

Kitchen Working Environment in Relation to the Health Condition of Kitchen Personnel

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ABSTRACT

This study aimed to present the profile of the restaurants and respondents in terms of location, number of years in operation and service, age, sex, educational attainment; assess the condition of the workplace in terms of ventilation, kitchen layout, equipment and kitchen personnel; test the significant difference on the kitchen working environment in relation to the health condition of kitchen personnel when group according to profile variable. The study made use of descriptive survey method with the kitchen personnel of fast /casual restaurants as respondents. Statistical tools used were percentage, frequency distribution, weighted mean and ANOVA. Based on the results, majority of the restaurants are operating from 4 to 5 years in Lipa City. Most of the respondents are college graduates, female ages 21 to 25 years old and 3 to 4 years in service to the company. The respondents strongly agreed in the condition of the workplace in terms of kitchen equipment and kitchen personnel while agreed in kitchen ventilation and layout. There is no significant difference on the condition of the workplace in terms of location and number of years of restaurant, as well as in terms of kitchen equipment and kitchen personnel. However, there is a significant difference on the condition of the workplace in terms of ventilation and kitchen layout when grouped according to sex and finally, no significant difference in the condition of the workplace in terms of equipment and kitchen personnel when grouped according to respondents' profile. The study's action plan may be proposed to restaurant management to prioritize their employees' health condition by implementing a free monthly check-up.

Keywords: *Condition of the workplace, Kitchen working environment*

INTRODUCTION

Food industry plays a significant role in the economy. As innovation takes place, establishments have ideas and strategies that will improve their service, style, menus and the ambiance of the place to meet the demand of a customer. Food will never be lost in the minds of all individuals seeing that people today are looking for food that has distinct flavor (Denning, 2014).

Like every other country, the food industry has flourished very well in the Philippines. Filipinos love to eat and that is the reason why you will see many food establishments in the cities

as well as in the rural areas. Ideally, every restaurant is equipped with working materials which ensure that the work flow of personnel is efficient. There is a high chance for employees to get hurt in busy environment such as restaurants. Slips, trips and falls are likely to occur due to wet floors during operations. Although minor injuries like cuts and burn do not happen often, employees are still advised to be aware of these while working. Kitchen staff are required to know all the kitchen guidelines and ethics to avoid poor performance and to increase product quality of a business (Arboleda, 2012; Durham, 2017).

The workplace of a kitchen establishment should be properly ventilated and provide the necessary needs of an employee so that they can withstand the pressure inside the kitchen, lifting of heavy equipment, struggle of standing for hours of time and working near hot ovens, stoves and grills since the work-life balance of kitchen personnel is involved, opening the restaurant in the crack of dawn, frequently working late at night, weekends and holidays (Working Condition, 2017).

There is a wide variety of food establishments in the locality of Batangas and Lipa, Philippines. Like Batangas, native restaurants are one of the foundations that could never be taken away from peoples' interest as the ambience lets you feel that you are just in your home (Vizconde & Felicen, 2012). In addition, food parks and cafés are emerging in the generation especially to the millennials. Moreover, Lipa is known as one of the progressive cities where establishments can be located on both sides of the road. Korean restaurants, food parks and cafés get the interest of the people because of the kind of culture they are giving, and most millennials are enjoying these.

This study was conducted to alert and inform not just the culinary students but also the kitchen staff and those eager and willing to study a course that show off the skills of an individual in the field of cooking and about the hazards and possible incidents that may happen when working inside the kitchen. This is also to provide anyone who's in the field of cooking and to the future generation the information about the appropriate standard size of the equipment in the kitchen and the importance of food safety practices during operating hours. This study could be beneficial to those in this field of work when understood efficiently by professional chefs and soon-to-be chefs and would be given more knowledge on what to expect and what may become of them when pursuing a spot in the culinary world.

OBJECTIVES OF THE STUDY

This study aims to assess the kitchen working environment in relation to the health condition of kitchen personnel of selected restaurants in the cities of Batangas and Lipa. Specifically, it will: Present the profile of the restaurants in terms of locations and number of years in operations; Present the profile of the respondents in terms of age, sex, number of years in service and educational attainment Assess the condition of the workplace in terms of ventilation, kitchen layout, equipment and kitchen personnel; Test the significant difference on the kitchen working environment in relation to the health condition of kitchen personnel when group according to profile variable and; Propose an action plan based on the result of the study.

METHODS

Research Design

The researchers used the descriptive design to assess the kitchen working environment in relation to the health condition of kitchen personnel who are currently working on a fast-casual restaurant. Descriptive research is a study of status and is widely used in education, nutrition, epidemiology, and the behavioral sciences. Its value is based on the premise that problems can be solved, and practices improved through observation, analysis and description. The most common descriptive research methods are the survey which includes questionnaires, personal interviews, phone surveys and normative survey. Descriptive research generates data, both qualitative and quantitative that defines the state of nature at a point in time (Koh E. & Owen W. 2017).

Participants of the Study

The kitchen personnel of registered fast casual restaurants of Batangas City and Lipa City are the participants of the study with 80 corresponding respondents based on the established years of operation which is 4 to 5 years. Participants are chosen because they are qualified to give the necessary data or information that are needed in this research.

Instrument

The questionnaire was the major instrument used by the researchers that used a very concise and formal set of questions to gather information and designed to obtain information on the following. The questionnaire is composed of two parts where the profile of the restaurants and respondents are indicated. In part I, it includes the following data such as location, age, sex, number of years in service and educational attainment while part II contains the condition of the workplace in terms of ventilation, floor plan/kitchen layout, equipment and kitchen personnel. It will assess the kitchen working environment in relation to the health condition of kitchen personnel when group according to profile variable and will propose an action plan based on the result of the study.

Procedure

The researchers formulated the questions answered by the respondents in a form of survey questionnaires. After the validation, it was distributed to the participants personally. During the survey, all the information gathered was held confidentially and used for research purposes only. As soon as the researchers gathered the pertinent data, it was compiled, organized and tabulated to get the findings, conclusions and recommendation to answer the problem of the study.

Analysis

In collecting all the necessary information needed, the study utilized tools such as percentage and frequency distribution to show the profile of the respondents in terms of location, age, sex, number of years in service, educational attainment. Weighted mean was used to assess the kitchen working environment in relation to the health condition of kitchen personnel. ANOVA was used to test the significant difference in the effect of the kitchen working environment to the health condition

of kitchen personnel. To interpret the result of the study, the following scale will be used: 3.50-4.00 Strongly Agree, 2.50-3.49 Agree, 1.50-2.49 Disagree and 1.00-1.49 Strongly Disagree.

RESULTS AND DISCUSSION

Table 1. Percentage Distribution of the Restaurants' Profile

Profile Variables	Frequency	Percentage (%)
Location		
Batangas City	32	40.0
Lipa City	48	60.0
Number of Years in Operation		
2-3 years	11	13.8
4-5 years	38	47.5
6-7 years	25	31.3
8-9 years	6	7.6

Table 1. reveals the percentage distribution of the restaurant's profile in terms of location and number of years of operation. Majority of the respondents from Lipa City are employed on a fast-casual restaurant with an average rating of 48 or 60 percent while Batangas City obtained 32 or have an average of 40 percent.

Majority of the respondents are from Lipa City and some are from Batangas City because of the demographic location of the restaurants and for practical reason that Batangas and Lipa residents or workers would opt to work in a nearer place rather than choosing employer in a far place. Empirically, there is localization policy that prioritizes residents of a certain locality and which requires the employers to give a higher percentage of workers coming from the barangays adjacent to where the establishment is located. As indicated in the Senate Section Act No.227 Sec. 2, it is the policy of the state to promote, develop and improve the general welfare of the barangay residents, raise its economic and social status by prioritizing them in terms of employment.

When it comes to the number of years of operation, majority of the fast-casual restaurants operates 4-5 years with the frequency of 38 or 47.5 percent followed by 6-7 years with 25 or 31.3 percent, 2-3 years with 11 or 13.8 percent and 8-9 years got 6 or 7.6 in percent.

In general, the operation of some fast-casual restaurants lasts for about 4 to 5 years in the food industry where as their business name and the quality of the product is already known by the market for giving excellent service. As mentioned by Fridman (2018), the company name and product quality play a key role in the industry as it creates loyalty and a long-lasting relationship between the establishment and its customer.

Table 2. shows the percentage distribution of the respondent's profile in terms of age, sex, educational attainment and number of years in service. Most of the respondent ages 21-25 years old with 37 or 46.3 percent and 26-30 years old with 33 or 41.3 percent while the least aged are 36-40 years old with 4 or 5.0 percent. The respondents whose ages are 21-25 years old and 36-40 years

old are college graduates who can execute the required tasks in the fast-casual restaurants. This also implies that the young individuals are most likely seen working on a fast-casual restaurant kitchen.

Table 2. Percentage Distribution of the Respondents' Profile

Profile Variables	Frequency	Percentage (%)
Age		
21-25 years old	37	46.3
26-30 years old	33	41.3
31-35 years old	6	7.5
36-40 years old	4	5.0
Sex		
Male	21	26.3
Female	59	73.8
Educational Attainment		
High school Graduate	20	25.0
Undergraduate	25	31.3
College Graduate	35	43.8
Number of Years in Service		
1-2 years	24	30.0
3-4 years	33	41.3
5-6 years	20	25.0
7-8 years	3	3.8

In terms of sex, majority of the respondents are female with a frequency of 59 or 73.8 percent while male have 21 or 26.3 percent. Most of the respondents who worked in the kitchen are female because they are more flexible and well-disciplined. According to Robinson (2017), females are more attentive as they pay extra attention to details and obedient, hard-working and artistic when it comes to ideas.

As to educational attainment college graduates have the highest frequency of 35 or 53.8 percent. Next in line with a frequency of 25 or 31.3 percent is undergraduate followed by high school graduate with 20 or 25 percent. High school graduates got the least percentage of 25 percent among the other items.

Majority of the respondents are college graduates because employers prefer an individual who has a degree level that can comply with their standards. It is said that having a college degree has an advantage because they are considered for a high paying job and has a greater chance for quality employment. Additionally, college graduates are more knowledgeable since they are equipped with proper training and seminars provided by their schools and excellent in dealing with adversity (Buted et al., 2014; Festijo et al., 2012; Barlan, 2013).

As explained by Carmichael (2014), companies are more interested in hiring people with advance degree as they help drives the productivity in the market and contributes to the innovation of the establishment.

In the terms of years in service, 3-4 years got the highest with 33 or 41.3 percent followed by 1-2 year with 24 or 30.0 percent while the least were 7-8 years with 3 or 3.8 percent. Based on our interview, the respondents said that their management is taking good care of their employees by providing them the benefits they needed and have a great leader or manager who lead them to make their operation successful. More so, they also added that they love and enjoy what they are doing and that what makes them stay for longer years in the service.

Managing the team is the responsibility of all managers where they create a positive outlook towards their work and help their employees to engage more in the operation through complimenting them about their job (Importance of Good Management, 2015).

Table 3. Condition of the Workplace in terms of Ventilation

Ventilation	Weighted Mean	Verbal Interpretation	Rank
1. Exhaust hood is place directly over the cooking equipment.	3.55	Strongly Agree	3
2. Room temperature is regularly monitored using a thermometer (air probe).	3.30	Agree	10
3. Exhaust screen is available.	3.42	Agree	5
4. Air conditioning system is installed in the kitchen area.	3.38	Agree	6
5. Exhaust fan is properly working.	3.51	Strongly Agree	4
6. Exhaust fan is mounted on walls.	3.33	Agree	9
7. Fresh air is used to keep smoke away from the kitchen.	3.37	Agree	7.5
8. Exhaust hood size is appropriate to the kitchen equipment.	3.61	Strongly Agree	1
9. Exhaust fan is maintained to reduce smoke and odour.	3.58	Strongly Agree	2
10. Convection oven uses blower/fan to recirculate the heat throughout the interior of the oven.	3.37	Agree	7.5
Composite Mean	3.44	Agree	

Legend: 3.50 – 4.49 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

Table 3. displays the condition of the Workplace in terms of Ventilation. The composite mean of 3.44 indicates that the respondents agree that having proper ventilation contributes to the health condition of the employees. Proper ventilation plays a vital role in the kitchen working environment as it creates a safe and comfortable working environment. Maintaining the quality of indoor air can increase the productivity as well as the comfort of the employees. Proper regulation of the ventilation unit prevents heat-related illness through working on a better environment (Maintenance of Ventilation, 2018).

The exhaust hood size is appropriate to the kitchen equipment obtained the highest rank with a weighted mean of 3.61 which is interpreted as strongly agree, followed by the exhaust fan is maintained to reduce smoke and odor which gained a weighted mean of 3.58 and exhausted hood is placed directly over the cooking equipment got the third highest weighted mean of 3.55.

Exhaust hood size is appropriate to the kitchen equipment got the highest where it plays a significant role in the type of kitchen equipment as it captures the right amount of heat and smoke.

Installing the proper size of an exhaust hood determines the volume of air that a hood can hold and helps to the occupant's safety and comfort (Buted et al., 2014).

As stated by the National Fire Protection Association (NFPA) (2016), exhaust air volumes for hoods shall be of a enough level to collect and remove flue gases and residual vapors from the equipment.

On the other hand, fresh air is used to keep smoke away from the kitchen and convection oven uses blower/fan to recirculate the heat throughout the interior of the oven got the lowest weighted mean of 3.37 and interpreted as agree, followed by exhaust fan is mounted on walls with a weighted mean of 3.33 and room temperature is regularly monitored using a thermometer (air probe) got a weighted mean of 3.30.

This further implies that the respondents agree that the room temperature is the lowest in terms of condition of the workplace. Temperature is measured through thermometer or air probe as it monitors the condition of air to ensure that the comfort level is met. Maintaining the proper temperature prevents contamination and increases productivity, safety and hygiene of the employees. Monitoring properly the room temperature reduces the number of air contaminants to prevent respiratory issues and other diseases that affects the health and safety of the occupants (Importance of Kitchen Ventilation, 2017).

Table 4. Condition of the Workplace in terms of Kitchen Layout

Kitchen Layout	Weighted Mean	Verbal Interpretation	Rank
1. Dishwashing area used three different sinks for washing, rinsing and sanitizing.	3.45	Agree	6.5
2. Hand washing sink is close to the preparation area.	3.53	Strongly Agree	4
3. Floor walls are made of tiles.	3.41	Agree	8.5
4. Kitchen equipment, utensils, pots and pans are within reach.	3.58	Strongly Agree	3
5. Kitchen aisles are at least four feet wide.	3.41	Agree	8.5
6. Separate slop sink is used for washing mops and towels.	3.48	Agree	5
7. Light switches are located beside the kitchen entrance.	3.68	Strongly Agree	1
8. Kitchen floor materials are not slippery when wet.	3.45	Agree	6.5
9. Separate storage room is provided for cleaning chemicals and other cleaning materials.	3.61	Strongly Agree	2
10. Kitchen area is proportional to the size of the dining area.	3.33	Agree	10
Composite Mean	3.49	Agree	

Legend: 3.50 – 4.49 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

Table 4. presents the condition of the Workplace in terms of Kitchen Layout. With a composite mean of 3.49, it shows that the respondents agree that having a well-planned kitchen layout relates to the health condition of the employees. It is clearly defined from the meaning of ergonomics that there must be compatibility between a worker, their work station and work task so as to end up with a positive output (Louise Petty, 2016). Having a well-planned kitchen layout

relates to sanitation code that fits the proper working environment suitable for kitchen personnel. Proper kitchen layout plays a major role in the working environment as it minimizes the risks of accidents in the area. Proper positioning of workstation in the area improves the productivity of the employees to work efficiently and effectively. Properly designed kitchen layout makes the flow of operation easier with ease. Allowing inspectors to review your kitchen design helps you to ensure that health and safety guidelines are met (Importance of Restaurant, 2017).

Light switches are located beside the kitchen entrance obtained the highest rank with a weighted mean of 3.68 and interpreted as strongly agree, followed by separate storage room is provided for cleaning chemicals with a weighted mean of 3.61 and kitchen equipment, utensils, pots and pans are within reach got a weighted mean of 3.58.

Light switches are used to perform logical functions as it connects and resist the flow of connectivity. Installing light switches beside the usual point of entry makes employee's access easier as it is easily noticed when going in and out of the area.

Positioning properly the light switches provides appropriate lighting to clearly see details where it is adjacent to a non-grounded terminal of power supply as it promotes legal safety (Lighting at Work, 2012).

Low rank results were floor walls are made of tiles and kitchen aisles are at least four feet wide got the same weighted mean of 3.41 which interpreted as agree. Dishwashing area used three different sinks for washing, rinsing and sanitizing and kitchen floor materials are not slippery when wet acquired the same weighted mean of 3.45 while kitchen is proportional to the size of the dining area obtained a weighted mean of 3.33.

Proper planning of layout creates efficient space that increases the employee's productivity. Balancing properly the measurement between dining area and kitchen enables employees to produce more products.

As stated by Decker (2012), the standard ratio for dining room is 60 percent whilst 40 percent in the kitchen area as it depends mostly on the type of restaurant and menu that is going to launch.

Table 5. reveals the condition of the Workplace in terms of Kitchen Equipment. The composite mean of 3.56 shows that the respondents strongly agree that maintaining properly the kitchen equipment contributes to the health condition of the employees. Proper maintenance of kitchen equipment plays an integral part to the health condition of the employees as it reduces the risk associated in the workplace and enhances the employee's safety. Maintaining the equipment regularly helps prolonged its life system where as productivity also increases by improving its reliability. Proper maintenance of kitchen equipment ensures the hygienic conditions as well as the safety through educating employees regarding the proper use of equipment to avoid work-related health problems (Safe Maintenance, 2012).

Table 5. Condition of the Workplace in terms of Kitchen Equipment

Kitchen Equipment	Weighted Mean	Verbal Interpretation	Rank
1. Food thermometer is properly working/calibrated.	3.40	Agree	10
2. Ventilation equipment is functioning and kept clean.	3.53	Strongly Agree	9
3. Food equipment is clean and sanitized.	3.60	Strongly Agree	3.5
4. Food equipment and utensils are in good condition.	3.68	Strongly Agree	1
5. Wheeled carts are used to move heavy/bulky supplies.	3.55	Strongly Agree	7
6. Working table's height is four inches below the worker's elbow.	3.55	Strongly Agree	7
7. Electrical cords are in good condition.	3.58	Strongly Agree	5
8. Stainless working table is available.	3.55	Strongly Agree	7
9. Storage racks, ranges and oven are easy to move.	3.60	Strongly Agree	3.5
10. Utensils are kept clean and wiped dry after used.	3.61	Strongly Agree	2
Composite Mean	3.56	Strongly Agree	

Legend: 3.50 – 4.49 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

As shown in the table, food equipment and utensils are in good condition ranked highest among the other items with a weighted mean of 3.68 which interpreted as strongly agree, followed by utensils are kept clean and wiped dry after used with a weighted mean of 3.61 and food equipment is clean and sanitized and storage racks, ranges and oven are easy to move got the same weighted mean of 3.60.

Proper evaluation of condition of the equipment and utensils ensures its efficiency in protecting the product from contamination. Monitoring regularly the equipment prevents minor malfunctions as it helps the system to function in good working order. Therefore, maintaining properly the equipment extend its service life and ensures that it doesn't harbour any bacteria when it is in good shape (Equipment and Utensils, 2018).

Wheeled carts are used to move heavy/bulky supplies, working table's height is four inches below the worker's elbow and stainless working table is available obtained the same weighted mean of 3.55, followed by ventilation equipment is functioning and kept clean with a weighted mean of 3.53 and food thermometer is properly working/calibrated got the lowest weighted mean of 3.40.

Proper calibration of food thermometer assures that food is free from contamination through monitoring every cooking time. Proper monitoring of temperature prevents food from undercooking as it leads to food borne illnesses. Proper maintenance of food thermometer ensures safety as it also determines the desired doneness on a food (Kitchen Thermometers, 2015).

Table 6 presents the condition of the Workplace in terms of Kitchen Personnel. The composite mean of 3.64 reveals that the respondents strongly agree that having proper hygiene and sanitation influences the health condition of the employees. Proper hygiene and sanitation play a vital role in the health condition of the employees as it creates a high degree of cleanliness. Maintaining the area clean helps prevent cross-contamination between food and employee. Proper

understanding the guidelines between hygiene and sanitation helps employees to perform well in their respective area through working on a safe environment (Lucey, 2012).

Table 6. Condition of the Workplace in terms of Kitchen Personnel

Kitchen Personnel	Weighted Mean	Verbal Interpretation	Rank
1. Visitors are given protective clothing before entering kitchen premises.	3.57	Strongly Agree	10
2. Proper hand washing procedure is implemented.	3.63	Strongly Agree	7.5
3. Kitchen staff does not wear jewelry while on duty.	3.63	Strongly Agree	7.5
4. Proper food handling is observed.	3.68	Strongly Agree	1.5
5. First aid kit is available in the workplace.	3.61	Strongly Agree	9
6. Hand sanitizer is available.	3.66	Strongly Agree	4
7. Proper hygiene is strictly followed.	3.65	Strongly Agree	6
8. Kitchen staff are regularly trained on food safety.	3.68	Strongly Agree	1.5
9. Kitchen staff have an updated health certificate.	3.66	Strongly Agree	4
10. Bare hand contact with ready-to-eat food is avoided.	3.66	Strongly Agree	4
Composite Mean	3.64	Strongly Agree	

Legend: 3.50 – 4.49 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 – 1.49 = Strongly Disagree

Highest in rank acquire the same weighted mean of 3.68 was proper food handling is observed and kitchen staff are regularly trained on food safety which interpreted as strongly agree.

Proper handling of food prevents contamination where bacteria are spread out between the handler and food product. Properly educated regarding food handling techniques can avoid food-borne illnesses. Proper food handling training ensures that employees are equipped with knowledge and skills in order to assess the quality of food that is handled (Ibrar, 2013).

On the same rank, kitchen staffs are regularly trained on food safety with a weighted mean of 3.68. Proper food safety training ensures employees the high level of quality control over food. Proper training helps employees to execute tasks confidently as they are knowledgeable about the different possibilities of mishandled food. According to Brockman (2015), keeping the employees well-trained and up-to-date of the latest practices improves the kitchens food safety.

Proper hygiene is strictly followed got a weighted mean of 3.65 while proper hand washing procedure is implemented and kitchen staff does not wear jewelry while on duty have the same weighted mean of 3.63. Visitors are given protective clothing before entering kitchen premise got the lowest rank with a weighted mean of 3.57.

Lowest in rank obtained a weighted mean of 3.57 was visitors are given protective clothing before entering kitchen premises. Proper wearing of protective clothing in the workplace guarded visitors against possible risks as they are not commonly exposed to danger.

Proper health and safety duties ensure that actions don't adversely affect the health and safety of others. Managing work-related health and safety risk prevent physical injuries through wearing of appropriate clothing in the workplace (Health and Safety Work Act, 2017).

Table 7. Difference of Responses on the Condition of the Workplace in terms of Ventilation and Kitchen Layout when Grouped According to Restaurants' Profile

Profile	Ventilation			Kitchen Layout		
	F-Value	p-value	I	F-value	p-value	I
Location	-.226	.822	NS	.228	.820	NS
Number of Years Operation	.045	.987	NS	1.854	.145	NS

Legend: Significant at p -value < 0.05 ; HS – Highly Significant, S- Significant; NS-Not Significant

The table 7. shows the difference of responses on the Condition of the Workplace in terms of Ventilation and Kitchen Layout when grouped according to restaurants' profile. It was found out that all computed p-values were all greater than 0.5 alpha level thus the researchers fail to reject the null hypothesis. This means that the responses are the same across each profile.

Hence, there is no significant relationship between the condition of the workplace in terms of ventilation, kitchen layout and the profile of the restaurants as to location and number of years in the operation. This further explains that no matter where the restaurant is located and whether it has operated for number of years, it does not affect the ventilation and kitchen layout.

As shown in the Table 8., it presents the difference of responses on the Condition of the Workplace in terms of Kitchen Equipment and Kitchen Personnel when grouped according to restaurants' profile. It was discovered that all computed p-values were greater than the alpha level 0.05 thereby the researchers fail to reject the null hypothesis. It emphasizes that the responses are the same across each profile.

Table 8. Difference of Responses on the Condition of the Workplace in terms of Kitchen Equipment and Kitchen Personnel when Grouped According to Restaurants' Profile

	Kitchen Equipment			Kitchen Personnel		
	F-Value	p-value	I	F-Value	p-value	I
Location	.602	.549	NS	.845	.401	NS
Number of Years Operation	.894	.448	NS	2.161	.100	NS

Legend: Significant at p -value < 0.05 ; HS – Highly Significant, S- Significant; NS-Not Significant

Therefore, there is no significant relationship between the condition of the workplace in terms of kitchen equipment and kitchen personnel as well as the location and number of years in operation. This further explains that no matter where the restaurant is located and whether it has operated for number of years, it does not affect the kitchen equipment and kitchen personnel.

As seen from the result of Table 9, there was a statistically significant difference observed on ventilation and kitchen layout. It was noticed since the obtained p-value of 0.024 and 0.011 was less than 0.05 alpha levels. This summarizes that a significant difference exists and was found out that female have higher assessment than male

Table 9. Difference of Responses on the Condition of the Workplace in terms of Ventilation and Kitchen Layout when Grouped According to Respondents' Profile

	Kitchen Ventilation			Kitchen Layout		
	F-Value	p-value	I	F-Value	p-value	I
Age	1.849	.146	NS	.934	.429	NS
Sex	2.308	.024	S	2.614	.011	S
Educational Attainment	2.390	.098	NS	1.895	.157	NS
Number of Years in Service	.836	.478	NS	.122	.947	NS

Legend: Significant at p-value < 0.05; HS – Highly Significant, S- Significant; NS-Not Significant

Among the cited items, it indicates that female have higher assessment with a significant difference in the p-value of 0.024 and 0.011 that is less than 0.05 in the alpha level. In terms of kitchen ventilation and layout, most of the population in the female chefs are skinny and can easily move in a crowded area and endure the atmosphere in the kitchen for long hours.

In today's situation, numbers of female chefs conquer the culinary industry to splinter the barriers in the male-domination. According to Moskin (2014), women has a competitive spirit where they always thriving for the best since the world that they are in is full of judgement, closely pays attention to the employee's need, passionate, hard-working, creative, persistent and have a great determination to be successful in her field through learning every day, has a positive outlook towards her job and consistent with their work.

As stated by Landsdale (2018), in order to create a positive working environment mistakes are being handled with patience rather than screaming and debasement by the female. Additionally, Camara quoted that as expectations got higher on women, they are less scared in the innovation because they believe that females can do a lot of things.

According to the result of Table 10., there was a statistically significant difference observed on the kitchen equipment and personnel. This was observed since the obtained p-value of 0.041 was less than 0.05 alpha levels. This means that a significant difference exists and was found out that high school graduate has higher assessment.

Table 10. Difference of Responses on the Condition of the Workplace in terms of Kitchen Equipment and Kitchen Personnel when Grouped According to Respondents' Profile

	Kitchen Equipment			Kitchen Personnel		
	F-Value	p-value	I	F-Value	p-value	I
Age	1.255	.296	NS	.698	.556	NS
Sex	0.798	.427	NS	1.942	.056	NS
Educational Attainment	3.336	.041	S	2.359	.101	NS
Number of Years in Service	.916	.437	NS	.212	.888	NS

Legend: Significant at p-value < 0.05; HS – Highly Significant, S- Significant; NS-Not Significant

As shown in the results of Table 11., educational attainment is significant to the kitchen equipment because having the right knowledge on certain equipment helps prevent accident that may occur during operational hours on the employees. With a broad knowledge in the equipment, it is easy to understand its basic function or purpose in order to properly guide the employees to execute correctly the task.

Nowadays, individuals with the same level of education have different skill level due to differences in the quality of education. Additionally, skills are extremely relevant today as individuals are entitled to meet the qualifications required by the employer (Toscano; Esperanza; Rodrigues; Ferro; Margarida, 2017).

Table 11. Proposed Action Plan to Improve the Kitchen Working Environment

Key Result Area/Objectives	Strategies/Program	Outcomes
Room temperature is regularly monitored using a thermometer (air probe).	Regular calibration of room thermometer.	Employees will be comfortable without having a hard time while working.
Kitchen area is proportional to the size of the dining area.	The management may consider the proper placement of furniture and equipment.	Employees will be able to work efficiently and can provide a fast service.
Food thermometer is properly working/calibrated.	Regular checking of kitchen equipment and monitoring working area.	Employees' productivity will increase since all the equipment are working properly.
Visitors are given protective clothing before entering kitchen premises.	Restaurant's owner may provide complete proper equipment to the employees.	Employees will feel secured while inside the working environment.

CONCLUSIONS

Majority of the restaurants are from Lipa City and operating from 4 to 5 years. 2. Most of the respondents are to 21 – 25 years old, female, college graduates, have served the company for 3 to 4 years. Also, the respondents agreed to the condition of the workplace in terms of ventilation and kitchen layout. On the other hand, the respondents strongly agreed on the condition of kitchen equipment and kitchen personnel. On the other hand there is no significant difference on the condition of the workplace in terms of location and number of years of restaurant, as well as in terms of Kitchen equipment and kitchen personnel, however there is a significant difference on the condition of the workplace in terms of ventilation and kitchen layout when grouped according to sex and finally, no significant difference in the condition of the workplace in terms of equipment and kitchen personnel when grouped according to respondents profile. As an action plan it was proposed in order to improve the kitchen working environment.

RECOMMENDATIONS

The researchers recommend that the restaurants may prioritize their employees' health condition by implementing a free monthly check-up and may review and establish a policy or a guideline which give emphasis on the monitoring of temperatures of the kitchen and the thermometers. There must be a periodic checking of the calibration of thermometer and other tools and equipment. May also coordinate with the Health and Sanitation department to further assist the health condition of the kitchen employees by creating seminars and training that will improve their health condition. For future researchers they may propose a similar study and use this as a guide to discuss the other health conditions of employees in their workplace.

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