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Research Article

Assessing the Performance of Vessel Safety Inspectors of Maritime Safety Services Units in the Coast Guard Districts of Southern and Southeastern Mindanao

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ABSTRACT

Introduction: This study assessed the performance, motivation, and challenges of vessel safety inspectors in the Maritime Safety Services Units of the Coast Guard Districts of Southern and Southeastern Mindanao. It examined how operational conditions in maritime safety enforcement and qualifications of the inspectors affect their effectiveness.

Method: The study determined the vessel safety inspectors' age, sex, educational background, length of service, and inspection-related training, and correlate these factors with the six dimensions of performance: knowledge, skills, identity, context of performance, personal factors, and fixed factors. Their motivation was also assessed in terms of intrinsic and extrinsic influences.

Results: Most inspectors are young, male, and degree holders in Criminology and Marine Transportation. Overall performance was "rated as Good" (89%) with strength in personal factors (93%) including professionalism and communication, and identity (90%) such as adherence to protocols and awareness. Areas for improvement includes critical thinking and fixed factors (86%) such as geographic constraints, policy limitations, and resources availability. Motivation was moderate (intrinsic mean = 3.45; extrinsic mean = 3.28). Experienced inspectors have higher motivation, particularly on external rewards. Operational conditions such as limited logistical support, inadequate training opportunities, and mobility constraints were the identified challenges in inspections.

Conclusions: Vessel safety inspectors demonstrate competence despite operational challenges. Strengthening recruitment, targeted trainings, logistical support, motivation programs, and modern technology – anchored on a clear action plan will enhance efficiency, effectiveness, and aligning inspection practices with maritime safety policies and procedures.

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Background

The maritime industry plays an important role in the global economy, ensuring the transport of people, goods and other services. However, this significant function also provides some risks, as maritime accidents can cause environmental destruction, economic harm, and even loss of lives. In relation to this, the United Nations has considered maritime safety as part of its Sustainable Development Goals (SDGs), which captures safe maritime transport, protection of the marine environment, and promotion of sustainable development (Cleaner Seas, 2024).

In the Philippines, the maritime safety law enforcement is given to the Philippine Coast Guard (PCG) through Republic Act 9993 "Coast Guard Law of 2009". This government agency is task on implementing maritime laws and vessel safety enforcement inspections (VSEIs) to ensure vessel seaworthiness and competence of its crews. This type of inspection is mandated every three months on all Philippine-registered vessels, including fishing vessels of three gross tons and above. To amplify this mandate, the Maritime Safety Services Command (MSSC) was created to manage Maritime Safety Services Units (MSSUs) in all parts of the region. As these units are the frontline in implementing safety standards, specifically vessel safety inspections (Ong, 2021).

Despite these mechanisms, maritime accidents continue to happen in the Philippines (Awal & Hasegawa, 2017). In 2023, several maritime accidents highlighted challenges in maritime safety. The sinking of Motor Tanker Princess Empress which caused oil pollution, the Motor Vessel Lady Joy III fire which endangered its passengers, and the Motorbanca Aya Express capsizing which caused multiple fatalities. Investigation revealed that such accidents often emanate not only on weather disturbances, it also connects with human and organizational limitations. In addition, these maritime accidents tapped the Senate and the PCG, leading to a firmer enforcement policy and the transfer of inspection authority to the MSSC for standardization (Felipe, 2023).

Within Mindanao, particularly in the Coast Guard Districts of Southern and Southeastern Mindanao, maritime safety law enforcement faces additional challenges. The number of vessel safety inspectors or personnel only authorized to conduct vessel safety enforcement inspection is low considering that the maritime traffic in these regions continues to increase (Philippine Ports Authority, 2023). Also, the region of Mindanao is exposed to frequent weather disturbances, indicating the risks of maritime accidents. These factors highlight the significance of determining how vessel safety inspectors assigned in these Coast Guard Districts perform their duties and what factors influence their effectiveness (Dimailig et al., 2017).

With these given situations, this study assesses the performance and motivation of vessel safety inspectors of Maritime Safety Services Units in the Coast Guard Districts of Southern and Southeastern Mindanao. Specifically, it aims to evaluate how inspectors perform vessel safety enforcement inspection. This study shows their level of performance and motivation, contributing to the development of an action plan and improvement of maritime safety law enforcement which aligns with the Philippine Coast Guard vision and mission of producing world-class coast guardians of the sea.

Methods

In this part of the study, the researcher explains how the assessment of performance of vessel safety inspectors was conducted. It illustrates the research design and selection of participants and respondents. This section streamlines the ethical consideration used to maintain the integrity of the study. Also, research instruments were introduced and explain how they were validated including the step-by-step procedure in gathering data. It clearly presents all the methods used in the study to analyze and capture more accurate and reliable results.

Research Design

This study used a concurrent mixed-method research design to address research questions in a principled manner. This research method involves collecting, analyzing, interpreting, and reporting qualitative and quantitative data in a single phase or simultaneously (Creswell & Creswell, 2018).

The concurrent mixed-method research approach provides insights into the research phenomena and integrates multiple data sources to assist study problems (Poth & Munce, 2020). Consolidation of data will help the researcher gain a wider view of the study from different perspectives and research views (Shorten & Smith, 2017). Qualitative data provides an in-depth inquiry into the research and acquires a deeper insight into the phenomenon from narratives, while quantitative data supports the researcher in collecting information on different aspects of the phenomenon from different respondents. Further, the concurrent mixed-method research approach is effective in formulating conclusions as it obtains data and information from two research methods (Dawadi et al., 2021).

In this study, the researcher applied the concurrent mixed-method research approach to design the appropriate research instruments for gathering relevant quantitative and qualitative data from the respondents. This method was used to discover the condition of the respondents and provided an understanding of assessing the variables that contribute to their performance.

Respondents of the Study

The respondents of the study were the vessel safety inspectors assigned in Maritime Safety Services Units of the Coast Guard Districts of Southern and Southeastern Mindanao. A purposive sampling technique was used in selecting the respondents to determine their characteristics and understandings. Specifically, a total population sampling was used to cover the entire population of respondents. The total number of respondents in this study was **36**.

Indicated in Table I is the list of the respondents, including their respective sectors, attributes, and geographic location:

Table I. Number of Respondents

Respondents	Number	Sectors	Attributes	Geographic Location
Coast Guard Vessel Safety Inspector	14	Maritime Safety Services Unit-Southern Mindanao	Employed	Coast Guard District Southern Mindanao
	22	Maritime Safety Services Unit-Southeastern Mindanao		Coast Guard District Southeastern Mindanao
Total	**36**			

Ethical Considerations

The researcher observed high professionalism in performing this study. Formal permissions were obtained, following the standard protocols and procedures. The researcher sought concurrence from the identified respondents of this study to ensure their rights were observed and their privacy in terms of information acquired are well-kept and safe.

The respondents of this study were notified through an informed consent to determine their concurrence or not. The informed consent contains the purpose of the study, the execution of the study, and the rights of the respondents to proceed or refrain from the process.

Through the use of informed consent, the respondents were also accorded appropriate treatment as this will contains the necessary provisions for their confidentiality. Among those included were the use of data, storage of data, and the disposal of the research instruments and other materials used during the course of the study.

The researcher and other entities involved in this study were given no time to investigate

the identity of the respondents. However, all data and information collected were secured. It was part of the commitment of the researcher to avoid dissimilar information and ensure a low level of risk in attributing such information to a particular subject or person for anonymity.

The researcher also acknowledged all the sources of data and information used in this study through proper citations of the authors and stated all in the reference list. This paper was subjected into a plagiarism checker via TURNITIN EULA with a 12% percentage proof of originality and uniqueness.

Instrumentation

The researcher used a self-made survey questionnaire, an observation checklist, and a semi-structured interview as research tools for gathering data from the respondents.

Survey Questionnaire

The self-made survey questionnaire has 100 sets of items. The form was composed of four parts: The initial part was a 10-item questionnaire covering the demographic profile of respondents. The second part was a scenario-based exam with 60-item questions to assess the performance of the vessel safety inspectors. The third part was a 20-item questionnaire determining the extent of motivation of the vessel safety inspectors. The last part was another 10-item question relating to the current challenges encountered in the conduct of vessel safety enforcement inspection. The data collected on the initial and second parts of the survey questionnaire were gathered and analyzed using Pearson's R correlation.

Observation Checklist

The self-made observation checklist consisting of 125-items per maritime policies guided the researcher in evaluating the work output of the vessel safety inspectors. In addition, an analysis of documents like monthly reports and other related documents was conducted by the researcher to address the aforementioned problems.

Interview Questionnaire

In a self-made semi-structured interview, the discussion was guided with a set of questions, major and follow-up questions, and solicited answers and recommendations to improve the quality of their performance.

Validation of Instrument

The researcher considered several actions in determining the content validity of the self-made survey questionnaire, the observation checklist, and the semi-structured interview as research instruments of the study.

The survey questionnaires, the observation checklists, and the semi-structured interviews were developed based on the literature and observations of the researcher. These research instruments have undergone content validation from some experts from the academe and the Philippine Coast Guard.

Survey Questionnaire

The survey questionnaire, including the scenario-based test, was pilot tested on 6 individuals within the target population to measure its effectiveness in terms of clarity, feasibility, and suitability. The feedback acquired on the pilot test determined the respondent's difficulty in answering, length and format, and design of the survey form and scenario-based exam. Furthermore, the researcher used the Cronbach's Alpha technique on the survey, which resulted in 0.816 (Good) for the extent of motivation in terms of extrinsic factors, 0.713 (Acceptable) for the extent of motivation in terms of intrinsic factors, and 0.776 (Acceptable) for the challenges encountered by the vessel safety inspectors. Likewise, the Split-Half reliability test results on the scenario-based tests have 0.583 (Strong) correlation between forms. These results proved the internal consistency of the set of items used. The revision, modification, and/or deletion to improve the set of items in the survey questionnaire and the scenario-based exam were based on the findings and feedback.

Observation Checklist

The observation checklist was validated by an expert who conducts vessel safety inspections.

Interview Questionnaire

The semi-structured interview was validated through a team expert review to minimize uncertainty and emotive questions.

All collected data were analyzed through appropriate statistical techniques and software. Checking and counter-checking of the results were explored based on research questions and hypotheses.

Data Gathering Procedure

The data gathering procedure of this study was done accordingly to the data or needs of the research instruments. This is to ensure that the researcher will acquire the necessary information and keep the respondents safe and comfortable. A copy of an approved letter request, along with the letter to the respondents, informed consent form, and the content of research instruments, was sent and secured.

Survey Questionnaire

The determination of the total population was one of the procedures in data gathering; then, the researcher selected respondents for the study. These respondents were oriented by informed consent before the data gathering. The research survey was done in a face-to-face setup. After accomplishing, the respondents were advised to forward their answers in a PDF format and sent via email so they can also have a furnished copy. The gathering method for the examination was the same as the survey, considering that the survey and the scenario-based test were combined in one form. There is no time limit; however, they need to finish once they start answering the test.

Observation Checklist

The researcher coordinated with the Commanding Officers of the MSSUs for the schedule of their vessel safety enforcement inspections. To materialize the essence of unannounced observation, the researcher asked permission to join the inspections randomly. A self-made observation checklist was used by the researcher to guide the particular areas of vessel inspections. In addition, the researcher secured an appointment and asked the concerned MSSUs for permission to disclose and acquired related documents on vessel safety inspections, like monthly reports, client feedback forms, and the inspection checklists they used.

Interview Questionnaire

The researcher had the Commanding Officers of MSSU-SM and MSSU-SEM, and team leaders of vessel safety inspectors as informants for the semi-structured interview. The format of the interview was introduced to them and allowed them to answer at their most preferred time. Although the survey, document analysis, and unannounced observations were done face-to-face, digital platforms like Zoom and Google Meet were used in the interview phase. This is due to the so-called new normal status and weather conditions in the area. The 16 informants were interviewed one by one, and with their approval, the discussions were put into record.

Data Analysis

The data acquired in the self-made survey forms, including scenario-based tests, observation checklists, and semi-structured interviews, were transcribed into Microsoft Excel. Also, these statistical tools were used for the analysis of data:

Percentage. This tool was used for the self-made survey forms, the scenario-based test, and the level of performance. This tool is significant for computing the proportion or frequency results of a particular item. Specifically, the traditional grading scale with the following percentages was used for the scenario-based test: 90% – 100% as Excellent; 80% – 89% as Good; 70% – 79% as Satisfactory; 60% – 69% as Needs Improvement; and 0% – 59% as Unsatisfactory. The derived overall % came from the average scores from the 6 performance indicators. This was also rounded up to the nearest whole number.

Weighted Mean. This was applied to the extent of motivation involving extrinsic and intrinsic factors and the challenges encountered by vessel safety inspectors. This tool refers to the average results for every item. This tool had a formulated numerical scale using the 4-Point Likert Scale to analyze and have a verbal interpretation of the extent of motivation of vessel safety inspectors. For the level of performance,

the following descriptive index was used: 3.50 – 4.00 as Highly Motivated; 2.50 – 3.49 as Moderately Motivated; 1.50 – 2.49 as Slightly Motivated; and 1.00 – 1.49 as Not Motivated. For the challenges of vessel safety inspectors, the following descriptive index was followed: 1.00-1.49 as Strongly Disagree; 1.50-2.49 as Disagree; 2.50-3.49 as Agree; and 3.50-4.00 as Strongly Agree.

Pearson Correlation Coefficient (r). This was used to analyze the results on the relationship between the qualifications, motivations, and performance of the respondents. The interpretations used were as follows: 0 – no correlation, ±0.10 - ±0.29 weak correlation, ±0.30 - ±0.49 moderate correlation, ±0.50 - ±0.99 strong correlation, and ±1.0 as perfect correlation.

Thematic Analysis. This tool was applied to the document analysis, observation, and semi-structured interviews. It analyzed and interpreted the results in corresponds with the themes within qualitative data.

The presentation of results on the surveys and exams was in tabular form. Likewise, the results of document analysis, observation, and the semi-structured interviews were triangulated, and the presentation was in tabular and narrative forms.

Results and Discussion

This section presents a thorough discussion of data acquired from surveys, scenario-based tests, observation checklists, document analysis, and semi-structured interviews.

Level of Performance of the Vessel Safety Inspectors in the Maritime Safety Services Units

The assessment of the performance of the vessel safety inspectors in the Maritime Safety Services Units included examinations and interviews. The exam was a multiple-choice exam and was formatted using scenario-based questions aligned with the 6 identified areas of performance: Level of Knowledge, Level of Skills, Level of Identity, Context of Performance, Personal Factors, and Fixed Factors. Each area has 5 different scenarios, which also present 2 questions for assessment. Also, MSSU Commanders and VSEI team leaders supplemented interview responses to strengthen the gathered information.

Table II. Level of Performance of the Vessel Safety Inspectors

INDICATORS	% Correct	Level of Performance
Knowledge	88%	*Good*
Skills	87%	*Good*
Identity	90%	*Excellent*
Context of Performance	87%	*Good*
Personal Factors	93%	*Excellent*
Fixed Factors	86%	*Good*
OVERALL	**89%**	***Good***

Legend: 90% - 100% - Excellent; 80% - 89% - Good; 70% - 79% - Satisfactory; 60% - 69% - Needs Improvement; 0% - 59% - Unsatisfactory

Knowledge. The level of knowledge of vessel safety inspectors from MSSUs showed an overall "Good Performance", achieving an 88% rate on five operational scenarios. Interviews revealed that co-inspectors are cooperative and knowledgeable, while team leaders are also experienced and show effective team cooperation. The vessel safety inspectors have strong coordination and are well knowledgeable; however, consistency in the implementation and enforcement across all scenarios remains for improvement.

The findings emphasized that adequate knowledge is important to ensure safe and effective maritime operations, particularly in safety inspections. It also highlighted that knowledge is not merely supplementary, but foundational to safe performance (Crestelo Moreno et al., 2022).

Skills. The vessel safety inspectors revealed "Good Performance" with an 87% rate in scenarios requiring interpersonal and situational problem-solving skills. The team collaboration and leadership, focusing on how to deal with disrespectful team members and other behavioral issues, is where they particularly excelled. In an interview with MSSU Commanders and VSI team leaders, skills like technical knowledge, effective communication, analytical and problem-solving, leadership, adaptability, implementation, and enforcement proficiency were essential for VSEI. These skills are based on their work experiences, education, and continuous learning. Thus, focusing on the areas for improvement will help enhance the performance of vessel safety inspectors.

The results on vessel safety inspectors' skills reinforce the significance of non-technical skills like communication, leadership, and adaptability. In addition, the need for continuous improvement must keep evolving to meet modern maritime safety challenges (Praetorius et al., 2020).

Identity. The vessel safety inspectors of MSSUs illustrated a clear comprehension of their role, garnering an "Excellent Performance" or 90% rate in terms of identity. They excelled in guidelines on vessel safety enforcement inspections and other laws. However, the understanding of specific inspection protocols, such as the minimum number of inspectors allowed to conduct an inspection, shows areas for improvement. The identity of inspectors is multifaceted, covering social aspects, interpersonal aspects, and professional aspects. They demonstrated authority through proper uniforms and the wearing of IDs, collaborated with other Coast Guard units and personnel, and established connections with other shipping companies. Thus, vessel safety inspectors have a strong foundation; however, improvement of operational protocols and targeted training will help enhance their performance.

The results on the identity of vessel safety inspectors particularly on situation awareness, self-knowledge, and group skills are essential for safe maritime operations. While inspectors demonstrated strong professional identity and collaboration, their gaps in inspection protocol comprehension need for development. Addressing these through targeted human factor approaches would strengthen both individual and team performance (Cordon et al., 2017).

Context of Performance. The vessel safety inspectors demonstrated a rate of 87% or "Good Performance" in the context of performance. Managing inspection and responding to challenging situations like the failure of a vessel to undergo a pre-departure inspection due to major deficiencies is where they shone. On the other hand, preparedness for follow-up training remains an area for growth and improvement. Thus, effective planning, coordination, inspection, teamwork, and following the existing protocols contribute to the performance of vessel safety inspectors. This also displayed their ability in critical thinking and decision-making.

The results in the context of performance particularly in risk tolerance, decision-making, and training directly shape safety performance in maritime operations. When risk tolerance is managed through strong safety culture, teamwork, and continuous training, the safety behavior improves in a more quality inspection (Xi et al., 2019).

Personal Factors. The vessel safety inspectors in MSSUs garnered a 93% "Excellent Performance" in terms of personal factors. This shows their competencies, preparedness, and individual abilities necessary for their job. They excelled in the field of physical standards, educational attainment, length of experience, and recruitment process. On the other hand, focus on meetings requires some improvement. According to MSSU Commanders and VSEI team leaders, inspectors show competence, adaptability, positive attitude, professionalism, and good communication skills, which are also essential for showing commitment to continuous learning and training. Thus, the inspectors are effective in performing their functions, although some refinements are still needed and should be open to improvement opportunities.

The findings on the quality of inspectors' personal factors directly influences safety outcomes at sea. Excelling in competence, adaptability, and communication, VSIs in the MSSUs enhance the predictive and preventive safety

inspections which lowers accidents linked to human-factor (Heij & Knapp, 2018).

Fixed Factors. The performance of vessel safety inspectors of MSSUs attained 86% "Good" performance in terms of fixed factors. However, limitations of VSEI, geographical constraints, and political considerations arise as challenges. Thus, vessel safety inspectors have an overall good understanding of fixed factors, although some areas also present opportunities for further improvement.

The results on the fixed factors of inspector's which aligns strategically on fixed, structural, and geographic risks is essential for maximizing safety outcomes. While inspectors already show competence, adopting risk-based and data-driven inspection models, this would help overcome the limitations identified such as VSEI system gaps, geographic constraints, and political pressures. Improving inspection strategy can transform good performance into excellent performance by ensuring resources are properly deployed (Knapp & Heij, 2019).

Extent of Motivation of the Vessel Safety Inspector in the Maritime Safety Services Units

This assessment presents the results on the extent of motivation of vessel safety inspectors in the Maritime Safety Services Units in terms of intrinsic and extrinsic factors using a 4-point Likert Scale. The highlights include the highest and lowest-rated factors, with an understanding of the strengths and areas needing improvement.

Intrinsic Factors. The study revealed that vessel safety inspectors exhibit moderate levels of intrinsic motivation, reflected in a weighted mean of 3.45. Healthy working environment, teamwork, and good relationships with colleagues served as the internal drive of motivation; however, inspections with minimum supervision, target setting, and properly addressing the wrongdoing of co-inspectors may be considered as areas for improvement. In an interview with MSSU Commanders and VSEI team leaders, personal commitment, sense of purpose, integrity, and self-motivation arise as additional internal motivations. Thus, giving due importance to these intrinsic motivators will help improve job satisfaction and performance of inspectors.

Thus, the significance of internal motivators validates some important aspects such as teamwork, sense of purpose, and personal values. It strengthens the connection between leadership behavior and motivation. Although intrinsic motivation factors are moderate, addressing specific gaps can lead to improved performance (Yuen et al., 2018).

Table III. Extent of Motivation in terms of the Intrinsic Factors

INTRINSIC FACTORS	WM	VI
1. I have a healthy working environment.	**3.69**	Highly Motivated
2. I can easily work well with my team members.	3.64	Highly Motivated
3. The team leader openly accepts the recommendations of his/her team members.	3.64	Highly Motivated
4. My team members are happy with my work performance.	3.50	Highly Motivated
5. I am not easily distracted when accomplishing a certain task.	3.42	Moderately Motivated
6. I am eager to help my team increase the target number of vessel inspections.	3.39	Moderately Motivated
7. I do not have any difficulty communicating with other people.	3.33	Moderately Motivated
8. I can complete my target goals on time.	3.31	Moderately Motivated
9. I am not afraid to address the wrongdoing of my co-inspectors.	3.31	Moderately Motivated
10. I can conduct vessel safety enforcement inspections with minimum supervision.	3.25	Moderately Motivated
OVERALL	3.45	Moderately Motivated

Legend: 3.50 - 4.00 - Highly Motivated; 2.50 - 3.49 - Moderately Motivated; 1.50 - 2.49 - Slightly Motivated; 1.00 - 1.49 - Not at All Motivated; WM - Weighted Mean; VI - Verbal Interpretation

Extrinsic Factors. The study on extrinsic motivation of vessel safety inspectors assigned in the MSSUs revealed that they are moderately motivated with a 3.28 weighted mean. Regular salaries and benefits served as the strongest motivators with a 3.61 weighted mean. In addition, task and job satisfaction also contribute to their external motivation, including their contentment with their present working assignments. Recognition, career growth, and target goals also deliver controlled motivation. On the other hand, completion of training on vessel safety inspection recorded the lowest with a 3.14 weighted mean.

These results indicates that incentive-based systems, which include financial rewards and recognition, have an impact on performance. It serves as an effective drive for motivating individuals and their effectiveness, especially in public service roles. These external factors can lead to better job satisfaction and organizational outcomes (Elamalki et al., 2024).

Table IV. Extent of Motivation in terms of the Extrinsic Factors

EXTRINSIC FACTORS	WM	VI
1. I regularly receive my salary and other incentives.	3.61	Highly Motivated
2. I am content with my present working assignment.	3.50	Highly Motivated
3. There is an appropriate number of team/s and member/s to perform vessel safety enforcement inspections.	3.33	Moderately Motivated
4. I have gain confidence in inspecting all types of vessels.	3.25	Moderately Motivated
5. I am aware of the vessel safety enforcement inspection deficiency codes.	3.22	Moderately Motivated
6. I can attain the monthly target of inspection of our unit without difficulty.	3.19	Moderately Motivated
7. I can make a comprehensive report on vessel safety enforcement inspection.	3.19	Moderately Motivated
8. I am familiar with all the vessel safety enforcement inspection forms and checklist and their usage.	3.19	Moderately Motivated
9. I am oriented with the different areas of the vessel that need an inspection depending on the type of vessel.	3.17	Moderately Motivated
10. I have completed training on vessel safety inspection.	3.14	Moderately Motivated
OVERALL	3.28	Moderately Motivated

Legend: 3.50 - 4.00 - Highly Motivated; 2.50 - 3.49 - Moderately Motivated; 1.50 - 2.49 - Slightly Motivated; 1.00 - 1.49 - Not at All Motivated; WM - Weighted Mean; VI - Verbal Interpretation

Challenges Encountered by Vessel Safety Inspectors in their Conduct of Inspection

The integrated analysis of survey and interview results highlighted the challenges encountered by the vessel safety inspectors of MSSUs, which affect their effectiveness and efficiency in performance. Among these concerns are inadequate logistical support, including outdated equipment and a lack of office supplies. This situation allows these inspectors to resort to their personal resources just to comply with the inspections. Also, fewer opportunities for specialized training programs have an effect on their ability to stay updated on the demands of the maritime industry, affecting their professional growth and competence. Mobility constraints, as no dedicated vehicle is available, may lead to low responsiveness and delays in operations. The demanding nature of their work also requires an equal quantity of medical benefits, and thereby, an enhanced health support system is essential. The few numbers of qualified inspectors also trigger higher workloads, which may compromise the quality of inspections and the maritime safety standards as a whole. Inspectors also suffer from limited accommodations, which prompts them to seek billeting outside official premises, resulting in potential fatigue and personal expenses.

Addressing these identified challenges requires a systematic approach and strategy; thus, an effective action plan should be

formulated to strengthen logistical requirements, continuous and specialized training, improve mobility access, provide appropriate health support, optimize staffing and competence level, and ensure adequate accommodation. Further, implementing this effective and efficient approach will help enhance the performance of vessel safety inspectors.

Action Plan for Vessel Safety Enforcement Inspection

In this study, the proposed action is a strategic initiative aimed at developing the implementation of vessel safety enforcement inspection within a designated area of responsibility. The concern MSSUs will primarily take the lead and implement these maritime safety-related actions to ensure that all homeported and transiting domestic vessels are compliant with existing maritime safety rules and regulations. This proactive effort is in response to the increasing maritime traffic, which is also highly prone to different maritime incidents. The purpose of this action plan is to prevent accidents, protect lives, and secure property at sea by intensifying maritime law enforcement and ensuring the seaworthiness of domestic vessels.

The action plan will focus on the five areas of concern, including the improvement of training and skills of vessel safety inspectors, career development and motivation enhancement, promotion of gender diversity and recruitment practices, inspection system, tools, and infrastructure upgrade, and providing a holistic approach to refining existing PCG maritime policies and procedures. This action plan has three implementing stages: short-term, medium-term, and long-term to ensure sustainable and continuous development. Overall, the action plan intends to build a competent, motivated, and inclusive pool of PCG vessel safety inspectors who can perform the high-quality standard of vessel safety enforcement inspection in the region.

The action plan will have seven chapters including the context and background of vessel safety enforcement inspection, the strategic framework, the operational strategies that needs to be focus on, the systematic timeline and action plan for the five areas of concern of vessel safety enforcement inspection, the target outcomes for vessel safety inspectors, the monitoring and evaluation of the programs, and the conclusion of the action plan.

Conclusion

The Philippine Coast Guard vessel safety inspectors are largely young, male, and degree holders, mostly specializing in BS Criminology and BS Transportation. However, there is a clear absence of gender diversity and level of experience, which necessitates the need for targeted training programs.

Likewise, vessel safety inspectors showed a strong adaptability and supervisory skills, attaining an overall performance. Although they struggled with other performance factors such as critical thinking, problem-solving, and fixed factors, they paved the way for further training. Also, they need to improve their skills in behavioral management, conflict situations, and maritime rules and regulations to develop work effectiveness and performance.

Motivation among these vessel safety inspectors is generally moderate, influenced by intrinsic factors like commitment and responsibility, and extrinsic factors like career growth and salary. On the other hand, confidence, time management, and accountability are subject to improvement. Those inspectors with longer experience are more motivated by external factors, and training plays an important for developing extrinsic motivation.

The vessel safety enforcement inspection follows structured guidelines under the local and foreign maritime laws. Through document analysis, interviews, and observations, it was revealed that vessel safety inspectors properly inspect vessel conditions, crew competence, and their compliance with safety standards. Furthermore, training is essential to develop their effectiveness, and a continuous development program is needed to enhance their inspection capabilities.

Challenges such as inadequate logistical support, database system, and limited mobility hamper their efficiency and effectiveness in inspection. Although the vessel safety inspectors of Southern and Southeastern Mindanao are well-trained and competent, giving due regard

to their operational constraints, working conditions, and logistical support systems will improve their performance.

Henceforth, an action plan is highly applicable based on the challenges and identified areas for improvement of the vessel safety inspectors.

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