



Level Of Awareness On Safe Navigation And Collision Regulations Of Fisherfolks In Banate Bay, Iloilo: Basis For Enhanced Training Plan

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ABSTRACT

The safety of life at sea is a critical aspect in terms of navigation. The purpose of the study is to determine the level of awareness of Safe Navigation and Collision Regulations of Fisherfolks in Selected Barangays in the Fourth District of Iloilo. The study used a quantitative/qualitative research design using random sampling and using 30% of the total population. The study used adapted questionnaires. The total respondents of the survey are 48 fisherfolks, 24 from Sitio Lamintao Brgy. Talisay, Barotac Nuevo, Iloilo, and 24 fisherfolks from Brgy. Alacaygan Banate, Iloilo. The result shows that there is no significant difference in the level of awareness of fisherfolks. Further, the result revealed that the fisherfolks are less knowledgeable in Safe Navigation and Collision Regulations in terms of sound and lights and light and shapes.

1. Introduction.

Fishing is one of the most dangerous occupations in the world. It also is frequently unregulated (ILO, 2000). Protection of men, women fisherfolk, Senior Citizens, and differentially abled fisherfolk is often overlooked and is a very serious problem in the Philippines. Most often they are exposed to hazardous working conditions. While risks will always be an inherent part of fishing, measures to reduce risks at sea have had some success, which the Philippines as a member of the United Nations complied with the United Nations Convention on the Law of the Seas (UNCLOS) and later the Code of Conduct for Responsible Fishing. The rights and obligations of coastal nations to manage their 200-mile Exclusive Economic Zones (EEZs) and include the protections of workers in the fishing sector are now being given attention. With these, the Bureau of Fisheries and Aquatic Resources in partnership with the Philippine Coast Guard and the Local Government Unit aims to educate our fisherfolk and other sectors on possible measures that need to be learned to ensure their survival while at sea.

The International Regulations for Preventing Collisions at Sea, also known as COLREGs, provide guidelines for safe navigation and preventing collisions at sea. Rule 10 of the Collision Regulations deals with the behavior of vessels in or near traffic separation schemes adopted by the International Maritime Organization. Lack of understanding of these regulations can result in collisions between vessels. E-learning can be used to boost understanding of navigation rules and reduce accidents. According to the results of the common causes of collision in Banate Bay are not specifically mentioned. However, some of the common causes of collision in general are: unsafe speed, aggressive driving behavior, ignoring the rules of the road, running stop signs or red lights, and tailgating. It is important to note that collision at sea can also occur due to a lack of knowledge and understanding of navigation rules and regulations. Therefore, it is crucial for fisherfolks in Banate Bay to have a good understanding of safe navigation and collision regulations to prevent collisions at sea.

In this regard, International Maritime Organization adopted a set of rules in 1972, the so-called Convention on the International Regulations for Preventing Collisions at Sea (COLREGs). On the other hand, if we look into the root causes of collisions, by far the majority of causes are due to deviation of COLREGs proper implementation. In essence, if those in-

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volved in the collision had followed the COLREGs properly, the accident could have been avoided. However, even though we are currently witnessing many technological advances and automation in navigation, from the completion of the Electronic Chart Display and Information System phase to sophisticated digital bridges with touch screens and high-tech sensors, the implementation of COLREGs still requires human judgment and decision-making. What's more, approximately 80% of the information received by the brain comes through our eyes. Although bridge systems nowadays give navigators a real-time picture of the area, these systems cannot identify details that the seaman's eye can reveal. Based on the data on Marine transportation occurrences from 2010-2019, 87 accidents happened in fishing vessels and 75 accidents happened in 2020.

2. Objectives of the Study.

This study aims to determine the level of awareness of fisherfolks in Sitio Lamintao Brgy. Talisay, Barotac Nuevo, Iloilo and Brgy. Alacaygan, Banate, Iloilo on the safe navigation and collision regulations in terms of sound and light signals and light and shapes.

Specifically, this study sought answers to the following questions:

1. What is the level of awareness of fisherfolk in Sitio Lamintao Talisay Barotac Nuevo, Iloilo in terms of sound and light signals and light and shapes?
2. What is the level of awareness of fisherfolks in Brgy. Alacaygan, Banate, Iloilo in terms of sound and light signals and light and shapes?
3. Is there a significant difference in the level of awareness of fisherfolks in Sitio Lamintao Barotac Nuevo, Iloilo, and Brgy. Alacaygan Banate, Iloilo in terms of sound and light signals and light and shapes?

2.1. Materials and Methods.

A descriptive qualitative/quantitative research design was used in this study. Random sampling was utilized using 30% of the total population. Focus group discussion was conducted to get reliable data from their personal experiences at sea. Out of 150 fisherfolks from Sitio Lamintao Brgy. Talisay, Barotac Nuevo and Brgy. Alacaygan, Banate, and Iloilo only 48 fisherfolks were selected using simple random sampling.

To determine the level of awareness of sound and light signals and light and shapes, the researcher adopted the following scale of means and their corresponding description by Erol Sözen of Research Gate.

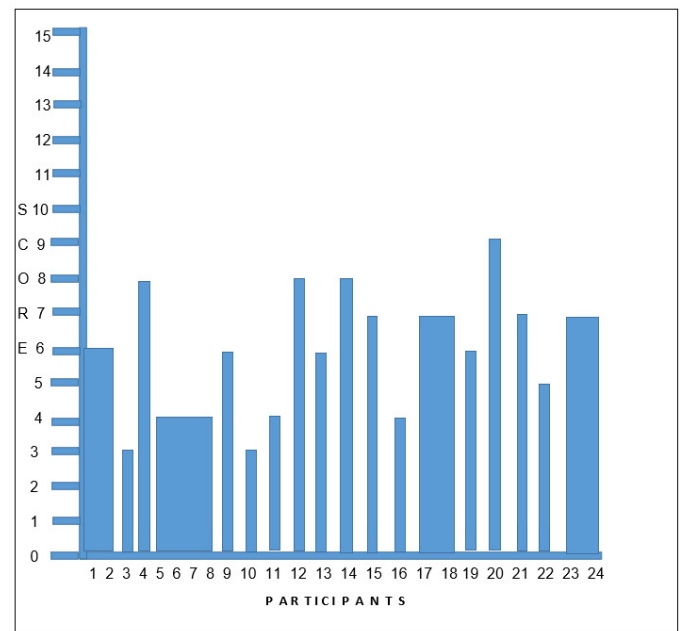
Table 1: Scale of means and their corresponding description.

Description	Value	Range
Very Much Knowledgeable	5	12.1 – 15.00
Much Knowledgeable	4	9.1 – 12.00
Knowledgeable	3	6.1 – 9.00
Less Knowledgeable	2	3.1 – 6.00
Very Less Knowledgeable	1	0 – 3.00

Source: Erol Sözen.

3. Results and Discussions.

Figure 1: The result of the pretest exam on sound and light signals and light and shapes on collision regulations at Sitio Lamintao Talisay, Barotac Nuevo, Iloilo.



Source: Authors.

Figure 1 shows that the Y-axis represents the score of the respondent and the X-axis represents the respondent. Respondents 3 and 10 got a score of 3 which can be interpreted as very less knowledgeable, respondents 5, 6, 7, 8, 11, and 16 got a score of 4 which can be interpreted as less knowledgeable, respondent 22 got a score of 5 which can be interpreted less knowledgeable, respondents 1, 2, 13, 9, and 19 got a score of 6 which can be interpreted less knowledgeable, respondent 15, 17, 18, 21, 23 and 24 got a score of 7 which can be interpreted knowledgeable, respondent 4, 12 and 14 got a score of 8 which can be interpreted knowledgeable and respondent 20 got a score of 9 which can be interpreted knowledgeable. In summary, 2 respondents belonged to a very less knowledgeable, 12 respondents belonged to the less knowledgeable, and 10 respondents belonged to the knowledgeable. This implies that more than half of them are less knowledgeable.

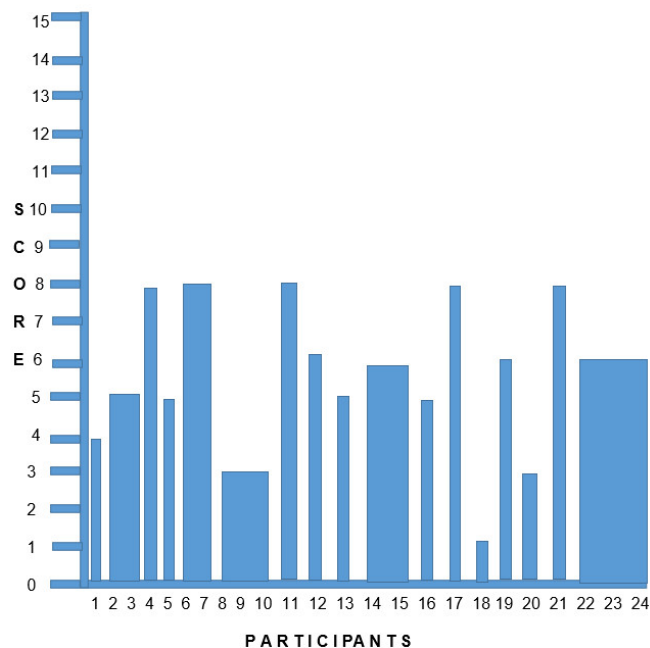
Table 2: Level of awareness of fisherfolks in Sitio Lamintao Brgy. Talisay, Barotac Nuevo, Iloilo.

Mean	N	Std. Deviation
5.8	24	1.7

Source: Authors.

Table 2 shows the average level of awareness of fisherfolks in Sitio Lamintao Brgy. Talisay, Barotac Nuevo, Iloilo. On average, the fisherfolks of Sitio Lamintao Brgy. Talisay, Barotac Nuevo, Iloilo obtained a mean score of 5.8 with a standard deviation of 1.7 which can be interpreted as less knowledgeable.

Figure 2: The result of the pretest exam on sound and light signals and light and shapes on collision regulations at Brgy. Alacaygan Banate, Iloilo.



Source: Authors.

Figure 2. The result of the pretest exam on sound and light signals and light and shapes on collision regulations at Brgy. Alacaygan, Bante, Iloilo. It shows that the Y-axis represents the score of the respondent and the X-axis represents the respondent. As to the result of the pretest exam on sound and light signals and lights and shapes on collision regulation, the figure shows that respondent 18 got a score of 1 which can be interpreted as very less knowledgeable, Respondents 4, 8,9,10, 20 got a score of 3 which can be interpreted very less knowledgeable, respondent 1 got a score of 4 which can be interpreted less knowledgeable, respondent 2,3,5,13 and 16 got a score of 5 which can be interpreted less knowledgeable, respondents 12,14,15,19, 22, 23, and 24 got a score of 6 which can be interpreted less knowledgeable, respondent 6, 7 11,17,21 got a score of 8 knowledgeable. The study implied that 6 respondents belonged to a very less knowledgeable, 13 respondents belonged to a less knowledgeable, and 5 respondents belonged

to a knowledgeable more than half of them are less knowledgeable.

Table 3: Level of awareness of fisherfolks in Brgy. Alacaygan, Banate, Iloilo.

Mean	N	Std. Dev.
5.3	24	1.9

Source: Authors.

Table 3 shows the average level of awareness of fisherfolks in Brgy. Alacaygan Banate, Iloilo. On average, the fisherfolks of Brgy. Alacaygan, Banate, and Iloilo obtained a mean score of 5.3 with a standard deviation of 1.9 which can be interpreted as less knowledgeable.

Table 4: T-Test for Independent Sample.

	Mean	t-value	Sig.
Lamintao	5.8	1.018	.314
Alacaygan	5.3	1.018	.314

Source: Authors.

In Table 4, the result shows that there is no significant difference in the level of awareness of fisherfolks which resulted in $P > 0.05$ significance. The implication of the result of the study of the fisherfolks in Banate Bay are less knowledgeable in Safe Navigation and Collision Regulations and they need to attend the training program conducted by the Extension of the Iloilo State University of Fisheries Science and Technology.

Conclusions.

Based on the preceding findings, the following conclusions were drawn:

- The result revealed that the fisherfolks in Sitio Lamintao Brgy Talisay Barotac Nuevo, Iloilo with a mean score of 5.8 were less knowledgeable in Safe Navigation and Collision Regulations in terms of sound and lights and light and shapes.
- The result revealed that the fisherfolks in Brgy Alacaygan Bnate, Iloilo with a mean score of 5.3 are less knowledgeable in Safe Navigation and Collision Regulations in terms of sound and lights and light and shapes.
- The result revealed that there is no significant difference in the level of awareness of fisherfolks in Sitio Lamintao Brgy Talisay Barotac Nuevo, Iloilo, and Brgy Alacaygan Banate, Iloilo which resulted in $P > 0.05$ with no significance.
- It implies that the fisherfolks of Sitio Lamintao Brgy Talisay Barotac Nuevo, Iloilo, and Brgy Alacaygan Banate, Iloilo need to attend the training on Safe Navigation and Collision Regulations to be conducted by the Iloilo State

University of Fisheries Science and Technology by the Extension Services and Community Development.

Recommendations.

Given the preceding results and conclusions, the following recommendations were drawn:

- The FARMC will recommend to the LGUs that the fisherfolks need training on the Safe Navigation and Collision Regulations for free.
- The LGUs will make a Policy or Ordinance for the renewal and application of the fishing permit
- The Iloilo State College of Fisheries and the different LGUs in Western Visayas need to have an MOA for this training for the safety of every fisherfolk.
- The Safe Navigation and Collision regulations must be a part of Iloilo State College of Fisheries for their extension activities.
- The evaluation must be conducted after the training.

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