moderating Variable (MV): Restaurant management practices. The moderating variable evaluates how restaurant management influences employees' ability to implement food safety training and practices. A moderating variable helps researchers by providing a deeper understanding of the relationship between the independent and dependent variables, offering deeper insights. It examines whether management reduces or intensifies the challenges faced by employees. In this study, the moderating variable is restaurant management practices, Support for Employee Training, and Availability of Resources and Equipment.

CHAPTER II

METHODS

Research Design

This study focused on identifying the challenges associated with food safety training and practices among selected casual dining restaurant employees in Lucena City.

The researcher employed a quantitative approach. According to Deckert and Wilson (2023), descriptive surveys utilize questionnaires, interviews, and observational methods to collect data on various attributes such as experiences and attitudes. Descriptive surveys serve as foundational tools for new researchers, offering insights into populations or conditions that can inform future studies. Furthermore, Gravetter and Forzano (2018) stated that a survey is a form of descriptive research. The researcher used a survey to gather valuable information about employees' food safety knowledge, practices, and perceptions to gain a more detailed understanding of the current situation at Giligan's Restaurant regarding food safety improvement.

Population and Sample of the Study

The researchers selected the respondents using a purposive sampling technique. The respondents of the study comprised 50 employees from selected casual dining restaurants in Lucena City, particularly those directly involved in food preparation and handling. Participants were chosen based on their position in the restaurant's operations, resulting in a representative group of individuals who had a direct impact on food safety practices. This selection provided a more focused study on the influence of food safety training on the knowledge, attitudes, and behaviors of personnel who were most directly accountable for upholding food safety regulations.

Data Gathering Tools

The researchers utilized a paper-based survey questionnaire as the main instrument for collecting the data required for this study. The questionnaire was

distributed to respondents only after the instructor signaled that it was permissible to do so. The researcher explained the importance of the respondents' participation in the study and clarified some terms to ensure that respondents answered the questionnaire with full knowledge of their responsibility as participants in the study.

A four-point Likert scale was used, with options ranging from “Strongly Agree” (4) to “Strongly Disagree” (1). This scale was applied to assess the effectiveness of the study titled “Challenges in Food Safety Training or Practices of Selected Casual Dining Restaurant Employees in Lucena City.”

Data Gathering Procedures

After the questionnaire was validated, the researcher distributed the surveys to selected casual dining restaurant employees in Lucena City to gather information about their current knowledge and practices related to food safety. Respondents were requested to answer the survey with complete honesty. The researcher then analyzed the collected data to identify any gaps in knowledge or practices concerning food safety and provided recommendations for further training or improvements in food handling at selected casual dining restaurants in Lucena City.

Research Locale

The study was conducted in selected casual dining restaurants in Lucena City, Quezon, which is part of the second legislative district of Quezon Province. Lucena, officially known as the City of Lucena, is a first-class, highly urbanized city in the CALABARZON region of the Philippines. Although it operates as the capital of the Province of Quezon, it is geographically located within but politically independent from the province.

Source of Data

This study utilized both primary and secondary sources of data. The primary data source consisted of employees from selected casual dining restaurants in Lucena City, Quezon. Secondary data sources included theses, articles, and internet-based materials relevant to the topic, which were used to gather the necessary background information for the study.

Statistical Treatment of Data

The researcher used the computer software Statistical Package for the Social Sciences (SPSS) version 26 for all descriptive and inferential statistical computations. Gravetter et al. (2021) stated that SPSS is a computer program that performs most statistical calculations.

The following statistical treatments were applied in this research:

Frequency Counting and Percentage. Frequency counting involved tallying responses and presenting the proportion or share in relation to the total. This approach provided an organized representation of the data by identifying trends, subgroups, and response categories. Percentage calculations reflected the portion of the whole sample, using the following formula:

Formula:

$$\% = f/n \cdot 100$$

Where:

% = Percentage

f = Frequency

n = sample

This formula was used to determine the respondents' demographic profile, including sex, age, educational attainment, and length of employment in the workplace.

Weighted Mean. The weighted mean was used to compute an average by assigning different weights to certain values. It was calculated by multiplying each weight by its corresponding value, summing the products, and dividing by the total sample. This method allowed for certain responses to contribute more to the final mean. The formula used was:

$$\bar{x} = \Sigma fx / n$$

Where:

\bar{x} = Mean

Σ = Summation of

F = Frequency

x = Weights

n = Sample

This calculation was applied to assess challenges in food safety training and practices in terms of work environment, food safety practices, and the availability of equipment and resources.

Standard Deviation. The standard deviation is a measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean (also called the expected value) of the set, while a

high standard deviation indicates that the values are spread out over a wider range.

Additionally, it is also the traditional choice for measuring variability, summarizing the typical distance from the average to the data values. This will be used to determine the amount of dispersion of the data responses of the participants.

Formula:

$$s = \sqrt{\frac{\sum_{i=1}^N (x_i - \bar{x})^2}{N - 1}}$$

Where:

s = sample standard deviation

N = the number of observations

x_i = the observed values of a sample item

\bar{x} = the mean value of the observations

CHAPTER III

RESULTS

This chapter presents the gathered, analyzed, and interpreted data. Tables and figures are included, and their corresponding weights are tabulated. This chapter also presents the results of the data gathered from respondents' assessments to determine the challenges encountered by selected casual dining restaurant employees in consistently implementing the food safety training and practices they learned during training in their daily responsibilities.

Demographic Profile of the Respondents

To provide an overview of the respondents' demographic profile, data were quantified and presented in tabular form to enable analysis and interpretation. The frequency and percentage distributions of the respondents' demographic profiles—such as sex, age, educational attainment, and length of service in the workplace—are summarized in the tables below.

Table 1.1

Age

Age Range	Frequency	Percentage	Rank
18 – 25 years old	19	38.00	2
26 – 35 years old	22	44.00	1
36 – 45 years old	9	18.00	3
Total	50	100.00	

Table 1.1 presents the demographic profile of the respondents in terms of age. Out of 50 respondents, most were 26–35 years old, based on the highest frequency of 22, corresponding to 44.00%. This was followed by respondents aged 18–25 years, with a frequency of 19, corresponding to 38.00%. The lowest frequency of 9, corresponding to 18.00%, fell under the age group of 36–45 years. The overall results imply that most of the respondents were 26–35 years old.

Table 1.2*Gender*

Gender	Frequency	Percentage	Rank
Female	20	40.00	2
Male	30	60.00	1
Total	50	100.00	

Table 1.2 presents the demographic profile of the respondents by gender. Out of 50 respondents, the majority were male, based on the highest frequency of 30, corresponding to 60.00%. The remaining 20 respondents, representing 40.00%, were female. The overall results imply that the majority of the respondents were male.

Table 1.3 *Educational Attainment*

Educational Attainment	Frequency	Percentage	Rank
College Graduate	17	34.00	1
College Level	10	20.00	3
Junior High School Graduate	8	16.00	4
Senior High School Graduate	14	28.00	2
Vocational Graduate	1	2.00	5
Total	50	100.00	

Table 1.3 presents the demographic profile of the respondents in terms of educational attainment. Out of 50 respondents, most were college graduates, with the highest frequency of 17, corresponding to 34.00%, followed by senior high school graduates, with a frequency of 14, corresponding to 28.00%. The lowest frequency of 1, corresponding to 2.00%, was observed among vocational graduates. The overall results imply that most of the respondents were college graduates.

Table 1.4*Length in the Workplace*

Length in the Workplace	Frequency	Percentage	Rank
0 – 6 months	9	18.00	3
6 – 11 months	15	30.00	2
1 – 4 years	20	40.00	1
5 – 8 years	6	12.00	4
Total	50	100.00	

Table 1.4 shows the demographic profile of the respondents in terms of length of service in the workplace. Out of 50 respondents, the majority had been working for 1–4 years, with the highest frequency of 20, corresponding to 40.00%. This was followed by those with 6–11 months in the workplace, having a frequency of 15, or 30.00%. The least frequency of 6, corresponding to 12.00%, fell under those with 5–8 years in the workplace. The overall results imply that most of the respondents had been working in the workplace for 1–4 years.

The Challenges in Food Safety Training and Practices of selected Casual Dining Restaurant Employees

This section presents the challenges in food safety training and practices of selected casual dining restaurant employees in terms of work environment, food safety practices, and equipment and resources. The data were statistically treated using weighted mean and standard deviation. The gathered data are shown in the tables below.

Table 2.1*Work Environment*

Work Environment	WM	SD	Interpretation	Rank
1. I am comfortable in my skills to follow sanitation guidelines in the workplace.	3.82	0.39	Strongly Agree	1

2. I believe that the training programs cover the real-world challenges that arise in a workplace.	3.58	0.54	Strongly Agree	2
3. The lighting is adequate in the workplace area for safe food preparation	3.42	0.50	Strongly Agree	6
4. There is enough amount of PPE provided by the management.	3.54	0.61	Strongly Agree	3
5. The training area is adequate and conducive for learning.	3.46	0.58	Strongly Agree	5
6. The equipment and tools are well maintained and helps upon doing our job efficiently.	3.48	0.54	Strongly Agree	4
7. The training materials such as manuals and videos are up to date and sufficient.	3.32	0.59	Strongly Agree	7
Overall Weighted Mean	3.52	0.30	Strongly Agree	

Legend: 3.26 - 4.00 Strongly Agree 2.51 - 3.25 Agree
 1.76 - 2.50 Disagree 1.00 - 1.75 Strongly Disagree

Table 2.1 presents the challenges in food safety training and practices of selected casual dining restaurant employees in terms of the work environment, which resulted in an overall weighted mean of 3.52, interpreted as a strongly agree response. This signifies that there was a strong positive level of agreement among the respondents. The highest mean of 3.82, also interpreted as a strongly agree response, corresponded to indicator number 1, “I am comfortable in my skills to follow sanitation guidelines in the workplace,” followed by indicator number 2, “I believe that the training programs cover the real-world challenges that arise in a workplace,” which had a mean of 3.58.

The lowest mean of 3.32, interpreted as a strongly agree response, was found in statement number 7, “The training materials such as manuals and videos are up to date and sufficient.” The overall results suggest that there was a strong positive level

of agreement regarding the challenges in food safety training and practices of selected casual dining restaurant employees in terms of the work environment. Based on Abdi et al. (2020), inadequate food handling practices, poor personal and environmental hygiene, insufficient infrastructure, poor sanitation, and a lack of food safety knowledge among food handlers are key risk factors for the spread of foodborne illnesses.

Table 2.2

Food Safety Practices

Food Safety Practices	WM	SD	Interpretation	Rank
1. I Adhere the hand washing protocols at all times.	3.82	0.39	Strongly Agree	1
2. I have basic personal hygiene training and adhere it at all times.	3.76	0.48	Strongly Agree	2
3. I avoid cross-contaminating food by using separate chopping boards, and utensils for raw and cooked foods.	3.60	0.61	Strongly Agree	3
4. Peak hours make it challenging for me to keep up with best practices in food safety compliance.	3.16	0.74	Agree	6
5. I feel hesitant to report food safety issues to management because I'm afraid of getting in trouble.	2.78	1.02	Agree	7
6. Training on food safety is applicable and helpful during our day-to-day job.	3.54	0.58	Strongly Agree	4
7. Food safety protocols are being complied at all times especially during peak hours.	3.44	0.58	Strongly Agree	5
Overall Weighted Mean	3.44	0.31	Strongly Agree	

Legend: 3.26 - 4.00 Strongly Agree 2.51 - 3.25 Agree
1.76 - 2.50 Disagree 1.00 - 1.75 Strongly Disagree

Table 2.2 shows the challenges in food safety training and practices of selected casual dining restaurant employees in terms of food safety practices, which resulted in an overall weighted mean of 3.44, interpreted as a strongly agree response. This signifies that there was a strong positive level of agreement among the respondents. The highest mean of 3.82, interpreted as a strongly agree response, corresponded to indicator number 1, “I adhere to the hand washing protocols at all times,” followed by indicator number 2, “I have basic personal hygiene training and adhere to it at all times,” which had a mean of 3.76.

The lowest mean of 2.78, interpreted as an agree response, was found in statement number 5, “I feel hesitant to report food safety issues to management because I'm afraid of getting in trouble.” The overall results suggest that there was a strong positive level of agreement regarding the challenges in food safety training and practices of selected casual dining restaurant employees in terms of food safety practices.

According to Selander (2024), food safety is crucial for everyone’s health and well-being. It is essential that those working in food service are properly trained and educated on how to handle food safely to prevent the spread of foodborne illnesses. Without adequate training, employees may unknowingly mishandle food, potentially leading to foodborne illnesses among consumers. This could result not only in physical harm but also in reputational damage to the establishment. Foodborne illnesses may range from mild discomfort to severe health complications. By prioritizing comprehensive food safety training programs, businesses can significantly reduce the risk of such incidents and protect the health of their customers.

Table 2.3

Equipment and Resources

Equipment and Resources	WM	SD	Interpretation	Rank
1. We have proper training in handling, cleaning and sanitizing or equipment.	3.78	0.42	Strongly Agree	1
2. I experience delays in training due to malfunctioning equipment.	2.66	1.04	Agree	

3. I find it challenging to keep up with cleaning protocols due to limited resources.	2.40	1.09	Disagree	7
4. I find it difficult to maintain cleanliness when there are not enough cleaning tools available.	2.42	1.11	Disagree	6
5. Our refrigeration unit where we stock our and frozen food are well maintained and functioning well at all times.	3.48	0.50	Strongly Agree	3
6. There are adequate tools and equipment during our training, and we are given enough time for hands on training.	3.52	0.54	Strongly Agree	2
7. Our dry storage rooms are organized and well-lit can be easily navigated.	3.42	0.61	Strongly Agree	4
Overall Weighted Mean	3.10	0.35	Agree	

Legend: 3.26 - 4.00 Strongly Agree 2.51 - 3.25 Agree
1.76 - 2.50 Disagree 1.00 - 1.75 Strongly Disagree

Table 2.3 presents the challenges in food safety training and practices of selected casual dining restaurant employees in terms of equipment and resources, which resulted in an overall weighted mean of 3.10, interpreted as an agree response. This signifies that there was a positive level of agreement among the respondents.

The highest mean of 3.78, interpreted as a strongly agree response, was found in indicator number 1, “We have proper training in handling, cleaning and sanitizing of equipment,” followed by indicator number 6, “There are adequate tools and equipment during our training, and we are given enough time for hands-on training,” which had a mean of 3.52.

The lowest mean of 2.40, interpreted as a disagree response, was found in statement number 3, “I find it challenging to keep up with cleaning protocols due to limited resources.” The overall results suggest that there was a positive level of

agreement regarding the challenges in food safety training and practices of selected casual dining restaurant employees in terms of equipment and resources.

According to Sargasri (2019), HACCP emphasizes staff training and management, ensuring that employees understand food safety practices, which are essential for preventing hazards and maintaining hygiene throughout the production process. HACCP is not only about identifying food contamination; it also involves knowledge of maintaining hygiene. Trained employees understand the importance of regularly cleaning and sanitizing equipment, surfaces, and work areas.

Table 3.1

Significant Difference in the Work Environment in the Demographic Profile

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation	Decision
Age								
Between Groups	0.0020	2	0.0010	0.0270	0.9734	3.5546	Not Significant	Accept Ho
Within Groups	0.6579	18	0.0366					
Total	0.6599	20						
Gender								
Between Groups	0.0788	1	0.0788	2.6715	0.1281	4.7472	Not Significant	Accept Ho
Within Groups	0.3537	12	0.0295					
Total	0.4325	13						
Length in the workplace								
Between Groups	0.0388	4	0.0097	0.3014	0.8747	2.6896	Not Significant	Accept Ho
Within Groups	0.9661	30	0.0322					
Total	1.0050	34						
Educational Attainment								
Between Groups	0.0685	3	0.0228	0.5530	0.6510	3.0088	Not Significant	Accept Ho
Within Groups	0.9911	24	0.0413					
Total	1.0597	27						

Table 3.1 shows that there were no significant differences in how employees perceived the work environment based on their demographic profile. Specifically, for age, the p-value was 0.9734, which is greater than the 0.05 level of significance.

This indicates that age did not significantly impact employees' perceptions of the work environment. Similarly, for gender, the p-value was 0.1281, which is also greater than 0.05, suggesting that gender did not have a significant effect on perceptions of the work environment.

In examining the length of time in the workplace, the p-value was 0.8747, greater than the 0.05 level of significance. This suggests that the number of years employees had worked at the company did not significantly influence how they viewed the work environment. Lastly, for educational attainment, the p-value was 0.6510, which was also higher than the 0.05 level of significance, indicating that an employee's level of education did not significantly affect their perception of the work environment.

These findings imply that age, gender, length of service, and education level did not have a substantial impact on how employees experienced the work environment. Therefore, organizations do not need to design specific interventions based on these demographic factors, as the work environment appears to be perceived similarly across groups.

Figure 3.2

Significant difference on the Food Safety and practices into Demographic Profile

ANOVA								
Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation	Decision
Age								
Between Groups	0.1406	2	0.0703	0.3195	0.7305	3.5546	Not Significant	Accept Ho
Within Groups	3.9609	18	0.2201					
Total	4.1015	20						
Gender								
Between Groups	0.0003	1	0.0003	0.0022	0.9634	4.7472	Not Significant	Accept Ho
Within Groups	1.7369	12	0.1447					
Total	1.7372	13						
Length in the workplace								
Between Groups	0.0678	4	0.0170	0.1111	0.9777	2.6896	Not Significant	Accept Ho

Within Groups	4.5771	30	0.1526					
Total	4.6449	34						
Educational Attainment								
Between Groups	0.0218	3	0.0073	0.0388	0.9895	3.0088	Not Significant	Accept H_0
Within Groups	4.4914	24	0.1871					
Total	4.5132	27						

Table 3.2 presents the data on food safety and practices and reveals that there were no significant differences across different demographic groups—age, gender, length of time in the workplace, and educational attainment—regarding their perceptions of food safety and practices.

For age, the p-value was 0.7305, which is greater than the 0.05 level of significance, indicating that employees of different age groups did not differ significantly in their food safety perceptions and practices. Similarly, for gender, the p-value was 0.9634, which is greater than 0.05, suggesting that male and female employees had similar views on food safety.

Regarding the length of time in the workplace, the p-value was 0.9777, which also exceeded the 0.05 level of significance. This indicated that the number of years employees had worked at the company did not significantly affect their food safety practices. Lastly, for educational attainment, the p-value was 0.9895, which indicated no significant difference in food safety practices based on educational level.

These results imply that age, gender, length of service, and educational attainment did not significantly influence food safety and practices. Therefore, organizations aiming to improve food safety and practices can implement general interventions or training programs without the need to tailor them to specific demographic groups.

Table 3.3*Significant Differences in the Equipment and Resources in Demographic Profile*

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation	Decision
Age								
Between Groups	0.0915	2	0.0458	0.1388	0.8713	3.5546	Not Significant	Accept Ho
Within Groups	5.9346	18	0.3297					
Total	6.0261	20						
Gender								
Between Groups	0.0763	1	0.0763	0.2531	0.6240	4.7472	Not Significant	Accept Ho
Within Groups	3.6158	12	0.3013					
Total	3.6921	13						
Length in the workplace								
Between Groups	0.1516	4	0.0379	0.0877	0.9856	2.6896	Not Significant	Accept Ho
Within Groups	12.9685	30	0.4323					
Total	13.1201	34						
Educational Attainment								
Between Groups	0.2744	2	0.1372	0.4461	0.6470	3.5546	Not Significant	Accept Ho
Within Groups	5.5347	18	0.3075					
Total	5.8090	20						

Table 3.3 presents the significant difference in equipment and resources according to demographic profile. The data show that age, gender, length of time in the workplace, and educational attainment did not significantly affect employees' perceptions or use of equipment and resources.

For age, the p-value was 0.8713, which is greater than the 0.05 level of significance. This suggests that employees across different age groups did not differ significantly in their views on the availability or adequacy of equipment and resources. For gender, the p-value was 0.6240, also above the 0.05 level of significance, indicating that male and female employees perceived the equipment and resources similarly.

Regarding the length of time in the workplace, the p-value was 0.9856, which is greater than the 0.05 level of significance, implying that the number of

years an employee had worked at the company did not significantly impact their opinion on equipment and resources. Lastly, for educational attainment, the p-value was 0.6470, which is greater than the 0.05 level of significance, suggesting that employees with varying levels of education did not differ in how they perceived or used the equipment and resources available to them.

These findings imply that age, gender, length of service, and educational attainment did not significantly influence employees' experiences with equipment and resources.

CHAPTER IV

DISCUSSION

A. Summary of Findings

1. Most of the respondents were aged 26 to 35 years, male, college graduates, and had one to four years of work experience.
2. A strong positive agreement existed regarding the challenges in food safety training and practices, particularly concerning the work environment and food safety practices.
3. There was a positive agreement on the challenges related to food safety training and practices, focusing on the availability and adequacy of equipment and resources.
4. The ANOVA results showed that demographic factors (age, gender, workplace tenure, and education) did not significantly affect employees' perceptions of the work environment, food safety practices, or equipment and resources, as the p-values were greater than 0.05.

B. Conclusions

After having presented the summary of findings in the results and discussion of this undertaking, the research now infers the following logical conclusions:

1. The findings revealed and concluded that the majority of the respondents were aged 26 to 35 years, male, college graduates, and had been in the workplace for one to four years.
2. There was a strong positive level of agreement regarding the challenges in food safety training and practices of selected casual dining restaurant employees in terms of the work environment and food safety practices.

3. There was a positive level of agreement regarding the challenges in food safety training and practices of selected casual dining restaurant employees in terms of equipment and resources.
4. The ANOVA results across the three areas—work environment, food safety and practices, and equipment and resources—showed that demographic factors such as age, gender, length of time in the workplace, and educational attainment did not significantly impact employees' perceptions or experiences. Specifically, in all three categories, the p-values for each factor were greater than the 0.05 level of significance. This indicated that these demographic factors did not contribute to variations in how employees perceived their work environment, food safety practices, or the adequacy of equipment and resources.

C. Recommendations

Given the limited scope of this study, the following recommendations are offered for future researchers who wish to further explore the challenges encountered by selected casual dining restaurant employees in consistently implementing food safety training and practices in their daily responsibilities:

1. Administrators and employees should be educated through seminars and workshops on the different food safety training and practices.
2. Management should promote open communication, allowing employees to report food safety risks without fear.
3. Efforts should be made to improve the restaurant atmosphere, including comfort and seating arrangements, cleanliness and maintenance, food quality, service responsiveness, professionalism of staff, and food offerings.
4. Restaurants should conduct weekly to monthly assessments of the environment.
5. Management should adapt to changes in restaurant themes based on current trends and customer demands.
6. Regular assessment of employee performance and customer satisfaction should be conducted.

7. Future researchers are encouraged to conduct comparative studies in different settings with a larger population.
8. The scope and population of the study should be expanded. Since this study was limited to selected restaurants in Lucena City, Quezon, the applicability of its findings to other institutions was restricted. To improve the generalizability of the study, future researchers are recommended to include all restaurants in Lucena City, Quezon, to ensure that retention strategies, workplace culture, and the availability of learning resources are properly assessed and compared.
9. Based on these findings, organizations should consider designing general policies and interventions that apply equally to all employees, regardless of demographic profile. Since age, gender, length of service, and educational level did not significantly influence employee perceptions, targeted interventions based on these factors are unnecessary. Instead, organizations could focus on improving overall operational efficiency, providing adequate training, and enhancing workplace conditions to benefit all employees uniformly. Additionally, ongoing feedback from employees could help identify other factors that may have a more substantial impact on their experiences and perceptions, which could inform future improvements.

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APPENDICES

APPENDIX A

"CHALLENGES OF FOOD SAFETY TRAINING OR PRACTICED OF SELECTED CASUAL DINING RESTAURANT EMPLOYEES IN LUCENA CITY"

Survey Questionnaires

I. Profile of the Respondent

Instructions: Please answer this question completely and truthfully. Your responses will be used for research purposes. Your responses to this survey will be kept completely confidential. Thank you very much.

1.1 Sex

☐ Female ☐ Male ☐ Others Specify_____

1.2 Age

☐ 18-25 years old ☐ 26-35 years old ☐ 36-45 years old ☐ 46-55 years old ☐ 56 years old and older

1.3 Educational Attainment

☐ Vocational ☐ Junior High School Graduate ☐ Senior High School Graduate

☐ College Level ☐ College Graduate ☐ Masteral ☐ Post Graduate ☐ Others

1.4 How long they are in the workplace?

☐ 0-6 months ☐ 6-11 months ☐ 1-4 years ☐ 5-8 years ☐ 9-12 years

☐ 12 years and up

II. What challenges or tasks make it difficult in terms of:

Instructions: Please answer the following questions honestly and thoughtfully. Select the option that best reflects your answer by placing a check (/) in the corresponding box below: Strongly Agree (4), Agree (3), Disagree (2), Strongly Disagree (1)

2.1 Work Environment

STATEMENT	4	3	2	1
I am comfortable in my skills to follow sanitation guidelines in the workplace.				
I believe that the training programs cover the real-world challenges that arise in a workplace.				
The lighting is adequate in the workplace area for safe food preparation.				
There is enough amount of PPE provided by the management.				
The training area is adequate and conducive for learning.				
The equipment and tools are well maintained and helps upon doing our job efficiently.				
The training materials such as manuals and videos are up to date and sufficient.				

2.2 Food Safety Practices

STATEMENT	4	3	2	1
Adhere the hand washing protocols at all times.				
I have basic personal hygiene training and adhere it at all times.				
I avoid cross-contaminating food by using separate utensils for raw and cooked foods.				
Too much task makes it challenging for me to keep up with best practices in food safety compliance.				
I feel hesitant to report food safety issues to management because I'm afraid of getting in trouble.				
Training on food safety is applicable and helpful during our day-to-day job				
Food safety protocols are being complied at all times especially during peak hours.				

2.3 Equipment and Resources

STATEMENT	4	3	2	1
We have proper training in hand washing, cleaning and sanitizing our equipment.				
I experience delays in training due to malfunctioning equipment.				
I find it challenging to keep up with cleaning protocols due to limited resources.				
I find it difficult to maintain cleanliness when there are not enough cleaning tools available.				

Our refrigeration unit where we stock our and frozen food are well maintained and functioning well at all times.				
There are adequate tools and equipment during our training, and we are given enough time for hands on training.				
The equipment used for food preparation is regularly inspected and maintained.				

APPENDIX B

GRAMMARIAN CERTIFICATE

This is to certify that the undersigned has reviewed and gone through all the pages of the research paper entitled “ **CHALLENGES OF FOOD SAFETY TRAINING AND PRACTICES OF SELECTED CASUAL DINING RESTAURANT EMPLOYEES IN LUCENA CITY**” by **ASHLEY P. BARORRA, LAICA MAY O. CASTILLO**, and **DERIE XEKIA R. GUINTO** against the set of structural rules that govern the composition of sentences, phrases, and words in English.

Signed:



ANGELICA R. JIMENEZ, LPT

Grammarian

PRC ID- 1728762

angelicajimenez2629@gmail.com

09551220989

APPENDIX C

CERTIFICATE OF STATISTICIAN

This is to certify that the thesis entitled: **“Challenges of Food Safety Training and Practices of Selected Casual Dining Restaurant Employees in Lucena City”** A/Y 2024-2025 has undergone statistical and data analysis using various of statistical treatment.

This certification is issued to ensure that the University received quality research work.

Signed by:



ALLAN JR. DICEN PANTUA ,LPT, MAED

Senior High Mathematics Teacher/Statistician
DepEd San Jose, Camarines sur
MAEd MATH
PARSSU, Philippine Association of Researchers
and Statistical Software Users Inc.
Professional Member
PARSSU ID number 2982

APPENDIX D

STATISTICAL TREATMENT COMPUTATION

Table 1.1 *Age*

Age Range	Frequency	Percentage	Rank
18 – 25 years old	19	38.00	2
26 – 35 years old	22	44.00	1
36 – 45 years old	9	18.00	3
Total	50	100.00	

Figure 1. Distribution of respondents according to Age

Table 1.2 *Gender*

Gender	Frequency	Percentage	Rank
Female	20	40.00	2
Male	30	60.00	1
Total	50	100.00	

Figure 2. Distribution of respondents according to sex

Table 1.3 *Educational Attainment*

Educational Attainment	Frequency	Percentage	Rank
College Graduate	17	34.00	1
College Level	10	20.00	3
Junior High School Graduate	8	16.00	4
Senior High School Graduate	14	28.00	2
Vocational Graduate	1	2.00	5
Total	50	100.00	

Figure 3. Distribution of respondents according to Educational Attainment

Table 1.4 *Length in the Workplace*

Length in the Workplace	Frequency	Percentage	Rank
0 – 6 months	9	18.00	3
6 – 11 months	15	30.00	2
1 – 4 years	20	40.00	1
5 – 8 years	6	12.00	4
Total	50	100.00	

Figure 4. Distribution of respondents according to Length in the Workplace

APPENDIX E

GANTT CHART

ACTIVITY	SEPT				OCT				NOV				DEC				JAN			
	Week				Week				Week				Week							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Discussion of thesis paper																				
Brainstorming of possible title																				
Propose of title																				
Start of doing chapter 1-3 and Survey Questionnaire																				
Consultation of the paper from 1-3 to our adviser and coordinator																				
Revision of the paper after consultation																				
Preperation for the upcoming pre-defense																				

Pre-defense of chapter 1-2																				
Start the revision of 1-2																				
Consultation of the survey questionnaire																				
Starting the survey (Data Gathering																				
Start of doing the chapter 4-5																				
Consulation of the paper																				
Preparing for the final defense																				
Final defense																				
Checking the revision																				
Grammarian																				
Hard bound for final paper																				

APPENDIX F

Curriculum Vitae

LAICA MAY O. CASTILLO

Barangay Iba bang Yuni Mulanay Quezon Philippines
09707548730
castillolaica30@gmail.com

**OBJECTIVE:**

I am a graduating student in Bachelor of Science in Culinary Management at STI Collge Lucena and my goals is to serve people in a very best way, because I love doing it. I also wanted to enhance my ability that I learned in my school and expose what passion do I have and let my hidden talent or ability be shown

EDUCATION:**TERTIARY:****STI COLLEGE LUCENA**

Bachelor of science in Culinary
Management
Lucena City (2021 – present)

SECONDARY:**SENIOR HIGH SCHOOL****Mulanay Institute**

Electronic Processing
Mulanay Quezon (2019 – 2021)

JUNIOR HIGH SCHOOL**Ilayang Yuni Integrated National High School**

Mulanay Quezon (2015 – 2019)

PRIMARY:**Ibabang Yuni Elementary School**

Mulanay Quezon (2009– 2015)

SKILLS:

Time Management
Adaptability
Willing to Learn

TRAINING/SEMINARS:**Career Pathway in the field of Hospitality Industry**

(Multi-Purpose hall-Lucena City 2023)

Mix and Flair Competition (Participant)
(Multi-Purpose Hall-Lucena City)

Efficient and Resilient Supply Chain Management in the Digital Age
(Multi-Purpose Hall-Lucena City 2023)

Elevating Professional Appearances and Interpersonal Skills
(Multi-Purpose Hall-Lucena City 2023)

ACHIEVEMENTS/AWARDS:

Senior High School (WITH HONORS)
Bed Making Competition 2023
(CHAMPION)
Bed Making Competition 2024
(CHAMPION)

EXPERIENCE:

Service Crew (McDonald's)
(Tayabas Highway)

PERSONAL DATA:

AGE	: 22 Years Old
GENDER	: Female
CIVIL STATUS	: Single
DATE OF BIRTH	: November 27,2002
PLACE OF BIRTH	: San Francisco Quezon
HEIGHT	: 5'2
WEIGHT	: 56 kls
RELIGION	: Baptist

ASHLEY P. BARORRA

(CURRENTLY LIVING IN PUROK 6 BRGY, PROGRESO)

Gumaca, Quezon Philippines

09107721334

caleaashleybarrora@gmail.com



OBJECTIVE:

Providing excellent customer service is something I am passionate about. I'm dedicated to continuous learning and improving my skills in this industry. I offer my dedication and the knowledge I've gained. This opportunity allows me to grow professionally while contributing in your company.

2023 – Participants of Opportunities and Challenges in Charting Your Career Path in the Tourism and Hospitality industry

EDUCATION:

2023 – Participants of Career Pathway in the Field of Hospitality industry

TERTIARY: STI College Lucena
Bachelor of Science in
Culinary Management
Lucena, Quezon 2025 -
Present

2023 – Participants of The power of Personal Image, Elevating Professional Appearance and International Skills

SECONDARY: JUNIOR & SENIOR
HIGH SCHOOL
Gumaca National High
school
Gumaca, Quezon |2015-2021

2023 – Participants of Efficient and Resilient Supply Chain Management in the Digital Age

PRIMARY: Gumaca West Central
School
Gumaca, Quezon |2009-2015

ACHIEVEMENTS/AWARDS:

FOOD & BEVERAGE NC2 PASSER

CROOKERY NC2 PASSER

COLLEGE (November 23, 2023): 2nd place
Table Skirting

SKILLS HIGHLIGHTS:

**ADAPTABILITY
TIME MANAGEMENT
TEAMWORK
EMOTIONAL
INTELLIGENCE**

SENIOR HIGH SCHOOL (2019 – 2020):
Consistent with Honor

TRAINING/SEMINARS:

2021 – Participants of Tourism and Hospitality
Management International Conference
2023 – Participants of Astoria Hotel stay and
learned program

PERSONAL DATA:

AGE : 23
GENDER : Female
CIVIL STATUS : Single
DATE OF BIRTH : January 10, 2002

PLACE OF BIRTH : Gumaca, Quezon
HEIGHT : 4'11
WEIGHT : 45 klg.
RELIGION : Catholic

DERIE XEKIA GUINTO

Lot18 Blk 17 Campania Street Citta Grande Iyam
Lucena 1403, Quezon Philippines
09295143727
xekiaderie@gmail.com

**OBJECTIVE:**

I am willing to learn, assist with, and discover the area of work since I take great satisfaction in my work and give my all to it. My desires in the kitchen go beyond simple duties. I'm always looking for new challenges and chances to learn and develop.

EDUCATION:**TERTIARY:****STI College Lucena**

Bachelor of Science in Culinary Management
Lucena, Quezon | 2021

SECONDARY:**SENIOR HIGH SCHOOL****St. Augustine**

Humanities and Social Sciences
Lucena, Quezon | 2019 – 2021

JUNIOR HIGH SCHOOL**Quezon National High School**

Lucena, Quezon | 2017 – 2019

PRIMARY:**Lucena West 1 Elementary School**

Lucena, Quezon | 2008 – 2015

TRAINING/SEMINARS:**Career Pathway in the field of Hospitality Industry**

(Multi-Purpose hall-Lucena City 2023)

Mix and Flair Competition (Participant)

(Multi-Purpose Hall-Lucena City)

Efficient and Resilient Supply Chain Management in the Digital Age

(Multi Purpose Hall-Lucena City 2023)

Elevating Professional Appearances and Interpersonal Skills

(Multi-Purpose Hall-Lucena City 2023)

ACHIEVEMENTS/AWARDS:

Meeting, Incentive, Conference, exhibition Class 2023

Skill Competition (Baking Competition) 2023

Skill Competition (Quiz Bee) 2024

PERSONAL DATA:

AGE	: 22
GENDER	: Female
CIVIL STATUS	: Single
DATE OF BIRTH	: November 28, 2002
PLACE OF BIRTH	: Lucena City
HEIGHT	: 5'3
WEIGHT	: 68
RELIGION	: Catholic

APPENDIX G

ACTUAL RESEARCH EXPENSES

QUANTITY	SPECIFICS	ACTUAL COST
	Pre-defense Paneling Fee	500
	Final Defense Paneling Fee	1,175
	Grammarian	1000
	Print	500
	Statistician	2000
	Hardbound	PHP
	Transportation	300
TOTAL EXPENSES:		

Prepared By:

Ashley P. Barorra

Researcher

Laica May O. Castillo

Researcher

Derie Xekia Guinto

Researcher

Approved By:

John Albert Cervantes

Research Adviser

Prof. Jalekah Capisanan

Research Coordinator