Journal of Economics and Business

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.

The Food Safety Culture of a Night Market

Hans Malikh C. Catedral[1]

[1] University of San Carlos, Cebu City, Philippines, hansccatedral@gmail.com

Abstract

Night markets are a popular food destination among tourists in Southeast Asia. The off-premise nature of these destinations resulting in higher risk for food contamination has brought about the need to improve food safety culture. Previous studies have focused primarily on food sanitation practices of vendors. However, food safety culture has been found as an effective means for improving safety practices in recent years by changing behavior and placing emphasis on food safety. The study determined the food safety culture of vendors of a night market in Cebu City. Findings shall be used as the basis for recommended guidelines on food safety specifically for night markets. This descriptive research utilized a survey questionnaire to 40-night market vendors. Results showed high mean scores in the indicators of leadership and coworker support, communication, work pressure, and self-commitment while lower scores on environment support and risk judgment. An employees' workload, provision of structural facilities and employee feedback are indicators that give rise to the level of food safety culture in an organization. The study highlights the role of management as results show food safety procedures are only followed at a certain extent but time and management pressures contribute to a decrease in following safe food handling.

Keywords: Cebu City, Food Safety, Food Safety Culture, Night Market, Night Market Vendor.

1. Introduction

1.1 Rationale of the Study

Various research in food tourism has come out in recent years, particularly focused on hygiene issues and its impact on destination experience. The Skift Report (2015) postulated that cuisine has the ability to strengthen and diversify local economies by promoting local food culture and thus is a dynamic segment in the tourism sector.

As such, night markets are a popular food destination for tourists because they offer shopping alternative for cooked food, perishable items, clothing and other household necessities (Ishak, Aziz & Latif, 2012). Furthermore, they act as business incubators as aspiring entrepreneurs would only put in a small investment to start a business. It reflects a piece of unique culture for they portrayed the eating preferences, interaction patterns and some of the evening leisure activities of the various ethnic groups in the country.

Despite exemplifying historical, economic, social and financial meaning, Tsai (2013) postulates that it represents some hidden and negative societal manifestations that should be improved. Among these is the issue of food safety. The study of Huang, Wang & Huang (2012) showed that most night market vendors have minimal

educational achievements, learn from observation and during rush hours, food vendors lacked time to wash their hands and used clean napkins or tissues for cleaning. Most night markets are also located in a street or open space, and thus, the off-premise nature of the operation where products are prepared outdoors and are exposed to food contaminants increase the risk for cross-contamination and food poisoning.

In Europe, the emergence of street food is seen as an area that could pose risks to consumers' health, because of perception of insecurity, lack of manager skills in business and the lack of controls. This is even truer for developing countries, food security continues to be a problem and is not well rooted in the mentality of the populace (Bellia, Pilato & Hugues, 2016). A study in Africa showed that sanitation emerged as the major gray area of attitudes to Ghana's traditional foods with the concerns being more expressed among elderly, women, and Muslim tourists (Amuquandoh, 2013).

On the other hand, many countries in Asia have managed to develop various night markets throughout their cities and are a popular spot among tourists such as Shihlin Night Market in Taiwan, Rot Fai Market in Bangkok and Bugis Street in Singapore. As more night food markets open in the Philippines, the challenge of ensuring food safety is an issue as the country has constantly dealt with many food poisoning incidents due to poor food safety standards and lack of government enforcement.

Many studies continue to show food safety as an important indicator of destination competitiveness. The Travel and Tourism Competitive Report (World Economic Forum, 2015) suggests that hygiene in terms of access to drinking water and sanitation are important for the comfort and health of travelers. The Association of Southeast Asian Nations (2012) notes that member states vary in levels of development that affect levels of tourist experiences. One of its biggest gaps is that of safety and security. As such, the trends show a shift from common tourist visit motivators of "sea, sun, and sand" to "safety, security, and sanitation" as essential elements of the tourism experience. Williams (2014) suggests that sanitation should be given importance if the country (Philippines) aims to be world-class. This is done by incorporating sanitation to the very fabric of Filipino culture and lifestyle.

For countries like Taiwan, street food and night markets are almost entirely unregulated (Ferry, 2015). The lack of monitoring may result in higher risks of food-borne illnesses and other health risks. In Malaysia, night market vendors admit that they cook and use oil repeatedly, making it unfit for food consumption (Azman et al., 2012).

Food safety culture, in recent years, has been found as an effective means of improving food safety in the workplace. Griffith, Livesey, and Clayton (2010) suggested that food safety performance is affected by six culture factors: leadership, food safety management systems, and style, commitment to food safety, food safety environment, risk perception and communication. It was further explored in the study of Ungku Fatimah et al. (2014) in measuring food safety culture of onsite foodservice operations. The study presented a model for determining the food safety culture. The following factors came out as components of food safety culture: leadership, communication, self-commitment, management system and style, environment support, teamwork, accountability, work pressure, and risk perception. However, in factor analysis, these nine components were compressed into a six-factor structure of food safety culture.

Chapman and Powell (2011) stressed that a good food safety culture is one where individuals know the risks associated with the foods they handle and how those should be managed, dedicate resources to evaluate supplier practices, stay up-to-date with emerging food issues, foster a value system within the organization that focuses on avoiding illnesses, communicate compelling and relevant messages regarding risk-reduction activities and empower others to put them into practice, promote effective food safety systems before an incident occurs and one that does not blame customers when illnesses are linked to their products.

Many researchers throughout the years have studied various dimensions of safety culture. In the study of Flin (2007), he identifies 1) management 2) system 3) risk and 4) work pressure as factors that affect employee behavior towards safety. The concept of management refers to how employees see management's commitment towards safety, supervision, and training. System, on the other hand, refers to safety standards, regulations, and maintenance.

Furthermore, Clayton, Griffith, Price & Peters (2002) studied 137 food handlers to understand their food safety practices in Wales. Results showed that lack of time, staff and resources were found to be barriers in safe food

handling. The study also showed that more staffing, lesser workload, and better workspaces were key for better safe food handling practices.

Food safety culture should involve communication with management to help understand employee commitment to food safety (Nayak & Waterson, 2017). Clayton et al. (2015) investigated food workers' perception of factors that impact food safety practice and identified work pressure to prioritize other food service tasks (e.g., "getting the food from the fryer to the table") over proper food safety procedures as a barrier to food safety.

There have been some local studies on food safety particularly on street vending. Despite being a good source of livelihood, Buted and Ylagan (2014) noted that many street vendors neglect the significance of food safety which then increases the risk of foodborne diseases. Studies also suggested that mere food safety knowledge does not essentially equate to observance or compliance to the requirements. This means that vendors have to understand its importance and advocate for it (Rustia, Azanza & Gascon, 2017).

1.2 Theoretical Framework

The study is anchored on the study of Ungku Fatimah (2013) in measuring food safety culture of onsite foodservice operations. The study presented a model for determining the food safety culture in an onsite foodservice operation. The six food safety culture factors were identified using a mixed methods approach and were analyzed through factor analysis. The six factors are 1) Management and co-worker support 2) Communication – evaluates employee perception towards the transfer of information and knowledge within management, supervisory staff, and food handlers. 3) Self- Commitment 4) Environment Support 5) Work Pressure and 6) Risk Judgment. This study uses the principles of both Good Manufacturing Practices (GMPs) regulations and the Codex Alimentarius Recommended International Code of Practice – General Principles of Food Hygiene. Both quality assurance systems lay the foundation in food production by creating an environment conducive for making food that is safe for consumption. The study is also anchored on Schein's model of organizational culture. This is constantly used as a way to properly understand the culture within an organization. This research is anchored on Schein's Organizational Culture Model. He divides culture into three levels: artifacts, values, and basic assumptions. The study focuses on basic assumptions. It forms the most comprehensive level of organizational culture. They form a basis that establishes how organizational members perceive their environment and determines their course of action in specific situations.

1.3 Objectives of the study

The purpose of the study is to determine the food safety culture of the night market vendors at a night market in Cebu City. Specifically, the study sought to 1) assess night market vendors' food safety culture in the areas of 1.1 Management and Coworkers Support; 1.2 Communication; 1.3 Self-commitment; 1.4 Environment support; 1.5 Work Pressure and 1.6 Risk Judgment; and 2) develop recommendations based on the findings as basis for the formulation of food safety management policies for the night market.

2. Materials and Methods

2.1 Research Design

This study used the descriptive research design utilizing the survey method to collect the relevant data for the study. A survey questionnaire was deployed 40 nonsupervisory night market vendors. Interviews with the night market organizers were conducted to validate and further expound the data gathered. This method is preferred for this kind of research because the expected responses and results are best presented by descriptions.

2.2 Research Site

For the purpose of anonymity, the research environment shall be named Cebu Night Market located in Cebu City. On an average, Cebu Night Market has around 35 to 45 vendors at a time, is open from Thursday to Sunday weekly. All vendors offer food and beverages. It is a year-round open-air food and lifestyle market in

Cebu aimed at boosting the campaign to patronize regional, local products and attract people to travel to the region.

The Cebu Night Market is one of the biggest food markets in Cebu City that aims to showcase Cebuano products in the local food industry. It also features crafts, clothing and beauty and wellness products from locals. The food market usually opens from 5:00PM-1: 00 AM, around 1,900 square meters in size and is recognized by the Department of Trade and Industry and the Department of Tourism as an official food market bazaar.

2.3 Participants

The respondents of the study are nonsupervisory food handlers of the night market to assess food safety culture in each of their food stalls. In order to determine the sample size, the researcher used Slovin's formula which resulted in 40-night market food handlers.

2.4 Instruments

The researcher used survey questionnaires as the main data gathering tool in the study which was handed out to night market food handlers. This is based on the work of Ungku Fatimah, Strohbehn, & Arendt (2014) where they created a compressed six-factor structure of food safety culture. However, some modifications were incorporated to fit the questionnaire into the night market setting. The scope of the instrument is on 1) Management and co-worker support (10 items) – refers to management roles in encouraging safe food handling practices and teamwork among coworkers; 2) Communication (6 items) – evaluates employee perception towards transfer of information and knowledge within management, supervisory staff and food handlers; 3) Self-Commitment (5 items) - evaluates employee perception towards employees values and beliefs on food safety in line with their team/ organization. 4) Environment Support (4 items) – represents measures on adequacy and quality of infrastructures that support safe food handling practices; 5) Work Pressure (3 items) - evaluates employee perception towards pressure in preparing food that may affect safe food handling and, 6) Risk Judgment (3 items) - evaluates employee perception associated with organization risk-taking decisions when implementing and complying with food safety rules and regulations.

To ensure internal consistency, the researcher used Cronbach's alpha to evaluate the reliability of the research instrument. The instrument administered to the night market vendors resulted in the internal-consistency coefficient value of 0.916.

2.5 Data Collection and Analysis

In the gathering, the data, the researcher initially requested permission from the night market organizing body to conduct the study. The survey questionnaires were distributed personally.   It was forwarded with a cover letter describing the study and indicating the confidentiality of the information that may be given out by the respondents. Mean, and standard deviation was used to analyze the questionnaire administered to night market vendors.

3. Results and Discussion

3.1.1 Night Market Vendor Perception on Management and Coworkers Support

Table 1. Night Market Vendor Perception on Management and Coworkers Support

Management and coworker support	Mean	Std. Deviation	Interpretation
Leaders inspire me to follow safe food handling practices	4.88	1.40	Somewhat involved
My leader is actively involved in making sure safe	4.88	1.70	Somewhat

food handling is practiced			involved
There is good cooperation among team members to ensure that customers receive safely prepared food	4.88	1.57	Somewhat involved
New and experienced team members work together to ensure food safety practices are in place	4.75	1.63	Somewhat involved
Leaders enforce food safety rules consistently with all team members	4.73	1.57	Somewhat involved
When lots of work needs to be done quickly, employees work together as a team to get the tasks completed safely	4.95	1.45	Somewhat involved
My leader always watches to see if I am practicing safe food handling	4.60	1.65	Somewhat involved
My coworkers are always supportive of each other regarding food safety	4.70	1.64	Somewhat involved
Team members remind each other about following food safety practices	4.75	1.56	Somewhat involved
Team members are disciplined or reprimanded when they fail to follow food safety practices	4.73	1.63	Somewhat involved
Overall Mean	**4.79**	**1.36**	**Somewhat involved**

General Interpretation Guide:

6.01 – 7.00 Very Involved

5.01 – 6.00 Involved

4.01 – 5.00 Somewhat Involved

3.01 – 4.00 Somewhat uninvolved

2.01 – 3.00 Uninvolved

1.00 – 2.00 Very Uninvolved

Source: Vogt (1999)

As reflected in the table, the overall mean for this indicator was 4.79 (SD=1.36). In addition, the values of the means of each of the items under this indicator range between 4.73 and 4.95, which can be described as "Somewhat involved." The highest mean rating was on employees working together to get tasks done (4.95). This means that leaders are somewhat involved in inspiring employees and are actively involved in the practice of safe food handling. Furthermore, findings reveal that leaders are somewhat involved in enforcing food safety rules among all team members. The importance of leadership in the practice of food safety culture was posited by Yiannas (2009) where leaders of the organization should choose to have strong food safety culture as they influence attitude towards food safety, a willingness in discussing concerns and place emphasis on its importance. Improving management guidance will ensure employee compliance in the practice of food safety.

Moreover, the results show that team members are somewhat involved in encouraging of each other, reminding one another and disciplining each other in the practice of food safety. At the same time, new and experienced team members work together to ensure safe food handling is practiced and cooperate among one another to prepare food safely. It can be deduced that members of the team need to support each other more to prepare safe food properly.

Among the various indicators, the lowest mean was on leaders somewhat involved in watching team members see if they are practicing safe food handling (4.60). Adesokan et al. (2015) also stressed that management support in providing regular refresher training for food handlers further assist in the adoption of safe food handling behaviors.

3.1.2 Night Market Vendor Perception on Communication

Table 2. Night Market Vendor Perception on Communication

Communication	Mean	Std. Deviation	Interpretation
I can freely speak up if I see something that may affect food safety	4.73	1.63	Quite well-conveyed
My leader generally gives appropriate instructions on safe food handling	4.93	1.44	Quite well-conveyed
I am encouraged to provide suggestions for improving food safety practices	4.95	1.38	Quite well-conveyed
All managers give consistent information about food safety	4.88	1.51	Quite well-conveyed
All of the necessary information for handling food safely is readily available to my area.	4.70	1.56	Quite well-conveyed
Leaders provide adequate and timely information about current food safety rules and regulations	4.60	1.47	Quite well-conveyed
Overall Mean	**4.80**	**1.30**	**Quite well-conveyed**

General Interpretation Guide:

6.01 – 7.00 Perfectly Conveyed

5.01 – 6.00 Fairly Conveyed

4.01 – 5.00 Quite Well conveyed

3.01 – 4.00 Fairly well-conveyed

2.01 – 3.00 Very little conveyed

1.00 – 2.00 Not at all conveyed

Source: Vogt (1999)

The table above showed the means and standard deviation of the perception of night market vendors on communication within each team. This factor is aimed at evaluating employee perception towards the transfer of information and knowledge within management, supervisory staff and food handlers in the organization.

Referring to the overall result, the overall mean for this indicator was 4.80 (SD=1.30), which is described as "Quite Well-Conveyed." Additionally, the table also revealed that the mean values of the items under this indicator ranged between 4.70 and 4.95, which are all interpreted as "Quite Well-Conveyed." The results reveal that communication in terms of employees providing suggestions for improving food safety was quite well-conveyed and resulted in the highest mean rating (4.95). This suggests that employees value engagement particularly in voicing out food safety issues present in the workplace and proposing action plans to resolve it.

It is generally interpreted that communication in terms of provision of information on food safety issues, adequacy and timeliness of food safety rules and regulations, and its availability for use is quite well-conveyed among respondents. Communication with management is considered significantly important to improve employee commitment and develop a positive food safety culture in the organization (Nayak &Waterson, 2017). However, among all items, leaders providing adequate and timely communication resulted in the lowest mean (4.60). This means that management is inconsistent in providing updates and communicating food safety information. It can be remembered that the General Principles of Food Hygiene (FAO, 2012) entails ensuring products have adequate, accessible information available and food handlers ensuring vendors have adequate information about the product such as ingredients, possible allergens, expiration and proper storage in cases where consumers may need it.

3.1.3 Night Market Vendor Perception on Self-Commitment

Table 3. Night Market Vendor Perception on Self-Commitment

Self-Commitment	Mean	Std. Deviation	Interpretation
I follow food safety rules because it is my responsibility to do so	5.03	1.58	Engaged
I follow food safety rules because I think they are important	5.00	1.52	Somewhat engaged
I am committed to following all food safety rules	4.98	1.49	Somewhat engaged
I keep my work area clean because I do not like clutter	5.13	1.52	Engaged
Food Safety is a high priority for me	4.85	1.85	Engaged
Overall Mean	**5.00**	**1.48**	**Engaged**

General Interpretation Guide:

6.01 – 7.00 Very engaged

5.01 – 6.00 Engaged

4.01 – 5.00 Somewhat engaged

3.01 – 4.00 Somewhat unengaged

2.01 – 3.00 Unengaged

1.00 – 2.00 Very Unengaged

Source: Vogt (1999)

The table above presents the means and standard deviation of the perception of night market vendors on self-commitment. This factor evaluates employee perception towards employees' values and beliefs on food safety in line with their organization. Data revealed that the night market vendors have a high self-commitment towards practicing food safety, as indicated by a grand mean response rating of 5.00. This result can be explained by the vendors' general engagement in following food safety rules because it is important (5.00) and because it is their responsibility to do so (5.03). The highest mean showed that employees keep their area clean due to a general dislike to clutter (5.13). It is suggested that a strong commitment to food safety from all levels of management is needed to ensure a responsive approach to keeping food safe. The need to reevaluate engagement on food safety practices and consistency in communicating food safety information was stressed by Reynolds (2016).

Employees were also found to be somewhat engaged to follow all safety rules (4.98). The lowest employee engagement was found on making food safety a high priority (4.85). Rustia, Azanza & Gascon (2017) posited the importance of self-commitment by both management and front-line workers. The authors believed that food safety knowledge does not essentially equate to observance or compliance with the requirements. This means that vendors have to understand its importance and advocate for it.

Among all indicators, leaders providing adequate and timely communication resulted in the lowest mean (4.60). This means that management is inconsistent in providing updates and communicating food safety information. The General Principles of Food Hygiene (FAO, 2012) entails ensuring products have adequate, accessible information available and food handlers need to ensure they have adequate information about the product such as ingredients, expiration and proper storage in cases where consumers may need it.

3.1.4 Night Market Vendor Perception on Environment Support

Table 4. Night Market Vendor Perception on Environment Support

Environment Support	Mean	Std. Deviation	Interpretation
Equipment items needed to prepare food safely are readily available and accessible.	4.73	1.54	Somewhat Sufficient
Adequate supplies are readily available to perform safe food handling practices	4.43	1.75	Somewhat sufficient
Facilities are of acceptable quality to follow safe food handling practices	3.98	1.97	Somewhat insufficient
It easy for me to follow safe food handling practices	3.98	1.87	Somewhat insufficient
Overall Mean	**4.28**	**1.39**	**Somewhat sufficient**

General Interpretation Guide:

6.01 – 7.00 Extremely sufficient

5.01 – 6.00 Mostly sufficient

4.01 – 5.00 Somewhat sufficient

3.01 – 4.00 Somewhat insufficient

2.01 – 3.00 Mostly insufficient

1.00 – 2.00 Extremely insufficient

Source: Vogt (1999)

Table 4 showed the means and standard deviation of the perception of night market vendors on environment support. Referring to the overall result, the overall mean for this indicator was 4.28 (SD=1.40), which is described as somewhat sufficient. The table revealed that vendors feel somewhat sufficient in terms of the equipment needed in order to prepare food which shows the highest mean (4.73). This is followed by the availability of adequate supplies needed to prepare safe food (4.43). This suggests that due to the nature of the business, employees at a certain extent may not always have all the equipment needed to perform their jobs and may have to improvise with supplies and equipment available at times.

Lack of facilities and equipment has been identified by Ball, B., Wilcock, A., & Aung, M. (2010) and Macheka, L., Manditsera, F., Ngadze, R, Mubaiwa, J, & Ny, L. (2013) as a barrier towards practicing food safety and the implementation food safety management systems. The General Principles of Food Hygiene (FAO, 2012) also notes proper sanitation and maintenance of premises were recorded as important to permit continuous and effective control of food hazards and agents likely to contaminate food.

3.1.5 Night Market Vendor Perception on Work Pressure

Table 5. Night Market Vendor Perception on Work Pressure

Work Pressure	Mean	Std. Deviation	Interpretation
My work load does not interfere with my ability to follow safe food handling practices	3.98	1.94	Somewhat unmanageable

I always have enough time to follow safe food handling procedures, even during rush hours	4.28	1.75	Somewhat manageable
The number of staff scheduled at each shift is adequate for me to get my work done and handle food safely	4.48	1.71	Somewhat manageable
Overall Mean	**4.24**	**1.57**	**Somewhat manageable**

General Interpretation Guide:

6.01 – 7.00 Very manageable

5.01 – 6.00 Manageable

4.01 – 5.00 Somewhat manageable

3.01 – 4.00 Somewhat unmanageable

2.01 – 3.00 Unmanageable

1.00 – 2.00 Very unmanageable

Source: Vogt (1999)

Table 5 showed the means and standard deviation of the perception of night market vendors on work pressure. Referring to the overall result, the overall mean for this indicator was 4.24 (SD=1.57), which is described as slightly agree. Among the three items, the number of staff scheduled per day were found to be adequate and thus, work pressure in this indicator was considered somewhat manageable. This resulted in the highest mean rating of 4.48. Vendors showed that at a certain extent, time to produce food was still somewhat manageable while following safe food handling procedures at the same time even during rush hours, having a mean of 4.28. However, the workload was found to be somewhat unmanageable and interferes an employee's ability to carry out food safety procedures.

Overall slight agreement on these items means that at some point, they are poised to produce what the customers demand at a shorter time, compromising some food safety measures without having to inform or manifest them outright to them. The results agree with the study of Clayton et al. (2015) that participants identified pressure to prioritize other food service tasks such getting the food from the fryer to the table over proper food safety procedures as a barrier to food safety.

3.1.6 Night Market Vendor Perception on Risk Judgment

Table 6. Night Market Vendor Perception on Risk Judgment

Risk Judgment	Mean	Std. Deviation	Interpretation
I believe that written food safety policies and procedures are nothing more than a cover-up in case of a law suit.	4.23	1.83	Somewhat Risky
I am sometimes asked to cut corners with food safety so we can save on costs when preparing food	4.20	1.81	Somewhat Risky
When there is pressure to finish production, team leaders sometimes tell us to work faster by taking shortcuts with food safety	4.15	1.88	Somewhat Risky
Overall Mean	**4.19**	**1.60**	**Somewhat Risky**

General Interpretation Guide:

6.01 – 7.00 Exceptionally Risky

5.01 – 6.00 Risky

4.01 – 5.00 Somewhat Risky

3.01 – 4.00 Somewhat Non-risky

2.01 – 3.00 Non-risky

1.00 – 2.00 Exceptionally Non-risky

Source: Vogt (1999)

The table above presents the means and standard deviation of the perception of night market vendors on risk judgment. This indicator evaluates employee perception associated with organization risk-taking decisions when implementing and complying with food safety rules and regulations. Referring to the overall result, the overall mean for this indicator was 4.19 (SD=1.60), which is described as somewhat risky. In addition, the mean of the three items range from 4.15 to 4.23, and all are described to be somewhat risky.

The results suggest a certain extent of perceived risk as employees feel that written food safety policies and procedures are nothing more than a cover-up in case of a law suit (4.23) such that it reached to a point when they are asked to cut corners with food safety so we can save on costs when preparing food, and being told to work faster by taking shortcuts with food safety. The results may be attributed to employees feeling that documents on food safety and permits are available, yet are not practiced in the food service setting. This is somewhat risky as negligence of food safety procedures may then increase the likelihood of shortcomings in the food preparation process.

The results support the study of Sun, Wang & Huang (2012) that even though vendors are aware of proper hygiene knowledge, they rarely put it into practice because of time-constraints in their business. Green and Selman (2005) also pointed out that time pressures to perform a job including equipment and resources are recognized factors that affect food preparation practices.

The overall mean for this indicator was 4.19 (SD=1.60), which is described as slightly agree. In addition, the mean of the three items range from 4.15 to 4.23, and all are described to be slightly agree. This means that at some point, employees feel that that written food safety policies and procedures are nothing more than a cover-up in case of a law suit (4.23) such that it reached to a point when they are asked to cut corners with food safety so we can save on costs when preparing food, and being told to work faster by taking shortcuts with food safety. This can be attributed to employees feeling that documents on food safety and permits are available, yet are not practiced in the food service setting.

The results support the study of Sun, Wang & Huang (2012) that even though vendors are aware of proper hygiene knowledge, they rarely put it into practice because of time-constraints in their business. Green and Selman (2005) also pointed out that time pressures to perform a job including equipment and resources are recognized factors that affect food preparation practices.

4 Conclusions

Night market vendors exhibit good safety culture in the factors of self-commitment, communication and management, and coworkers support. An employees' workload, provision, and sanitation of proper equipment and timely feedback were found to be indicators that give rise to the level of food safety culture in an organization. The influence of management was highlighted to affect the level of food safety practices and that organizations can improve food safety culture by managing work pressure, adherence to proper sanitation procedures and by fulfilling structural requirements in accordance to the provisions of the Sanitation Code. At a certain extent, vendors follow food safety rules but time and management pressures become contributory factors to a decrease in following food safety procedures.

5   Recommendations

The results highlight some recommendations for improvement: in terms of management, increased visibility of leadership will ensure consistent enforcement of food safety policies at all levels in the organization. There is also a need for effective and relevant hygiene training enforced by management commitment to food safety.

Operationally, proper provision of tools and equipment should be provided to food handlers in the process of preparing food. This will help ease staff workload and ensure the safe production of food. The distribution of a personal food hygiene checklist may be used to improve personal hygiene. This will ensure that staff adherence to good personal hygiene and personal protective equipment. Food displayed should be properly packaged and covered to minimize contamination.

The findings and recommendations of the research may be used as the basis for destination management guidelines or policies particularly in a night market or off-premise food production setting by both night market organizers and government regulatory bodies concerned on food safety. The research also highlights the importance of management support and influence which encompasses all factors of food safety culture.

References

Adesokan, H. K., Akinseye, V, & Adesokan, G. (2015). Food Safety Training Is Associated with Improved Knowledge and Behaviours among Foodservice Establishments' Workers. *International Journal of Food Science*, 1-8. Retrieved from https://www.hindawi.com/journals/ijfs/2015/328761/

Al Suwaidi, A., Hussein, H., Al Faisal, W., El Sawaf, E., & Wasfy, A. (2015). Hygienic Practices Among Food Handlers in Dubai. *International Journal of Preventive Medicine Research, 1* (3), 101-108.

Amuquandoh, F. E. (2011). International Tourists' Concerns About Traditional Foods in Ghana. *Journal of Hospitality and Tourism Management, 18*, 1-9.

Azman, A., Mohd Shahrul, S., Chan, S., Noorhazliza, A., Khairunnisak, M., Nur Azlina, M., Qoodriyah, H., Kamisah, Y., & Jaarin, K. (2012). Level of knowledge, attitude, and practice of night market food outlet operators in Kuala Lumpur regarding the usage of repeatedly hea. *Medical Journal of Malaysia*, 67 (1), 91-101. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/22582556

Ball, B., Wilcock, A., & Aung, M. (2010). Background Factors Affecting the Implementation of Food Safety Management Systems. *Food Protection Trends* 30(2), 27-33.

Bellia, C., Pilato, M., & Seraphin, H. (2016). Street food and food safety: A driver for tourism? *Quality - Access to Success, 17*, 20-27. Retrieved from https://bit.ly/2MxPJY2

Buted, D., & Ylagan, A. (2014). Street Food Preparation Practices. *Asia Pacific Journal of Education, Arts, and Sciences*, 1 (2),53-60. Retrieved from https://bit.ly/2QtmRTY

Clayton, D., Griffith, C., Price, P., & Peters, A. (2002). Food handlers' beliefs and selfreported practices. *International Journal of Environmental Health Research*, 25-39.

Clayton, M., Smith, K., Neff, R., Pollack, K., & Ensminger, M. (2015). Listening to food workers: Factors that impact proper health and hygiene practice in food service. *International Journal of Occupational Environmental Health*, 314-327.

Cortese, R. D., Veiros, M., Feldman, C., & Cavallia, S. (2016). Food safety and hygiene practices of vendors during the chain of street food production in Florianopolis, Brazil: A cross-sectional study. *Food Control*, 178-186.

Ferry, T. (2015). *How Safe is Taiwan's Food?* Retrieved March 26, 2017, from Taiwan Business Topics: https://topics.amcham.com.tw/2015/02/taiwan-food-safety/

Flin, R. (2007). Measuring safety culture in healthcare: A case for accurate diagnosis. *Safety Science*, 653-667.

Food and Agriculture Organization. (2012). *Guidelines on the Application of General Principles of Food Hygiene to the Control of Viruses in Food.* Retrieved May 10, 2018, from Food and Agriculture Organization: www.fao.org/docrep/W8088E/w8088e04.htm

Green, L., & Selman, C.(2005).Factors Impacting F Workers' and Managers' Safe Food Preparation Practices: A Qualitative Study. *Food Policy,* 25 (12), 981-990.

Griffith, C., Livesey, K., & Clayton, D. (2010). Food safety culture: the evolution of an emerging risk factor? *British Food Journal*, 112(4), 439-456.

Ishak, N. K., Aziz, K., & Latif, R. (2012). Typology of Night Markets in Malaysia. *Journal of Case Research in Business and Economics*, 1-8.

Macheka, L., Manditsera, F., Ngadze, R, Mubaiwa, J, & Ny, L. (2013). Barriers, benefits and motivation factors for the implementation of food safety management system in the food sector in Harare Province, Zimbabwe. *Food Control, 34*, 126-131.

Malacanang. (1974). *Presidential Decree Number 856- Sanitation Code of the Philippines.* Retrieved from The Law Phil Project: https://www.lawphil.net/statutes/presdecs/pd1975/pd_856_1975.html

Nayak, R., & Waterson, P. (2017). The Assessment of Food Safety Culture: An investigation of current challenges, barriers and future opportunities within the food industry. *Food Control*, 73, 1114-1123.

Chapman, B., Jacob, C., & Powell, D. A. (2011). Enhancing food safety culture to reduce rates of foodborne illness. *Food Control*, 817-822.

Proietti, I., Frazzoli, C., & Mantovani, A. (2014). Identification and management of toxicological hazards of street foods in developing countries. *Food and Chemical Toxicology, 63*, 143-152.

Rane, S. (2011). Street vended food in developing world: hazard analyses. *Indian Journal of Medical Microbiology, 51* (1), 100-106.

Reynolds, J. (2016). *Investigating child care food safety culture and barriers & motivators to safe food handling practices.* Iowa State University. ProQuest Dissertations Publishing. Retrieved from https://bit.ly/2xfQkZ3

Rustia, A., Azanza, M., & Gascon, F. (2017). Food Safety Knowledge Assessment Model for Pre-trained Food Handlers. *Philippine Journal of Science, 146* (4), 371-385.

Skift Report. (2015). *The Rise of Food tourism. Ontario Culinary tourism alliance and Skift.* Retrieved from Skift: https://trends.skift.com/trend/free-report-the-rise-of-food-tourism/

Sun, Y., Wang, S., & Huang, K. (2012). Hygiene Knowledge and Practices of night market food vendors of Tainan City, Taiwan. *Food Control*, 23(1), 159-164. Retrieved from https://bit.ly/2NEwuAT

The Association of Southeast Asian Nations. *Tourism Marketing Strategy 2012-2015.* Jakarta: ASEAN. Retrieved from https://www.aseantourism.travel/downloaddoc/doc/2486

Tsai, C. (2013). Culinary Tourism and Night Markets in Taiwan. *International Journal of Business and Information*, 247-266. Retrieved from https://ijbi.org/ijbi/article/download/83/89/

Ungku Fatimah, U., Strohbehn, C., & Arendt, S. (2014). An empirical investigation of food safety culture in onsite foodservice operations. *Food Control,46* , 255-263.

Williams, M. C. (2014). Competitiveness of Philippine Tourism in Terms of the ASEAN Tourism Strategic Plan 2011-2014. *International Journal of Education and Social Science*, 83-98.

World Economic Forum. (2015). *The Travel & Tourism Competitiveness Report.* Geneva: World Economic Forum.

Yiannas, F. (2009). *Food safety culture creating a behavior-based food safety management system.* New York: Springer.