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Research Article

Evaluation of the Coast Guard District Southwestern Mindanao (CGDSWM) Summer Lifeguard Training

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ABSTRACT

Whenever lifeguards are deployed as emergency responders in leisure swimming areas or during floods, drowning incidents are prevented. But too often than not, there are fewer or no lifeguards at all, risking safety assurance. When the Philippine Coast Guard was seasonally deployed on public beaches, this initiative was affected by human resources, financial logistics, and inconsistent implementation. As such, the Coast Guard District Southwestern Mindanao (CGDSWM) launched a Summer Lifeguard Training Program to capacitate coast guard personnel. After two successful trainings, no evidence-based evaluation has been made to support its effectiveness. Hence, this study examines the program's effectiveness in terms of objectives, content, instructors, and facilities; evaluates lifeguard performance; and describes associated challenges to inform program improvements. Using surveys, document review, and interviews, the study collected data from 69 PCG-trained lifeguards, 65 supervisors and commanding officers, and 15 program implementers and course directors. Findings revealed a highly effective training program in developing essential lifeguard competencies, though improvements are needed in disaster-response coverage, instructional strategies, and simulation realism, with mean range scores from 3.46 to 3.55. The PCG-trained lifeguards were also rated with a consistently advanced level of competencies with a total mean score of 3.79, showing readiness for real-world emergency response and effective training transfer. Yet there are recurring structural, logistical, and resource challenges that affect its program outcomes. Thus, a proposed enhancement framework has been developed outlining recommendations for a systematic, participatory, and sustainable training program, fit for standardized and nationwide PCG adoption.

Keywords: *Coast Guard Training Program, Lifeguard Training Evaluation, Training Effectiveness, Water-Rescue Competencies*

Introduction

The Philippines accounts the drowning as a major concern in the country since it records 71% of typhoon-related deaths (Gray, et al., 2022), affecting 3,000 fatalities annually from

1963 to 2003, with the highest risk of fatalities among young males (Antonio & Consunji, 2021; Guevarra, et.al., 2021). However, despite increasing demand in coastal areas, many destinations remain susceptible to unintentional

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drowning incidents because of the lack of sufficient accredited lifeguards (De Galicia, 2023; Villones et al., 2023; Zafra, 2021).

Effective lifeguarding is a critical intervention to prevent drowning, requiring strong physical, technical, and psychological readiness (Santiago et al., 2022). To be a professional lifeguard and ready for water-related emergency response, trainees are required to complete a structured training, achieve certification, and conduct continuous skills development (Ramos, W. et.al., 2021), all of which can only be achieved through a professional training course.

However, the lifeguard training quality and program outcomes are affected by several challenges. The effectiveness of existing lifeguard training systems is hindered by having inconsistent standards, the use of limited evaluation criteria, and inadequate resources (Kim, N. G. & Lee, J. H., 2021). Countries like the Philippines with limited-resource settings experience these challenges more noticeably, such as the lack of technical expertise, inadequate equipment, poor funding, and inconsistent administrative support (Mecrow et al., 2024; Dong et al., 2024; Gupta et al., 2020). It is then more difficult for countries like the Philippines to implement and sustain training programs compared to other countries with a high-resource environment, as it is also affected by uneven coordination, limited surveillance, and patchy local implementation among program implementers (Artiga et al., 2020; Guevarra et al., 2021; Go et al., 2018).

To support coastal protection efforts, the Philippine Coast Guard issued a policy across PCG districts to conduct regular patrols during peak seasons where there is a higher tourist proportion. As such, they issued PCG Standard Operating Procedure (SOP) No. 04-23, which is a comprehensive guideline for the conduct of coastal security patrols within the maritime jurisdiction of the Philippines. This policy supports the Republic Act 9993, which assigns the Philippine Coast Guard to enforce maritime safety regulations and implement coastal safety measures by deploying lifeguards in high-traffic coastal areas during certain seasons. The guidelines for the lifeguard accreditation and requirements of private resorts and beaches are ratified in PCG Memorandum

Circular Nr. 03-14 (MC 03-14), which further emphasizes the importance of lifeguard deployment, but it brings disparity because it only caters to private beaches, leaving a gap for the public beach areas.

To bridge this gap, the former Commander of Coast Guard District Southwestern Mindanao has implemented a training program in 2024 and 2025 for PCG lifeguards within his area of responsibility. The training was designed and conducted to capacitate personnel with professional lifeguard competencies before their seasonal deployment in the public beaches of the whole Zamboanga Peninsula region and Isabela City, Basilan. From then on, the CGDSWM plays a critical role in enhancing coastal safety through capacity-building initiatives, as it is the unit responsible for maritime safety, security, and environmental protection across its area of operation.

However, despite the program's strategic importance, there is limited evidence on the effectiveness of lifeguard training programs of the Philippine Coast Guard. Since it is a pilot Summer Lifeguard Training conducted by the Coast Guard District Southwestern Mindanao, there is still no empirical evidence to support that the training program is effective or has the potential for wider adoption across other PCG districts nationwide.

Hence, this study answers these research questions:

1. How can the summer lifeguard training for PCG be assessed in terms of:
 - a. Training Objectives
 - b. Training Contents
 - c. Instructor Capabilities
 - d. Materials and Facilities
2. What are the challenges that affect the training program's overall effectiveness and the performance of trained personnel encountered by participants in the CGDSWM Summer Lifeguard Training?
3. What is the performance of the trained lifeguard personnel as assessed by their CO's and supervisors?
4. What enhanced lifeguard training framework can be proposed for adoption by the Philippine Coast Guard to improve the overall performance of its personnel in responding to water-related emergencies?

This study aims to determine if the CGDSWM Summer Lifeguard Training Program was effective in the design and implementation, and if it has generated competent lifeguards who the PCG needs to comply with its mandates. The study also identifies key challenges and proposes an enhanced framework to improve lifeguard readiness, which advances SDG 3, 4, 11, and 13 by improving lifeguard training, strengthening public safety, and enhancing the resilience of coastal communities.

Methods

This study employed a mixed-method Concurrent Triangulation Design, simultaneously collecting and analyzing quantitative and qualitative data. A cross-sectional survey was conducted among 69 PCG-trained lifeguards to assess the training program’s effectiveness based on its objectives, content, instructor capabilities, materials, and facilities, and among 65 commanders and supervisors at CGDSWM stations and sub-stations to evaluate lifeguard performance. Furthermore, document review of the After Activity Report of the Summer Lifeguard Training in 2024 and 2025 was conducted to help contextualize key questions, and interviews were conducted with 15 training implementers and course directors to explore challenges affecting lifeguard performance. Participants were selected by total enumeration for PCG-trained lifeguards as well as program implementers/course directors; while purposive sampling was used to select Commanding Officers and Supervisors following the inclusion criteria that (a) they serve as Commanders of PCG Station or Sub-stations or directly supervise lifeguard deployment within their operational areas; and that (b) they have first-hand experience observing PCG-trainees doing lifeguard functions. Participant anonymity was protected by excluding all names, identifying details, and images from both data collection and reporting.

Before conducting the study, and upon approval from the Philippine Coast Guard chain of command and the PMMA ethics committee, the PCG personnel of the CGDSWM were invited to participate. Informed consent was obtained from each participant before deploying the survey questionnaires, which outlined the purpose, procedures, rights, and conditions of their participation. Ethical protocols were also followed, such as confidentiality by limiting access to collected data to authorized personnel only, as well as proper handling of information and disposal of records; and ensuring utmost respect, fairness, and non-discrimination throughout the research process was also followed. To ensure compliance with ethical academic writing standards, Turnitin was used to detect and prevent plagiarism, and proper citation was done to protect intellectual property and maintain the originality of the research. The Turnitin similarity index of 9% and 0% AI fully satisfies the originality requirements.

The data collected from quantitative surveys were analyzed using descriptive analysis of means and standard deviations, whereas qualitative data from document review and interviews were systematically transcribed, evaluated, and analyzed through thematic analysis.

Result and Discussions

These are the results and discussion of the study, following the order of the research problems.

Assessment of the Summer Lifeguard Training for PCG

The assessment of the effectiveness of the CGDSWM Summer Lifeguard Training Program, in terms of training program objectives, training contents, instructor capabilities, and materials and facilities, was evaluated by the PCG-trained lifeguards.

Table 1. Objectives of the Training Program

A. Training Program Objectives	Weighted Mean	Standard Deviation	Description
1. The extent to which training objectives are communicated to participants at the start of the program.	3.35	0.56	Very Effective

A. Training Program Objectives	Weighted Mean	Standard Deviation	Description
2. The alignment of the training objectives with the skills and knowledge required for lifeguard responsibilities.	3.49	0.58	<i>Very Effective</i>
3. The extent to which the lifeguard training program equips trainees with the necessary skills and knowledge to successfully perform open-sea swimming.	3.52	0.56	<i>Very Effective</i>
4. The extent to which the lifeguard training program equips trainees with the necessary skills and knowledge to execute rescue swimmer techniques.	3.54	0.56	<i>Very Effective</i>
5. The extent to which the lifeguard training program equips trainees with the necessary skills and knowledge to apply rescue techniques as needed.	3.42	0.50	<i>Very Effective</i>
6. The extent to which the lifeguard training program equips trainees with the necessary skills and knowledge to administer first aid and basic life support.	3.49	0.61	<i>Very Effective</i>
7. The extent to which the lifeguard training program equips trainees with the necessary skills and knowledge to contribute to the standardization of Coast Guard lifeguarding operations.	3.49	0.56	<i>Very Effective</i>
8. The extent of the allocated training duration to achieve the training objectives.	3.38	0.49	<i>Very Effective</i>
9. The alignment between the training objectives and the standards established by the Philippine Coast Guard (PCG).	3.45	0.56	<i>Very Effective</i>
10. The extent to which the skills learned prepared the trainees for real-world scenarios, such as responding to drownings or natural disasters.	3.45	0.61	<i>Very Effective</i>
OVERALL WEIGHTED MEAN	3.46	0.41	<i>Very Effective</i>

The Training Program Objectives were very effective, with an overall weighted mean of 3.46 and a standard deviation of 0.41 (Table 1). All item statements evaluating the objectives showed excellent scores with strong agreement and consistency in responses, apart from the extent to which the skills learned prepared the trainees for real-world scenarios, which received a slightly more dispersed response (0.61 SD). The highest-rated item

(Statement 4) was the extent to which the training program equipped trainees with the necessary skills and knowledge to execute rescue swimmer techniques (3.54); while communication of the training objectives (Statement 1) had a slightly lower mean score among all other items, suggesting that training goals may not really be that clearly conveyed at the start of the program. Overall, the objectives were clearly understood and are relevant to

the lifeguard competency development and practical for real-world emergencies, although

the approach for communicating the objectives may have room for improvement.

Table 2. Contents of the Training Program

B. Training Program Contents	Weighted Mean	Standard Deviation	Description
1. The scope of designing and structuring the training module to support comprehensive learning and skill development.	3.49	0.61	<i>Very Effective</i>
2. The assessment of the training curriculum's organization in ensuring a logical progression from one topic to the next.	3.51	0.61	<i>Very Effective</i>
3. The degree to which the training content was delivered within the learning process.	3.48	0.56	<i>Very Effective</i>
4. The scope of the contents in covering key topics on Basic Life Support (BLS-CPR).	3.52	0.58	<i>Very Effective</i>
5. The scope of the contents in providing hands-on exercises on Basic Life Support (BLS-CPR).	3.54	0.56	<i>Very Effective</i>
6. The extent of the training content in covering essential lifeguard competencies in the program.	3.39	0.60	<i>Very Effective</i>
7. The extent to which the training can translate theoretical knowledge to practical skills.	3.51	0.56	<i>Very Effective</i>
8. The scope of the rescue techniques lessons in preparing trainees for real-life situations.	3.62	0.55	<i>Very Effective</i>
9. The training's comprehensiveness in covering relevant information for responding to natural disasters.	3.45	0.56	<i>Very Effective</i>
10. The alignment between the training contents and the standards and requirements established by the Philippine Coast Guard (PCG).	3.52	0.61	<i>Very Effective</i>
OVERALL WEIGHTED MEAN	3.50	0.43	<i>Very Effective</i>

The training contents (Table 2) were also rated very effective, citing the scope of rescue techniques lessons to prepare trainees for real-life situations (3.62), with the most highly rated item, and suggesting that training lessons are practically useful during actual water rescue. On the contrary, the item with the least score but still with a very effective level pertained to how well the training covered all essential lifeguard competencies (3.39), suggesting that more topics were still anticipated as essential to lifeguarding. The overall standard deviation for the training contents assessment

showed consistent response with low SD (0.43 SD) but also revealed slightly high SD scores in at least four items (Statements 1, 2, 6, and 10), indicating moderate dispersion. Based on the findings, most respondents generally agree that the lifeguard training program's content is comprehensive, well-structured, and possesses the key lessons needed to become a professional lifeguard. The highly rated statements imply that there is practicality observed in most theoretical contents which can be applied in actual water emergency rescues.

Table 3. Instructors of the Training Program

C. Instructor Capabilities	Weighted Mean	Standard Deviation	Description
1. The extent to which instructors demonstrate knowledge on the topics of the CDGSWM Lifeguard Training Program.	3.58	0.55	<i>Very Effective</i>
2. The understandability of instructors in delivering their lectures.	3.58	0.60	<i>Very Effective</i>
3. The instructors' ability to effectively communicate complex water safety concepts.	3.67	0.53	<i>Very Effective</i>
4. The extent to which instructors integrate real-life life-guarding examples into practical exercises to enhance understanding.	3.59	0.52	<i>Very Effective</i>
5. The quality of instructor-led engagement in training discussions.	3.64	0.59	<i>Very Effective</i>
6. The proficiency of instructors in utilizing training tools, such as rescue equipment, to support learning.	3.65	0.51	<i>Very Effective</i>
7. The extent to which instructors utilize technology, such as film showing, to support learning.	3.58	0.53	<i>Very Effective</i>
8. The extent to which the learning environment encourages interaction through practical exercises.	3.36	0.64	<i>Very Effective</i>
9. The adaptability of instructors in adjusting teaching methods to accommodate diverse learning styles of trainees.	3.46	0.58	<i>Very Effective</i>
10. The measure of instructors' time management in maintaining the training schedule.	3.49	0.56	<i>Very Effective</i>
11. The responsiveness of instructors to feedback from trainees in fostering a supportive learning environment.	3.49	0.56	<i>Very Effective</i>
OVERALL WEIGHTED MEAN	3.55	0.45	<i>Very Effective</i>

Table 3 subsequently shows the assessment for materials and facilities showing an overall very effective weighted mean (3.55) with a relatively low standard deviation (0.45). Similar to the assessment of the training contents, most trainees also agree that the training instructors are highly competent, showing professionalism and are therefore effective in their training delivery. The item with the lowest score is on the extent to which the learning environment encourages interaction. Although it is still in the very effective level it showed a

slightly higher SD score indicative of more diverse responses or differing opinions among other trainees. The highest-rated indicator was seen in their ability to communicate complex water safety concepts (3.67), followed by proficiency in utilizing training tools such as rescue equipment (3.65) and Instructor-led engagement in discussions (3.64). The excellent rating of lifeguard training instructors signifies trainer competence to simplify and convey technically demanding lessons in a manner that trainees can easily understand.

Table 4. Materials and Facilities of the Training Program

D. Materials and Facilities	Weighted Mean	Standard Deviation	Description
1. The adequacy of rescue equipment (e.g., life-buoys, rescue tubes, throw bags) in supporting skill development.	3.61	0.57	<i>Very Effective</i>
2. The sufficiency of first aid supplies in facilitating hands-on emergency response training.	3.49	0.61	<i>Very Effective</i>

D. Materials and Facilities	Weighted Mean	Standard Deviation	Description
3. The extent to which CPR training equipment (e.g., manikins, AED trainers) enhances practical learning.	3.49	0.56	<i>Very Effective</i>
4. The usefulness of instructional materials (e.g., training manuals, visual aids) in reinforcing theoretical concepts.	3.52	0.56	<i>Very Effective</i>
5. The appropriateness of protective gear provided during training for safety and preparedness.	3.35	0.56	<i>Very Effective</i>
6. The suitability of the swimming pool or open water training area for practicing lifeguard skills in a realistic environment.	3.46	0.58	<i>Very Effective</i>
7. The adequacy of the training room in supporting theoretical instruction and discussions.	3.51	0.56	<i>Very Effective</i>
8. The availability and functionality of the emergency response station in ensuring readiness for emergency scenarios.	3.49	0.56	<i>Very Effective</i>
9. The adequacy of the simulation area in providing realistic practice for rescue techniques.	3.41	0.58	<i>Very Effective</i>
10. The extent to which training facilities contribute to an engaging learning experience.	3.67	0.59	<i>Very Effective</i>
OVERALL WEIGHTED MEAN	3.50	0.44	<i>Very Effective</i>

Finally, assessment of the Materials and Facilities (Table 8) was also rated very effective with an overall weighted mean of 3.50 and a relatively low dispersion of responses with an SD of 0.44. All statements showed consistent scores except for sufficiency of first aid supplies for hands-on emergency response training, which indicates diverse perceptions among respondents (0.61 SD). The training facilities provided an engaging learning experience, scoring the highest (3.67), followed by the availability of rescue equipment (3.61). This demonstrates that lifebuoys, rescue tubes, and throw bags have been provided in the training, which is also consistent with the PCG requirements. In contrast, the lowest score was the protective gear used during training (3.35), but still within the “Very Effective” level, which suggests that appropriateness or availability of the gear could still be enhanced.

Across all components in evaluating the Summer Lifeguard Training program, all aspects are rated at a very effective level. The component for the Instructor Capabilities garnered the highest overall weighted mean of 3.55, followed by Training Contents and Materials and Facilities, both with 3.50, while the lowest weighted mean of 3.46 was on Training

Program Objectives. Standard deviation also averages at 0.40, showing consistent ratings in all four indicators.

Overall, the PCG-trained lifeguards assessed that the CGDSWM Lifeguard Training Program is consistently very effective in terms of the training objectives, content of courses, capabilities of instructors, and the facilities and materials provided. However, the presence of several high standard deviations in some statements within each component indicates that some degree of variation in responses implies inconsistencies in the effectiveness of this training; thus, room for enhancement may still be needed to provide optimal training delivery.

Challenges Affecting the Overall Training Effectiveness and Lifeguard Performance

To provide groundwork in assessing challenges, document reviews of the After Activity Reports in 2024 and 2025 of the Summer Lifeguard Training programs were first conducted. The identified key challenges described in the reports can be categorized into two aspects: (1) Inconsistent station-level supervision and coordination among station commanders causing extended training schedules and logistical delays, which ultimately affect skill acquisition

and morale raising deployment readiness concerns; and (2) Lack of facilities, citing the use of personal laptops among instructors, shortage of rescue equipment (tubes, buoys, and whistles), lack of training supplies (notebooks, pens, and handouts), as well as the use of facilities outside the PCG premises posing safety and security concerns. In summary, document reviews have already revealed issues related to weak supervision, lack of proper facilities, and weak logistical support which may have affected the training program's effectiveness, which may also reveal deeper issues related to resource management, coordination, and accountability.

Following the responses from the document reviews, the challenges identified from the interviews among Implementers and Course Directors showed that the training program's effectiveness is affected by structural issues. These challenges are related to facilities, equipment, instructor availability, human factors of readiness, motivation, and confidence, and external conditions of weather, logistics, and financial constraints, something that is quite similar to the document reviews. The training also lacked refresher sessions, continuous after-training support, and the use of more innovative activities, which may strengthen skill retention.

Lack of Facilities and Materials. The absence of dedicated swimming pools and exclusive training venues, and often relying on the availability of external facilities, was mentioned several times. Example of these are as follows: *"No swimming pool facilities and individual lifeguard equipment..."* (Participant 1); *"Lack of proper facilities such as swimming pools..."* (Participant 5); *"Limited access to proper training equipment and facilities..."* (Participant 6); *"Poor training facility and equipment..."* (Participant 7); *"CG should have their own facilities like swimming pools..."* (Participant 10); *"Facility needed for such training is not available anytime..."* (Participant 11); *"Not having an exclusive facility for trainees..."* (Participant 12); *"CGDSWM doesn't have its own swimming pool..."* (Participant 13); *"Availability of conducive facility for the training..."* (Participant 15); *"Reliance on availability of designated pools hinders schedule..."* (Participant 12).

Because of this, there is limited training accessibility, and schedules are always adjusted when public facilities are free and available, which further affects the realism and consistency of practical exercises. Respondents have also observed a shortage of essential rescue tools and basic training supplies, limited rescue gear such as lifebuoys and spine boards, and inadequate access to training materials and logistics, as stated *"No individual lifeguard equipment provided..."* (Participant 1); *"Improving access to training equipment and materials..."* (Participant 3); *"Limited equipment and insufficient training resources..."* (Participant 5); *"Lack of sufficient rescue gear such as lifebuoys, spine boards..."* (Participant 6); *"Lack of equipment for trainees..."* (Participant 7); *"Limited access to equipment used for lifeguard training..."* (Participant 9); *"Funds diverted to uniforms instead of lifesaving equipment..."* (Participant 12); *"Logistics and equipment procurement issues..."* (Participant 15). *"Lack of logistical support..."* (Participant 9); *"Lacks support in terms of logistics, time, and attention by command..."* (Participant 15). Contrary to the results of the very effective facilities and materials in the training program assessment made by the trainees, the same observed logistical and resource deficiencies in the document review corroborate this identified challenge during the interviews. This indicates that the program implementers may have managed to provide the necessary equipment during the training sessions, but the trained lifeguards may not have been aware of the said limitations.

Program of Instruction (POI) and Training Content Issues. Aspects related to the POI and training content were also found to be perceived as one of the key challenges. The comments related to this were about having too generalized content, seemingly use of outdated procedures, limited environmental exposure, adopting excessive military-style training approach, lack of curriculum review, and the poor responsiveness to operational requirements. At least eight responses were clustered in this category. Some respondents even mentioned that it did not include the updated Search and Rescue (SAR) and Basic Life Support (BLS) procedures, having fewer target lessons to certain muscular sections, which might have stem

from the lack of a regular curriculum review and evaluation. Since the training program was also just a pilot program, a regular program review might not have been integrated so far.

Some of their verbatim included the following: *"Exercises do not target specific muscle groups..."* (Participant 1); *"Training should be for additional skills, not lengthy repetition..."* (Participant 2); *"Program should include different water environments..."* (Participant 8); *"POI should be studied thoroughly..."* (Participant 10); *"POI should be enhanced to include changes in SAR and BLS..."* (Participant 11); *"Proper POI should be followed, not rigid military-style training..."* (Participant 15).

Need for Refresher & Continuous Training for skills maintenance. When a skill is not often used, eventually it gets forgotten. This is how the absence of refresher trainings to were described as one of the key challenges in the lifeguard training. Some of the program implementers and course directors have even conducted personal initiatives to avoid lifeguard skill deterioration. Compared to the issues related to the POI, more statements about the importance of continuous trainings have been described by most of the respondents, such as *"Lack of refresher courses and monitoring of BMI; Refresher session highly needed but not programmed"* (Participant 1); *"Limited time/resources for refreshers, but effective when done..."* (Participant 3); *"Adequate learning materials should be provided..."* (Participant 5); *"Lack of continuous practice and refresher training..."* (Participant 9); *"Lack of refresher training..."* (Participant 10); *"Lack of refresher courses offered to maintain skills..."* (Participant 11); *"Effort of trained personnel to sustain their skills..."* (Participant 15). Some participants even suggest that these should have been provided quarterly or annually, in the form of practical exercises, lifeguard competitions, or continuous fitness activities. *"Quarterly evaluation/refresher must be observed..."* (Participant 2); *"Quarterly refresher training and evaluation needed..."* (Participant 6). Through constant practice and use of learned skills, the supervisors are convinced that PCG-trained lifeguards can maintain their current levels of swimming proficiency, explore varied rescue techniques,

and maintain confidence to conduct water emergencies.

Duration & Scheduling Challenges. The training duration and scheduling were also identified as a challenge, as described by three respondents. They mentioned that *"Duration is quite long..."* (Participant 2); *"Training duration needs to be increased to improve skills..."* (Participant 9); *"Duration exceeded its time allocation..."* (Participant 15). However, most have expressed differing views regarding training duration. While some considered the duration excessively long, others believed that the training period should be extended further to improve mastery of skills, or that the conduct of training has occasionally exceeded the intended time allocation. These differing perspectives seem to suggest inconsistencies in the perspective of course implementers who value training intensity, skill acquisition, and scheduling efficiency more than others. At any rate, this may also imply that there is varying implementation of program pacing or schedules across different implementers.

Instructor & Expertise Constraints. There was also the challenge of Instructor and expertise constraints, with at least three respondents who mentioned the limited number of available subject matter experts not only within CGDSWM but also nationwide. Statements about *"Availability of instructors must be full-time..."* (Participant 4); *"Limited subject matter experts not only in CGDSWM but nationwide..."* (Participant 8); *"Expertise of instructors/trainers must fit the type of students..."* (Participant 15) identified that the lack of full-time instructors and the need to match instructor expertise with trainee characteristics and learning needs was also part of the challenge in implementing the training. Although PCG-trained lifeguards have rated instructor capabilities very effective, program implementers have attributed the quality and sustainability of the training program to the availability of qualified and specialized trainers.

Trainee Commitment & Attitude. Finally, implementers and course directors also identified trainee commitment and attitude as

factors affecting training outcomes, which were also influenced by limited facilities and a lack of logistical support. Others have also noted that some personnel attended the course merely for compliance purposes rather than genuine professional development. Participant 14 emphasized *“Program must be conducted only for personnel willing to undergo training...”* (Participant 14). And others also mentioned that *“Poor facilities result in lack of commitment...”* (Participant 7); *“Students sometimes take the course for granted...”* (Participant 9). These statements suggest that trainee engagement, commitment, and personal motivation are essential elements influencing the effectiveness of skill acquisition and training performance, which is also empirically supported by earlier studies, as motivation, engagement, and related commitment are part of the factors that help trainees effectively learn and perform (Bauer et al., 2016).

In general, the challenges described based on document reviews and interview results were responses collected from Program Implementers and Course Directors of the CGDSWM Summer Lifeguard Training Program. While the experience of lifeguard trainees perceives the training program as highly effective, even in terms of materials and facilities, this finding seems to be opposed by training implementers who are more aware of the broader logistical

and operational challenges that took place while the training was being done. Problems like missing facilities, equipment shortages, and budget limitations may not have been observed completely by trainees who were likely more focused on the actual training experience and instructor performance. On the other hand, implementers who are tasked to do planning, provide adequate logistics and resources, and ensure sustainability, may describe experiences of shortages underlying facility and equipment gaps. This implies that the high ratings provided by trainees do not necessarily indicate that there were no resource-related challenges; training effectiveness is more likely dependent on the perspective of each involved stakeholder. It may also suggest that the program implementers were just resourceful enough to avoid the trainees from experiencing the logistical gap while undertaking the training, which were also corroborated from the after-training reports submitted as well by program implementers and course directors.

Evaluation of the Performance of PCG-trained Lifeguards

Table 5 presents the results of the evaluation on the performance of the PCG-trained lifeguards as assessed by Commanders and Supervisors.

Table 5. Performance Evaluation of the of PCG-trained Lifeguards

Competency Indicators	M 5	A 4	F 3	B 2	I 1	C 99	Weighted Mean	Description
1. Rescue Techniques – Performing lifesaving water rescues.	10	28	25	1	0	1	3.73	<i>Advanced</i>
2. CPR & Basic Life Support – Emergency resuscitation and cardiac response.	9	29	24	2	0	1	3.70	<i>Advanced</i>
3. First Aid & Injury Management – Immediate care for wounds and medical emergencies.	9	24	27	4	0	1	3.59	<i>Advanced</i>
4. Water Safety & Survival Skills – Applying safety principles and survival methods.	14	34	16	0	0	1	3.97	<i>Advanced</i>
5. Water Entry & Maneuvering – Effective entry and navigation in varied water conditions.	12	32	18	1	0	2	3.87	<i>Advanced</i>
6. Emergency Response Readiness – Prompt, appropriate reaction to lifeguard emergencies.	15	27	21	1	0	1	3.88	<i>Advanced</i>

Competency Indicators	M	A	F	B	I	C	Weighted Mean	Description
7. Decision-Making & Adaptability – Quick, informed choices in emergencies.	14	25	23	2	0	1	3.80	<i>Advanced</i>
8. Physical Endurance & Stamina – Sustaining strength for extended rescues.	12	29	21	2	0	1	3.80	<i>Advanced</i>
9. Precision in Techniques – Accurate execution of CPR, first aid, and rescues under pressure.	12	27	23	2	0	1	3.77	<i>Advanced</i>
10. Adherence to Safety Protocols – Consistent compliance with lifeguard standards.	13	27	20	4	0	1	3.77	<i>Advanced</i>
OVERALL WEIGHTED MEAN							3.79	<i>Advanced</i>

Based on the overall assessment, the PCG-trained lifeguard performs well with an advanced level of performance (3.79) that falls within the Advanced level. The average scores show consistent, almost similar mean scores with no skewed outliers, showing evidence of concentration of scores within the above-average performance. The variation within the actual levels of competencies shows that Water Safety and Survival Skills have the highest mean score (3.97). The subsequent statements with high mean scores are competency skills of Emergency Response Readiness (3.88), Water Entry & Maneuvering (3.87), Decision-Making & Adaptability (3.80), and Physical Endurance & Stamina (3.80), which all relate to essential water rescue skills. The competency on First Aid and Injury Management had the lowest mean score (3.59) and had a greater proportion of individuals under the Functional level (38.67%). The findings imply that PCG-trained lifeguards are proficient in doing water rescues, but they may still lack the full confidence to do immediate medical care.

Operational Readiness. The perceived factors that develop operational readiness were also determined following the evaluation of the overall performance. This was derived from open-ended survey responses to determine if commanders and supervisors believe that the trainees were fully prepared for real-life rescue situations. Results in the open-ended questions show results were somewhat similar to the performance evaluation results, further emphasizing that the CGDSWM

Summer Lifeguard Training was effective in developing operational competencies to do actual rescue operations.

The dominant positive feedback from the majority of the commanders and supervisors (18 respondents) is that they felt the lifeguard trainees were “prepared due to training.” They strongly feel that lifeguard preparedness is based on doing comprehensive and rigorous training cycles that include water-based exercises, land drills, and first aid or CPR. The practiced rescue simulations are said to closely resemble an actual rescue situation; hence it somehow developed endurance, discipline, and overall technical competency among the PCG personnel. This may be the reason why Water Safety and Survival Skills and Emergency Response Readiness and Water Entry and Maneuvering skills scored high averages from the earlier results in Table 5.

Similarly, doing more “Hands-on practice and drills,” particularly after the training, is also one aspect that boost preparedness, as mentioned by at least 14 respondents. Doing regular practical exercises, scenario-based simulations, and having consistent refresher drills, somehow helped PCG-trained lifeguards to remain calm under pressure. Hence, it has improved lifeguard confidence and situational responsiveness during emergencies, which may be the reason also why there were high ratings on Decision-Making and Adaptability, Precision in Lifeguarding Techniques, and Adherence to Safety Protocols from the performance evaluation.

Level of preparedness was also associated with having professional trainers and structured programs, which obtained eight responses under the moderate category. Since the training were handled by qualified instructors, including special operations personnel and medical practitioners, supervisors and commanders believed that in doing so, theoretical insights are better transformed to practical instruction techniques. On top of this, the training instructors also emphasized the importance of communication skills, teamwork, discipline, leadership, and decision-making as part of being a competent lifeguard, which suggests that the training adopted a holistic skill development in establishing lifeguard competencies.

The perceptions of operational readiness were also observed during actual deployments. About six commanders and supervisors have personally witnessed PCG-trained lifeguards performing effective rescue operations during missions, and calamity response activities. Even if there were insufficient life-saving resources in their stations, supervisors have observed that trained lifeguards were resourceful and can still do lifesaving techniques. This feedback is consistent with the earlier observation that there were indeed positive outcomes in the training having highly effective ratings from trainees of the materials and facilities, even if supervisors and commanders were aware of the limited resources.

On the other hand, several program weaknesses also emerged in the findings. First is the "Need for continuous refresher training," mentioned 12 times almost by all supervisors and commanders. Majority are convinced that a one-time training alone is less likely to sustain PCG-trained operational readiness and actively recommend continuous drills, scenario-based exercises, and exposure to actual rescue situations to maintain competency and confidence in performing rescues. The absence of continuous learning activities supports the comparatively lower scores received on the lifeguard competencies of First Aid and Injury Management and CPR and Basic Life Support skills. If there are no simulated rescue scenarios to practice on, these skills may be the first ones to deteriorate eventually after some time.

The above issue is also related to crash-course limitations and partial preparedness. The need for refresher training was also based on the short-duration or condensed schedule of the Summer Lifeguard Training program. Supervisors somehow feel that the training has only provided foundational knowledge but has not completely inculcated the endurance and adaptability that is needed during complex rescue situations. They claim that lifeguard trainees may feel they are prepared but could still lack certain competency skills because of the short training duration and the absence of refresher programs, which also leads to loss of proficiency.

Another issue raised was on the paradigm of the "simulation versus reality gap," as repeated seven times among commanders and supervisors. A common view that this respondent group shares is that even if trainees were exposed to a very realistic simulation exercise, real-life rescue situations are more unpredictable, causing lifeguards' different forms of stress beyond what they are experiencing in the training. Supervisors are convinced that lifeguard trainees should have higher levels of adaptability, be able to make rapid decisions, have emotional resilience, and have exceptional situational awareness. It goes to show that even if they have observed actual rescue experience done by the PCG-lifeguard trainees, several supervisors may not yet be fully convinced of the value of practice simulation exercises.

Finally, the recurring issue of equipment and budget constraints is a highlighted aspect that affects operational preparedness. About six respondents mentioned that the lack of sufficient lifesaving equipment and limited funding affect operational performance during actual deployment. Thus, this feedback then supports the mentioned challenges affecting training effectiveness, highlighting that the inadequate training facility and limited logistical and equipment also affect lifeguard personnel performance.

Proposed Recommendations for Training Program Enhancements

These are the suggestions made when respondents were asked what to improve in the CGDSWM Summer Lifeguard Training

Program, which were derived from open-ended questions in the survey.

From PCG-trained Lifeguards. This group's suggestions were focused primarily on augmenting lessons, creating more realistic training, and ensuring there are available and sufficient resources. The first was to increase public interaction and safety education components of the training program. Through promotion and advocacy of responsible water activities, trainees feel that they can help communicate better drowning prevention measures with beachgoers. Another is to add more hands-on and scenario-based exercises in the practical learning sessions, such as emergency simulations, coastline walk-throughs, and advanced swimming activities, as these activities are perceived to improve their capabilities and increase their level of confidence in actual rescue operations.

Part of ensuring there are available resources is their suggestion to upgrade infrastructure and resources, such as utilizing modern rescue tools like drones, sonar devices, rescue applications, personal watercraft, and upgraded first aid equipment. The PCG-trained lifeguard also prefers to be issued with rescue gear after completing the course so they can use it in actual emergencies during deployment. In terms of facilities, having a dedicated swimming pool only for lifeguard activities was highly suggested alongside expansion of the facility, classrooms, and training to cater to larger groups.

In addition, PCG-trained lifeguards also endorsed regular curriculum review to update relevant lessons and topics included in the program and to reinforce the need for refresher training. The review should cover updates of training materials to ensure that CPR and life-saving procedures are standardized and aligned with the PCG operational frameworks, forming part of the regular education and training operations of the PCG. Alongside the regular enhancement is the offering of annual or biannual refresher courses to sustain learned competencies. The program was also suggested to be expanded to non-PCG personnel.

Overall, the PCG-trained lifeguards' recommendations are focused on making the

lifeguard training more realistic, better supported with resources, and reinforced regularly to sustain long-term competence. These recommendations are quite common to similar recommendations from lifeguard education and water-rescue services, such as the need to have a more realistic practice session, provision of adequate and sufficient types of equipment and facilities, and having modernized curricula and refreshers, integrated into a more harmonized, wide-scale emergency operations (Sharpe et al., 2025; Kim & Lee, 2021; Tabaczek-Bejster et al., 2018; Peden et al., 2022).

From Commanders and Supervisors. On the other hand, the commanders and supervisors recommended strengthening the institutionalization of the training program, standardization of operations, and sustainability measures, although several issues also reflect similar suggestions from those of the PCG-trained lifeguards. Like the suggestions of their trainees, the commanders and supervisors also recommend the enhancement of training quality and curriculum design by crafting standardized training modules, extending training duration, and incorporating more realistic simulations and scenario-based activities in the sessions. Similarly, the lessons should also have components of stress management, leadership skills, effective communication skills, and building teamwork to make it more holistic.

The curriculum of the training program was also suggested to have a regular review and enhancement with updates issued via memorandum circulars. The enhancement should use effective monitoring and evaluation systems to check individual trainee progress and overall program outcomes. Individual improvement is advised to be tracked through refresher courses, requiring periodic requalification, and the conduct of quarterly lifeguard exercises. Program level improvement can also be measured through frequencies and quality of updated training materials, as well as the conduct of impact evaluation studies.

Facilities and materials are also one of the key recommendations raised. They suggest that standardized, modern rescue equipment, including rescue boards, radios, drones, medical kits, and other lifeguards' deployment

support packages, be provided not only during training but especially after completing the training program. Providing PCG-trained lifeguards with rescue tubes, buoys, life jackets, and spine boards across PCG stations and sub-stations is a crucial need during trained lifeguard deployment. How to do this require program implementers to have a more efficient procurement system and ensure stable logistical support from the administration.

Similar to the PCG-trainees, supervisors and commanders also agree that the training must have its own dedicated facilities, such as swimming pools and classrooms, as well as an allotted budget for transportation, fuel allocation, and adequate materials. Part of improving resources is also to allot a budget for the training workforce to ensure the availability of credible and qualified instructors in the training program. This is perceived to only be possible if the lifeguard training program is institutionalized across Coast Guard districts. By institutionalization, they mean that the lifeguard training program is adopted in the entire PCG district, with joint exercises among other agencies like DRRMO, who can also benefit from the lifeguard training.

Lastly, commanders and supervisors also considered community engagement as an important part of the enhancement. Part of the lifeguard duties is also to educate the public, involve stakeholders, and promote a stronger culture of water safety so that the public will comply with safety protocols.

Overall, the similarities or differences across recommendations from respondent groups show consistent overlap of several recommendations. Similarities in the suggested improvements from both the PCG-trained lifeguards and the commanders/supervisor's group were on the importance of professionalizing lifeguard training; modernizing equipment and facilities; ensuring continuous training and evaluation; and strengthening public safety and community engagement. The only difference seen in these recommendations is that there is more focus on the operational experience among challenges identified by lifeguards, while most commanding officers or implementers, who identify challenges related to structure, standardization, and system-wide

implementation, are more inclined to see the whole picture of the training program.

Proposed Lifeguard Training Framework for the Philippine Coast Guard Adoption

Based on the recommendations gathered from participants, a unified training enhancement plan that addresses curriculum, facilities, refresher systems, trainer development, funding, and interagency coordination is presented in Figure 1. From it, the proposed enhancement of the CGDSWM Summer Lifeguard Training Program that can be adopted by the PCG can be illustrated using this simplified developmental framework.

The proposed enhancement framework is exemplified as a pyramid, representing progressive levels of importance of layers and key elements that support the entire system, all leading to lifeguard readiness and public safety. Within its different layers, governance and resources rest as the foundation at the base towards the integration layer of collaboration on the topmost part. By following a systematic, government-aligned model, the layers, having Governance and Resources as foundation, the structural layer is dependent on the Program Design and Curriculum, and processed by Training Methodology and Delivery, with a support layer for Supervision and Support, and finally reaching Integration and Collaboration.

Governance ensures sustained implementation by strengthening resources and logistics. This includes investing in provisions for standardized equipment like rescue tubes, boards, drones, radios, sonar, and allotting dedicated facilities of swimming pools, or open-water sites for the training. This can be attained with district-level procurement systems to avoid reliance on personal funds, thereby having fixed budget allocations for training, logistics, billeting, and transport needs.

Moving to the next layer is enhancements directed at the program structure, in particular, the instructional quality and curriculum. The Program of Instruction includes aspects of nutrition and health on top of physically intensive exercises, longer training cycles up to 6–8 weeks, and adopting a progressive certification

level from Basic, Intermediate, and Advanced levels. The POI should include standardized CPR, BLS, advanced rescue, and sea safety modules aligned with PCG frameworks. It must also have aspects of leadership and communication skills to maintain a holistic approach to learning. Since trainers are limited, sessions can also include external experts in the Philippines, and should adopt trainer exchanges in schedules across different training units.

The next layer is Training Methodology as the process layer. The term process, this reflects using methods that are realistic and engaging. Several innovative ways in the teaching-learning process can include scenario-based simulations like multi-victim rescues, night ops, crowded beaches, plus stress management drills, hazard walk-throughs, and disaster preparedness. The modern strategies will

help diversify ways of learning, infusing learning even through the conduct of team exercises, lifeguard Olympics, and peer teaching that may also form part of regular PCG activities.

Just as with any other organizational framework, there is always a support layer that provides reinforcement to the foundations of the program. On this part, supervision and giving of adequate support are required to ensure instructor guidance, monitoring, refresher courses, and motivational leadership. Part of providing support is to require senior officers to actively mentor trainees, and reinforce life-saving duties, as well as comply with professional standards. The support can also conduct regular performance monitoring, such as check-ins, audits, and feedback, to help identify gaps in the curriculum early on.



Figure 1. Framework for Enhancing the Summer Lifeguard Training Program

Finally, the last layer is integration focused on collaboration and community engagement as the ultimate *crème de la crème*. This top tier is aimed at widening the coverage of benefits the PCG can gain from the institutionalized lifeguard training, expanding its reach to the community as the end beneficiary. The collaboration aspect includes conducting joint exercises with MDRMO, LGUs, resorts, and agencies, through regular lifeguard training operations, which involves recreational resorts to also strengthen training quality and augment resources. The community engagement aspect will transform the PCG-trained lifeguards into active promoters of water safety campaigns through outreach and public drills, building a culture of safety while doing their duties.

As a whole, the goal of the enhancement framework is to strengthen trainee readiness and achieve greater public safety impact. As PCG-trained lifeguards demonstrate technical proficiency, the targeted recommendations for the Summer Lifeguard Training utilize a systematic, participatory, and sustainable approach, while combining technical rigor with human-centered development, resilience, and community-oriented skills.

Conclusion

Based on the findings of the study, the following conclusions are hereby made: The Summer Lifeguard Training conducted by the Coast Guard District Southwestern Mindanao is generally effective in capacitating PCG-trained personnel for lifeguard responsibilities and water-related emergency response, as it has excelled in all aspects of its training components. The CGDSWM has significantly helped the Philippine Coast Guard achieve its goals in improving maritime safety while also providing an effective preventive initiative to address the incidence of drowning risks.

The effectiveness of the training program is also reflected by the achieved results of its intended purpose. Performance of PCG-trained lifeguards is rated with advanced proficiency levels in competencies of water safety and survival skills, emergency response readiness, water entry and maneuvering, preparedness, decision-making, and professionalism. Hence, we can conclude that the training inputs were effectively translated into operational

competence, having consistently advanced performance ratings of its trainees. The evaluations from commanders and supervisors who have direct observation of how well the PCG-trained lifeguards demonstrated real-world rescue situations earlier support the evaluation that the training has adequately equipped its personnel for lifeguard duties. Hence, the CGDSWM must indeed provide the required support to sustain these advanced competencies.

There is a risk, however, to the long-term impact and sustainability of the effectiveness of the training program, as it is affected by operational, resource, and personnel-related challenges. The current PCG-trained lifeguard proficiency may soon experience gradual decay if there are no consistent reinforcement activities. The only way to avoid this is for the Summer Lifeguard Training Program to be continuously enhanced, so that it adapts to the evolving operational demands and professional lifeguarding standards.

To do this, the program must address the identified gaps in instruction, facilities, logistics, and trainee preparedness through a systematic and evidence-based enhancement framework. The proposed framework was designed based on the experiences, observations, and recommendations of trainees, supervisors, commanders, program implementers, and course directors, showing that it is based on stakeholder needs and is grounded in operational realities to improve the quality and impact of the lifeguard training. More importantly, it not only serves as a guide for improving the Summer Lifeguard Training Program but also serves as a model that can be adopted in the various districts of the PCG. Having this, the PCG can ultimately address emergency readiness, promote public safety, and support tourism development while having a more resilient, responsive, and nationally relevant lifeguard training system.

Based from the conclusions, there are the policy recommendations: (1) Advocacy for the pilot implementation of the proposed Standardized Lifeguard Training Program Enhancement across PCG Districts nationwide to verify the feasibility and effectiveness of the program; (2) Conduct of a formal review and validation of the proposed Summer Lifeguard

Training Program enhancement framework, by key stakeholders within the PCG for a more comprehensive assessment from stages of planning to implementation, including evaluation mechanisms used, the directors, subject-matter experts, and operational units working for the program; (3) Incorporating external stakeholders' feedback in the training evaluation such as beachgoers, pool users, local communities, resort operators, and partner agencies (e.g., LGUs, DRRMO), which is one of the study limitations; and (4) Exploring future studies on further performance validation metrics such as rescue outcomes, deployment records and actual performance in stress stimulations of trainees compared across demographic variations, tenure gaps, and varied perceptions to lifeguard preparedness.

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