

## **Compliance to Philippine Coast Guard (PCG) Standards Among Motorboats Plying Iloilo and Guimaras Islands: Response to International Sea Safety and Security Requirements**

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**Abstract** The study determined the compliance on standards set by the Philippine Coast Guard (PCG) in the Panay Island, Philippines in response to Sea Safety and Security Requirements (SSSR) among motorboats plying Iloilo and Guimaras Islands, Philippines. Quantitative-qualitative research design was applied in this research. The researchers utilized secondary data and information taken from the PCG Office, Iloilo City. Frequency count, percentage, and rank used as descriptive tools to determine the quantitative data of the study. Interview was utilized as strategy to gather information regarding the compliance of standards among PCG officers and motorboat crew plying Iloilo and Guimaras Islands. Moreover, the study presented the compliance on standards concerning safety and security requirements. The results of the study were used to generate future discussions, talks, and conferences to draw strict compliance as stipulated by the international standards. Data obtained from this study were utilized as basis for policies implementation and monitoring among concerned government agencies on sea security and safety of the passengers and visitors who wish to explore Iloilo and Guimaras Islands in the Philippines.

**Keywords:** *compliance on standards, sea safety and security requirements, motorboats, and PCG (Philippine Coast Guard)*

### **1. Introduction**

The Philippine Coast Guard (PCG, in some parts of this study) is the government regulating agency for motorboats – both recreational and commercial. In this premise, the Coast Guard issues boating safety recommendations and ensures the proper compliance with government boating safety laws and equipment requirements. Every motorboat is responsible for knowing and adhering to Coast Guard boating laws and regulations, and laws specific to the country in which the vessel is registered or operated. This includes carrying at least the minimum safety equipment, registering and numbering of the motor boat properly, and the safe operation of the vessel.

Thus, this paper was conceived to find out whether or not the motorboats plying the waters of Iloilo and Guimaras adhere to policies and requirements imposed by the PCG. To ensure that these motorboats comply to sea safety and security requirements, the researchers deemed it proper to conduct this inquiry.

### **2. Statement of the Problem**

This paper aimed at finding out the compliance to PCG standards of the motorboats plying Iloilo and Guimaras Island. It also looked into whether or not these motorboats adhere to international sea safety and security requirements. This sought to address the following questions:

- (1) Do the motorboats plying the waters of Iloilo and Guimaras Island have available life jackets?
- (2) Do the motorboat operators at least master the basics of seamanship?
- (3) Are the motorboat operators able to take boat safety courses, whether formally or informally?
- (4) Are they knowledgeable of navigational rules?
- (5) Are motorboats equipped with radio and other safety devices?
- (6) Do motorboats have their periodic vessel check up before they are allowed to sail?

### 3. Conceptual Framework

This study looked into the interplay of the variables involved in this investigation. Firstly, the researchers consider the motorboat operators as the core of this inquiry. Their practices as well as the many facets involving their work are the starting point in which all the rest of the study emanate from. The data generated from the motorboat operators were then gauged utilizing the Coast Guard Standards. Then, after finding out their compliance, the implications as response to international sea safety and security requirements were generated. Figure 1 shows the schematic presentation of the interplay of the different variables.

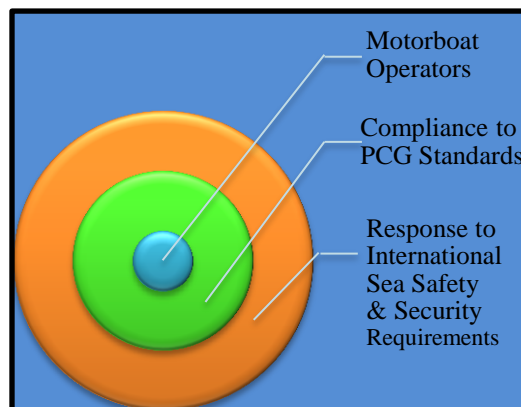


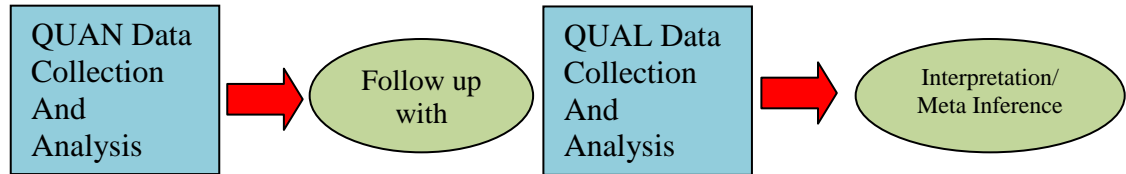
Figure 1. The Schematic Presentation of the Study

### 4. Research Methodology

Mixed method of research was utilized in this paper. It is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth and depth of understanding and corroboration.

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems that either approach alone (Creswell & Plano Clark, 2011).

In this study, the researchers had chosen the explanatory sequential design as one aspect of the mixed method. In this design, methods are implemented sequentially, (QUAN → QUAL). This is used by the researcher if he/s wishes to use qualitative findings to help interpret or contextualize quantitative results. Figure 2 shows the research design.



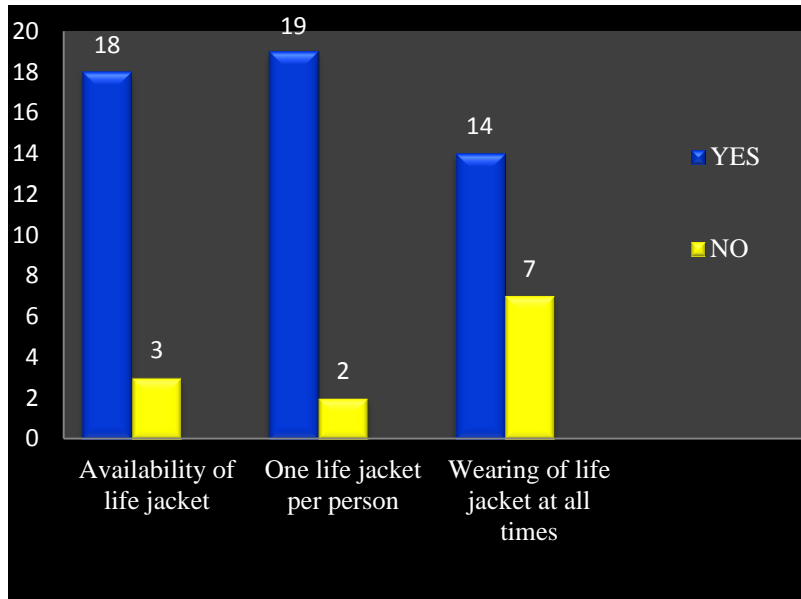
**Figure 2. The Mixed-Method of Research by Creswell (2011)**

## **5 Results**

### **5.1 Motorboats Plying the Waters of Iloilo and Guimaras Island: Availability of Life Jackets**

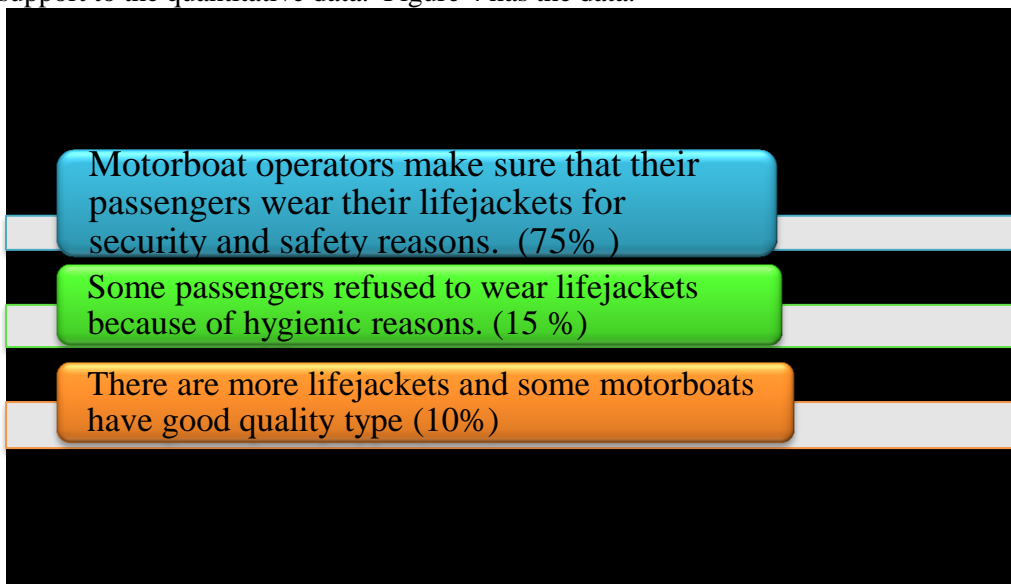
Out of the 21 motorboat operators, 18 indicated “yes” and 3 only indicated “no.” In terms of the ratio of the life jackets per passenger, 19 answered “yes” and 2 indicated “no.” In terms of whether passengers use lifejackets at all times, 14 indicated “yes” and 7 said “no.”

Figure 3 indicated the data.



**Figure 3. Motorboats Plying the Waters of Iloilo and Guimaras Island: Availability of Life Jackets**

The researcher also proceeded to the qualitative data and arrived at the following responses in support to the quantitative data. Figure 4 has the data.

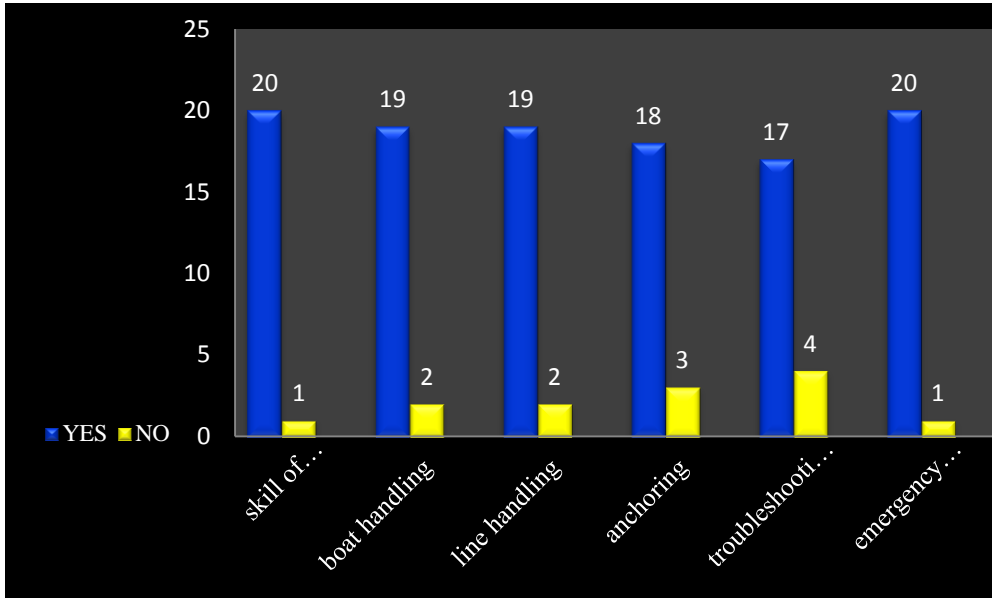


**Figure 4. Observations on the Availability of Life Jackets**

## 5.2 Motorboat Operators: Basics of Seamanship

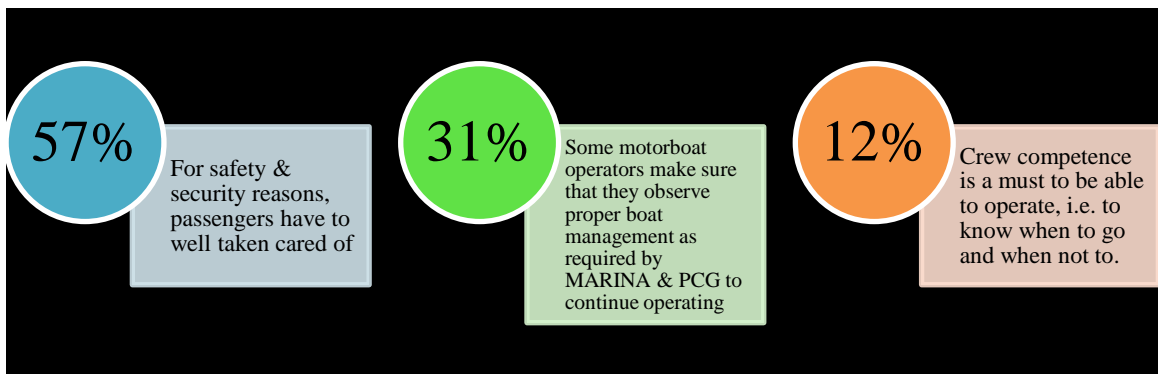
Seamanship is the art of operating a ship or boat. Seamanship means Safety onboard and this is managed through continuous training and implementation of good working practices. The practice of good seamanship should be the goal of all.

When the motorboat operators were asked whether they know their boats or good seamanship in terms of skill of managing a boat and navigation, 20 indicated “yes” and 1 indicated “no,” boat handling (19 for yes and 2 for no), line handling (19 for yes, 2 for no), anchoring (18 for yes, 3 for no), troubleshooting engine problems (17 for yes, 4 for no), and emergency response (20 for yes, 1 for no). Figure 5 has the data.



**Figure 5. Knowing the Basics of Seamanship**

The motorboat owners were also asked their observations and comments about the imperative of knowing their craft, three responses emerged. Figure 6 has the data.



**Figure 6. Observations on the Basics of Seamanship**

### 5.3 Motorboat Operators and Boat Safety Courses

Out of the 21 motorboat operators who were asked whether they had taken formal boating education, 11 indicated “yes” and 10 only indicated “no.” In terms of the basic of seamanship, 11 answered “yes” and 10 indicated “no.” Figure 7 has the data.

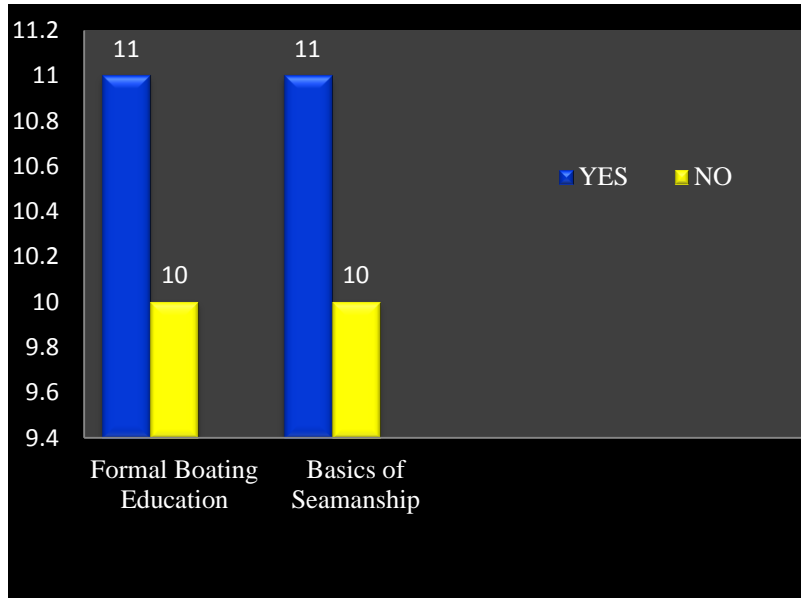


Figure 7. Motorboat Operators and Boat Safety Courses

The qualitative data revealed that the motorboat operators 52 percent of them had formal boating education and know the basics of seamanship. The researchers also gathered their responses and had the following observations as shown in Figure 8.

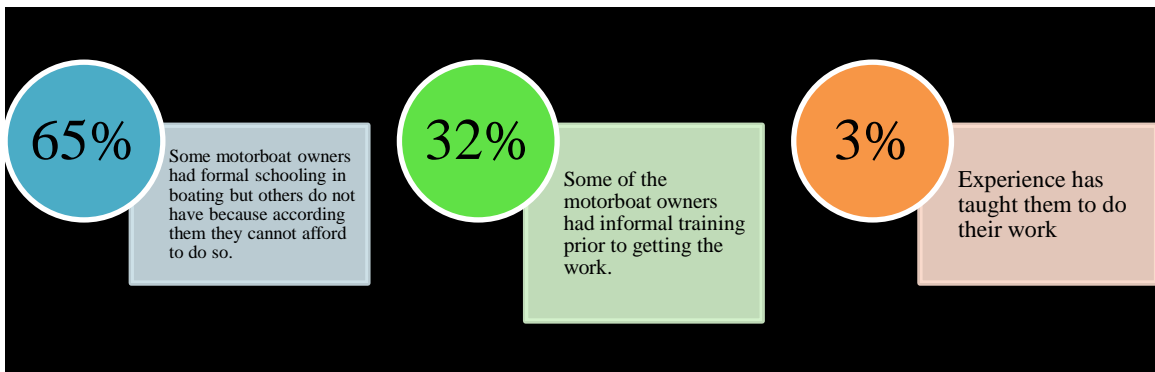
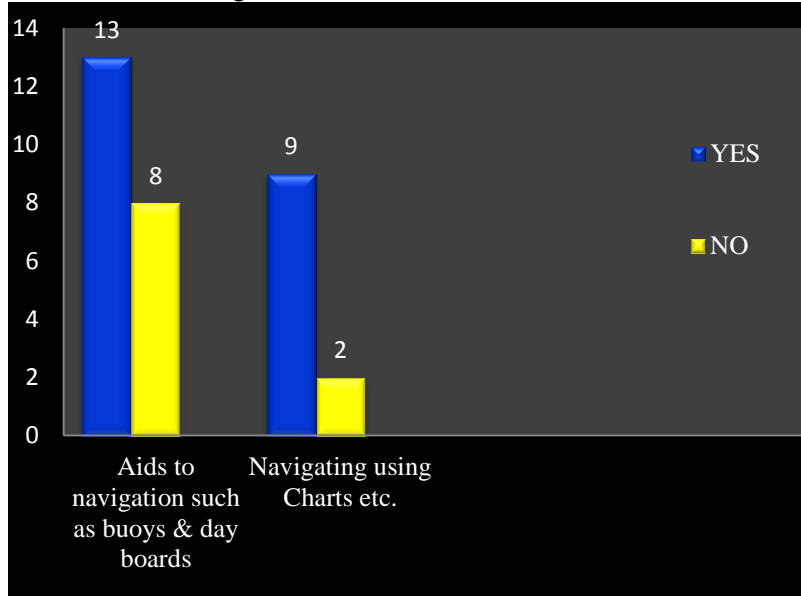


Figure 8. Observations on Motorboat Operators' Boat Safety Courses

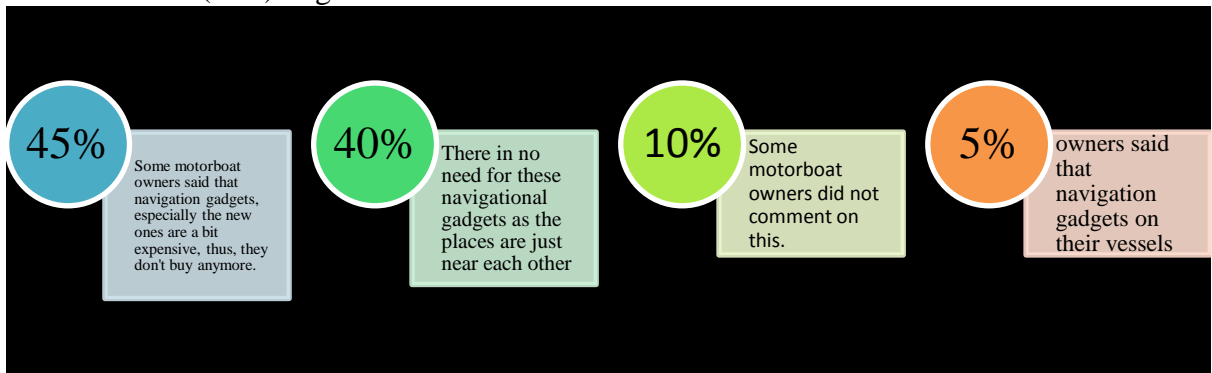
### 5. 4 Motorboat Operators and the Navigational Rules

Out of the 21 motorboat operators who were asked whether they the navigation rules like the aids to navigation using buoys and day boards, 13 indicated “yes” and 8 indicated “no.” In terms of whether they know the navigating gadgets as charts, GPS, RADAR, and a compass, 9 answered “yes” and 12 indicated “no.” Figure 9 has the data.



**Figure 9. Motorboat Operators’ Knowledge of Navigation Rules**

The qualitative indicated that motorboat owners have these gadgets but a bit old already (5%). They also said that the find these gadgets expensive (45%). They feel that motorboats only ply Iloilo and Guimaras thus no need for these gadgets (40%). Other motorboat owners did not comment on this (10%). Figure 10 has the data.

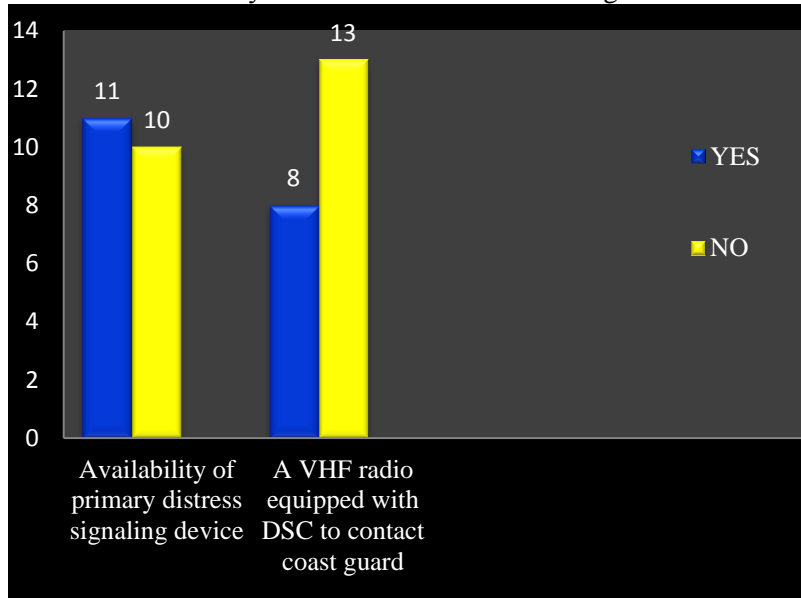


**Figure 10. Observations on Motorboat Operators’ Knowledge of Navigation Rules**

### 5. 5 Motorboats Equipped with Radio and other Safety Devices

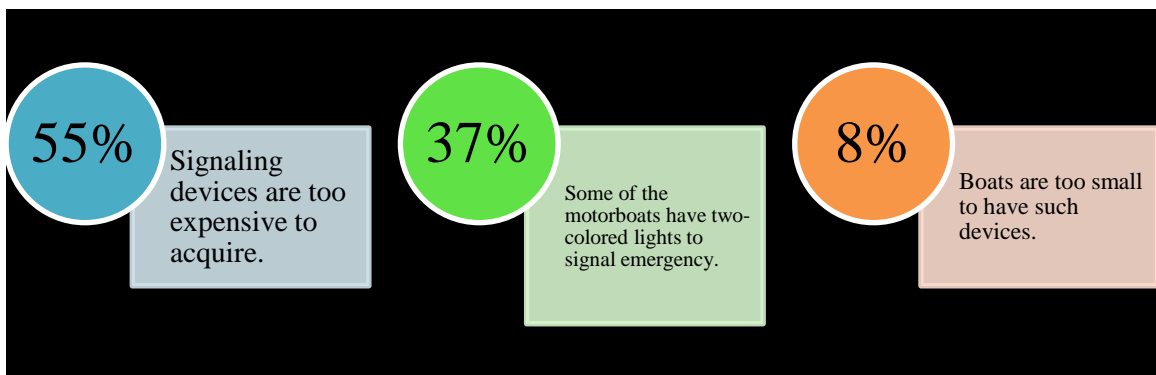
Out of the 21 motorboat operators who were asked whether their vessels are equipped with VHF radio, specifically availability of primary distress signaling device and A VHF radio equipped

with DSC connected to the coast guard for quick emergency response, 11 indicated “yes” and 10 indicated “no” and 8 indicated “yes” and 13 indicated “no.” Figure 11 has the data.



**Figure 11. Motorboats Equipped with Radio and other Safety Devices**

When interviewed, the motorboat operators’ said that some signalling device are too expensive to acquire (55 %), boats have two-colored lights to signal an emergency (37%) , boats are small to have such devices (8%). Figure 12 has the data.

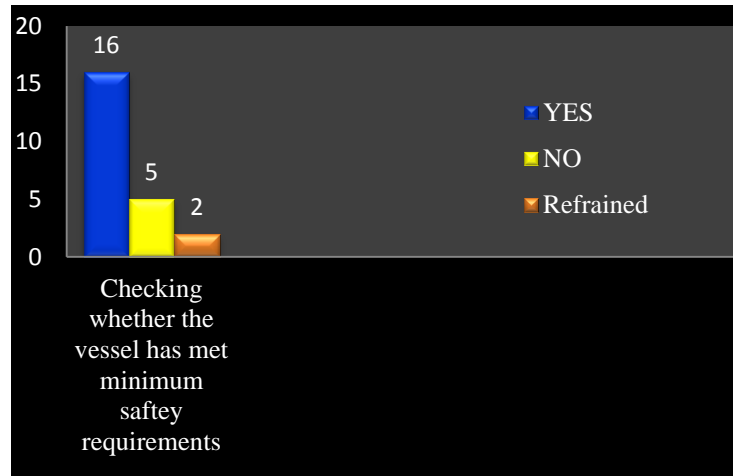


**Figure 12. Observations on Motorboats Equipped with Radio and other Safety Devices**

### 5. 6 Motorboats and Vessel Check Up before they are Allowed to Sail

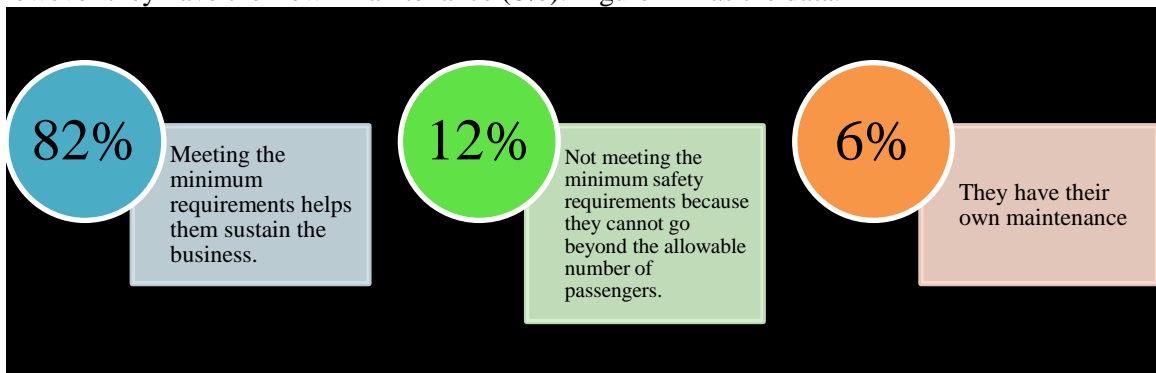
It is an international mandate that all vessels are supposed to be sea worthy before they are allowed to sail. When asked whether their motorboats are having the periodic vessel check-up, specifically checking whether the vessel has met the minimum safety requirements, 76% said “yes” 20% said “no” and 4% refrained from answering. Figure 13 has the data.





**Figure 13. Motorboats and Vessel Check Up before they are Allowed to Sail**

The qualitative data further reinforced the quantitative data on meeting the minimum safety requirements. Majority of the motorboat owners believe that meeting the safety requirements helps them sustain the business (82%), not meeting the minimum requirements because they cannot go beyond the allowable number of passengers (12%), and they do not have check up however they have their own maintenance (6%). Figure 14 has the data.



**Figure 14. Observations on Motorboats and Vessel Check Up before they are Allowed to Sail**

## 6. Findings

The findings are:

Majority of the motorboat operators comply to the requirements of having available life jackets on board. Although, some passengers refuse to use lifejackets because of hygienic reasons.

Majority of the motorboat operators possess the foundation of good seamanship as navigation, boat handling, line handling, anchoring, troubleshooting engine problems, and appropriate emergency response. Generally, they are also cognizant of their passengers' welfare.

Majority of the motorboat operators have undergone formal boating education though the number is not significantly higher than those who have not taken. Getting a formal education in boating and seamanship is expensive for them.

Majority of the motorboat operators have awareness of navigational rules and other devices.

A majority of the motorboat operators equipped their boats with signalling device but to others, provision can be expensive.

Majority of the motorboat operators have periodic vessel check with a few refusing to do so for fear that they might not be able to meet the guidelines for sea security.

## **7. Conclusions**

The following are the conclusions:

- (1) Motorboats still remain to be equipped with the necessary life saving devices.
- (2) Passengers' welfare is the main priority of the motorboat operators.
- (3) Formal boating education must be one of the considerations among motorboat operators.
- (4) Experience remains to be the best teacher in terms of motorboat operation.
- (5) Equipping motorboats of signalling devices is an imperative for motorboat operators.
- (6) Periodic vessel check assures sea safety and security.

## **8. Recommendations**

The following are recommended:

- (1) The results of the study must be disseminated to the members of the motorboat operators plying Iloilo-Guimaras Island so as they are informed of their compliance to the coast guard and MARINA's guidelines.
- (2) The school community must be aware of the results of the investigation to be able to use them as baseline data for future studies of similar nature.
- (3) Conduct more parallel studies to address compliance to sea policies and sea security.

## **9. References**

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[2] Teddlie, C. & A. Tashakkori (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. Los Angeles: Sage Publications, Inc.

[3] [www.marina.gov.ph](http://www.marina.gov.ph)