

The Effectiveness of the Food Safety and Hygiene Academy of Philippine (FoodSHAP) Training to Food Service Businesses owned by De La Salle University-Dasmariñas Students and Alumni

Poot, Joshua James C.¹, Enriquez, Shania Alexia², Ignacio, Joanna Charmaine³,
Mrs. Ailene Rolle⁴

pjc0108@dlsud.edu.ph¹, ess0137@dlsud.edu.ph², ijm1401@dlsud.edu.ph³

De La Salle University- Dasmariñas College of Tourism and Hospitality Management
Dasmariñas City, Cavite, Philippines

Abstract: Food safety training comes in a variety of formats. For food professionals, those employed in food production, retail food, and foodservice, it may begin with high school classes dedicated to food science, but it undoubtedly includes college courses in food science, food technology, and food engineering. Following that, professional organizations, institutions, and firms that provide services to the food sector provide continuing education courses, conferences, seminars, webinars, and symposia on food safety. This resulted in the conduct of a study to determine the perceived effectiveness of the Food Safety and Hygiene Academy of the Philippines (FoodSHAP) Training to Food Service Businesses owned by De La Salle University-Dasmariñas students and alumni amidst the pandemic. The study sought to ascertain the effectiveness of given lessons, assessments, and training among Hospitality Management students and alumni, as well as their application to their current food company operations. The researchers gathered data from 80 respondents using an online survey. The findings indicate that there is a positive correlation between food cleanliness, hygiene methods, and food safety concerns. The findings indicate that food safety education has a significant influence on the level of knowledge acquired by hospitality professionals and practitioners.

Keywords: Food Safety Training, Food Hygiene, Food Safety, Food Industry, FOODSHAP.

1. INTRODUCTION

Background of the Study

The food industry is crucial and essential to any country. It's one of the most important economic sectors. It affects public health, food safety, food security, social progress, and nutrition. The quality of the product, safety, and sanitation are all essential challenges within the food sector. The food industry is responsible for food supply, harvesting, processing, manufacturing, transportation, distribution, consumption, including waste. Because we all need food, the food industry has a huge impact and is one of the most important contributors to the economy. This industry deals with food and service supply, consumption, and catering on a global scale.

The one-day FoodSHAP® BASIC FOOD SAFETY (BFS) training covers the following, topics: Food safety basics, food hazards, food illness, high-risk foods, time and temperature control, hygiene practices, cleaning and disinfecting the premises and equipment, pest control, and keeping it safe in the kitchen, food safety training, food flow, food safety laws, and HACCP are just a few of the topics covered (FoodSHAP).

It is important to guarantee that the new worker understands what is being taught and, as an outcome, would be able to satisfy the needs of the site when they resume work at the completion of this program. Employees will grow as a result of the induction program, which will also assist them in settling into their new position. "As a result, many organizations will include basic food safety training with the general induction program," Swainson stated in 2019. Even if a new hire already has basic or certification for enhanced food safety, training for induction on these topics gives an excellent chance for the new hire to reflect on these standards in the context of specific business operations."

Employees should be familiar with basic food safety training, such as that provided by Food Safety and Hygiene Academy of the Philippines (FoodSHAP), to use when establishing a business. Food inspectors ensure that customers receive safe and healthy food by enforcing sanitation laws and laws, as well as providing training to food service operators and workers in every food industry. A thriving food control system requires well-qualified inspectors with proven competence. Because food control organizations in undeveloped countries have limited staffing, environmental health inspectors also serve as food inspectors.

It is not appropriate since they may need the required experience to fully assess and monitor food businesses. In the Philippines, they confirm to be accurate where sanitation inspectors conduct food safety inspections of various food outlets within exclusive jurisdiction of local authorities. Food sanitation is one of the nine sanitation inspector jobs and responsibilities. Food sanitation inspectors are in charge of guaranteeing that consumers receive safe and wholesome food by enforcing sanitary laws and guidelines, as well as food handler and operator training.

People looking to start a business at a low cost are considering the internet or home-based businesses. The food sector should successfully adopt Food Safety Management Systems (FSMS) based on the Hazard Analysis and Critical Control Point (HACCP) principles to reduce food safety risks and the chance of food contamination. Preconditioning programs include things like proper hygiene, sanitation, area segmentation (high risk and low risk), supplier, assessment, inspection, storing, logistics, sourcing, housekeeping, and staff cleanliness as a routine exam to ensure fitness. A food safety management system (FSMS) and a HACCP team should be in place for employers to identify and remove all food safety issues. Food safety control systems should be reviewed by all food business owners and those in the packaging sector since the implementation of numerous standards must be documented and must evaluate efficacy regularly. To maintain a safe environment, all enterprises should perform the proper guidelines.

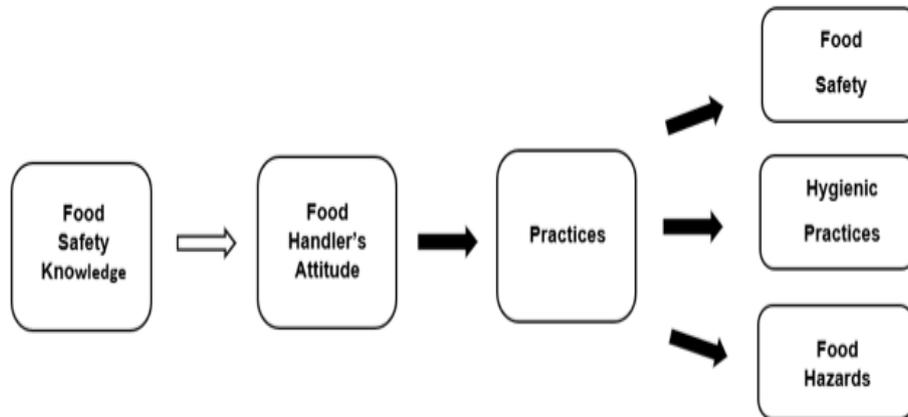
President Benigno S. Aquino III signed Republic Act No. 10611, popularly known as the "Food Safety Act of 2013," into law on August 23, 2013, with the goal of strengthening the country's food regulatory system. Regulating food safety standards, monitoring, testing, data collection, supervision, and other food safety regulatory activities compose the food safety regulatory system. They must guarantee that their products meet the standards of food-related laws and regulations, and that they have control measures in place to avoid, eliminate, or decrease consumer hazard, according to the legislation. Its specific responsibility is to safeguard the community from food-borne diseases and unsanitary conditions. Its objectives are to keep the community safe from food-borne diseases and unhygienic, mislabeled, or mislabeled food products, to boost consumer and industry trust in the food regulatory regime, and to support development in the economy by advocating ethical business practices through the provision of a legal framework for local and international trade.

According to Gavin (2016), when compared to traditional training approaches, including active learning methods into a food safety training may lead to improved food safety understanding from employees. Based on the study's findings, I concluded that both approaches to food safety training impacted how participants performed on the job. Respondents in the treatment and control groups rapidly and accurately identified potential food safety issues and discussed them.

Foodborne disease outbreaks are a huge public health concern all over the world. Furthermore, worldwide public health challenges have increased as a result of the COVID-19 epidemic. Organizations comprising manufacturers and suppliers along the food supply chain, in particular, are still struggling to develop and maintain high standards of food safety and cleanliness. Food safety is crucial because contamination can have a global impact and cause problems for a country's economy or company losses if they are found. Food safety training is one approach to enhance food safety, such as maintenance and generalization, which cannot be recorded due to the short timeframe of the current study (Yu, 2018). It did not, however, look into the impact of food safety procedures. Based on the experiences of De La Salle University Dasmariñas Hospitality Management students and graduates in running their food businesses, the researchers decided to conduct this study to see if FoodSHAP food safety training was sufficient. This research will assist experts in making their food safety training programs more successful for food service operators. This study will be beneficial to students, teachers, food handlers, and future researchers who are working on a similar topic. Furthermore, the researcher wants to use this data to determine the effectiveness of given lessons, assessments, and training among Hospitality Management students and alumni, as well as how they apply this to their present food company operations.

2. CONCEPTUAL FRAMEWORK

The effectiveness of food safety and hygienic practices in operating a food business was determined using conceptual frameworks in this study.



Western scientists established the Knowledge-Attitude-Practices Model in the 1960s, which divides human behavior into three sequential processes: knowledge acquisition, attitude formation, and behavior formation (Fan, Y. et al., 2018). Current food safety training programs, according to Zanin et al. (2017), are based on the "Knowledge-Attitude-Practice" model, which asserts that individual attitudes and actions are dependent on knowledge provision. They did a thorough analysis of prior food safety studies.

Research Objectives

One of the essential strategies traditionally recognized is food safety training for modifying and improving handling behaviors to avoid or limit the possibility of food contamination. The program's four objectives were to: (1) learn appropriate food preparation techniques as well as becoming aware of foods that are more likely to cause food-borne illness; (2) adopt food safety methods for preparation, processing, handling, and storage; (3) become familiar with current food safety legislation; and (4) become aware of the environmental impact of their employees' food handling (Yu, 2018).

Statement of the Problem

This research aims to see how efficient the Food Safety and Hygiene Academy of the Philippines (FoodSHAP) training is in managing a food business.

The researchers will be using a survey, specifically the FoodSHAP, extensively used by employees in the food service industry.

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

1.1 Age

1.2 Gender

1.3 Type of Food Business

1.4 Number of months that business the business has been open

2. How will the respondents assess the effectiveness of Food Safety and Hygiene Academy in the Philippines (FoodSHAP) Training in terms of:

2.1 Food Hygiene

2.2 Hygiene Procedures

2.3 Food Safety Issues

3. What is the effectiveness of Food Safety and Hygiene Academy (FoodSHAP) Training for food business operations as perceived by the food handlers? In terms of:

3.1 Finance

3.2 Human Resource

3.3 Marketing

3.4 Customer Relation

Hypothesis

H0: There is no significant relationship between having Food Safety and Hygiene Academy of the Philippines (FoodSHAP) Training in Operating a business

H1: There is a significant relationship between having Food Safety and Hygiene Academy of the Philippines (FoodSHAP) Training in Operating a business

3. REVIEW OF RELATED STUDIES AND LITERATURE

According to Azanaw et al., 2019, In the Philippines, food handlers were not obliged to register for food safety certification or to get sanitary permits., resulting in unsafe and inappropriate food preparation methods that expose customers to food related disease. Reheating, undercooked food, chilling of food, poor preparation, contamination, improper processing, and unsanitary circumstances have all been related to food borne illness.

Due to the fast development of online food that may or may not meet food safety standards, according to Aning and Madarang, 2020, It is critical to problematize the various handling methods at whichever point along the supply chain, especially when food is delivered to households. In light of these situations and aspirations, the behaviors of home-based food handlers who work in the online food market were investigated in this study. It uses food safety rules and regulations as a lens to identify flaws that might pose serious health risks. During the pandemic, food handlers' self-reported and observed food safety procedures were the subject of this study.

It also intended to see if there was a relationship between participants' demographic features and their self-reported food safety processes, and the inconsistencies in observed and self-reported health and safety processes. In training intervention, three components were targeted for behavioral change: attitude, normative beliefs, and perceived behavioral control. It detailed the dangers of food handlers failing to follow proper safety requirements and good and bad practices, health and economic consequences of food borne disease outbreaks, people who are at threat, as well as related policies and rules. To combat normative ideas, food safety professionals emphasized the need to follow the rules and emphasized the employees' duty (Husain, et al, 2016). Employees who are aware of having food safety training and benefits for being knowledgeable to follow the proper guidelines that couldn't affect the health of their co-workers and guests As stated by Husain 2016, Knowledge-based training is an educational technique that focuses on equipping employees with critical safety aspects, such as scientific knowledge. Operational infractions, which raise the risk of Food borne Illness outbreaks, have been linked to a lack of food-safety understanding, according to studies. A trained food handler is expected to have more knowledge and adopt better practices as a result of their education. Anyone with a higher degree of education shares their expertise with food handlers in the aim of influencing others who are less educated to make positive changes.

Food safety training programs are important for lowering the chance of tainted veggies being shipped to customers around the world. Any food safety system must include training. Inadequate food and hygiene training has an impact on food safety; thus, effective training is critical for successfully establishing a food safety management system. Employees handling foods, according to food safety training programs, should learn how food can become damaged and what to do if food gets damaged. (Gavin, 2016). Employees who will be handling food products should receive food safety training so that they are aware of how food can become contaminated. Food-borne illnesses, food poisoning, and other diseases may emerge as a result of food handlers' lack of training.

A number of studies have demonstrated that food safety training is a great method in order to improve food workers' intellect and behaviors, according to Malavi (2021). Food safety training has been shown to lower the occurrence of food-borne illnesses by raising awareness among employees, desire, behaviors, including safe food handling abilities. Food handlers have benefited from food safety training in order to increase their knowledge and skills. It was also discovered that food safety training lowers the risk of food-borne illness.

As stated by Lee et al, (2017). Infected food workers were able to spread the disease to others. Food handlers are essential in guaranteeing food safety and avoiding food illness. Poor personal hygiene behaviors are agents of gastrointestinal infectious illnesses. Salmonella was effectively isolated from seafood in a prior investigation, however, Salmonella is a rare carrier. Cross-contamination from sick food workers was responsible. Furthermore, multiple studies have shown similarities between infections recovered from patients and those isolated from food workers, implying that kitchen staff were food borne pathogen transmitting vehicles. Food handlers with a good understanding of basic food handling methods may be able to assist in controlling food poisoning, instances because they are in direct touch with food, especially ready-to-eat items. According to the study, cross-contamination of food products by infected hands can easily transfer food borne diseases. Food safety, not just the food handlers, has a significant impact on a company's reputation. To avoid a food borne illness epidemic in the workplace that can spread to customers, food handlers should follow basic safety measures. Food handlers should follow basic safety standards to avoid a food borne disease epidemic in the workplace that could spread to consumers, and those handlers who have a complete awareness of safe food handling techniques may be able to help reduce the number of food poisoning cases.

Food is essential for good health. As a result, food safety should be seen as a fundamental human right. A large number of people may be exposed to tainted food. Millions of people become ill each year, and hundreds of thousands die. Food safety concerns have not diminished in the twenty-first century. Local outbreaks can swiftly become global problems due to the speed and breadth of product dissemination. In every country, severe food borne disease outbreaks have occurred. Science and fair law enforcement are essential for food safety. New rules must be established on a regular basis to maintain a consistent supply of safe and healthy food items for people's health and well-being. (Menon,2018).

Food handlers must have the requisite knowledge and abilities to guarantee proper cleanliness and food safety standards are followed in medical institutions. Prior food-related job experience and education are equally critical in ensuring that employees safely carry out their food-handling responsibilities. Furthermore, food-borne infections caused by food handlers in food businesses can be decreased via training, policy, planning, and standard-setting. As a result, assessing food service staff's food safety, knowledge and procedures is critical to maintaining and enforcing food safety in healthcare facilities. (2019, Jasiwal).

Restaurant owners and managers must operate on tight profit margins. Food security is a major concern for restaurant operators, particularly in fast-food establishments. According to the Centers for Disease Control and Prevention, restaurant staff's inadequate food handling procedures are responsible for the majority of food-related illness outbreaks (CDC). Food employees spread infection owing to a lack of handwashing in 82 percent of food borne illness outbreaks. Food poisoning can be caused by a lack of food safety information, which can lead to risky food handling habits (Calcador, 2017). Food safety is a major issue for restaurant operators, specifically when operating a fast food establishment. Because of their contact with food, a food handler is a primary source of food contamination. As a result, when running a restaurant, the owner should ensure that his or her personnel are well-versed in food safety. Food poisoning or food-borne illnesses can result from a lack of food safety understanding.

Food safety and hygiene are crucial for businesses because they protect customers from food borne illnesses and poisoning. When germs, viruses, and other microorganisms infect food, it causes food poisoning in those who ingest it. Food poisoning may typically be treated at home in less than a week, but it might be dangerous and demands medical attention right once. As a result, it's critical to know how to keep customers safe from food poisoning. (Rennie,2020). Employees will understand their role in contributing to correct work practices if there is a food safety and hygiene policy in place, as a safe and sanitary workplace contributes to a productive workforce.

According to Tony Myles (2016), the chef faces numerous risks when it comes to pacing the kitchen. This threat may occur if the kitchen staff is limited and attempting to fill all of the kitchen's tasks, which can put them under a lot of pressure when serving their customers. Their stresses can lead to incidents such as blisters, wounds, slipping and falling, and fatigue, which can have an impact on employee and service performance. In addition to Fred Decker (2016), The risks of becoming a cook are not just for their physical performance, as well as for their mental stress and duties in their lives. Every chef must sustain a high performance at all times. They must guarantee sufficient staffing, as well as the ability to deal with the day-to-day problems that arise, as well as some staff conflicts. Because of these factors, they may experience mental stress and be unable to enjoy their normal lives outside. To maintain good performance, they dedicate their full attention to their work.

Scope and Delimitations

The researchers were able to collect precise data for study as a result of this. The survey will be done via an online platform and Google forms, with 80 employees from food service enterprises operated by De La Salle University Dasmariñas Hospitality Management students and alumni batch 2020 taking part.

4. METHODOLOGY

Research Design

In this study, the researchers will use a quantitative research design. According to Gay (2017), descriptive research entails gathering data to test hypotheses or answer questions about the study's subject's current state. The descriptive analysis identifies and documents current conditions. Descriptive research employs a systematic methodology to characterize events, phenomena, or facts in specific areas or groups. Descriptive research is a form of study that focuses on describing the features of the people or problems under investigation. The "what" of the study topic takes precedence over the "why" of the study topic in this methodology. Because the goal of this inquiry was to see how successful the Food Safety Act was, and Hygiene Academy of Philippines Training (FoodSHAP) in running a food business, the researchers used descriptive research.

Sampling Procedure

The study will use purposeful sampling, implying that researchers will set specific criteria or traits that participants must meet. Purposive sampling (also known as judgment, selective, or subjective) is a sample strategy, according to Business Research Methodology. A researcher chooses people from the general community to take part in the study depending on their evaluation. Purposive sampling is a non-probability sampling technique in which "sample items are picked based on the researcher's judgment." Many researchers feel that if they use good judgment, they may get a representative sample while saving time and money."

These participants were chosen based on a specific attribute that is relevant to the study. The study's participants will then be picked using the following criteria: It must be a present or former student of De La Salle University-Dasmariñas Hospitality Management program should have worked in the food industry for at least 6 months and Encountered Basic Food Safety for Food Handlers (FoodSHAP)

The Research Instrument

This section contained details regarding the researchers' data collection instrument. It went over the type of instrument that was used. It also demonstrated the various methods for developing an instrument and the materials utilized to do so. A research instrument is a device used to collect data on a certain topic.

A questionnaire was employed as the research tool in this study. It's a questionnaire that asks a sequence of questions to gather information from respondents. (McLeod, 2018). Adopting, Modifying, and Creating Your Own Instrument are the three methods for constructing an instrument.

Create your own was employed by the researchers. The statistician checked the validity and reliability of the research instrument.

The researchers utilized a four-point Likert scale with options of Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1), ranging from 4–Strongly Agree, 3–Disagree, 2–Disagree, and 1–Strongly Disagree to assess the success of the Philippine Food Safety and Hygiene Academy.

Data Treatment and Analysis

The statistical test performed in the paper was shown in this portion of the methodology. The different statistical tests were defined and explained. It also included the formula that the researchers utilized.

Data analysis is the application of statistical tests to answer research issues of objectives. The researchers will utilize the weighted mean. A weighted mean is a standard determined by multiplying the weight of a single event or outcome by the quantitative effect and then adding the results together. A weighted mean allows you to provide a weight, or relative importance, to each statistic when generating an average. Values with a higher weight are considered to be more significant when compared to the other values. The researchers can find the most essential aspects in obtaining food safety training by employing weighted techniques.

5. RESULTS AND DISCUSSION

This chapter discussed the data gathered by the researchers from the selected participants.

All of the data would be presented through figures and tables. The researchers interpreted afterwards the presented figures and tables with a narrative explanation. Furthermore, the researchers analyzed and explained the contribution of the gathered data to the study. The researchers also clarified the hypothesis of the study. This chapter also contained a synthesis as the summary of the whole chapter.

The findings of the data gathered, as well as demographic profiles of the respondents in terms of age, gender, civil status, job status, and educational attainment, will be presented in this area of the research.

Statement of the problem #1

What is the demographic profile of the respondents? In terms of their:

1. Demographic Profile of the respondents

1.1 Age

Table 1.1: Demographic Profile according to age

Age	Frequency	Percent
18-22	45	50
23-27	40	44.444
others	5	5.556
Total	90	100

Table 1 depicts the demographic profile of the respondents based on their age. The majority of the responders are between the ages of 18 and 22, accounting for 50% of the total (50 percent). On the other hand, the age group of 28 and up received the fewest responses, accounting for five-point-fifty-six percent (5.56 percent) of the population.

1.2 Gender

Table 1.2: Demographic Profile according to Gender

Gender	Frequency	Percent
Female	48	53.333
Male	41	45.556
others	1	1.111
Total	90	100

Table 1.2 reveals the demographic profile of the respondents according to their gender. The figure shows that fifty-three-point thirty-three percent (53.33%) of the respondents are female while forty-five-point fifty-six percent (45.55%) of the respondents are male and one-point -eleven percent are other genders (1.11%).

The data implies that there are more women who tend to work in a food establishment than the other genders although the gap of the frequency in female and male is not that big. Also, the “others” in the data may include LGBTQ which has the least percentage. It may be due to the social culture that women are more on the tasks for cooking and cleaning while men are for constructions or heavy duties and since the “other” category is few this may be due to discrimination.

To further analyze the data given by the proponents, the findings of Zippia the Career Expect (2020) identified that in the US women make up 60.9% of all food service workers, while men make up 33.9% and the LGBTQ people make up 7% of all food service workers. Although the gap is big both men and women including the LGBTQ still, they are more likely to work in a food industry.

1.3 Type of Food Business

Table 1.3: Demographic Profile of the Respondents according to the type of food business.

Type of food business	Frequency	Percent
Cafeteria	17	18.889
Casual Dinner	5	5.556
Fast Food	9	10
others	59	65.556
Total	90	100

Table 1.3 presents the demographic profile of the respondents according to the type of food business. The figure presents that sixty-five-point fifty-six percent (65.56%) are operating other type of food business, eighteen-point eighty-nine-percent (18.89%) of the respondents are operating cafeteria, ten percent (10%) of the respondents are operating Fast Food and five-point fifty-six percent (5.56%) are operating casual dinner.

The data shows that most of the respondents are working in other types of food business compared to cafeteria, casual dinner and fast food indicated in the survey.

1.4 Employment Status

Table 1.4: Demographic Profile of the Respondents according to the number of months that business has operating

Number of months that business operates	Frequency	Percent
1-2 years	48	53.333
3-5 years	4	4.444
3-6 months	33	36.667
others	5	5.556
Total	90	100

Table 1.4 shows the demographic profile of the respondents according to the number of months that the business operates. The figure shows that fifty-three-point thirty-three percent (53.33%) of the respondents are operating 1-2 years, thirty-six-point sixty-seven percent (36.67%) of the respondents are operating 3-6 months, five-point fifty-six percent (5.56%) are operating more than 5 years and four-point forty-four percent (4.44%) are operating 3-5 years.

The data shows that most of the respondent’s business has been around for 1-2 years. They have been able to sustain their business and maintain the good hygiene of their business as well as how they treat their customers.

Statement of the Problem #2

How will the respondents assess the effectiveness of Food Safety and Hygiene Academy in the Philippines (FoodSHAP) Training in terms of:

Mean	Interpretation
1.00-1.49	Strongly Disagree/Very Low
1.50-2.49	Disagree/Low
2.50-3.49	Agree/High
3.50-4.00	Strongly Agree/Very High

2.1 Responsiveness

Table 2.1: Respondents’ assessment of service quality in terms of Food Hygiene

Assessment on the Effectiveness of: FOOD SAFETY	Mean	Verbal Interpretation
1. I am keeping an eye on food safety and any potential that could cause food borne illness.	3.844	Strongly Agree
2. I am using hot water (38°C) to wash my hands.	3.411	Agree
3. I wash the fruits and vegetables, but not meat, poultry, or eggs.	3.344	Agree
4. I am aware of the ethical, financial, and legal consequences of food poisoning.	3.678	Strongly Agree
5. I work with caution. (For example, carefully slicing a meat to avoid open wounds that cause food poisoning bacteria).	3.689	Strongly Agree
Overall Assessment of food safety	3.593	Very High

In terms of responsiveness, Statement 1 “I am keeping an eye on food safety and any potential that could cause food borne illness” gained the highest rank and has a mean of 3.84 which can be interpreted as Strongly Agree. On the other hand, the statement that received the lowest rank is statement 3 “I wash fruits and vegetables, but not meat, poultry, or eggs” with a mean of 3.34 which can be interpreted as Agree.

This implies that the owner and the employees are aware or have knowledge in food safety. However, the respondents only agree when it comes to washing the hands using hot water. According to Hillier MD (2020), washing hands using hot water promotes the opening of the pores in the hands assisting in the eradication of microorganisms. This kind of hand washing technique will be a big help to lessen the risk of food contamination.

2.2 Hygiene Procedures

Table 2.2: Respondents' assessment of service quality in terms of Hygiene Procedures

Assessment on the Effectiveness of: HYGIENE PROCEDURES	Mean	Verbal Interpretation
1. I apply the CLAYGO (Clean as You Go) policy to the work area. Immediately tidy up after each work.	3.822	Strongly Agree
2. I used a clean towel to turn off the faucet.	3.167	Agree
3. I do not wear nail polish or nail varnish and I keep my nails short.	3.644	Strongly Agree
4. I put on gloves before touching raw or cooked food, and I change gloves every time I contact another food.	3.511	Strongly Agree
5. I wear hairnets and I keep my head covered.	3.633	Strongly Agree
6. I wear spit guard.	3.511	Strongly Agree
7. When touching or distributing food, I wear protective clothing (apron).	3.756	Strongly Agree
8. I always make sure that the entire work area is clean.	3.822	Strongly Agree
9. I always use a wound strip to completely cover any wounds or cuts on my hands or arms.	3.756	Strongly Agree
10. I never touch my face, hair, jewelry, or clothing while preparing food.	3.711	Strongly Agree
11. When coughing or sneezing into my hands, I wash my hands thoroughly and replace any contaminated protective materials, including gloves.	3.767	Strongly Agree
12. In the workplace, I never smoke, chew gum, spit, or eat.	3.789	Strongly Agree
Overall Assessment of Personal hygiene	3.657	Very High

For assurance, table 2.2 reveals that the statement that received the highest rank is statement 1 “I apply the CLAYGO (Clean as You Go) policy to the work area. Immediately tidy up after each work.”. It gathered a mean score of 3.82. On the other hand, the statement that –acquired the lowest score in terms of assurance is statement 2 “I used a clean towel to turn off the faucet.” which can be interpreted as agree.

This implies that the respondents strongly agreed that they have knowledge and they apply the knowledge in their workplace since the overall assessment of personal hygiene is very high with a mean of 3.65.

To further understand the given data, the study of Taner Tuncer. et al. (2020), hygienic practices in the responsibility of food handlers are considered as the most effective method to reduce food contamination risk in food establishments. Amidst these hygienic practices, hand hygiene is a more effective method for preventing foodborne diseases when compared with the cleaning and disinfection of surfaces that contact food. Therefore, food handlers must be aware of their hygiene for the reason that it may affect the food safety.

2.3 Food Safety Issues

Table 2.3: Respondents' assessment of service quality in terms of Food Safety Issues

Assessment on the Effectiveness of: FOOD hazards	Mean	Verbal Interpretation
1. I dress in the necessary protective gear; I don't wear anything that might contaminate food, such as jewelry.	3.756	Strongly Agree
2. I never use the same equipment to prepare raw and ready-to-eat food without being thoroughly cleaned and sanitized in between those food types.	3.433	Agree
3. I only use the designated chopping board for every type of food (red – raw meat, blue – raw fish, green – salad and fruits, brown – vegetables, white – bakery and dairy, yellow – cooked meat)	3.556	Strongly Agree
4. I use a separate preparation area for items containing allergenic ingredients.	3.544	Strongly Agree
5. I always check the expiration date and the quality of my products and ingredients because spoilage bacteria can damage the quality of food, reduce its shelf life and cause illness.	3.644	Strongly Agree
6. I know the difference between chemical and biological hazards.	3.478	Agree
7. I make sure that pest controls are being maintained to avoid physical hazard.	3.644	Strongly Agree
8. I immediately remove food waste and rubbing from the food area.	3.622	Strongly Agree
9. I carefully clean table and utensils that have come in contact with an allergen.	3.667	Strongly Agree

10. I make sure that cleaning products, like bleach, sanitizer or detergents are far from the food to avoid chemical hazard.	3.667	Strongly Agree
11. While preparing food, I never touch my face, hair, jewelry, or clothing.	3.689	Strongly Agree
12. I never taste food with my fingers or utensils that are then brought back to the food.	3.656	Strongly Agree
Overall Assessment of food hazards	3.613	Very High

When it comes to Food Hazards, Table 2.2 shows that statement 1 “I dress in the necessary protective gear; I don’t wear anything” received the highest rank with a mean score of three point seventy-five (3.75%) which has a verbal interpretation of Strongly Agree. Meanwhile, statement 3 “I never use the same equipment to prepare raw and ready-to-eat food without being thoroughly cleaned and sanitized in between those food types.” received the lowest rank and has a mean of three-point forty-three percent (3.43%) which has a verbal interpretation of Agree.

This implies that the respondents strongly agreed that they dress in the necessary protective gear to avoid food hazards that may affect the health of their customers and their business. However, despite wearing necessary protective gear, the respondents agree that the respondents use the same equipment to prepare raw and ready-to-eat food without being thoroughly cleaned and sanitized. This implies that even though they use protective gear, the food they are preparing for their customers may be contaminated by bacteria’s and it can produce negative results in their business.

To relate this to the given data, according to Roberts 1986, Foodborne diseases outbreaks can be complicated by the lack of basic infrastructure, poor sanitary knowledge, and practices in food businesses. Poor food health and safety can have significant effects for those who consume food, including severe foodborne illness. Therefore, the management must be able to provide good hygiene.

2.4 FOODSHAP in Operating the Business

Table 2.4: Respondents’ assessment of service quality in terms of FOODSHAP in Operating the Business

Assessment on Food Health and Safety Issues	Mean	Verbal Interpretation
1. I follow the proper hand washing procedures.	3.767	Strongly Agree
2. In operating my food business, I wear a clean and suitable uniform.	3.644	Strongly Agree
3. I use the right hot water temperature (82 degrees Celsius or above) in sanitizing an area.	3.411	Agree
4. I make sure that I and my workmates are healthy and don’t have diseases that will contaminate the food.	3.7	Strongly Agree
5. I follow the proper tasting of food, wherein I only use clean spoon and not my bare hands.	3.644	Strongly Agree
6. I do not touch my hair, or eat or drink while working to avoid the transfer of bacteria from my head to mouth or food.	3.656	Strongly Agree
Overall assessment of FHSA	3.637	Very High

Table 2.4 reveals that statement 1 “I follow the proper hand washing procedures” received the highest rank with a mean score of three-point seventy-six percent (3.76) which has a verbal interpretation of strongly Agree. Meanwhile, statement 3 “ I use the right hot water temperature (82 degrees Celsius or above) in sanitizing an area.” received the lowest rank with a mean score of three-point forty-one percent (3.41) and has a verbal interpretation of Agree.

This implies that the respondents strongly agreed that the staffs follow the proper hand washing procedures. Hygienic practices by food handlers, combined with good sanitary conditions, can have a positive impact on business operations. However, most of them no longer follow the right hot water temperature (82 degrees Celsius above) in sanitizing levels because of the reason they’re probably busy they’re forgetting the right sanitation. The person with a higher position in the business should always check to avoid poor sanitary conditions.

To relate this to the given data, according to Roberts 1986, Foodborne diseases outbreaks can be complicated by the lack of basic infrastructure, poor sanitary knowledge, and practices in food businesses. Poor food health and safety can have significant effects for those who consume food, including severe foodborne illness. Therefore, the management must be able to provide good hygiene.

Statement of the problem #3

What is the effectiveness of Food Safety and Hygiene Academy (FoodSHAP) Training for food business operations as perceived by the food handlers? In terms of:

3.1 Finance

Finance Relationship between	Correlation Coefficient	p-value	Interpretation
Food Safety	0.149	0.162	Not significant
Personal Hygiene	0.521	< .001	significant
Food hazards	0.601	< .001	significant
Food safety and hygiene academy	0.368	< .001	significant

Interpretation:

There is no significant relationship between the assessment on Food safety and its perceived effectiveness on Finance since the correlation coefficient of 0.149 has a p-value greater than 0.05. The null hypothesis of no significant relationship is not rejected. Thus, the assessment on Food safety has no significant effect on Finance.

However, there is a positive and significant relationship between the assessment on personal hygiene, food hazards and food safety and hygiene academy and its perceived effectiveness on Finance since the correlation coefficients of 0.521, 0.601 and 0.368 have p-values less than 0.05. The null hypothesis of no significant relationship is rejected. Thus, the higher assessment on personal hygiene, food hazards and food safety and hygiene academy would indicate higher perception on the effectiveness of Finance and vice versa.

3.2 Human Resource

HR Relationship between	Correlation Coefficient	p-value	Interpretation
Food Safety	0.381	< .001	significant
Personal Hygiene	0.461	< .001	significant
Food hazards	0.32	0.002	significant
Food safety and hygiene academy	0.354	< .001	significant

Interpretation:

There is a positive and significant relationship between the assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy and its perceived effectiveness on Human Resources since the correlation coefficients of 0.381, 0.461, 0.320 and 0.354 have p-values less than 0.05. The null hypothesis of no significant relationship is rejected. Thus, the higher assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy would indicate higher perception on the effectiveness of Human Resources and vice versa.

3.3 Marketing

Marketing Relationship between	Correlation Coefficient	p-value	Interpretation
Food Safety	0.341	0.001	significant
Personal Hygiene	0.47	< .001	significant
Food hazards	0.523	< .001	significant
Food safety and hygiene academy	0.471	< .001	significant

Interpretation:

There is a positive and significant relationship between the assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy and its perceived effectiveness on Marketing since the correlation coefficients of 0.341, 0.470, 0.523 and 0.471 have p-values less than 0.05. The null hypothesis of no significant relationship is rejected. Thus, the higher assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy would indicate higher perception on the effectiveness of Marketing and vice versa.

3.4 Customer Relation

Customer Relation and assessment on	Correlation Coefficient	p-value	Interpretation
Food Safety	0.252	0.017	significant
Personal Hygiene	0.493	< .001	significant
Food hazards	0.367	< .001	significant
Food safety and hygiene academy	0.302	0.004	significant

Interpretation:

There is a positive and significant relationship between the assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy and its perceived effectiveness on Customer Relation since the correlation coefficients of 0.252, 0.493, 0.367 and 0.302 have p-values less than 0.05. The null hypothesis of no significant relationship is rejected. Thus, the higher assessment on food safety, personal hygiene, food hazards and food safety and hygiene academy would indicate higher perception on the effectiveness of Customer Relation and vice versa.

6. CONCLUSION

The researchers' conclusions based on the study's results are presented in this section. The researchers will develop a fresh notion and understanding based on what they found and learnt from the participants. This section also includes the researchers' conclusions based on the study's results.

The researchers discovered that the participants had their own techniques and perspectives on how they operate based on the participants' experiences. Participants have this mindset to protect customers from food-borne illnesses and poisoning because sanitation is good for business and customers prefer to see food handlers who follow proper hygienic practices and safe food handling, and this will help everyone in this industry make their food safety training programs more successful for food service operators. The researcher came to the conclusion that few responders have their own plan for cleaning, storing, and other aspects of food safety, and that action must be performed quickly and not put off. Also, everybody who is aware of this initiative should take it seriously since it is a huge aid to our community.

As the individuals share their own experiences and thoughts. As they learn how these chosen participants used what they learned in food safety practices for preparation, processing, handling, and storage, the researchers get a sense of how they felt. The researchers concluded that we should now begin to raise awareness in order to motivate many prospective food handlers to prevent food-borne disease in their clients, as well as those food handlers who have received food safety training but do not use correct food safety practices. All of the participants share this outlook on life: they want to keep their company running smoothly and without issues, and they want to provide excellent service and cuisine to their consumers. The most essential thing the researchers learn from the participants is that we must safeguard our clients at all costs since we never know what problems they may face just by serving them. They must exercise extraordinary vigilance to guarantee that no illness is spread.

7. RECOMMENDATION

Recommendations Based on the conclusions stated above, the researchers would like to make the following recommendations:

Food owners- the researchers would like to recommend that they improve their knowledge in food safety often or they continue to attend a training for food safety so that their knowledge will be refresh. They also need to have more knowledge in the different hazards, Ind Health (2019) stated that identifying the hazards is the first step in Risk Management. It indicates that hazards that are not identified will not be subjected to the rigors of the Risk Management process, resulting in the failure to identify preventive measures for implementation and communication in the workplace.

Students- the researchers would like to recommend that they should invest time in reviewing their lessons that they have taken in their training to refresh the knowledge they have.

Future researchers- the researchers of this study would like to recommend them to widen their scopes and not just focus on the students and alumni of De La Salle University Dasmarias. This will help the research to be beneficial to many people and make them realize the effectiveness of food safety training. They should also construct test with items that is grounded with higher aspect of learning.

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