

Conference Paper

Restaurant Customers Awareness Level on the Benefits of Using ‘Luto Sa Palayok’ in Filipino Cuisine

Marivic Delos Santos, Reymarie Lobo, Arthur Digman, Ronalyn Pereña,
Rosszen Yorka Rivera Tuazon and Andrew Nico Pilapil
*College of International Tourism and Hospitality Management, Lyceum of the Philippines
University Cavite*

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Abstract: The purpose of the study is to conduct survey in the restaurant customer’s awareness level on the benefits of using ‘Luto Sa Palayok’ in Filipino Cuisine. It introduce the local clay pot of the Philippines called “ palayok” and its benefit as a cooking utensil. ‘it investigates the perceived health factors associated with the use of the clay pot’ Descriptive research design was used in the study, and a survey questionnaire was distributed to the participants of the selected restaurants that utilized *palayok* in cooking. Descriptive statistics such as frequency counts, mean, range and percentages were calculated and interpreted to answer the objectives of the study. The result of the study revealed that customers of each restaurant are highly aware about the nutritional benefit of using clay pot. It enhances the quality of food in terms of taste and presentation. It was concluded that most of the customers in selected restaurants are highly aware about the different usage of clay pot and its effectiveness in cooking. The recommendations made were based from the findings of the customer’s level of awareness. It was revealed that during the Focus Group Discussion, the restaurant owner and managers provided their own way of promoting palayok in cooking and serving most of the Filipino dishes. They added that Filipino food is more appropriate to be cooked and served in *palayok*.

Keywords: Advantage, enhance, effectiveness, palayok, cooking

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Introduction

Pottery has been known as the oldest and most useful handicraft created by humans. Pottery are made out from clay which is hardened by heat which has been around for a long time used as containers, cooking equipment, and plates or bowls to eat.

During prehistoric time, it was accounted that people carry water using woven baskets lined with river clay; after the water was poured out of the container, the clay layer will dry up; the shape would shrink and be detached from the sides of the basket due to the loss of moisture, and when the clay is already in shape, separated from the basket, dried under the sun on to hot sand, it will cause to maintain the basket's form. With these, ancient people discovered that they could use the heat and clay to produce pottery that can be used as sturdy containers to make and store food.

The earliest recorded evidence of clay usage was during Late Paleolithic period in East Asia before it eventually spread to the Middle East and Mediterranean basin during Neolithic period, thousands of years later. (Haim, Watzman, 2013) The oldest fragments of pottery were discovered to be manufactured in both China and Japan dated to about 14,000 BC, long before they started farming. In Dingshan, the pottery capital of China, they found a unique sandy clay form into container and called as purple clay. (Bartruff D. 2003). This pottery was made with finer clays and fired at a higher temperature than earthenware; both in China and Japan. During 16th century, pottery was brought from China to Acapulco to Vera Cruz, Mexico to Europe through a trade route in Manila. (Joanna 2003).

Ancient Greek uses pottery as a highly valued form and decorations where they portray their daily lives and the stories of their Gods. German potters started to produce stoneware around 13th century. This pottery was made with fine clays and fired at a higher temperature than earthenware.

Pottery dated back as early as 6000 BC when light and heat were discovered and became available any time of the day. It became the implication that fire had been fully utilized. Our ancestors started making pottery before their Cambodian neighbors, and at about the same time as the Thai's, as part of what appear to be widespread long-term development of pottery technology. As foreign exchange increased, Filipinos discovered that kiln-fired and glazed ceramics from China and other Asian country like Thailand, Vietnam and India was more waterproof and durable. They also exhibit the versatility of the clay pots and showed us its other uses. Chinese used clay to make plates, bowls, cups, bottles, and displays, while Thai and Vietnamese clay pots are mainly glazed and painted for storing rice and liquids. There were also earthen jars brought by the Spaniards which were used to store olives oil, and wines; and the Martaban jars brought by the Arabs were used as containers of water and as storage jars for trade good and staples. Filipinos learned and adopted the making process of these countries, mostly of China's and started using pottery in a different way when then became a part of Filipinos daily lives. However, pottery making continued to develop in certain areas, just as the Burnay unglazed clay pottery of Vigan.

Palayok is made of clay molded by hand or without moulds used. *Palayok* is a Filipino word; in other parts of the country, especially in the Visayas region it is called *kulon*; and the smaller sized *kulon* is called *anglit*. Here are some examples of

different *palayok*, different pottery products, and different native equipment from different provinces that can be found in National Museum:

The *Culi a clay pot used for meat preserver* that was found in 1977 from Bay-yu, Bontoc, Mountain Province. The *Calatagan* pot There are thirty-nine inscriptions engraved around the shoulder of the pot and experts says it is a ritual during 14th-15th Centuries the clay pot can be found in Talisay, Calagatan, Batangas. *Mangkok* is a footed vessel painted with hematite which was found in *Ayub Cave, Pinol, Maitum, Saranggani* province. The four-breasted and Seven-breasted pot, thee ceramic objects that molded with human breasts have come to be known as the *Masuso pots*. The *Jar of Tiruray* tribe-used as rice or cassava wine container. The *Kolun* is a type of claypots that can be found in *Tagakaolo* tribe in *Malalag* Davao this was found in 1914, collected by John M. Garvan. *Lu'a-* is a spatula made of wood that can be found in *Bagobo* tribe in Talomo River, Davao in 1914. Stove *Sama-* is a type of stove made of Clay that can be found in Zamboanga City'. The famous *Tapayan* of Southern tagalog is large earthenware vessel that can also be found in Southeast Asia.

There are local potteries that are still making clay pot or *palayok*; they are offering different kinds of pottery items that can be used in cooking and in numerous different ways. Here are the five examples of local pottery that are still making *palayok* and other pottery that can be used in cooking: The PettyJohn Pottery in Calamba, Laguna, for more than 30 years, they are making different pottery item and displaying it in different exhibits. Pottery making are their habits. The Clay Avenue Studio in San Narciso, Zambales, still uses a gas kiln, three potter's wheels, and a wide array of pottery tools to make a *palayok* or other pottery item. They also offer pottery class.

In Antipolo City Lanelle Abueva-Fernando Pottery, is making handmade stoneware ceramics. This pottery owns a restaurant in Antipolo where they are selling their pottery products. Their loyal clientele for their handmade stoneware ceramic includes hotels, restaurants and even spas. The Stoneware Pottery Inc. is using materials directly from Germany. The potters in this establishment are trained not only in crafts but also in business and marketing aspect. They are making *palayok*, platewares, vases, and are accepting customized orders. The *Ugu Bigyan's* Potter's Garden is a nature-inspired ceramics maker and clayware may have drawn crowds from all over the country to his workshop in *Tiaong*, Quezon. They are also offering patron's workshop for making a clay pot.

The researchers were able to conduct an interview with a cooking expert, Atching Lillian, residing in Pampanga City. According to her, most of their traditional recipes were cooked in *palayok* due to its distinct taste and no chemical reactions coming from cast iron. The original recipes of Kapampangan are all cooked in *palayok* and *luto sa kahoy* (cooking with the use of scrap of woods).

Atching Lillian also quoted in her published book Atching Lillian's Heirlooms Recipes, "I am very fortunate to have been born became into a family that has a

high regard for culture and a hereditary passion for cooking.” The best *pinaupong manok* (native chicken cooked in palayok by dry heat method) was cooked in *palayok* according to Natividad Reyes.

Palayok is still being used at present but only few still uses it. Usually *palayok* is used in restaurants who serve Filipino foods. In most cities, *palayok* is only used for serving and not as a cooking instrument, however, in some provinces, it is usually being used by some villagers in cooking and food container. Since the earlier times because of the need to have plates and bowls to eat people from the province utilized *palayok* as food container. Another usage of *palayok* was containers for storage of food, liquid, and dry goods. Other usage includes pouring vessels, jugs, dishes, vases, and native dippers (*tabo*) others were made as ornamental like goblets, footed dishes, and globular bottles. *Palayok* is earthenware that allows the steam for cooking to evaporate from its pores. Food cooked in this takes a lot of time before it loses its cooking juices which allows food to be cooked thoroughly. It has been a huge part of native cooking in the Philippines, dishes like *Kare-kare*, *Bulalo*, *Sinigang*, and other *lutong bahay* were created or improved using *palayok*.

Synthesis

Pottery has been introduced in the Philippines, similar to other Asian countries it served many purpose particularly in cooking. *Palayok* became popular not only throughout the country from its property of on the conservation of nutrients and enhancing the natural taste of food. Food that cooked in *palayok* believed to be flavorful and healthier.

Palayok has become one of the main equipment, in cooking like other native equipment, like bamboo (*kawayan*) and banana leaves (dahon ng saging) where different Filipino dishes has been made. *Palayok* The porous material that creates a moist enclosed environment that resulting to better and palatable food when the clay pot is saturated with water and heated on the gas stove which provides evaporation of steam from the pores. It helps the food to be cooked slowly without losing its moisture, aroma and nutrients. It also gives the food an earthy flavor and has minerals like calcium, magnesium, iron, phosphorus and Sulphur that can benefit to health. Clay is also alkaline in natural that helps in neutralizing pH balance of food by interacting with its acid. That is why naturally acidic foods like tomatoes acquire some natural sweetness when it's cooked in *palayok*. It also free from toxins and does not have any metal reaction occurrence, leaving with the pure taste of the food and does not leave harmful substances into it.

Methodology

This chapter describes the method of the study. It includes the research design, locale of the study, sources of data, population and sampling technique, instrument, data gathering data analysis and statistical treatment.

Research Design

Descriptive quantitative design was utilized for this study, mixed method was employed, since interview in the form of focus group discussion was applied and interpreted qualitatively. The quantitative part of the research is the distribution of survey questionnaire it was collected and interpreted statistically. The study of 'Restaurant Customer's Level of Awareness on the Benefits of using 'Luto Sa Palayok' in Filipino Cuisine It aims to answer the following statement of the problem: Determine the profile of the participants from the selected restaurants serving and cooking using *palayok* in terms of: a. Age; b. Sex; c. Educational Attainment? It was followed by determine the factors that influence cooking with the use of *palayok*? What are the advantages of using *palayok* in cooking? Determine the effectiveness of using palayok in serving and cooking Filipino food? The focus group discussion comprises restaurant staffs and managers. The following questions were asked; Why do you think Palayok is a symbol of Filipino culture? How do you promote palayok in your respective food establishment? Base from your menus, which do you think is more suited to use palayok both in cooking and serving food?

The study was conducted in the five selected restaurants that were utilizing *palayok* in cooking. There were total of 150 participants from this study. There were thirty (30) participants for each five (5) selected restaurants.

Data Analysis

To determine the level of awareness the researcher utilized 5 point Likert scale

To answer the survey questionnaire:

Mean score	Likert scale	Interpretation
5.00 – 4.20	5 – highly aware	very high
4.19 – 3.40	4 – most aware	high
3.39 – 2.60	3 – Aware	moderate
2.59 – 1.80	2 – somewhat aware	low
1.79 – 1.00	1 – not aware	very low

Results and Discussion

1. Profile of the customers of the five selected Restaurants

A. According to Age

Result – 21 – 30 years old got the highest percentage

51 – 60 years old got the lowest percentage

Age of the respondents doesn't matter craftsmanship (2015) Mystique Paula Wolfert wrote her obsession about clay pot at the age of 19 years old. The awareness of the age 21 – 30 years old were based on the information handed down from generation. Kumar (2017) Aged like his grandmother used clay

pot in storing water and it is healthy when used in cooking. He added it is more better than steel, plastic and glass.

B. Sex

Based from the data presented, majority of the respondents were female while male bracket has the least number of respondents.

According to Multimedia Archives eServices (2018) The Skill of Traditional Clay Pot Making in Kgatlang District, “Earthenware pottery-making skills are practised among the Bakgatla ba Kgafela community in south-eastern Botswana. The women potters use...” women in Botswana use varipus material in making clay pots, the article shows that way back or even in different countries women are more aware regarding pottery and especially the clay pots. Can Stock Photo (2018) Potter makes A Clay Pot Stock Photo, in which photos have shown or illustrated by the photos given where women holds clay jar while man puts clay pot to the shelf. The photos show that women are more into pottery than men who just use them to stock them in a shelf.

C. Educational Attainment

Based from the data gathered college level got the highest percentage in terms of educational attainment.

During the time of data gathering since it was done accidentally most of the participants are college level. They are all aware all about *palayok* since some of them owns one and they are familiar with *palayok*. still have specially those who lives from the rural area. The market manila.com conduct a survey regarding cooking and serving Filipino food in *palayok* he was amazed that 45 % of his readers wants such experience he shared. His article were being followed on line thru marketmanila.com. Most of the ideas of cooking palayok were acquired thru social media. (GMA NewsYouTube - Feb 17, 2014)

2. Mean Response Level on the Awareness of using Palayok base from the 5 selected Restaurants

Factors	Mean	Interpretation
1. Health & Nutrition	3.96	Most aware
2. Quality of Food	3.86	Aware
3. Cultural and Ethnicity	3.68	Aware
4. Benefits of using Clay pot in cooking	3.91	Most Aware
Grand mean	3.85	Aware

According to Food nDTV (2017), Benefits of using clay Pots in cooking, Ayurveda Specialist at Dr. Vaidya's, Dr. Surya Bhagwati, "cooking in a clay pot not only has a variety of health benefits but also makes for an easier cooking process and in the end, a more flavorful and nutritious dish. She added that the advantage of cooking from claypot compare with other utensils is the simplicity and improve the taste of food.

3. *Advantages of using palayok*

Mean Response on the Level of Awareness on the Advantages of using Palayok in Cooking

Indicators	Mean	Interpretation
a. Clay pots help meat to be Moist and tender	3.96	aware
b. The usage of oils and fats can be lessen	3.84	aware
c. Claypots are attractive for both cooking and serving	3.96	most aware
d. Claypot prevents potential high risk compare with metal cooking equipment	3.87	aware
e. Claypot can be long lasting if Taken properly	3.87	aware
f. It is environmental friendly	3.94	most aware
g. Claypots are inexpensive and easily Available	4.0	most aware
Total Mean:	3.92	most aware

The result of the study participants from the 5 selected restaurant were most aware to the advantages of cooking using palayok.

According to Eucharia Onyeka, a Professor of Food Chemistry and Nutrition, in her inaugural lecture entitled: "Food Security: Concerns and Comforts in Food Processing" also warned that aluminum cooking pots are not good for health reasons. According to her, "Aluminum is regarded as a macro toxin agent because its salt can be absorbed by the intestine and accumulated in various human tissues including bone, liver, parathyroid and can lead to nutritional disease such as cardiovascular disease, obesity and diabetes"

4. *Effectiveness of Using claypot in cooking*

Mean Response on the level of awareness on the effectiveness of using Palayok in cooking

Statement	Mean	Interpretation
a. Allows moisture and heat to circulate easily	3.86	aware
b. Keeps the water cool by allowing the heat to escape	3.75	aware
c. Good for slow cooking	3.82	aware
d. Cooking in claypot retains the temperature for a longer	3.85	aware
Total Mean	3.85	aware

Data shows that the participants were all aware of the effectiveness of clay pot in cooking.

According to Jennifer Swartvagher, Foodal (2015), “Meals made in a clay pot are very easy to prepare. By enclosing your meal in a porous clay container that has been soaked in water, you ensure that the food’s natural juices, as well as all of the vitamins and minerals, are retained.” As to what she said in her blog regarding clay pot you can see that she very much appreciates and share how clay pots are effective to use.

The porosity and natural insulation properties of clay causes heat and moisture to circulate throughout clay pots. The advancement of technology indeed make the life of the people easy. Today cooking provides with various modern kitchen utensils. From the Article entitled Clay Pot Cooking: Preserve and Enhance The Nutrition In Your Food, the author conclude the serious problem with the modern cooking utensils. (Bodke 2016). He pointed out that; nutrients are preserved since clay is porous, moisture and heat circulate evenly. Claypots takes longer time to heat than metal pots.

An experiment was conducted to prove the retention of nutrients of using clay pot compare with pressure cooker. Researchers at the CDRI (Central Drug Research Institute) Lab in Lucknow, India have done a case study on Clay Pot cooking using (daal) curry lentil . They both compare the nutritional value and findings shows that, lentil curry cooked in pressure cooker only 13% of the original micronutrients left base from the raw lentil curry, while the daal cooked in claypot , 100% of the micro nutrients which originally present from raw daal were found. It only shows that from the utensils like pressure cooker the nutrient were not preserved. The alkaline nature of clay can interacts with the acidity and it neutralizes the ph balance, which means it can protects one’s body from diseases like cancer. The cancer cells may develop from acidic environment.

The use of claypot in cooking requires less oil, clay has a natural non-stick property due to the moisture that eliminates the addition of oil in cooking, the food can be cooked from its natural juices.

The environmental benefit of claypot, clay is an environment-friendly substance. Careful storage and uses can make claypots last its uses.

Focus Group Discussion

Since the result of the study were positive, that the participants were aware of the advantages and effectiveness of the *palayok* used in cooking food, how restaurants will be utilized this concept of *palayok* from their establishments. The researcher is presenting a transcript as a result from the Focus Group Discussion.

1. How clay pot can contribute in the enhancement of Filipino Cuisine?

- *I read from my history subject about cooking and palayok is always an example to describe Filipino families.*
- *I enjoy food served in Palayok*
- *It is Heirloom experience*
- *Best in serving kare – kare and bulalo*
- *That describe a true Filipino cuisine*

2. How do you promote palayok in your respective food establishment?

- *Show a smile when staff served food using palayok a sign of Filipino hospitality*
- *Creates homely feeling like lutong bahay*
- *Vibrant native Filipino theme and music paired with food container made out of palayok*
We can inform customer's the health benefit of palayok
We can put into frame display in every corner of the establishment using "bakit palayok" (why palayok ?)
- *Put a catchy tagline for each palayok for the promotion*

3. Base from your menus, which do you think is more suited to use palayok both in cooking and serving food?

In restaurant business we always want satisfaction from our customers. Most of the dishes served in all of the establishment here were using palayok since it promotes our business. We want to serve all our food in palayok for economical reason. Most food served with stock are; bulalo, nilaga, and sinigang and even Kare – kare were served and cooked in palayok.

We both served and cook food in palayok because it retains the temperature of the food. Since our establishment is native we use palayok as a container and served it at the same time.

Conclusion

The study presented the following and interpreted data from the participants of the study

- were diners from the selected restaurant specifically from Tagaytay. The number of participants were 150 and it was selected from the five restaurants where research was conducted.
- That the researcher utilize both instruments survey questionnaire and interview.
- Result shows that most of the participants were all aware of the advantages, health benefit and effectiveness of using palayok in cooking. The highlight of the literature shows most of the benefit of claypot in cooking. It was an added information and contribution to the reader of the study.

Recommendation

Filipinos are much aware of the palayok in cooking , just like other culture both have different technique of cooking food in clay pots. There are claypots that doesn't need to soaked whenever it will be used these are the fully finished and done burnishing. There are unfinished that needs to soaked each time before use. Some are unfinished and must be soaked in water for 30–45 minutes before each use to avoid cracking. The design and shape of the pot differ slightly from one culture to another to suit their style of cooking. The cooking from claypot shows many advantages, however there are varieties of claypot that will be best for cooking. When it comes to non toxic cookware, one of the best ideas is the old one: Clay pots and casseroles, takes long time in cooking to absorb heat. But once they do, they spread that heat evenly throughout the clay pot body and releases it just as slowly to the food cooking within. This allows for the flavors of a dish to build slowly, for spices penetrate more deeply, and for meats, even the tough cuts, to break down into succulent pieces. This also helps the food more retain nutrients. For the restaurants who wants to invest from cooking in claypot distinctively it provides good profits on their part, however there must be time element involve. Storage of claypot must be given proper attention that it could easily break when not properly used and stored.

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