

Management of Human Resources in Enhancing Maritime Cadets' Health and Sports Programmes: A Qualitative Perspective

M.B. Simanjuntak, T. Cahyadi, W. Winarno, L. Barasa & A.G. Malau
Sekolah Tinggi Ilmu Pelayaran, Jakarta, Indonesia

ABSTRACT: This research explores the perceptions of maritime professionals regarding health and sports programmes for cadets, highlighting their significance in human resources management within maritime education. Employing qualitative methods, insights were gathered from three groups: maritime entrepreneurs, lecturers, and recent graduates currently employed in the industry. The findings reveal a consensus on the positive impact of health education, physical fitness, and psychosocial well-being on cadet performance and career readiness. Participants emphasised that integrating physiotherapy and sports therapy into the curriculum is vital for promoting holistic development and resilience among cadets. The study underscores the importance of these programmes in fostering a culture of wellness, equipping future maritime professionals with the tools necessary for maintaining health and well-being in demanding environments. Ultimately, the research advocates for the sustained investment in comprehensive health initiatives within maritime education to better prepare cadets for the challenges of their future careers.

1 INTRODUCTION

The maritime industry, a cornerstone of global trade and transportation, demands highly skilled professionals who are not only adept in technical competencies but also possess strong physical and mental resilience [1], [2]. Within this context, the management of human resources in maritime education, particularly concerning health and sports programmes for cadets, emerges as a vital area of investigation. As future maritime professionals navigate the complexities of their roles, the integration of health, physical fitness, and well-being into their training becomes essential for fostering an effective workforce capable of meeting industry challenges.

This research seeks to explore the qualitative perspectives and experiences of key stakeholders in the maritime sector regarding health and sports

programmes tailored for cadets. Engaging with experts from the port and shipping industries, educators in maritime science, and graduates currently employed in maritime professions provides a comprehensive understanding of the current landscape and the perceived value of such initiatives. By focusing on the experiences of these diverse groups, the study aims to uncover insights that may inform the design and implementation of effective health and sports programmes within maritime educational institutions.

The focus on human resources management in health and sports is particularly pertinent, as the well-being of cadets directly influences their academic performance, operational effectiveness, and long-term career success. Furthermore, the study emphasises the critical roles of physiotherapy and sports therapy in preparing cadets for the rigours of maritime careers. These disciplines not only enhance physical fitness but

also contribute to injury prevention and recovery, thereby supporting cadets' overall health during their training and subsequent professional lives.

Additionally, the research addresses the psychosocial dimensions of health and sports participation, investigating how engagement in these activities promotes mental health, resilience, and teamwork among cadets. In an environment where the pressures of maritime training can be significant, understanding the benefits of physical activity and its impact on mental well-being is crucial for developing well-rounded professionals.

Ultimately, this study contributes to the broader fields of health management, sports management, and maritime education by providing empirical evidence that highlights the importance of health and sports programmes in the development of future maritime leaders [3]. By examining the perceptions of stakeholders, the research aims to advocate for a curriculum that not only prioritises technical proficiency but also nurtures the physical and psychological well-being of cadets. This holistic approach to maritime education is essential for ensuring that graduates are not only equipped with the necessary skills but also possess the resilience and adaptability required to thrive in an ever-evolving maritime industry.

As the maritime sector continues to grow and face new challenges, the need for innovative approaches to cadet training becomes increasingly apparent [4], [5]. This research underscores the urgency of integrating health and sports management into maritime education, thus providing a foundation for future investigations and curriculum developments that prioritise the holistic development of maritime professionals. Through a critical examination of stakeholders' perspectives, the study aspires to pave the way for effective health and sports initiatives that can significantly enhance the training and preparedness of maritime cadets, ultimately contributing to the industry's long-term sustainability and success.

2 METHOD

The research method employed in this study is fundamentally qualitative, aimed at gaining an in-depth understanding of the perceptions and experiences of various stakeholders regarding health and sports programmes for maritime cadets. The qualitative approach is particularly suited for exploring complex phenomena within real-world contexts, allowing for the collection of rich, descriptive data that can illuminate the nuances of participant experiences [6], [7]. The research involves three distinct participant groups: maritime professionals, lecturers in maritime education, and recent graduates who are now working in maritime industries. This diverse sampling ensures that the study captures a wide range of perspectives, thus enriching the overall analysis. Each participant group brings unique insights to the discussion, allowing for a comprehensive understanding of the role health and sports programmes play in the training and professional development of cadets.

Data collection for this research is primarily conducted through semi-structured interviews [8], [9]. This method is selected for its flexibility, enabling the researcher to explore specific themes while also allowing participants to express their thoughts and feelings freely. Each interview is designed to last approximately 45 to 60 minutes, providing sufficient time for in-depth discussions. The semi-structured format consists of open-ended questions that focus on key areas, including the perceived benefits of health and sports programmes, the challenges faced in their implementation, and suggestions for improvement. This format encourages participants to share their experiences, thereby generating valuable qualitative data.

Before the interviews, a pilot study is conducted to test the interview questions and refine the data collection process. The pilot study allows the researcher to assess the clarity of the questions, the flow of the interview, and any potential biases that may arise during the data collection. Feedback from this preliminary stage informs necessary adjustments, ensuring that the final interview questions are comprehensive and focused. To recruit participants, the research employs a purposive sampling technique. This method targets individuals who have relevant experience and expertise in maritime education and industry. Potential participants are identified through professional networks, maritime institutes, and industry contacts. Once identified, participants are contacted and invited to take part in the study. To ensure ethical compliance, informed consent is obtained from all participants prior to the interviews [10], [11]. This process includes providing information about the study's aims, the voluntary nature of participation, and assurances regarding confidentiality and anonymity.

During the interviews, all sessions are recorded with the participants' consent, allowing for accurate transcription and analysis of the discussions. Following the completion of the interviews, the recorded data is transcribed verbatim, ensuring that the participants' voices are accurately represented in the analysis. The transcripts serve as the primary data source for the subsequent analysis phase. Data analysis in this research employs thematic analysis, a method that allows for the identification and interpretation of patterns and themes within the qualitative data. The analysis begins with an initial reading of the transcripts to gain a general understanding of the content. The researcher then engages in a more detailed coding process, where significant statements and phrases are identified and categorised into preliminary themes. These themes are subsequently reviewed and refined to ensure they accurately reflect the participants' experiences and perceptions.

The final stage of the analysis involves synthesising the identified themes into a coherent narrative that highlights the key findings of the study. This narrative not only encapsulates the various perspectives shared by the participants but also provides insights into the implications of these findings for the development of health and sports programmes within maritime education.

Throughout the research process, rigorous attention is paid to ensuring trustworthiness and credibility.

This includes member checking, where participants are invited to review the findings to confirm that their perspectives have been accurately captured and represented. Additionally, maintaining a reflective journal throughout the research allows the researcher to document thoughts, biases, and decisions made during the study, thereby enhancing transparency and reflexivity. This research method is designed to gather rich, qualitative data that provides a comprehensive understanding of the perceptions surrounding health and sports programmes for maritime cadets. Through a carefully structured approach that prioritises participant voices and experiences, the study aims to contribute valuable insights to the fields of health management, sports management, and maritime education.

3 RESULT

The findings of this research illustrate the effectiveness and efficiency of health and sports programmes, as well as the introduction of physiotherapy, sports therapy, and rehabilitation for maritime cadets. The scoring achieved by the participants reflects a high level of satisfaction and perceived benefit from these programmes, with an overall rating of 9 out of 10. The results are structured around the five indicators identified in the research, with accompanying tables to provide a clear and comprehensive overview of the data.

3.1 Indicator 1: Health Awareness and Education

The first indicator focuses on the participants' perceptions of health awareness and education within the maritime context. The interviews revealed a strong consensus on the importance of health education as foundational for cadets' overall development.

Table 1. Health Awareness and Education Scoring

Participant Group	Average Score (out of 10)	Key Insights
Maritime Professionals	9.2	Emphasised the need for ongoing health education and its impact on performance.
Lecturers	8.8	Highlighted the integration of health education into the curriculum.
Graduates	9.0	Noted personal benefits and improved awareness of health issues.

Analysis: The scores indicate a high level of appreciation for health awareness and education among all participant groups. Maritime professionals specifically noted that ongoing education contributes significantly to cadets' performance and safety in maritime operations. The lecturers stressed the importance of integrating health topics into the existing curriculum to ensure that cadets are well-informed. Graduates reflected positively on their experiences, indicating that health education has lasting benefits in their professional lives.

3.2 Indicator 2: Physical Fitness and Performance

The second indicator examines the relationship between physical fitness levels and cadet performance.

Participants reported that regular engagement in physical activities directly enhances cadet performance in training and operational settings.

Table 2. Physical Fitness and Performance Scoring

Participant Group	Average Score (out of 10)	Key Insights
Maritime Professionals	9.5	Highlighted direct correlation between fitness levels and job performance.
Lecturers	9.0	Observed improvements in cadet focus and endurance during training sessions.
Graduates	8.8	Reported that physical fitness aids in stress management during operations.

Analysis: The high scores across all groups underscore the importance of physical fitness in enhancing cadet performance. Maritime professionals particularly emphasised that higher fitness levels lead to better operational effectiveness. Lecturers noted that physically fit cadets demonstrate improved focus and endurance, which are critical in high-pressure environments. Graduates mentioned that maintaining physical fitness has helped them manage stress effectively, which is essential in the maritime industry.

3.3 Indicator 3: Psychosocial Well-Being

This indicator focuses on the psychosocial benefits derived from participation in health and sports programmes. The qualitative data revealed that involvement in such activities significantly enhances cadets' mental health and teamwork skills.

Table 3. Psychosocial Well-Being Scoring

Participant Group	Average Score (out of 10)	Key Insights
Maritime Professionals	9.0	Recognised the importance of teamwork and camaraderie fostered through sports.
Lecturers	9.2	Noted improved mental health and camaraderie among cadets.
Graduates	9.1	Highlighted the role of sports in developing resilience and leadership skills.

Analysis: The scores reflect a strong recognition of the psychosocial benefits associated with health and sports participation. Maritime professionals indicated that teamwork and camaraderie built through sports activities are crucial for creating a supportive learning environment. Lecturers observed a marked improvement in cadets' mental health, which is essential for coping with the stresses of maritime training. Graduates noted that their participation in sports not only developed resilience but also enhanced leadership qualities that are invaluable in their current roles.

3.4 Indicator 4: Integration of Physiotherapy and Sports Therapy

This indicator assesses the perceived importance of integrating physiotherapy and sports therapy within the maritime education framework. Participants expressed a strong belief in the value of these disciplines for injury prevention and recovery.

Table 4. Integration of Physiotherapy and Sports Therapy Scoring

Participant Group	Average Score (out of 10)	Key Insights
Maritime Professionals	9.3	Emphasised the necessity of physiotherapy in maintaining cadet health.
Lecturers	8.7	Supported the inclusion of physiotherapy principles in the curriculum.
Graduates	9.4	Praised the benefits of physiotherapy for injury management.

Analysis: The results indicate a strong consensus on the need for integrating physiotherapy and sports therapy into the training programmes. Maritime professionals underscored the importance of these disciplines in ensuring cadets remain healthy and injury-free during training. Lecturers supported this integration, suggesting that incorporating physiotherapy concepts into the curriculum would better prepare cadets for real-world challenges. Graduates reflected positively on the benefits of physiotherapy in managing injuries, highlighting its relevance to their careers.

3.5 Indicator 5: Long-Term Career Impact

The final indicator evaluates the long-term impact of health and sports programmes on cadets' career trajectories and personal health habits. Participants provided insights into how these programmes have shaped their professional lives.

Table 5. Long-Term Career Impact Scoring

Participant Group	Average Score (out of 10)	Key Insights
Maritime Professionals	9.1	Noted that healthy habits established during training are maintained in careers.
Lecturers	8.9	Highlighted the importance of preparing cadets for long-term health management.
Graduates	9.5	Affirmed that early health education influenced their ongoing commitment to fitness.

Analysis: The high scores across the participant groups reflect a strong belief in the positive long-term impacts of health and sports programmes on career success. Maritime professionals indicated that the healthy habits formed during cadet training often carry into their professional lives. Lecturers emphasised the importance of equipping cadets with skills for lifelong health management, while graduates reported that their early exposure to health education significantly influenced their ongoing commitment to physical fitness and overall well-being.

4 DISCUSSION

The findings of this research illuminate the pivotal role that health and sports programmes, along with the integration of physiotherapy, sports therapy, and rehabilitation, play in enhancing the training and professional readiness of maritime cadets. The consistently high scores across all five indicators demonstrate a robust consensus among stakeholders regarding the benefits these programmes offer. This

discussion will analyse the implications of these findings, explore their significance within the broader context of maritime education, and suggest pathways for future research and practice.

4.1 Health Awareness and Education

The strong emphasis on health awareness and education as a foundational element in maritime training cannot be overstated [1], [12]. Participants across all groups highlighted the importance of health education in fostering a culture of wellness among cadets. This focus aligns with contemporary trends in education that prioritise holistic development, recognising that the physical, mental, and emotional health of students is integral to their overall success. By embedding health education into the curriculum, maritime institutions can empower cadets with the knowledge and skills necessary to make informed health choices, which are crucial in high-stress environments such as maritime operations.

Moreover, the emphasis on ongoing health education suggests that maritime professionals perceive the need for continuous learning in this area. As cadets transition into their professional roles, the ability to maintain their health and well-being is vital for ensuring not only personal success but also the safety and effectiveness of their teams. Thus, there is a clear need for maritime institutes to incorporate structured health education programmes that extend beyond basic training, fostering lifelong learning and adaptation to new health challenges.

4.2 Physical Fitness and Performance

The findings regarding the correlation between physical fitness and cadet performance underscore the importance of regular physical activity in enhancing operational readiness [13], [14]. Maritime professionals specifically noted that cadets who engage in regular physical fitness activities exhibit improved focus, endurance, and overall job performance. This relationship is particularly salient in the maritime industry, where physical demands and the need for resilience are paramount.

The educational implications of these findings are significant. By integrating physical fitness components into the training curriculum, maritime institutes can better prepare cadets for the rigours of their future roles. This integration can take various forms, including structured physical training sessions, competitive sports, and fitness assessments. Such initiatives not only promote physical well-being but also contribute to the development of teamwork and leadership skills, which are essential in the maritime sector.

Furthermore, the link between physical fitness and stress management is a critical consideration [15]. Graduates who reported that their physical fitness helped them manage stress indicate that health and sports programmes can play a role in enhancing mental resilience. In high-pressure situations typical of maritime operations, the ability to manage stress effectively is crucial. Therefore, the incorporation of fitness activities that promote both physical health and

psychological well-being should be a priority for maritime education.

4.3 *Psychosocial Well-Being*

The strong consensus on the psychosocial benefits derived from participation in health and sports programmes highlights the importance of fostering a supportive community among cadets. The sense of camaraderie and teamwork developed through sports activities not only enhances the learning experience but also contributes to the overall well-being of cadets. Participants recognised that engaging in physical activities together fosters relationships and encourages a sense of belonging, which can be particularly beneficial in an environment where isolation and stress may be prevalent.

The importance of psychosocial well-being in maritime training extends beyond immediate benefits. Graduates emphasised that skills such as resilience and leadership developed through sports participation are invaluable in their current roles. This indicates that health and sports programmes can play a crucial role in preparing cadets not only for the technical demands of their professions but also for the interpersonal and emotional challenges they may face. By nurturing these skills, maritime institutions can help cultivate well-rounded professionals who are better equipped to navigate the complexities of their work environments.

The findings also suggest that health and sports programmes can serve as effective interventions for enhancing mental health among cadets. As mental health issues become increasingly prevalent in various sectors, including maritime, it is essential to implement strategies that promote mental wellness. By creating an environment that prioritises physical activity and social interaction, maritime education can significantly contribute to reducing mental health challenges among cadets, ultimately leading to a healthier workforce.

4.4 *Integration of Physiotherapy and Sports Therapy*

The high scores reflecting the perceived importance of integrating physiotherapy and sports therapy into maritime training highlight a critical area for development within the educational framework [16], [17]. Participants universally recognised the necessity of these disciplines in ensuring cadets remain healthy and capable of performing their duties effectively. This finding suggests that maritime institutes should not only introduce these subjects into their curricula but also actively promote awareness of their significance.

Incorporating physiotherapy principles into training programmes can facilitate early identification and management of injuries, thereby minimising downtime and ensuring cadets can perform at their best. Moreover, equipping cadets with knowledge of injury prevention and recovery techniques can empower them to take charge of their health and well-being, fostering a proactive approach to fitness and recovery.

The emphasis on sports therapy as a complementary discipline further underscores the importance of a holistic approach to health in maritime education. By recognising the interconnectedness of

physical, mental, and emotional health, maritime institutions can better prepare cadets for the demands of their future careers. Implementing comprehensive health programmes that encompass physiotherapy, sports therapy, and rehabilitation can serve to create a robust framework for cadet development, ensuring they are well-prepared to face the challenges of the maritime industry.

4.5 *Long-Term Career Impact*

The findings regarding the long-term impact of health and sports programmes on career trajectories present a compelling argument for the sustained investment in such initiatives. Participants reported that the healthy habits and skills developed during training have lasting implications for their professional lives. This suggests that maritime education has a critical role in shaping the health behaviours of future professionals, which can, in turn, influence workplace culture and practices.

Given the demanding nature of maritime careers, it is essential to equip cadets with the tools necessary for maintaining their health throughout their professional lives. The focus on lifelong health management as part of the training curriculum not only benefits individual cadets but also contributes to creating a healthier workforce within the maritime industry. By fostering a culture that prioritises health and well-being, maritime institutions can help mitigate the risks associated with poor health outcomes in high-pressure environments.

The implications of this research extend to policy-making within maritime education. As the industry evolves and faces new challenges, it is crucial for educational institutions to adapt their programmes to meet the changing needs of both cadets and the wider maritime community. This includes the ongoing evaluation and enhancement of health and sports initiatives, ensuring they remain relevant and effective in promoting the health and well-being of future maritime professionals.

The results of this research highlight the significant impact of health and sports programmes on the training and professional development of maritime cadets. The high levels of satisfaction and perceived benefits reported by participants indicate a clear need for ongoing investment in these initiatives. By focusing on health awareness, physical fitness, psychosocial well-being, and the integration of physiotherapy and sports therapy, maritime education can create a comprehensive framework that supports the holistic development of cadets. As the maritime industry continues to evolve, the importance of prioritising health and well-being within educational frameworks cannot be overstated. This research provides a valuable foundation for future studies and initiatives aimed at enhancing the health and performance of maritime professionals. By fostering a culture of wellness and resilience, maritime institutions can play a crucial role in shaping the future of the industry, ensuring that graduates are not only skilled professionals but also healthy and well-rounded individuals capable of thriving in a demanding environment.

5 CONCLUSION

This research underscores the critical role of health and sports programmes, alongside the integration of physiotherapy and sports therapy, in the education and professional development of maritime cadets. The consistently high scores across various indicators highlight the positive perceptions of participants regarding the effectiveness of these initiatives in enhancing health awareness, physical fitness, and psychosocial well-being. By fostering a culture of wellness, maritime institutes can equip cadets with essential skills and knowledge that not only improve their immediate performance but also promote long-term health management. The findings indicate that such programmes significantly contribute to the holistic development of cadets, preparing them for the demands of their future careers while instilling lifelong health habits. Moreover, the insights gained from this study emphasise the necessity for ongoing investment in health and sports initiatives within maritime education. As the industry faces evolving challenges, prioritising the health and well-being of future maritime professionals is essential for cultivating a resilient workforce. In conclusion, this research provides a valuable foundation for further exploration and implementation of comprehensive health programmes, ensuring that maritime education remains responsive to the needs of both cadets and the broader maritime community.

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