Volume 25 Issue 15
Originally issued as G4

Global Journal of Human-Social Science: G
Linguistics & Education
Volume 25 Issue 4 Version 1.0 Year 2025
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Water Survival Skills and Swimming Performance of BSMT Students: A Sequential Explanatory Study

By Krystel Joyce V. Repalda

Abstract- Poor swimming performance is dangerous. The aim of this study was to determine the significance of water survival skills as a factor of swimming performance, and to explore experiences on water survival among BSMT students. Using sequential explanatory design, I surveyed 267 randomly selected samples and interviewed 5 purposively selected students. Water survival skills were found to be a significant factor, accounting for a 56.1% degree of influence. Survival skills experiences under technique developed, independent in water, and building confidence, respectively, are swimming stroke adjustment, breathing control, and overall skill enhancement; reliance on personal skills, utilization of training adaptation, and internal lessons of growth; and overcoming fear, self-reliance, and future preparedness. Mixed-method studies and enhanced training with structured water survival drills are recommended.

Keywords: *water survival skills, swimming performance, BSMT students, sequential explanatory study.*

GJHSS-G Classification: *LCC GV838.5*



Strictly as per the compliance and regulations of:

© 2025. Krystel Joyce V. Repalda. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creativecommons.org/licenses/by-nc-nd/4.0/.

Water Survival Skills and Swimming Performance of BSMT Students: A Sequential Explanatory Study

Krystel Joyce V. Repalda

Abstract- **Poor swimming performance is dangerous. The aim of this study was to determine the significance of water survival skills as a factor of swimming performance, and to explore experiences on water survival among BSMT students. Using sequential explanatory design, I surveyed 267 randomly selected samples and interviewed 5 purposively selected students. Water survival skills were found to be a significant factor, accounting for a 56.1% degree of influence. Survival skills experiences under technique developed, independent in water, and building confidence, respectively, are swimming stroke adjustment, breathing control, and overall skill enhancement; reliance on personal skills, utilization of training adaptation, and internal lessons of growth; and overcoming fear, self-reliance, and future preparedness. Mixed-method studies and enhanced training with structured water survival drills are recommended.**

Keywords: water survival skills, swimming performance, BSMT students, sequential explanatory study.

I. Introduction

Maritime students are struggling with poor swimming performance, which is compromising their ability to respond effectively in aquatic emergencies (Mitishev & Sozonov, 2024). This subpar performance is resulting in diminished overall effectiveness and raising concerns about safety in real-life scenarios. Ultimately, the students' inadequate swimming abilities are hindering their ability to succeed in their maritime education and future careers (Duijn et al., 2022).

Despite being a highly competitive sport, swimming has faced challenges in sustaining its global prominence. Hunter et al. (2023) observed a decline in the United States swimming performance, with nations like Japan and Russia narrowing the gap. He attributed this decline to insufficient investment in grassroots programs and a failure to adapt to evolving trends in the sport. Tawanda and Tsara (2022) examined Africa's swimming performance and highlighted challenges in maintaining long-term success, citing a shallow talent pool and limited coaching and training resources. Similarly, Petrenko and Taran (2021) explored the difficulties Russian swimmers face in international competitions. He pointed out that inadequate investment in infrastructure and training facilities, along with limited competitive opportunities, has hindered the country's swimming development.

In the Philippine context, it has faced challenges in developing world-class swimmers, with its swimming performance trailing behind neighboring Southeast Asian countries. Rosario (2024) identified a lack of investment in swimming infrastructure and programs as a major barrier, leading to a shortage of trained coaches, inadequate training facilities, and limited competition opportunities. Celso (2025) noted that Filipino swimmers struggle to meet international standards due to limited exposure to high-level competition and insufficient support systems. Blanco (2022) emphasized the need for a more structured and systematic approach to swimming development, highlighting the lack of clear vision and coordination among key stakeholders, including coaches, athletes, and government agencies.

Despite the critical importance of swimming skills in maritime schools and industries, there is a significant gap in existing literature and training programs that address the specific challenges faced by maritime students and professionals. While studies and training programs on general swimming skills exist, there is a lack of research and initiatives tailored to the unique demands of the maritime industry. Addressing this gap is crucial, as inadequate swimming skills among maritime students and professionals can lead to serious consequences, including accidents and loss of life. With increasing regulatory requirements and safety standards in the maritime industry, urgent training programs are needed to ensure safety and compliance.

This research highlights the significance of water survival skills in enhancing swimming performance among Physical Education BSMT students, emphasizing its critical role in maritime training. Understanding this relationship is essential, as water survival mastery boosts confidence, stamina, and emergency readiness—key attributes for safety and performance in maritime environments. The findings aim to improve training strategies and curricula to better prepare students for the physical demands and challenges of maritime careers. Beneficiaries include CHED officials, who can use the insights to enhance curriculum standards; school administrators, who can refine maritime programs; PE teachers, who can tailor instruction to student needs; maritime students, who

Author: Master of Arts in Education Major in Teaching Physical Education. e-mail: krysteljoyce.repalda@hcdc.edu.ph

© 2025 Global Journals

gain improved training; and future researchers, who can build on this comprehensive analysis for further innovations.

This study aimed to determine the significance of water survival skills as a factor of swimming performance; and to explore experiences on water survival among study participants. Specifically, it seeks to determine whether water survival skills significantly influence swimming performance and to identify which specific survival skills explain variations in overall performance, describe the level of Water Survival Skills and Swimming Performance among the BSMT students, and determine the significant relationship between water survival skills and swimming performance among BSMT students. Further, this study sought to answer the following question: What are the water survival experiences of the study participants that contribute to their swimming performance?

The following hypothesis was tested at a 0.05 level of significance: Water survival skills and swimming performance are not significantly correlated. Meanwhile, the assumption of this study is that the experiences of BSMT students on reflexive movements would lead to their fundamental movements.

This study is anchored in Harrow's (1972) Psychomotor Learning Theory. The theory posits that this taxonomy is organized according to the degree of coordination, including involuntary responses and learned capabilities: reflex movements - automatic reactions, basic fundamental movement - simple movements that can build to more complex sets of movements, perceptual - environmental cues that allow one to adjust movements, physical activities - things requiring endurance, strength, vigor, and agility, skilled movements - activities where a level of efficiency is achieved, non-discursive communication - body language.

In this study, the automatic reactions variable is indicated by flexion, extension, stretch, and postural adjustment. (Harlow, 1972) aligns with reflexive movements and exhibits foundational psychomotor abilities such as floating, treading water, breath control, and coordinated reflexive actions crucial for survival in aquatic environments, as discussed in the theory. The physical activities indicated by strenuous effort for long periods, muscular exertion, a quick, wide range of motion at the hip joints, and quick, precise movements (Harrow, 1972) are aligned with basic fundamental movements that encompass skills such as strength, endurance, agility, and coordination that support more complex and purposeful physical tasks as included in the theory. Other elements explained in the theory, such as fundamental movement, perceptual, skilled movements, and non-discursive communication, are excluded.

II. Method

This study employed sequential explanatory mixed-methods design (Creswell & Creswell, 2017), prioritizing quantitative data followed by qualitative analysis to enhance ecological validity.

The study was conducted at a private maritime institution in Davao City's Población District, focusing on Maritime Department students in transportation and engineering programs.

For the Quantitative Phase, using Yamane's formula (1967, cited in Hasan & Kumar, 2024), 267 BSMT students were randomly selected from 800 second-years. For the Qualitative Phase, five highest-scoring BSMT students were purposively selected based on researcher judgment for useful information provision.

For the Quantitative Phase, a 40-item adapted questionnaire assessed water survival skills (Moran et al., 2011; Stallman et al., 2017) and swimming performance (Pyne et al., 2004; Langendorfer, 2015). For the Qualitative Phase, open-ended interviews explored BSMT students' experiences comprehensively (Creswell & Poth, 2016; Patton, 2014), requiring careful design and piloting (Lim, 2025).

Both quantitative surveys and qualitative interviews were conducted after securing ethical clearance, ensuring comprehensive data collection through systematic monitoring and transcription processes.

The quantitative data was analyzed using Mean calculations and linear regression analysis to determine the water survival skills' influence on swimming performance using established correlation interpretation schemes. Meanwhile, the qualitative data was analyzed using Thematic analysis to identify patterns and insights from interview responses using systematic coding approaches (Braun & Clarke, 2006; Lochmiller, 2021).

Credibility through prolonged engagement (Adler, 2022), confirmability via audit trails (Amin et al., 2020), dependability through coding systems (Haq et al., 2023), authenticity ensuring genuine representation (Ahmed, 2024), and transferability through detailed descriptions (Riazi et al., 2023) established trustworthy-ness (Creswell & Creswell, 2017).

The researcher ensured the protection of participants' confidentiality (Pring, 2024), voluntary participation principles (Mumford et al., 2021), and harm minimization strategies (Picketts et al., 2021) with institutional approval.

III. Results and Discussion

The results of the analysis and interpretation of the gathered data are presented. Specifically included are the descriptive analysis, correlation analysis, modified paradigm, emerging themes and subthemes, and the summary of findings.

© 2025 Global Journals

a) Descriptive Analysis

Table 1 is the descriptive table. It contains the variables involved in the study, namely, water survival and swimming performance, and their respective indicators. It also contains the number of samples, standard deviation, the mean, and the corresponding descriptive interpretations

Table 1: Descriptive Table

Variable	n	SD	Mean	Descriptive Level
Water Survival Skills	267	1.00	3.25	Moderate
Technique		0.99	3.26	Moderate
Adaptability		0.99	3.35	Moderate
Endurance		0.99	3.23	Moderate
Self-reliance		1.02	3.14	Moderate
Swimming Performance	267	0.87	4.18	High
Efficiency		0.92	4.10	High
Strength		0.88	4.17	High
Speed		0.86	4.23	Very High
Accuracy		0.84	4.20	Very High

Specifically, Table 1 shows that the water survival skills variable obtained an overall mean score of 3.25, described as a moderate level. This indicates that the water survival skills of second-year BSMT students are good, affirming Ekanayaka et al. (2021) and Kim et al. (2022) findings on training effectiveness.

Moreover, the findings reveal that the overall swimming performance obtained a mean score of 4.18, which is described as a high level. This indicates that the swimming performance of second-year BSMT students is very good, corroborating Guo et al. (2022) and Lopes et al. (2021) training structure studies.

b) Correlation Analysis

Table 2 is the correlation table. It specifically contains the predictive variable, which is water survival skills, and the criterion variable, which is the swimming performance of second-year BSMT students. Lastly, it contains the r-value, the p-value, and the decision on the hypothesis.

Table 2: Correlation Table

Independent Variable	Swimming Performance			
	r-value	p value	Decision on Ho @ 0.05	Interpretation
Water Survival Skills	0.561	0.000	Rejected	Significant

Table 2 shows that the correlation between water survival skills and swimming performance obtained a p-value of 0.000, which is less than 0.05 level of significance. Therefore, the null hypothesis was rejected, confirming a statistically significant moderate relationship between the two variables. Furthermore, such a correlation obtained an r-value of 0.561, indicating a moderately positive strength. Water survival skills and swimming performance showed moderate positive correlation, supporting Duijn et al. (2022) and Denny et al. (2021).

c) Modified Paradigm

Figure 1 shows the modified paradigm of this study. In this paradigm, three emerging themes from the data collected were generated, describing their experiences. The following are the accounts of the experiences raised by the participants. The following themes emerged: technique development, independence in water survival, and building confidence.

© 2025 Global Journals

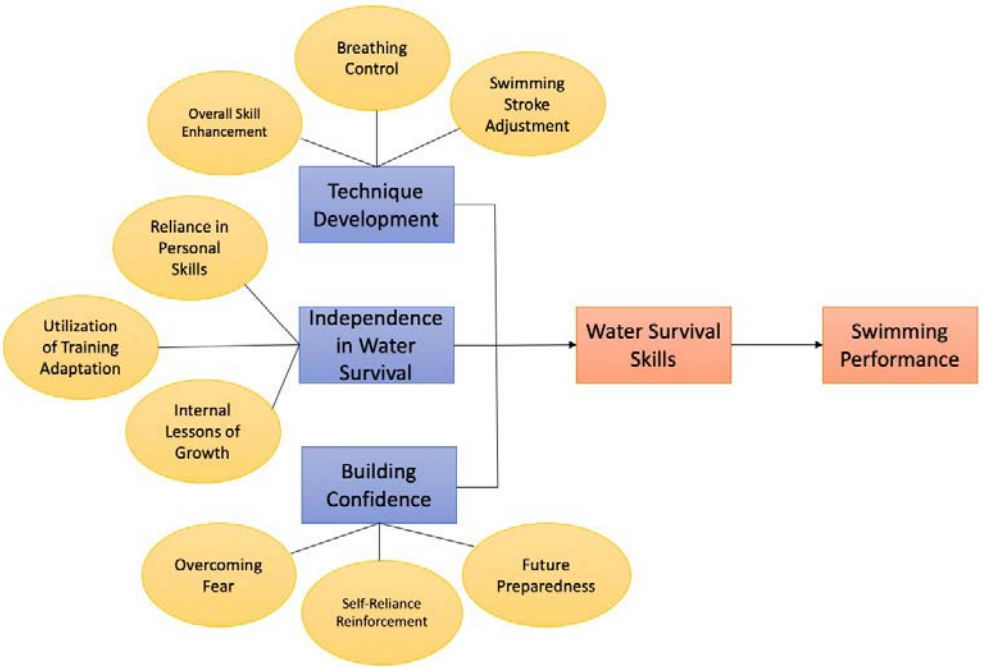


Figure 1: The Modified Paradigm of the Study

These emerging themes were supported and justified by the testimony of the participants during In-depth interviews. Table 3 shows the emerging themes on the experiences of BSMT in refining their water survival skills and improving their swimming performance.

Table 3: Emerging Themes on the Experiences of BSMT Students in Refining their Survival Skills and Improving their Swimming Performance

Discourse and Dimensions	Extracted Statements
Technique Development [a]	
Swimming Stroke Adjustment	"Even with small improvements in my swimming, like raising my elbow and smoothing my arm movements, I noticed that I do not get tired or run out of breath easily anymore. By extending my arms with each stroke and keeping my body straight, I can swim faster and more easily." (IDI-Participant 3, L48-50) "By focusing on small changes in my stroke, like staying relaxed at the start of each movement and gliding smoothly through the water, I learned how to float without struggling. Swimming faster while keeping the correct body position is a big improvement for me." (IDI-Participant 2, L73-77) "I discovered that small but regular improvements in my swimming style like using long, even strokes and keeping my head relaxed—really helped me save energy. I also used resistance training, like swimming with a buoy or fins, and short sprints, but I still kept the correct stroke position even when my speed changed." (IDI-Participant 5, L30-33)
Breathing Control	"When I learned how to control my breathing slowly, exhaling underwater and breathing at the right time to match my strokes, it helped me stay calm even when I felt nervous. Because I now breathe and stroke properly, I can float in a relaxed way and save energy through smooth movements instead of struggling while swimming." (IDI-Participant 1, L40-44)

© 2025 Global Journals

	"Learning to control my breathing really helped me. I practiced exhaling underwater so I could take deep breaths when I turned my head. When I swim alone, I do breathing exercises that feel like panic situations so I can learn to stay calm and keep my heart rate steady." (IDI-Participant 2, L45-50) "I try to keep my face underwater longer by taking quick but proper breaths, and this helps me swim more smoothly. I do not breathe all the time, but when I do, I take deep breaths. This helps keep my body straight and avoids too much head movement that can slow down my swim." (IDI-Participant 3, L51-55)
Overall Skill Enhancement	"I noticed that because my stroke, breathing, and technique improved, I can now swim longer without getting tired easily." (IDI-Participant 1, L27-29) "The change in my technique—from better strokes to proper breathing—really helped me stay afloat and swim farther. That experience taught me to trust myself, especially during emergencies." (IDI-Participant 3, L30-33) "Since my movements in the water are smoother now, it became the source of my confidence in swimming while still having enough energy left. Because of that experience, I realized I really need to keep practicing." (IDI-Participant 4, L34-37) "The combination of good technique, correct breathing, and practiced skills helped me trust myself in long-distance swimming." (IDI-Participant 5, L38-40)
Independence in Water Survival [b]	
Reliance on Personal Skills	"Oh my... there was a time I was swimming and did not realize I had reached a sudden drop-off, and it was already very deep...I just kept my presence of mind, so instead of asking for help, I stayed calm and slowed down my strokes. I still felt like I had enough energy, and my breathing stayed steady. Because I was careful, I was able to slowly get back to a safe place." (IDI-Participant 2, L67-71) "I had an experience I will never forget… it was when a really strong wave pulled me far from the shore, and I was all alone. It was so scary! But I stayed calm and used my presence of mind. I applied what I knew — smooth freestyle swimming and proper breathing — so I could move through the water and escape the strong waves." (IDI-Participant 3, L52-56) "Umm… because I focused and moved my hands smoothly, I was able to get through the waves without sinking, and I stayed balanced the whole time. I think it was really because of the strength and proper movement of my whole body that I did not panic and was able to keep swimming until I reached a safe place." (IDI-Participant 5, L31-34)
Utilization of Training Adaptation	"My confidence really developed because of regularly practicing emergency drills, including improving my strokes and practicing proper breathing." (IDI-Participant 1, L25-28) "Ahhh… for me, I use interval training like swimming fast then slowing down after, taking turns so I can rest a bit. It really helps build my strength and control the proper body position while swimming." (IDI-Participant 2, L78-81) "For me, because my stroke improved, I can swim faster now, so when there was a strong wave, I was able to avoid it. My controlled breathing also really helped keep my heartbeat calm and steady." (IDI-Participant 4, L82-84) "It was really good, to be honest… because it helped me maintain the correct stroke even when my swimming speed changed. In one practice, I really had to swim fast to get a life jacket that was floating away." (IDI-Participant 5, L85-88)

© 2025 Global Journals

Internal Lessons for Growth	"For me, staying calm and focused came from practicing how to handle stressful situations. I learned that if you already know what to do, you will not panic easily. The technique I practiced helped me trust myself during emergencies." (IDI-Participant 3, L30-33) "For me, that moment proved that all my effort to improve my stroke and trust my instinct was really worth it. Even if it was hard, I trusted the way I practiced." (IDI-Participant 2, L54-56) "The small changes in my swimming, like smoother strokes and relaxed breathing, helped me avoid getting tired quickly. It also helped me stay in control even when the waves were strong and gave me the confidence to swim farther with energy left." (IDI-Participant 5, L57-60)
Building Confidence [c]	
Overcoming Fear	"I will never forget that surprise survival exercise in open water. Even though the waves were really strong, using the right swimming technique helped me stay calm. I did not focus on the fear of sinking—I just focused on getting to safety." (IDI-Participant 1, L12-15) "During our coastal swim with strong waves, I realized I could keep swimming confidently because my arms did not get tired, and my breathing was still okay. I was able to keep the right body position in the water and escape the waves—ha-ha-ha—without panicking." (IDI-Participant 2, L39-42) "You know, I had this one experience, oh my God!… I fell off the boat I was riding, and I did not even have a life vest. So, I told myself to just stay calm while waiting for help. I used my improved stroke and breathing skills, stayed floating, and made sure I did not waste all my energy." (IDI-Participant 3, L43-47)
Self-Reliance Reinforcement	"Ahhhm… one time, I experienced being pulled by the waves away from the shore, and the worst part was—I did not have anyone with me to help. So I used my smooth freestyle stroke and controlled breathing, then swam diagonally to escape the strong pull of the waves." (IDI-Participant 3, L71-75) "During a weekend trip, I got separated from my group in the deeper part of the sea. Instead of panicking, I recalled my training—I controlled my breathing, slowed down my strokes, and chose the easiest and smoothest path back to shore. I really trusted myself while checking my direction and swam with confidence." (IDI-Participant 4, L76-80) "I practice being independent in the water by training alone sometimes. That one time, I was snorkeling when I suddenly got pulled by a strong underwater current. It was really difficult… but I pushed myself to face the challenge even without anyone to depend on. That moment truly tested my self-reliance." (IDI-Participant 5, L81-86)
Future Preparedness	"Honestly, because my freestyle has really improved, I can now swim farther without getting tired quickly. I stay more focused on my goal instead of worrying about drowning. Now, I feel more ready for long-distance swimming—I am more confident, and it feels easier for me." (IDI-Participant 1, L82-85) "Ahmm… I am happy because I have improved in my stroke, breathing, and overall skills. I can now swim longer distances without losing energy too fast. These improvements really helped me—both physically and mentally—so I can be prepared for unexpected challenges in the water." (IDI-Participant 2, L21-24) "Since I worked on improving my swimming technique, I now trust myself more and believe I can handle long-distance swimming. I now have lasting strength, and I am ready to face long swims, especially in case of water emergencies." (IDI-Participant 4, L19-22)

© 2025 Global Journals

d) Technique Development

Technique development represents a comprehensive process where BSMT students refine physical swimming abilities while cultivating essential professional qualities like discipline, confidence, and preparedness. This paradigm transcends mere skill acquisition, recognizing that mastered techniques could determine survival outcomes in maritime emergencies, thereby motivating deeper commitment to excellence. Rigorous training strengthened technique and endurance, confirming Ekanayaka et al. (2021) and Petrass et al. (2021) structured training benefits.

Swimming Stroke Adjustment: Swimming stroke adjustment involves modifying and refining stroke mechanics to enhance efficiency, conserve energy, and adapt to varying water conditions. Participants demonstrated that small, consistent improvements—like proper elbow positioning, smooth arm movements, and body alignment—significantly impact endurance and performance, proving that incremental progress builds substantial swimming competence. Modified stroke mechanics enhanced efficiency and energy conservation, affirming Seifert and Carmigniani (2023) and Riyanto et al. (2025).

Breathing Control: Breathing control encompasses regulating respiratory patterns to maintain composure during demanding water conditions. Participants mastered underwater exhalation, stroke-synchronized breathing, and panic-simulation exercises. This skill reduces anxiety, conserves energy, prevents fatigue, and enables swimmers to maintain proper form while developing mental focus essential for survival situations. Synchronized breathing improved swimming rhythm and stress management, supporting Ceviz (2024) and Grossman et al. (2021) research findings.

Overall Skill Enhancement: Overall skill enhancement integrates stroke technique, breathing control, endurance, and decision-making improvements. Participants experienced holistic development where refined mechanics improved efficiency, controlled breathing enhanced mental calmness, and combined skills fostered greater confidence. This comprehensive approach optimizes energy use and prepares swimmers for effective emergency responses. Integrated swimming techniques led to improved endurance and stability, confirming Riyanto et al. (2025) and Reichmuth et al. (2021).

e) Independence in Water Survival

Independence in water survival emphasizes BSMT students' ability to rely on personal skills and decision-making during challenging aquatic situations. This paradigm highlights how training and technique development build confidence, maintain composure under pressure, and manage emergencies without external assistance, reflecting professional maritime readiness standards. Immersive training cultivated student independence in water survival scenarios, affirming Downey (2021) and Petrass et al. (2021) findings.

Reliance on Personal Skills: Reliance on personal skills involves trusting abilities, training, and decision-making to handle water emergencies effectively. Participants demonstrated presence of mind during unexpected deep-water encounters and strong wave situations. Their experiences show how rigorous training enables independent navigation of high-pressure scenarios, enhancing personal safety and professional readiness. Students developed self-reliance through applying survival strategies independently, supporting Chiong (2023) and Riyanto et al. (2025) studies.

Utilization of Training Adaptation: Training adaptation refers to applying, adjusting, and refining learned techniques when facing unpredictable conditions. Participants successfully modified stroke patterns, breathing techniques, and energy management based on real-time challenges. This adaptive capability empowers critical thinking, composure maintenance, and effective decision-making during high-pressure maritime scenarios. Adapting training to real scenarios built survival autonomy, confirming Viktorelius and Selberg (2022) and Riyanto et al. (2025).

Internal Lessons for Growth: Internal lessons for growth encompass personal realizations and mindset shifts arising from overcoming water survival challenges. Participants developed self-awareness, resilience, and confidence through stressful situation management. These lessons strengthen abilities to maintain calmness, make intelligent decisions, and grow through each experience, building comprehensive survival competence. Repeated realistic challenges built resilience and mental toughness, supporting Rasyid et al. (2023) and Fazeli et al. (2024).

f) Building Confidence

Building confidence involves developing trust in abilities through consistent practice, skill refinement, and realistic scenario exposure. This confidence enables individuals to maintain composure, make quick decisions, and effectively apply survival techniques during challenging water situations, forming the foundation for maritime professional competence. Consistent water survival drills overcame fear and built self-assurance, affirming Stillwell and Khatchaturian (2020) and Stanley (2021).

Overcoming Fear: Overcoming fear involves gradually managing anxiety through supportive, guided water experiences. Participants successfully transformed fear into focused action during surprise exercises and emergency situations. By concentrating on techniques rather than potential dangers, they developed trust in abilities and maintained composure in aquatic

© 2025 Global Journals

environments. Students gained confidence facing water-based fears through controlled training, supporting Roche et al. (2022) and Jaskiewicz et al. (2022).

Self-Reliance Reinforcement: Self-reliance reinforcement strengthens students' ability to trust skills and judgment during challenging situations. Participants successfully handled separation from groups, strong currents, and emergency scenarios independently. These experiences demonstrate how preparation fosters calm decision-making and capability under pressure, building essential maritime professional confidence. Survival drills without assistance reinforced student self-reliance and confidence, affirming Merlin et al. (2024) and Thanvisitthpon (2025).

Future Preparedness: Future preparedness represents readiness gained through training that equips individuals for unexpected water emergencies. Participants developed physical skills, mental resilience, and strategic thinking necessary for calm, efficient responses. Improved techniques transformed both ability and mindset, fostering goal-oriented focus and positive outlook in challenging maritime endeavors. Refined techniques prepared students for maritime demands, supporting Casey et al. (2021) and Doremidov (2024) training effectiveness studies.

g) Conclusion and Qualitative Results

Based on the results of the study, it is concluded that water survival skills are a significant factor in swimming performance. This conclusion affirms psychomotor learning theory, which posits that psychomotor taxonomy is organized according to the degree of coordination, including involuntary responses and learned capabilities: reflex movements - automatic reactions, basic fundamental movement - simple movements that can build to more complex sets of movements, perceptual - environmental cues that allow one to adjust movements, physical activities - things requiring endurance, strength, vigor, and agility, skilled movements - activities where a level of efficiency is achieved, non-discursive communication - body language.

The water survival experiences of study participants are swimming stroke adjustment, breathing control, and overall skill enhancement as technique-developed experiences; reliance on personal skills, utilization of training adaptation, and internal lessons of growth as independence in water survival experiences; and overcoming fear, self-reliance, and future preparedness as building confidence experiences.

IV. Recommendations

Based on the conclusion and qualitative results, it is recommended that further sequential explanatory mixed study may be conducted using other variables to trace the 43.9% variance in the swimming performance. Furthermore, maritime training programs that integrate structured, progressive water survival drills into the curriculum may be defined to enhance the psychomotor development and swimming performance of BSMT students. These initiatives contribute to greater preparedness, confidence, and competence in handling real-life maritime emergencies.

References Références Referencias

1. Adler, R. H. (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, *38*(4), 598-602. https://doi.org/10.1177/08903344221116620
2. Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, *2*, 100051. https://doi.org/10.1016/j.glmedi.2024.100051
3. Amin, M. E. K., Nørgaard, L. S., Cavaco, A. M., Witry, M. J., Hillman, L., Cernasev, A., & Desselle, S. P. (2020). Establishing trustworthiness and authenticity in qualitative pharmacy research. *Research in social and administrative pharmacy*, *16*(10), 1472-1482. https://doi.org/10.1016/j.sapharm.2020.02.005
4. Blanco, D. V. (2022). The development of Olympic movement in the Philippines: Actors, stakeholders, and capacities. *Asian Journal of Sport History & Culture*, *1*(2), 183-205. https://doi.org/10.1080/21640599.2016.1227544
5. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
6. Casey, T., Turner, N., Hu, X., & Bancroft, K. (2021). Making safety training stickier: A richer model of safety training engagement and transfer. *Journal of safety research*, *78*, 303-313. https://doi.org/10.1016/j.jsr.2021.06.004
7. Celso, R. (2025). Grit and competence among swimming coaches in the Philippines: An explanatory-sequential inquiry. *Studia sportiva*, *19*(1). https://doi.org/10.5817/StS2025-1-1
8. Cevïz, E. (2024). The effect of 3 breathing techniques on 25 m freestyle swimming performance level in swimming branch. *Turkish Journal of Sport and Exercise, 26*(3), 574-583. https://doi.org/10.15314/tsed.1498030
9. Chiong, C. D. (2023). Beyond the maritime education classrooms: Analysis of life skills gained from maritime trainings. *Journal of Namibian Studies: History Politics Culture*, *33*, 3650-3666. https://doi.org/10.59670/jns.v33i.3171
10. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications. Retrieved from https://bit.ly/Creswell-Creswell-Research-Design

© 2025 Global Journals

11. Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. Retrieved from https://www.academia.edu/download/55010759/creswell_Qualitative_Inquiry_2nd _edition.pdf
12. Denny, S. A., Quan, L., Gilchrist, J., McCallin, T., Shenoi, R., Yusuf, S., & Hoffman, B. (2021). Prevention of drowning. *Pediatrics*, *148*(2). https://doi.org/10.1542/peds.2021-052227
13. Doremidov, D. (2024). Survival equipment and surviving at sea. *Theseus*. https://urn.fi/URN:NBN:fi:amk-2024121234988
14. Downey, J. (2021). STCW water survival training needs basic swim evaluation. In Proceedings of the International Maritime Lecturers' Association (IMLA) 2021 Joint Conference With IMEC32, ICERS15, and INSLC21, 72-78. http://dx.doi.org/10.21677/imla2021.07
15. Duijn, T. V., Cocker, K., Seifert, L., & Button, C. (2022). Assessment of water safety competencies: Benefits and caveats of testing in open water. *Frontiers in Psychology*, *13*, 982480. https://doi.org/10.3389/fpsyg.2022.982480
16. Ekanayaka, J., Geok, C. K., Matthews, B., & Dharmaratne, S. D. (2021). Influence of a survival swimming training programme on water safety knowledge, attitudes and skills: a randomized controlled trial among young adults in Sri Lanka. *International journal of environmental research and public health*, *18*(21), 11428. https://doi.org/10.3390/ijerph182111428
17. Fazeli, S., Haghani, M., Mojtahedi, M., & Rashidi, T. H. (2024). The role of individual preparedness and behavioural training in natural hazards: A scoping review. *International Journal of Disaster Risk Reduction*, 104379. https://doi.org/10.1016/j.ijdrr.2024.104379
18. Grossman, K. J., Lim, D. J., Murias, J. M., & Belfry, G. R. (2021). The effect of breathing patterns common to competitive swimming on gas exchange and muscle deoxygenation during heavy-intensity fartlek exercise. *Frontiers in Physiology*, *12*, 723951. https://doi.org/10.3389/fphys.2021.723951
19. Guo, W., Soh, K. G., Zakaria, N. S., Hidayat Baharuldin, M. T., & Gao, Y. (2022). Effect of resistance training methods and intensity on the adolescent swimmer's performance: a systematic review. *Frontiers in public health*, *10*, 840490. https://doi.org/10.3389/fpubh.2022.840490
20. Haq, Z. U., Rasheed, R., Rashid, A., & Akhter, S. (2023). Criteria for assessing and ensuring the trustworthiness in qualitative research. *International Journal of Business Reflections*, *4*(2). https://doi.org/10.56249/ijbr.03.01.44
21. Harrow, A. J. (1972). *A taxonomy of the psychomotor domain: A guide for developing behavioral objectives*. New York: Longman. https://archive.org/details/taxonomyofpsycho0000harr
22. Hasan, M. K. H., & Kumar, L. K. (2024). Determining adequate sample size for social survey research: sample size for social survey research. *Journal of the Bangladesh Agricultural University*, *22*(2), 146-157. https://doi.org/10.3329/jbau.v22i2.74547
23. Hunter, S. K., Angadi, S. S., Bhargava, A., Harper, J., Hirschberg, A. L., Levine, B. D., & Bermon, S. (2023). The biological basis of sex differences in athletic performance: consensus statement for the American College of Sports Medicine. *Translational Journal of the American College of Sports Medicine*, *8*(4), 1-33. https://doi.org/10.1249/TJX.0000000000000236
24. Jaskiewicz, F., Kowalewski, D., Kaniecka, E., Kozlowski, R., Marczak, M., & Timler, D. (2022). Factors influencing self-confidence and willingness to perform cardiopulmonary resuscitation among working adults—A quasi-experimental study in a training environment. *International Journal of Environmental Research and Public Health*, *19*(14), 8334. https://doi.org/10.3390/ijerph19148334
25. Kim, B., Jung, J. H., & Kim, S. Y. (2022). Impact of survival swimming experience on positive emotions, self-efficacy, and safety behaviors among swimming club members in Korea. *Iranian Journal of Public Health*, *51*(11), 2528. https://doi.org/10.18502/ijph.v51i11.11170
26. Langendorfer, S. J. (2015). Changing learn-to-swim and drowning prevention using aquatic readiness and water competence. *International Journal of Aquatic Research and Education*, *9*(1), 2. https://doi.org/10.25035/ijare.09.01.02
27. Lim, W. M. (2025). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, *33*(2), 199-229. https://doi.org/10.1177/14413582241264619
28. Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The qualitative report*, *26*(6), 2029-2044. https://doi.org/10.46743/2160-3715/2021.5008
29. Lopes, T. J., Neiva, H. P., Gonçalves, C. A., Nunes, C., & Marinho, D. A. (2021). The effects of dry-land strength training on competitive sprinter swimmers. *Journal of Exercise Science Fitness*, *19*(1), 32-39. https://doi.org/10.1016/j.jesf.2020.06.005
30. Merlin, Q., Vacher, P., Mourot, L., Levillain, G., Martinent, G., & Nicolas, M. (2024). Psycho-physiological Effects of Slow-Paced Breathing on Adolescent Swimmers' Subjective Performance, Recovery States, and Control Perception. *Journal of Functional Morphology and Kinesiology*, *9*(1), 23. https://doi.org/10.3390/jfmk9010023
31. Mitishev, I. I., & Sozonov, N. I. (2024). Maritime catastrophes case studies as part of maritime education and training. *Scientific Bulletin "Mircea*

© 2025 Global Journals

Cel Batran" Naval Academy, 27(1), 118-133. https://www.proquest.com/docview/3101277641/fulltextPDF/1517AE439AD94B7EPQ/1?accountid=33462&sourcetype=Scholarly%20Journals

32. Moran, K., Quan, L., Franklin, R., & Bennett, E. (2011). Where the evidence and expert opinion meet: A review of open-water recreational safety messages. International Journal of Aquatic Research and Education, 5(3), 251-270. https://doi.org/10.25035/ijare.05.03.05
33. Mumford, M. D., Higgs, C., & Gujar, Y. (2021). Ethics in coercive environments: Ensuring voluntary participation in research. In S. Panicker & B. Stanley (Eds.), Handbook of research ethics in psychological science (pp. 113–123). American Psychological Association. https://doi.org/10. 1037/0000258-008
34. Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications. https://bit.ly/Patton-Qualitative-Research
35. Petrass, L. A., Simpson, K., Blitvich, J., Birch, R., & Matthews, B. (2021). Exploring the impact of a student-centred survival swimming programme for primary school students in Australia: the perceptions of parents, children and teachers. *European Physical Education Review*, *27*(3), 684-702. https://doi.org/10.1177/1356336X20985880
36. Petrenko, A., & Taran, L. (2021). Features of the dynamics of difficulty of competitive routines and the results of performances of the strongest teams in the world in artistic swimming. *Slobozhanskyi herald of science and sport*, *9*(4), 114-126. https://journals.uran.ua/sport_herald/article/view/242832
37. Picketts, L., Warren, M. D., & Bohnert, C. (2021). Diversity and inclusion in simulation: addressing ethical and psychological safety concerns when working with simulated participants. *BMJ Simulation & Technology Enhanced Learning*, *7*(6), 590. https://doi.org/10.1136/bmjstel-2020-000853
38. Pring, R. (2024). Confidentiality and the right to know. In *The politics and ethics of evaluation* (pp. 8-18). Routledge. https://doi.org/10.4324/9781003504719
39. Pyne, D. B., Trewin, C. B., & Hopkins, W. G. (2004). Progression and variability of competitive performance of Olympic swimmers. *Journal of sports sciences*, *22*(7), 613-620. https://doi.org/10.1080/02640410310001655822
40. Rasyid, M., Suhesty, A., Rahayu, D., Indayani, N. N., & Adhikarapandita, A. (2023). Growth your mindset to increase resilience in college students. *Indonesian Journal of Educational Research and Review*, *6*(2), 322–329. https://doi.org/10.23887/ijerr.v6i2.60194
41. Reichmuth, D., Olstad, B. H., & Born, D. P. (2021). Key performance indicators related to strength, endurance, flexibility, anthropometrics, and swimming performance for competitive aquatic lifesaving. *International Journal of Environmental Research and Public Health*, *18*(7), 3454. https://doi.org/10.3390/ijerph18073454
42. Riazi, A. M., Rezvani, R., & Ghanbar, H. (2023). Trustworthiness in L2 writing research: A review and analysis of qualitative articles in the Journal of Second Language Writing. *Research Methods in Applied Linguistics*, *2*(3), 100065. https://doi.org/10.1016/j.rmal.2023.100065
43. Riyanto, R., Cahyadi, T., Winarno, W., Faozun, I., Barasa, L., Zakiah, D., & Simanjuntak, M. B. (2025). The integration of structured physical training and nutrition to enhance seafarer endurance and career preparedness in maritime education. *Physical Therapy Journal of Indonesia*, *6*(1), 19-25. https://doi.org/10.51559/ptji.v6i1.242
44. Roche, L., Cunningham, I., Rolland, C., Fayaubost, R., & Maire, S. (2022, November). Reducing fear of water and aquaphobia through 360 degree video use?. In *Frontiers in education* (Vol. 7, p. 898071). Frontiers Media SA. https://doi.org/10.3389/feduc.2022.898071
45. Rosario, M. A. B. (2024). The challenges of selected provincial coaches in implementing circuit training: basis for program development. A pilot study. *Journal of Anthropology of Sport and Physical Education*, *8*(3), 29-34. https://doi.org/10.26773/jaspe.240705
46. Seifert, L., & Carmigniani, R. (2023). Coordination and stroking parameters in the four swimming techniques: A narrative review. *Sports Biomechanics*, *22*(12), 1617-1633. https://doi.org/ 10.1080/14763141.2021.1959945
47. Stallman, R. K., Moran Dr, K., Quan, L., & Langendorfer, S. (2017). From swimming skill to water competence: Towards a more inclusive drowning prevention future. *International Journal of Aquatic Research and Education*, *10*(2), 3. https://doi.org/10.25035/ijare.10.02.03
48. Stanley, T. J. (2021). *Perceived and Real Water Competency and Drowning Risk Among Adults in Open Water: A Wicked Problem* (Doctoral dissertation, University of Auckland). https://researchspace.auckland.ac.nz/bitstreams/61cd1e4e-691f-4d7f-9b78-c352eae4e2ef/download
49. Stillwell, B., & Khatchaturian, R. (2020). Teaching strategies for beginning high school students afraid in water. *Journal of Physical Education, Recreation & Dance*, *91*(4), 30-39. https://doi.org/10.1080/07303084.2020.1720869
50. Tawanda, Z., & Tsara, E. (2022). Talent Identification, nurturing and mentorship: Challenges and

© 2025 Global Journals

opportunities in the global economy. *Transformational Human Resources Management in Zimbabwe: Solutions for the Public Sector in the 21st Century*, 39-59. https://doi.org/10.1007/978-981-19-4629-5_4

51. Thanvisitthpon, N. T. (2025). Enhanced flood adaptive capacity through a growth mindset: A case study of a flood-prone village in Thailand. In *Community Climate Justice and Sustainable Development* (pp. 231-278). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3373-0619-3.ch010
52. Viktorelius, M., & Sellberg, C. (2022). The lived body and embodied instructional practices in maritime basic safety training. *Vocations and Learning*, *15*(1), 87-109. https://doi.org/10.1007/s12186-021-09279-z
53. Yamane, T. 1967. Statistics: An Introductory Analysis. 2nd ed. Harper & Row, John Weatherhill, Inc, New York, Tokyo. https://books.google.com.au/books?id=Wr7rAAAAMAAJ

© 2025 Global Journals