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CUSTOMERS' SATISFACTION ON THE USE OF LIQUEFIED PETROLEUM GAS IN NAVAL, BILIRAN

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ABSTRACT

This study aimed to determine the customers` satisfaction on the use of LPG in Naval, Biliran. Specifically, it sought to determine the profile of the respondents, the reasons they used it, the problems they encountered and the satisfaction level in terms of price, quality, product availability, performance of the employees and employee-customer relationship. It is a descriptive design with a survey questionnaire as a main tool in gathering the data from 50 respondents. Most of the respondents were at age ranging 45-55 years old, females, married, college level, Roman Catholics, plain housewives, and with monthly income ranging P 5,000 – P 15,000. The reason for using LPG was, it was used for cooking. The problem encountered was, it could lead to an explosion. The satisfaction level in terms of quality and availability of LPG product and performance of the employees were described as very satisfied. While satisfaction level in terms of level of price and employee customer relationship were described as satisfied. The LPG dealers may consider the need of the customers who were mostly plain housewives; maintain a safe, clean and convenient place to attract the customers to buy the product; ensure the safety of LPG; set the price that it may attract the customers to buy the product; ensure the features be the same of that in reality; improve the service delivery; maintain the performance of their employees towards the customers; and improve the employee-customer relationship.

Keyword: customer; satisfaction; use; lpg; naval, biliran

1. INTRODUCTION

LPG stands for liquefied petroleum gas which is flammable gas used for several of the purposes all over the world as a fuel in the vehicles and several of the chemical industry where the flammable gas is required. Liquefied Petroleum Gas (LPG) is increasing and becoming the preferred choice of fuel in the world. The increase in patronage could be attributed to its affordability, efficiency and environmental friendliness and is used widely in household kitchens, industries and commercial establishment. It is known to be the most useful and effective energy alternative for domestic as well as business use (Dhanabhakyam, M. & Sumathi, T. (2014).

LPG`S domestic user can never be ignored. It has played a revolutionary role when it comes to changing the face of domestic fuels used for heating and cooking. In India, LPG for household consumption is early 89% of total LPG off-take. Moreover, in India, the consumption of LPG for the year 2011-2012 is projected to be more than 16.5 MMT (million metric tons) as envisaged in vision 2015 document of ministry of Petroleum and Natural Gas. On the other hand, there are still many rural areas where they have on awareness on use of LPG for domestic purpose. In developing countries, the main benefits of LPG are in helping people to switch from unsustainable biomass use to a clean and safe cooking fuel. This provides enormous health benefits helping to avoid the 1.6 million deaths per year from respiratory problems caused by smoke and other pollutant released by inefficient biomass in enclosed burning in enclosed places.

With the use of LPG, it releases women and children from the drudgery of collecting firewood and health problems associated with carrying heavy bundles long distances. Its main domestic uses are with respect in lighting, refrigeration, cooking and most of all heating. It is good for powering standalone stoves and huge cooking stoves. It has been found to be cost effective and hence is used in large scale cooking.

This study was conducted because the researcher wants to know the attitudes of the customers relative to the LPG`S performance, to know if the consumers are satisfied in the use of LPG, and if satisfied, to determine their satisfaction level in the use of the product and the services provided by the suppliers.

2. REVIEW OF LITERATURE

This section presents the related literature and studies which are related to the present study so that the understanding of this research may be enriched.

Vinayagamoorthy et al., (2007) in their study entitled, "Study on Service Quality Perception of Domestic LPG", stated that the service marketers have really understood that competition can be well managed by differentiating through quality. Significance of service lies in customer service management. In this the competitive environment, service quality has become the success mantra in all service sector. Keeping this in mind, this study has been conducted at Salem City to identify the service quality of Indane gas. The result indicates that customers are not highly satisfied with the service provided by the Indane gas. So the company took some serious action to improve the service quality.

In similar vein, Young et al., (2009) in their study entitled "Sustainable consumption: green consumer behavior when purchasing products, concluded the green consumers' decision-making process when buying a technology-based product. The most common green criteria that their interviewees mentioned when they were deciding which consumer electronics products to purchase were mainly what could be classified as: 1. Product environmental performance (energy efficiency, durability, water consumption, LPG conversion, fuel type, fuel consumption and energy ratings); 2. Product manufacturing (recycled material content, chemical content, and reparability); 3. Second hand availability.

Likewise, Anyon (2009) in his report entitled, "LPG Gas: healthy energy for a changing World", concluded that, "Making "clean fuel" choices can directly help to improve the wellbeing of whole communities. Improvements in public health flowing from the use of cleaner fuels not only reduces the cost of providing health care and social services, but also contributes to the broader economy by helping to avoid the impacts of diminished productivity. Overall, LP Gas rates very highly and gives little or no ground to any others in the table, across all of the features considered to be greatest importance in a general-purposes fuel. With its intrinsically clean burning characteristics, LP Gas offers a practical avenue towards cleaning up there we breathe. As well as outperforming most traditional fuels, from a health perspective, LP Gas is readily available, convenient and is frequently a lower cost alternative to other energy sources.

Also, Saraf et al., (2009) in their study entitled "Comparative Emission Analysis of Gasoline/LPG Automotive Biofuel Engine" discussed about LPG emission. As LPG is stored under pressure, LPG tank is heavier and requires more space than gasoline tank. There is reduction in power output for LPG operation than gasoline operation. LPG systems requires more safety. In case of leakage LPG has tendency to accumulate near ground as it is heavier than air. This is hazardous as it may catch fire. LPG has lower carbon content than gasoline or diesel and produces less CO2 which plays a major role in global warming during combustion.

Johnson et al., (2010) in their article, "Clearing the air: black carbon, climate policy and LP Gas", concluded that, in the global debate about how to respond to climate change, BC emissions are just beginning to come to the attention of both energy stakeholders and policy makers and this study analysis points to an emerging understanding of BC as one of the key causes of global warming. Indeed, as in noted above, many scientists now rank BC second only to CO2, as the world`s primary warming emission.

Johnson & Atlantic (2010) in their study, "Substituting LP Gas for Wood: Carbon and Deforestation Impacts", concluded that, by 2015, 445 million people will convert some of their biomass consumption for cooking to LP Gas, by 2030 another 730 million people will follow suit. But, rather than shifting all cooking to 180 kg LP Gas/ household – year, they would shift part of it to LP Gas, 110 kg/household year. Using the same 50/50 split of product and residue, this would spare 440,000 hectares/year of forest by 2015.

Mekherjee (2010) in his article entitled, "Distribution & Retailing of LPG in India", concluded that they have seen the contrast between the different market segments prevailing in Indian LPG industry. Thee saw how the domestic segment is quite different from its

counterparty industrial and bulk segment, be it the implications of subsidy, demands of users or the interference from the government. Further, they studied the supply and logistic involved in LPG distribution and how the number of agencies in a region are optimized to reduce the deadweight loss to the society. We had also focused on the marketing strategy which we found to be difficult or at least peculiar, due to the fact that customer couldn't see the product which makes it by large homogenous. Lastly, we dealt with the scope of growth for LPG in Indian market and threat from its close and worthy substitute.

Cavalcanti Sa De Abreu & Lins (2010) in their study titled, "A Demographic Analysis of impacts of diminished productivity. Overall, LP Gas rates very highly and gives little or no ground to any others in the table, across all of the features considered to be of greatest importance in a general-purpose fuel. With its intrinsically clean burning characteristics, LP Gas offers a practical avenue towards cleaning up there we breathe. As well as outperforming most traditional fuels, from a health perspective, LP Gas is readily available, convenient and is frequently a lower cost alternative to other energy sources.

Priyan & Karthihaiselvi (2010) in their study, "Customers' opinion towards Indane gas dealers", found that, most of the customers are of the opinion that there is a delay in providing cylinder. It is suggested that there should be one more dealer in Sivakasi so as to distribute gas cylinder quickly. Majority of the customers prefer indene gas for the reasons like economy, convenient, time saving and cleanliness. As LPG has been move towards buyers' market, the dealer should provide better customers service that his competitors in order to have repeated sales, increased clientele and eventually sustainable development.

Inkoom & Biney (2010), in their study, "The Potential of Liquefied Petroleum Gas (LPG) as a Viable Energy Option for the Industrial Sector in Ghana", concluded that, the problems of LPG used are not confined to just one constraint, although the mixture of constraints that firms face varies from one industry to another. Some of the major factors hindering LPG use in the country are low level of awareness, supply constraints, cost of initial installation, volatile LPG prices, insufficient policy, and institutional framework. There are gains to be made in the industrial utilization of LPG burns cleanly without smoke or residual particulate matter, thus avoiding the serious health hazards other fuel might cause to the health of the workers. Manufacturing plants running of LPG produces much less carbon dioxide that the other conventional fuels. The use of LPG would improve the country's energy mix and minimize its dependence on RFO and other polluting fuels. What is not clear is whether environment and safety benefits, alone, give the manufacturer enough incentive to use LPG. Government support for the use of the LPG as should be based on the beneficial environmental impact of LPG, as compared to alternative fuels.

According to the report, ARGUS LPG World, News, Prices and analysis (2011), stated that, India is making a renew attempt to crub the abuse if heavily subsidized fuel such as LPG. The LPG Industry finds itself as often happens with global political shocks, on the wrong side of the political turmoil. International LPG prices look as they will bulk the normal spring trend and push sharply higher. They have little choices, given the surge in crude prices. LPG prices has surge already begun. So the LPG does not appear to have been lost to the Mediterranean market. The LPG industry must brace itself for a period of extreme price volatility.

Chikwendu (2011) in his study entitled, "Change-over from Kerosene to LPG use", concluded that, "Making LPG accessible to all through making it available across socioeconomics groups can be achieved by locating LPG depots strategically across the country to assure uninterrupted product availability and price stability. Krishnan Kutty (2012) in his seminar presentation entitled, "Oil & Gas for Sustainable Growth" R&D Intervention in LPG", he concluded that, consequently, the domestic accident due to LPG has been minimized to an insignificant level 0.23 ppm making LPG the safest domestic fuel.

Jarurungsipong & Rakthum (2012) in their study, "Price Controls Support LPG Fuel Consumption" argues that, LPG consumption will be significantly reduced if the government allows the retail prices of LPG in all segments to rise to market price levels.

Patil (2012), conducted a study entitled, "Customer satisfaction on Bharat Gas Agencies in Coimbatore", concluded that, the gas agency are well established in providing satisfactory after sales service to its customers. By seeing the observations, most of the customers are having positive perception towards that particular gas agency and are satisfied with its services such as availability of timely and safe delivery, staff support, trained mechanics etc.

Purvin & Gertz (2013) in his articles, "World LPG Market Outlook", stated that, over the past several years, the international LPG industry has seen a gradual shift in world trade patterns. Demand in the East of Suez market has risen faster the LPG supplies in the region

According to OGJ editors, (2012) in their article entitled "LPG Market Dynamics on Brink of Change", the report says, however, that scenario has not in fact occurred. Only Qatar has produced LPG volumes. For various reasons, others have not. The very large gas

carrier (VLGC) fleet has recently been in surplus because of over-ordering, the study says. But now, fleet demand is beginning to catch up with supply. FGE has seen a large improvement in utilization over 2010-12, from 82% to 90%. The current new building delivery program may prevent it from improving for a while, but the VLGC balance and market rate should improve by 2015, says the study, as longer-haul LPG exports to Asia from the US gulf increase.

Asamoah (2012) in his study entitled "Analysis of Liquefied Petroleum Gas (LPG) Shortage in Ghana: A Case of the Ashanti Region" concluded that, main producer and supplier of LPG, TOR, contributes extensively to the shortage of LPG in the market due to infrastructure limitations. It is thus recommended that the government secure private sector participation in the mid-stream refining segment. Private sector investors must be encouraged by the government to make long-term investments in developing the storage and transmission capacity of LPG within the country. The fact that LPG shortage is not experienced everyday throughout the year means that there comes a time when supply of the product either exceeds or equilibrates demand. This invariably means that a constant supply to the market by TOR at its current capacity is enough to meet the demand of LPG. It is thus recommended that TOR ensures that vessels with LPG berth weekly to deliver products so as to regulate the shortfall from TOR's production. This will increase the local stock levels for LPG. Also, the current system whereby consumers send their empty containers to refilling stations to fill them could be improved upon. Consumers should have the option of purchasing already filled cylinders at shops whiles they exchange their empty containers. This is practiced in other countries like Cameroon and Senegal where marketing companies own the cylinders (similar to the soft drinks distribution system that exists in Ghana). When this system is adopted, it would indirectly increase the overall capacity of LPG in the country; which will consequently reduce the storage constraints associated with storage at TOR. Although the supply of LPG is faced with many challenges usage of LPG as a clean fuel to save our forests, it equally campaigns for the conservation and judicious usage of the product by consumers. LPG as a source of fuel is increasingly becoming popular among Ghanaians. This is because it is affordable, clean and efficient in the distribution of goods and services. The increase in consumption of LPG would not end anytime soon, it is therefore imperative on all stakeholders to ensure that the excessive demand of the product does not result in shortage. As such there is the need for the continuous supply and sustainability of LPG to every area of the populace. There is no doubt that improvements in the supply chain of LPG would ensure that the product is always available for consumers.

Dr. C S Yatnalli Bhasavaraj, H. Huggi, D V Hire Math (2012), conducted a study entitled, "A study on costumer awareness and satisfaction towards LPG in Hirekerur Taluk (Karnataka)". According to their study they have concluded that the company should follow the following tips to improve the quality of service 1.) Periodical servicing of gas store should be conducted to ensure safety and economy in the use of LPG 2.) Awareness about safety and fuel saving should be created among the LPG users through mass media like TV advertisement newspaper, magazines etc.; 3.) All the LPG companies should restrict the maximum number of customer for each distributor after the maximum number of the customer oil company should allot another distributer for the place.

S.S Tarapore (2013) in his article "LPG Subsidy: Twists and Turns in the Tale", found that the initial mistake in phasing out or reducing the LPG subsidy was the introduction of multiple pricing. The problem was compounded by linking the number of cylinders used with the subsidized price. More appropriately, the subsidy should have been linked to the merit of the consumers and not the cylinders consumed. By linking the subsidy to the number of cylinders consumed, the subsidy got directed to those who clearly do not deserve the subsidy. The task of dealing with 140 million LPG connection was not clearly perceived by the policymakers. The brunt of the pressure fell on the final government barraged the distributors with a proliferation of instructions. The nation needs to salute the large amount of distribution who have borne the burden of immense pressure with great courage and fortitude. It is fortunate that the distributors and the Oil Marketing Companies (OMC) had very efficient computerized data systems which could track all customers. While it was recognized that the LPG under-recoveries were as large as Rs 32,000 core per annum, political economy constraints seem to have forced the government to increase the number of subsidized cylinders from six to nine per year. The upshot of this is that despite all the turmoil of the past six months, there has been virtually no reduction in the LPG subsidy and on present reckoning the subsidy bill could even swell.

3. OBJECTIVES OF THE STUDY

The study aimed to determine the consumer's satisfaction on the use of LPG on Poblacion, Naval, Biliran. Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
    - 1.1 age;
    - 1.2 sex;
    - 1.3 civil status;
    - 1.4 education attainment
    - 1.5 religion;

1.6 occupation; and,
1.7 monthly family income?
2. What are the reasons the consumers uses LPG in their household?
3. What are the problems encountered by the consumer in using the product?
4. What are the satisfaction level of the consumers in terms of:
4.1 price;
4.2 quality of the product;
4.3 availability of the product;
4.4 performance of the employee; and
4.5 employee-customer relationship?

Framework of the Study

This study valued the following theoretical and conceptual framework as its strong foundations of this research.

*Theoretical Framewor*k. This study is anchored on theory by Festinger (1957) also called as Dissonance Theory.

Dissonance theory posits that consumers make some kind of cognitive comparison between expectations about the product and the perceived product performance. This view of the consumer post-usage evaluation was introduced into the satisfaction literature in the form of assimilation theory.

Scope and Delimitations of the Study

The study was limited to the users or consumer of LPG in Naval, Biliran for the year 2018. It focused on the customer satisfaction on the use of LPG in terms of the price, quality, availability of the product, and employee-customer relationship. The respondents are residents in Naval, Biliran covering the two barangays: Brgy. Smo. Rosario and Brgy. P.I Garcia which households use the LPG product.

4. METHODOLOGY

This segment of the study discussed the research design, research locale, research subjects, research instrument, data gathering procedure, data scoring, and statistical treatment of data.

Research Design

A descriptive methods of research was used in the study. This was conducted through a survey type questionnaire which involves the collection of data from the selected respondents in a single period of time. A descriptive method of research is a fact- finding study with adequate and accurate interpretation of findings.

Research Locale

The study was conducted in the municipality of Naval, specifically in the two barangays in Naval, Biliran: Brgy. P. I. Garcia and Brgy. Smo. Rosario. Naval is the capital town of the eight coastal component municipalities of the island province of Biliran. It comprises a total land area of 10,824 hectares (26,750) and a population of 55,000 people. As an economic booming town, it is the center of trade and commerce of the entire island province, as well as its neighboring proximate municipalities that are under the jurisdiction of the Leyte Province.

Research Subjects

The respondents of the study were the residents in Naval, Biliran having an LPG in their respective houses. There were a total of 50 respondents from the two barangays: Brgy. P.I. Garcia and Brgy, Smo Rosario. The sampling of these respondents was based on their willingness to answer the questionnaire and who are LPG users. The study have chosen the two barangays, Brgy. P.I. Garcia and Brgy, Smo Rosario, Naval, Biliran because it found to be the nearest to the dealers of LPG.

Research Instrument

The research instrument used in the data gathering was a survey questionnaire as a main tool in gathering the data, prepared by the researchers based on the objectives of the study. To facilitate the preparation of the questionnaire, the research made use of materials such as books, unpublished reports and surfing the internet. There were four parts of the questionnaire.

Part I includes the assessment of the demographic profile of the respondents in terms of their age, sex, civil status, educational attainment, religion, occupation and monthly family income. Part II deals with the question with regards to the reasons why the respondent buy the LPG in the rank of order. Part III also deals with the question on the problem encountered of the respondents when using an LPG in the rank of order based on what they experienced. Part IV consists of the statements that will determine how satisfied the respondents in terms of price, quality of the product, availability of the product, performance of the employee and employee-customer relationship using the Likert's Five Points Scale.

Data Gathering Procedure

Before the survey was conducted, the researcher sent a letter of permission to the Municipal Mayor. After the approval, the questionnaire were distributed to the target respondents and the same were gathered and retrieved on the same day. The data was presented into tabular form, computed, analyzed, and interpreted.

Data Scoring

The Likert's Five Points Scale was used in analyzing the satisfaction level of the customers on the use of LPG in terms of price, quality, service of the employee, availability of the product and the customer-employee relationship, as follows:

Scale	Rating	Description
5	4.21 – 5.00	Very Much Satisfied
4	3.41 – 4.20	Very Satisfied
3	2.61 – 3.40	Satisfied
2	1.81 – 2.60	Barely Satisfied
1	1.00 – 1.80	Not Satisfied

Statistical Treatment of Data

The accomplished questionnaires were treated as follows:

To find the profile of the respondents in terms of age, sex, civil status, educational attainment, religion, occupation and monthly family income, the frequency and percentage was used to obtain the data using the formula as follows:

1. Percentage

$$\text{Percentage} = \frac{f}{n} \times 100$$

Where; %=Percentage

f=Frequency; and

n=Total Number of Respondents

To determine the satisfaction level of the consumers in terms of price, quality, service of the employee, availability of the product and service of the employee, the weighted mean was used.

2. Weighted Mean

$$WM = \frac{\sum fw}{n}$$

Where; WM=Weighted Mean

$\sum$ =Summation

f =Frequency

w =Weight

n =Total Number of Respondents

Ranking was also employed in determining the reasons why consumers buy the LPG and the problems encountered in using it.

5. RESULTS AND DISCUSSION

This chapter of the study presents the results and discussion of findings of data gathered. Said results and discussions were arranged and presented based on the research objectives.

Socio-Demographic Profile of the Respondents

Table 1 deals with the socio–demographic profile of the respondents in terms of age, sex, civil status, educational qualification, education, occupation, and monthly family income of the respondents of the study.

Table 1: Socio-demographic Profile of the Respondents

Age	**f**	**%**
Below 25 years old	14	28.00
25 -35 years old	7	14.00
35 – 45 years old	2	4.00
45 – 55 years old	16	32.00
Above 55 years old	11	22.00
Total	**50**	**100.00**
Sex	**f**	**%**
Male	17	34.00
Female	33	66.00
Total	**50**	**100.00**
Civil Status	**f**	**%**
Single	17	34.00
Married	29	58.00
Widow/widower	4	8.00
Legally Separated	0	0.00
Total	**50**	**100.00**
Educational Qualification	**f**	**%**
Elementary Level	1	2.00
Elementary Graduate	4	8.00
High School Level	6	12.00
High School Graduate	7	14.00
College Level	19	38.00
College Graduate	13	26.00
Total	**50**	**100.00**
Religion	**f**	**%**
Roman Catholic	38	76.00
Islam	0	0.00
Christian	7	14.00
Iglesia Ni Cristo	2	4.00
Seventh-day Adventist	1	2.00
Protestant	2	4.00
Total	**50**	**100.00**
Occupation	**f**	**%**

In practice of a profession	4	8.00
Fisherman	1	2.00
Farmer	2	4.00
Plain Housewife	34	68.00
Laborer	3	6.00
Pastor	2	4.00
Vendor	4	8.00
Total	**50**	**100.00**
Monthly Family Income	**F**	**%**
Below P5,000	0	0.00
P5,000 – P15,000	38	76.00
P15,000 – P30,000	9	18.00
P30,000 – P50,000	3	6.00
Total	**50**	**100.00**

Age. Table 1 revealed that a frequency of 16 or 32% of the respondents were between 45 – 55 years old. In a way, this is the right age of the people who should have stable lives with their family. Moreover, people at this middle age are still active and are engaged in working.

Sex. The table also revealed that a frequency of 33 or 66% of the respondents were female. This implies that the users of LPG comprises mainly of female because they are the one who are left at home, doing groceries, purchasing the household's needs including the LPG for cooking purposes.

Civil Status. The table also revealed that majority or 58% of the respondents are married. As married person, the person would like to make cooking easier and faster. This could be made possible through the use of LPG.

Education. Table 1 revealed that a frequency of 29 or 54% of the respondents were college level. This is the educational attainment of most plain housewives whose financial sources were mainly derived from their own husbands which makes them capable in buying things they want and need. One of these needs is to have an LPG which become a necessity for working couples so that the food preparation will be done in shorter period of time.

Religion. The table also revealed that a frequency of 38 or 76% of the respondents were Roman Catholics. This is due to the length of time that Naval town was under the Spanish era where Catholicism was being introduced by the Spaniards.

Occupation. Table 1 revealed that a frequency of 34 or 68% of the respondents were plain housewives. As such, they were the one responsible for the household's chores like taking care of the house as well as the daily preparations of foods in the kitchen for the family.

Monthly Family Income. Table 1 also revealed that a frequency of 38 or 76% of the respondents have a monthly family income between P5,000 – P15,000 so that they can afford to buy the LPG after buying their other basic needs.

Reasons for Buying LGP

This section presents the reasons of the respondents in buying the LPG. The data is shown in Table 2 in a rank of order.

Table 2: Reasons for Buying LPG

Reasons in buying LPG	WM	Rank
It is clean to use	2.16	5.0
It is safe to use	2.38	3.0
It is convenient	2.36	4.0
It is used for cooking	2.84	1.0
It is environmental friendly	2.40	2.0
LPG is easily available	1.74	7.0
LPG is easy to fill	1.92	6.0
It offers versatile usage of lower cost	1.28	9.0
It is used for heating food	1.52	8.0

Table 2 revealed the foremost reason for buying LPG is that it was used for cooking with a weighted mean of 2.84 or rank 1 among the uses. It means that almost all users use LPG for cooking purposes. The last rank among the reasons is, it offers versatile usage of lower cost with a weighted mean of 1.28. This is very important because most households can use the LPG for other purposes with a lower cost.

Problems Encountered in Using LPG

This section presents the problems encountered in using LPG. Data is reflected in Table 3 in a rank of order.

Table 3: Problems Encountered in Using LPG

Indicators	WM	Description
Delayed supply of LPG	3.26	4.0
Could lead to an explosion	3.88	1.0
Irregularity of prices	2.56	5.0
Less quality of stove, lighter and other related items	3.58	2.0
Unstained services in the outlet	3.34	3.0
AWM		

Table 3 revealed the problems encountered by the respondents in using LPG of which item 'could lead to an explosion' ranks first among the problems of the users. This is because the LPG is susceptible of exploding when there is defect in the tank. There are instances when an LPG cylinder has leakage which would lead to an explosion and causes fire. The irregularity of the prices was the last rank encountered by the respondents. This is because the local markets of LPG have to follow the price measurement in the world market.

Table 4: Satisfaction Level on Price

Indicators	WM	Description
Affordability	3.70	Very Satisfied
Price Fairness	3.26	Satisfied
Economy	3.22	Satisfied
Service Quality	3.72	Very Satisfied
Price Changes	2.96	Satisfied
AWM	**3.37**	**Satisfied**

Table 4 revealed the satisfaction level of the respondents in terms of the price of the LPG. The customers were very satisfied in terms of service quality, and affordability. These variables have weighted mean ranging from 3.72 to 3.70 which means that they were very satisfied. The customers were very satisfied on the product because the price dictates based on the quality of the LPG. Respondents were aware that if price increases, dealers must have to deliver a premium service. It means that the price that is being set and paid by the buyers is of equal value to the service rendered by the dealers. On the affordability of the LPG they were very satisfied because most of the time their income could afford to buy the LPG although it became expensive sometimes due to the movement of the price in the international market.

However, on price fairness, economy and price changes, the satisfaction level has a weighted mean ranging from 3.26 to2.96 or were described as satisfied. This means that the price and the product are fair enough for both the sellers and buyers. Fair price helps to develop customer satisfaction and loyalty. Economy on price brings satisfaction to the customers because they can afford to buy the product.

The average weighted mean was 3.37 or was described as satisfied. This means that the customers were satisfied in terms of the price of the product because they feel they can save the cost.

Table 5: Satisfaction Level on Quality of the Product

Indicators	WM	Description
Features	2.26	Barely Satisfied
Performance	3.82	Very Satisfied
Durability	3.68	Very Satisfied
Reliability	3.46	Very Satisfied
Serviceability	3.54	Very Satisfied
AWM	**3.43**	**Very Satisfied**

Table 5 revealed the satisfaction level of the respondents in terms of quality of the product. The customers were very satisfied in terms of performance, durability, serviceability and reliability of the product. These variables have a weighted mean ranging from 3.82 to 3.46. In terms of performance, customers were very satisfied because the product does what it is supposed to do. In terms of durability, customers were also very satisfied because it can last a long period of time although its tank could be damaged if is not kept in a clean place. In terms of serviceability customers were also very satisfied because the service brought by the product performs and fulfills the needs of the consumers with no hassle and according to what is expected. Moreover, costumers were very satisfied in terms of reliability because it helps always the households especially in cooking.

On the other hand, customers were barely satisfied in terms of its feature with a weighted mean of 2.64, it is because what the features say, sometimes, that it is environment friendly, is not what in reality. The appearance and the components in the sense meet the needs of the consumers but in truth it was not.

The average weighted mean of 3.43 was described as very satisfied. It means that the customers were very satisfied in terms of the quality of the product.

Table 6: Satisfaction Level on Availability of the Product

Indicators	WM	Interpretation
Convenience	3.76	Very Satisfied
Atmosphere/market place	3.70	Very Satisfied
Serviceability	3.64	Very Satisfied
Waiting time	3.22	Satisfied
Access	3.08	Satisfied
AWM	**3.48**	**Very Satisfied**

Table 6 revealed the level of satisfaction of the users in terms of the availability of the product. The respondents were very satisfied in terms of convenience, atmosphere/marketplace, and serviceability with a weighted mean from 3.76 to 3.64. They were very satisfied on the convenience because sometimes they find it easy to get the LPG from the store with little effort or difficulty in purchasing the product. The respondents were also very satisfied with the atmosphere or the marketplace. The respondents were very satisfied also on the serviceability because they have seen the employees servicing the LPG and they were able to accomplish the work within the given time set by the buyers.

On the other hand, the customers were satisfied with the waiting game and access with a weighted mean from 3.22 to 3.08 or were described as satisfied. The customers were satisfied with the waiting time in a way, since the delivery of the LPG is not late from the estimated time it would be delivered although there are circumstances that it was delivered not at the right time. This was due to the factors that impede the transportation of the LPG. With regards to the access, the customers were satisfied in a sense that the LPG dealers have a website although it is not visible sometimes to the customers and their website is difficult to find, their contact information is not disseminated into the customers and only few have known it. Customers are well pleased when there are no barriers to access a service.

The average weighted mean of 3.48 or was described as very satisfied. This means that the customers were satisfied as to the availability of the product since they have not experienced a shortage when they buy the product. The availability of the product has become an increasingly important factor for customers seeking an easy way to purchase the LPG.

Table 7: Satisfaction Level on Performance of the Employees

Factors	WM	Interpretation
Empathy	3.54	Very Satisfied
Assurance	3.48	Very Satisfied
Responsiveness	3.48	Very Satisfied
Reliability	3.62	Very Satisfied
Employee-Satisfaction	3.44	Very Satisfied
AWM	**3.51**	**Very Satisfied**

Table 7 revealed the satisfaction level in terms of the performance of the employees. The efficient service of the employees justifies that respondents were very satisfied in terms of reliability, empathy, assurance, responsiveness and employee-satisfaction. These variables have a weighted mean ranging from 3.62 to 3.44 described as very satisfied. They were very satisfied in terms of reliability in a way they observed the employees were accurate, efficient and effective in rendering service to the customers. On the empathy, they were satisfied just enough to the employee's ability to sense and react to their thoughts, feelings and experiences in using LPG. They were treated well by the employees and were provided an individualized attention with premium service. In terms of assurance, they were satisfied may be because the employees were very knowledgeable and friendly enough to the customer. In terms of responsiveness, the customers were very satisfied with the performance of the employees. In terms of employee satisfaction, the respondents were very satisfied because they were happy and contented to the service rendered by the employees.

The average weighted mean was 3.51 or was described as very satisfied. This means that the customers were very satisfied to the overall performance of the employees.

Table 8: Satisfaction Level on Employee-Customer Relationship

Indicators	WM	Description
Responsibility	3.60	Much Satisfied
Bond to customer	3.18	Satisfied
Customer ambivalence	3.12	Satisfied
Customer involvement	3.28	Satisfied
Employee-Satisfaction	3.30	Satisfied
AWM	**3.30**	**Satisfied**

Table 8 revealed that in terms of employee-customer relationship, the respondents were all satisfied with its responsibility, employee-satisfaction, customer's involvement, bond to customers and customer's ambivalence. These variables have a weighted mean ranging from 3.6 to 3.12 or were described as satisfied.

The customers were much satisfied to the employees' responsibility although sometimes the dealer don't stand on its products and sometimes gives hassles to the customers when a refund or exchange of the defective LPG. The respondents see that the employees sometimes do not give their full capacity to perform their duties and tasks towards the customers. The customers were satisfied to the employee service although sometimes they observe that the employees were not so dedicated with their work. Furthermore, the respondents were also satisfied with the customer involvement since the customer felt that they were more important to the dealers because they were allowed to suggest what is to be done for further improvements.

The respondents were satisfied the employees because there are times that the employees ask question to the customers and talk about things, thus, creating a bond between them. Moreover, with regards to the ambivalence of the customers, they were satisfied since the employees have action towards the attitudes and feelings of the customers about LPG.

6. CONCLUSION

Based from the findings, the following conclusion are dawn:

a) Majority of the respondents were between 45-55 years old, mostly females, married, college level, Roman Catholics, plain housewives, and with a monthly family income ranging from P5,000-15,000.
b) The main reason why respondents use and buy LPG was for cooking purposes.
c) The problem encountered by the respondents in using LPG is that, it could lead to an explosion.
d) The respondents were satisfied on the level of the price of LPG; very satisfied on the quality of the product, availability of the product and the performance of the employees; and satisfied on the level of employee-customer relationship.

7. RECOMMENDATIONS

a) The LPG dealers may consider the need of the customers who were mostly plain housewives.
b) The dealers of LPG may maintain a safe, clean and convenient place for customers to drop by to attract them in buying the product.
c) The dealers may ensure the safety of LPG that it would not leak and lead to explosion.
d) The dealers may set the price in such a way that it may attract the customers in buying the LPG product; ensure what the features say must also be the reality; improve the service delivery; maintain the performance of their employees; and improve the employee-customer relationship.

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