



Safety Practices among Fisher Folks in Antique: Basis for Extension Activity

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Abstract

This descriptive-correlational study aimed at ascertaining the safety practices among fisher folks as basis for extension activity. Utilized for data gathering was researcher-constructed questionnaire on safety practices. The computer-processed statistics were means, frequency, and rank for descriptive analysis and the t-test for Independent Samples, One-way ANOVA and Stepwise Multiple Regression Analysis for inferential analysis. Alpha level was set at .05. The study found out that generally, fisher folks' common safety practices were less. The fisher folks in Antique had shared five common safety practices: they check weather condition at all times, they put in heart and mind that "Safety First" is the utmost priority onboard, they check the condition of all equipment and machinery before use, they maintain healthy body while fishing, and they get information about changes in the sea condition. On the other hand, they also shared five least common safety practices: they maintain working condition of fire extinguisher and fire detection alarm, they trained to operate safety equipment and appliances, they join fire drills weekly, they join awareness program about safe navigation, and they use lifejacket when jumping into the water. No significant difference existed in the common safety practices among fisher folks when classified according to certain categories of variables. None of the personal factors could significantly predict the common safety practices among fisher folks.

Keywords: Fishing Industry, Safety, Practices, Fisher folks, Antique

1 Introduction

Shipping has a major role in transporting cargoes all over the world and perhaps one of the most dangerous modes of transporting passengers and cargoes. The best way of improving safety at sea is by developing international regulations to be followed by all shipping nations (1-13, 16)

Safety of life at sea (SOLAS) is one of the main concerns of International Maritime Organization (IMO), a specialized agency created by United Nations (UN). Many regulations and conventions have been adopted to improve operational safety conditions. The Philippine, as member country of IMO that belongs to the "white list", is expected to adhere to the regulations imposed by the agency (16).

Philippine –registered vessels below 35 Gross Tonnage (GT) are expected to strictly follow the policies and regulations imposed by the government. Small-scale fisherfolks engaged on fishing activity are prone to accidents and emergency at sea. Thus, they must be equipped with sufficient trainings on safety to further enhance their safety awareness and practices onboard vessels (18).

The Bureau of Fisheries and Aquatic Resources (BFAR) Regional Office 6 has filed the most number of cases on illegal, unreported, unregulated fishing in the country (8).

BFAR has filed 863 cases against fishing operators as of July 2016 to June 2017. Through the concerted efforts of the bureau, 238 cases have been rectified (14).

Thus, the researcher found it relevant to determine the safety practices among fisher-folks in Antique as basis for extension activity.

2 Theoretical Framework of the Study

This research is anchored on Risk Homeostasis Theory by Wilde which proposes that in every activity, people accept a level of individual evaluation of risk in terms of their overall safety to enable them to avoid accidents that usually occur at sea due to lack of safety practices. People tend to ignore risk when the level of risk is below the acceptable limit and eventually increase their exposure to risk. But, when people observe a higher risk, they exercise precautionary measures to avoid exposure on risk. Thus, people usually do not respond for their own good but they manage to respond on more rules, policies, regulations, and new procedures imposed to them by authorities.

Thus, there is a need of an approach to save them from injuries in times of work. The safety practices may determine an effective implementation of safety environment at sea.

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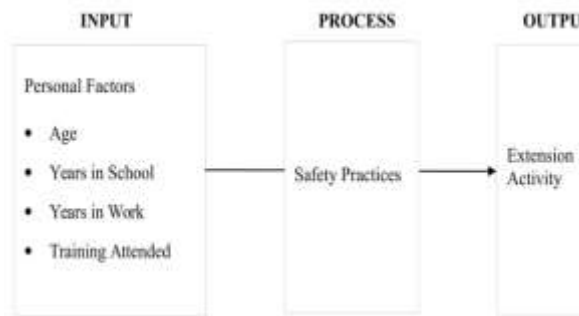


Figure 1: Illustrates in graphic form the paradigm of this research

3 Objectives of the Study

The objective of this study was to ascertain the common safety practices among fisherfolks in Antique. Also, to determine the significant difference in the common safety practices among fisherfolks in Antique when classified as to categories. Further, to determine the personal factors that best predict safety practices. Furthermore, to formulate an extension activity that will improve the safety practices of fisherfolks in Antique.

4 Methodology

4.1 Research Design

The descriptive method of research was employed in this investigation since the data were collected to answer questions concerning the common safety practices among fisherfolks in Antique. Descriptive research, according to Gay, et al., involves collecting data in order to answer questions concerning the common safety practices among fisherfolks in Antique. A descriptive research, Gay, et al. add, determines and reports the way things are (15).

4.2 Participants

The participants in this study were the 322 randomly selected fisherfolks in Hamtic, Antique, known as fishing village in the area, from a total registered fisherfolk population of 1,671 retrieved from the Municipal Fisherfolk Registration System (FishR) Database of Bureau of Fisheries and Aquatic Resources (BFAR) Region 6 as of year 2018 (8). Simple Random Sampling Technique was used to select the specified number of respondents in Hamtic, Antique, known as fishing village in the area.

4.3 Instrument

The data needed for the present research were drawn from a questionnaire-checklist on the common safety practices among fisherfolks constructed by the researcher and duly validated by a jury composed of five members. This instrument was constructed on the basis of the four prescribed modules in Modified Basic Safety Training Course (MBSTC), namely: Elementary First Aid, Personal Survival Technique, Fire Prevention and Fire Fighting, and Personal Safety and Social Responsibility which was developed by the MARINA for the IMO basic safety training course for seafarers' onboard ship below 35 gross tonnage (17).

All items in the instrument had factor loads of .941 for common safety practices, under the valid constructs intended for the study. The instrument consisted of two parts: Part I elicited information on the fisherfolks' age, years in school, years of work experience, and training attended. Part II elicited data on the fisherfolks' common safety practices.

4.4 Procedure

The researcher requested permission to administer the research instrument from the office of Municipality Mayor of Hamtic, Antique, known as fishing village in the area. Upon approval of the permit, meticulous oral instructions both in English and Tagalog were given to make certain that the participants accomplished the questionnaires properly.

4.5 Data Analysis

The accomplished questionnaires were scored and subjected to appropriate computer-processed statistics using the Statistical Package for the Social Sciences (SPSS) software version 23. Means, frequency, and rank were the descriptive statistical tools employed in the study. t-test, One-Way ANOVA, and the Stepwise Multiple Regression Analysis set at .05 alpha level were the inferential tools used.

5 Results and Discussion

5.1 Ranks on the Common Safety Practices among Fisherfolks

Table 1 presents the fisherfolks' common safety practices. The results revealed that the top five highest means on the fisherfolks common safety practices were: they check weather condition at all times ($M = 3.82$), rank 1.5; they put in heart and mind that "Safety First" is the utmost priority onboard ($M = 3.82$), rank 1.5; they check the condition of all equipment and machinery before use ($M = 3.80$), rank 3; they maintain healthy body while fishing ($M = 3.68$), rank 4.5; and they get information about changes in the sea condition ($M = 3.68$), rank 4.5. This means that fisherfolks' religiously comply with local government regulations, practice safety by heart, maintain the condition of all equipment, maintain healthy lifestyle, and ensure safe navigation.

However, the following were least ranked on the fisherfolks' common safety practices: they maintain working condition of fire extinguisher and fire detection alarm ($M = 1.26$), rank 21; they were trained to operate safety equipment and appliances ($M = 1.25$), rank 22; they join fire drills weekly ($M = 1.24$), rank 23; they join awareness program about safe navigation ($M = 1.21$), rank 24; and they use lifejacket when jumping into the water ($M = 1.20$), rank 25. This means that fisherfolks are deficient on safety equipment and appliances onboard, have no information regarding the operation of safety equipment and appliances, lack practice on fire drills, rarely conduct safety awareness program, and lack life-saving appliances available on boat.

5.2 Difference in the Fisherfolks' Common Safety Practices

Table 2 presents the difference in the fisherfolks' common safety practices when classified according to years in school, years in work, and training attended. The results reveal that

no significant difference existed in the fisherfolks' common safety practices when classified according to years in school $t(320) = 1.023$, years in work experience $t(320) = .702$, and training attended $t(320) = .245$, $p > .05$. These results imply that regardless of personal factors, fisherfolks have the same common safety practices. This result affirmed the findings of Ansuya, et al. that selected demographic variables have no influence on common practices on safety measures (3).

Table 1: Ranks on the Common Safety Practices among Fisher folks

Items	Mean	Description	Rank
1. I check weather condition at all times.	3.82	Highly practice	1.5
2. I put in heart and mind that "Safety First" is the utmost priority onboard.	3.82	Highly practice	1.5
3. I check the condition of all equipment and machinery before use.	3.80	Highly practice	3
4. I maintain healthy body while fishing.	3.68	Highly practice	4.5
5. I get information about changes in the sea condition.	3.68	Highly practice	4.5
6. I avoid fishing when not feeling well.	3.67	Highly practice	6.5
7. I keep myself fit and alert at all times.	3.67	Highly practice	6.5
8. I avoid fishing to the areas prohibited by the LGU.	3.64	Highly practice	8
9. I check the boat for damage or leak.	3.60	Highly practice	9
10. I keep the boat clean and well-arranged.	3.57	Highly practice	10
11. I apply basic first aid service in case of emergency.	3.37	Practice	11
12. I report any damage/faulty electrical equipment.	3.13	Practice	12
13. I join basic safety programs.	1.52	Low practice	13
14. I follow the procedures to operate fire extinguisher.	1.43	Not practice	14
15. I check working conditions of lifesaving appliances and equipment.	1.42	Not practice	15
16. I inspect the fire extinguisher as scheduled.	1.40	Not practice	16
17. I join safety awareness programs on Personal Protective Equipment or PPE.	1.39	Not practice	17
18. I keep first aid equipment ready at all times.	1.34	Not practice	18.5
19. I wear Personal Protective Equipment or PPE at all times.	1.34	Not practice	18.5
20. I join first aid sessions.	1.31	Not practice	20
21. I maintain working condition of fire extinguisher and fire detection alarm.	1.26	Not practice	21
22. I am trained to operate safety equipment and appliances.	1.25	Not practice	22
23. I join fire drills weekly.	1.24	Not practice	23
24. I join awareness program about safe navigation.	1.21	Not practice	24
25. I use lifejacket when jumping into the water.	1.20	Not practice	25
Total	2.28	Less practice	

Scale: Highly practice: 3.50 – 4.00; Practice: 2.50 – 3.49; Low practice: 1.50 – 2.49; Not practice: 1.00 – 1.49

On the other hand, this finding is contrary to the result of Rodriguez & Kiran's study which revealed that significant difference existed in respondents' practice on safety measures when classified according to income of fishermen and source of information (19).

Table 2: T-test Results for Difference in the Fisherfolks' Common Safety Practices

Category	M	t-value	df	2 tail Sig.
A. Years in school				
Elementary	2.58	1.023	320	.307
High School	2.54			
B. Years in work experience				
Shorter	2.54	.702	320	.483
Longer	2.57			
C. Training attended				
With	2.58	.245	320	.806
Without	2.55			

5.3 Difference in the Fisher folks' Common Safety Practice When Classified According to Age

Table 3 presents the difference in the fisher folks' common practices on safety measures when classified according to age. The results show that no significant

difference existed in the fisher folks' common practices on safety measures when classified according to age $F(2,319) = .229$, $p > .05$. This result suggests that the seafarers, regardless of age, have similar common practices.

Table 3: One –Way ANOVA Results in the Differences in the Fisherfolks' Common Safety Practices When Classified According to Age

Category	Sum of Squares	df	Mean Squares	F	Sig.
Age					
Between groups	.067	2	.034	.229	.796
Within groups	46.843	319	.147		
Total	46.910	321			

5.4 Predictors of the Fisherfolks' Common Safety Practices

Data in Table 4 reveal that of the four identified personal factors, age, years in school, years in work experience, and training attended are not significant predictors of the fisherfolks' common safety practices ($F = .139, 1.046, .492$, and $.060$, respectively, $p > .05$). These results imply that none of the personal factors may affect the manifested common safety practices among fisherfolks.

Table 4: Predictors of the Fisherfolks' Common Safety Practices

Category	Multiple R	R ²	Change	F	Sig. F	Std. Beta	Beta	t	Sig.
Age	.021	.000	.003	.139	.710	.011	.020	.372	.718
Years in school	.057	.005	.000	1.046	.307	.044	.057	1.023	.307
Years in work Experience	.039	.002	.002	.492	.483	.031	.039	.702	.483
Training attended	.014	.000	.003	.060	.806	.023	.014	.245	.806

5.5 Proposed Extension Activity

“*Kaligtasan ng mga Mangangisda*”: Extension Activity

This is a proposed extension activity of the University of Antique – College of Maritime Studies to address the problems of the fisherfolks in the Province of Antique when it comes to safety, which is a contributing factor on their fishing activity at sea.

The results of the study revealed that no significant difference existed in the common practices on safety measures among fisherfolks. Hence, the results of the study will serve as basis in the formulation and defining objectives and strategies, program priority of this extension activity to meet the needs of the fishing industry, and align with development priorities and commitments of the Philippine government.

In the next five years, from 2019 to 2023, the extension activity will achieve the specific objective by improving the overall safety practices among fisherfolks in the Province of Antique.

The extension activity aims to promote the overall safety; improve the safety practices; improve the financial stability and human capital; improve the health and wellness; and improve the livelihood endeavors among fisherfolks in the Province of Antique.

Table 5: presents proposed extension activity

Program Components	Name of Agency	Key Responsibilities
1. "Kaligtasan ng mga Mangingisda": CMS Extension Activity	College of Maritime Studies Local Government Unit Philippines Coast Guard Maritime Industry Authority	Improve safety practices of fisherfolks in Antique
PDP 2017-2022: Ensure safety and Build resilience.		PDP 2017-2022: Ensure safety and Build resilience.
United Nations' Sustainable Development Goals (SDG) 2030: SDG 11 – Make cities and human settlement inclusive, safe, resilient and sustainable.		United Nations' Sustainable Development Goals (SDG) 2030: SDG 11 – Make cities and human settlement inclusive, safe, resilient and sustainable.
Philippine Transport Plan and Strategy: Transport safety and security concerns.		Philippine Transport Plan and Strategy: Transport safety and security concerns.
Comprehensive National Fisheries Industry Development Plan (CNFIDP) 2016 – 2020.		Comprehensive National Fisheries Industry Development Plan
Inadequate/inconsistent fisheries policies that promote conducive environment for sustainable development.		(CNFIDP) 2016 – 2020: Inadequate/inconsistent fisheries policies that promote conducive environment for sustainable development.

6 Conclusions

The fisherfolks in Antique believe that they have shared five common safety practices: they check weather condition at all times, they put in heart and mind that "Safety First" is the utmost priority onboard, they check the condition of all equipment and machinery before use, they maintain healthy body while fishing, and they get information about changes in the sea condition. On the other hand, they also shared five least common safety practices: they maintain working condition of fire extinguisher and fire detection alarm, they trained to operate safety equipment and appliances, they join fire drills weekly, they join awareness program about safe navigation, and they use lifejacket when jumping into the water. They share similar common safety practices in terms of personal factors such as age, years in school, years in work experiences, and training attended. None of the fisherfolks' personal factors can predict their common safety practices that may affect their manifested common safety practices. The researcher proposed an extension activity titled, "Kaligtasan ng mga Mangingisda" to further improve the safety practices of fisherfolks in Antique.

7 Recommendations

It is recommended that the concerned agencies should coordinate with the fisherfolks to ensure their safety and build resiliency, sustainable development in fishing community. Also, concerned agencies should provide up-to-date safety information accessible to all fisherfolks. Further, concerned agencies should provide safety related trainings that improve their safety practices. Furthermore, concerned agencies should help the fisherfolks in providing safety equipment that will enhance their safety practices during fishing activities. These recommendations are aligned with the national and international policies on PDP 2017-2022,

United Nations' Sustainable Development Goals (SDG) 2030, Philippine Transport Plan and Strategy, and Comprehensive National Fisheries Industry Development Plan (CNFIDP) 2016 – 2020.

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