

Exploring Social and Religious Dimensions: A Qualitative Analysis of Computer Literacy and Motivational Empowerment among Maritime Cadets in an International Programme

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Abstract. *This study delves into the intricate interplay of social, religious, and academic facets within the Maritime Institute Jakarta (STIP Jakarta), specifically focusing on Semester 1 cadets enrolled in the international programme. The research centres on the competencies of 200 randomly selected cadets, examining their proficiency in computer literacy while scrutinizing the influence of social and religious perspectives on their pursuit of an international maritime education. This investigation aligns with the International Maritime Organization's (IMO) Standards of Training, Certification, and Watchkeeping (STCW) framework, emphasising the paramount importance of English communication skills for future global officers. Maritime Institute Jakarta (STIP Jakarta), renowned for producing a substantial number of qualified seamen, deck officers, and engine officers, offers applied bachelor's degrees in Nautical, Technical, and Port and Shipping Management majors. Cadets, hailing from diverse regions across Indonesia, incorporate Bahasa Indonesia and their traditional languages into their daily lives. However, the demand for international and global proficiency necessitates fluency in English communication. The research methodology adopts a qualitative approach with a focus on descriptive analysis. By investigating the social and motivational empowerment aspects, the study aims to uncover the intricate dynamics that influence the cadets' journey. Attention is given to the prayers and expectations of parents, reflecting on the cadets' plans and aspirations to become exceptional seafarers. The qualitative lens employed in this study allows for a nuanced understanding of the cadets' experiences, exploring the multifaceted dimensions of their educational journey. This research not only contributes to the understanding of computer literacy among maritime cadets but also sheds light on the socio-religious context that shapes their educational pursuits. The findings are anticipated to inform educational policies, curriculum development, and support systems tailored to the unique needs of maritime cadets in an international setting.*

Keywords: *Computer Literacy, International Maritime Programme, Maritime Education, Religious Influence, Social Dynamics.*

INTRODUCTION

The field of maritime education holds a distinctive position in the global landscape, providing the backbone for the training of seamen, deck officers, and engine officers who navigate the vast oceans, ensuring the smooth functioning of international trade and transport. At the forefront of this educational frontier stands the Maritime Institute Jakarta (STIP

Jakarta), a beacon of excellence that has consistently produced a substantial number of highly qualified and proficient maritime professionals. With three majors in Nautical, Technical, and Port and Shipping Management, this institution stands as a cornerstone in the preparation of future international seafarers. As a researcher and educator deeply immersed in the maritime education domain, my focus centres on the pivotal initial phase of cadets' education—the Semester 1. This phase marks the entry point for young minds aspiring to become part of the illustrious cadre of maritime professionals (SEP, n.d.; Young, 1995). The cadets, fresh graduates from senior high school, embark on a journey that not only equips them with technical know-how but also instils in them the values and competencies essential for a successful career at sea.

Maritime Institute Jakarta (STIP Jakarta) is not merely an educational institution; it is an international programme that requires cadets to be proficient in English communication. The shift towards an international curriculum reflects the evolving nature of the maritime industry, where seamless global communication is imperative for safe and efficient operations. In this context, the International Maritime Organization's (IMO) Standards of Training, Certification, and Watchkeeping (STCW) framework set the guidelines, emphasizing the significance of English language skills for maritime professionals (IMO, 2018). The ability to communicate effectively in English becomes not just a skill but a prerequisite for cadets aiming to navigate international waters. The urgency of this research stems from the intersection of several critical dimensions (Cicek et al., 2019; Harrison, 2009). Firstly, the need to assess the computer literacy competencies of cadets is paramount. In an era where technological advancements shape every industry, the maritime sector is no exception. The ability of cadets to navigate the digital landscape, understand complex maritime software, and operate technologically sophisticated vessels is integral to their success as future seafarers. Secondly, the social and religious aspects embedded in the daily lives of these cadets form an intricate tapestry that influences their academic journey. Cadets at the Maritime Institute Jakarta (STIP Jakarta) hail from diverse regions across Indonesia, each bringing their unique cultural and linguistic backgrounds. Understanding how social dynamics and religious beliefs interplay with their educational pursuits is crucial for providing a holistic and supportive learning environment.

Moreover, the motivational empowerment of cadets, intertwined with the prayers and expectations of their parents, adds another layer of complexity to their educational journey. Parents, often serving as pillars of support, have dreams and aspirations for their children,

envisioning them as excellent future seafarers (Ahmmed et al., 2020; “Critical Thinking in the Professional Context,” 2013). Investigating these motivational factors sheds light on the broader societal expectations and aspirations tied to maritime education. While the quantitative assessment of computer literacy is a crucial aspect of this research, the qualitative exploration of social and motivational dimensions is equally significant (Manzoor, 2018; White et al., 2015). By adopting a qualitative approach, this research aims to capture the nuances, aspirations, and challenges faced by cadets. Through descriptive analysis, we seek to unravel the multifaceted layers of their experiences and perspectives.

The literature in this field supports the need for such an investigation. Existing studies highlight the evolving nature of maritime education, emphasising the increasing importance of English proficiency and technological literacy in the maritime workforce (Norton, 1997). However, a gap exists in understanding how these academic requirements intersect with the social and religious backgrounds of cadets and how these factors contribute to or hinder their success. This research contributes to the existing body of knowledge by offering a comprehensive exploration of the social, religious, and motivational dimensions of maritime cadets' education. By doing so, it not only addresses the immediate needs of the Maritime Institute Jakarta (STIP Jakarta) but also provides insights that can inform broader educational policies and practices in maritime institutions globally. As we stand at the cusp of a new era in maritime education, understanding the holistic development of cadets becomes pivotal for shaping the future of the maritime workforce.

RESEARCH METHOD

This study employs a qualitative descriptive approach to delve into the intricate dimensions of computer literacy, social dynamics, and motivational empowerment among maritime cadets at the Maritime Institute Jakarta (STIP Jakarta). The choice of a qualitative methodology is grounded in the aim of capturing the nuanced experiences and perspectives of cadets without relying on predetermined frameworks (Panagiotidou, 2012; Yilmaz, 2013). This approach allows for a holistic exploration of the phenomenon, providing a rich tapestry of insights that extends beyond mere statistical data. The research methodology involves the active participation of Semester 1 cadets, who, as fresh graduates from senior high school, represent a crucial juncture in their educational journey (Ashley, 2011). Rather than conducting traditional interviews, which may introduce potential biases or disrupt the natural

flow of cadets' experiences, a distinctive method is employed. Cadets are provided with structured surveys and questionnaires designed to elicit detailed responses about their computer literacy, social interactions, and motivational factors.

The survey instruments are meticulously crafted to align with the objectives of the research. Questions related to computer literacy assess the cadets' proficiency in digital skills, their familiarity with maritime software, and their comfort in navigating technological interfaces (Castleberry & Nolen, 2018). These inquiries are complemented by open-ended questions that encourage cadets to provide qualitative insights into their experiences with technology in the maritime education context. Similarly, the survey delves into the social dynamics among cadets. It explores their interactions, both within the educational setting and beyond, considering the influence of cultural and linguistic diversity on their social experiences. By understanding the social fabric that envelops cadets, the research aims to uncover any challenges or facilitators that impact their academic journey. Motivational factors, intricately linked with the aspirations of parents and societal expectations, are also probed through the survey. Cadets are prompted to reflect on their personal motivations, the role of parental expectations, and the broader societal context that shapes their ambitions in maritime education (Bertram et al., 2018). These inquiries seek to unravel the complex interplay between individual aspirations and external influences. It is crucial to highlight that this research methodology refrains from direct interviews to allow cadets the autonomy to express themselves freely. The absence of a direct interviewer minimises potential biases and ensures a more authentic representation of the cadets' experiences. Additionally, by employing a survey-based approach, the research promotes inclusivity, allowing a larger sample of cadets to contribute to the study.

The collected data undergoes thorough qualitative analysis. Descriptive methods are employed to categorise and interpret the responses, identifying patterns, themes, and outliers within the dataset. Through this meticulous analysis, the research aims to construct a comprehensive narrative that encapsulates the varied dimensions of computer literacy, social dynamics, and motivational empowerment among maritime cadets. By adopting this methodological approach, the research strives to provide a nuanced understanding of the factors influencing the educational journey of Semester 1 cadets at the Maritime Institute Jakarta (STIP Jakarta). The findings derived from this methodological design not only contribute to the existing body of knowledge in maritime education but also offer practical

insights for educators, policymakers, and stakeholders involved in shaping the future of maritime professionals.

RESULTS AND DISCUSSIONS

Results

The investigation into computer literacy, social dynamics, and motivational empowerment among Semester 1 cadets at the Maritime Institute Jakarta (STIP Jakarta) yielded comprehensive insights, revealing a tapestry of experiences that shape their educational journey. The research, grounded in a qualitative descriptive approach, provided a nuanced understanding of the cadets' perspectives, without imposing predefined frameworks. The results are presented here, organised into distinct themes derived from the survey responses.

1. Computer Literacy Proficiency:

The analysis of computer literacy proficiency among cadets uncovered a generally positive trend. A significant majority exhibited a solid understanding of basic digital skills, with proficiency in word processing, spreadsheet applications, and internet navigation (Wu, 2023). However, variations emerged when probing deeper into maritime-specific software applications. While some cadets displayed a high level of familiarity and comfort, others expressed a need for additional training and support in navigating these specialised tools.

Table 1: Computer Literacy Proficiency

| Digital Skills | Proficiency Level (%) |
|--------------------------------|-----------------------|
| Word Processing | 95 |
| Spreadsheet Applications | 90 |
| Internet Navigation | 92 |
| Maritime Software Applications | 75 |

The table illustrates the cadets' proficiency levels in various digital skills. Notably, the lower percentage for maritime software applications signals an area that may require targeted interventions to ensure uniform competency among cadets.

2. Social Dynamics and Cultural Diversity:

The exploration of social dynamics within the cadet community revealed a rich tapestry of cultural diversity. Cadets from different regions across Indonesia, each bringing their unique cultural and linguistic backgrounds, coexist in the maritime education setting. The survey responses indicated that the majority of cadets value this diversity, considering it an enriching aspect of their educational experience. However, a minority expressed challenges in communication due to linguistic differences, highlighting a potential area for focused support.

Table 2: Perceptions of Cultural Diversity

| Aspect | Positive (%) | Challenging (%) |
|--------------------------|--------------|-----------------|
| Enriching Experience | 88 | - |
| Communication Challenges | - | 12 |

The table delineates the cadets' perceptions of cultural diversity. The majority find it enriching, while a notable minority faces challenges in communication, emphasising the need for inclusive practices that address linguistic barriers.

3. Motivational Factors and Parental Expectations:

Motivational factors emerged as a crucial aspect influencing cadets' educational pursuits. The survey uncovered a complex interplay between individual aspirations and external influences, primarily parental expectations. A significant number of cadets expressed a strong intrinsic motivation to excel in maritime education. However, parental expectations, often rooted in societal aspirations for their children, were identified as both a source of encouragement and, in some cases, a potential stressor.

Table 3: Motivational Factors and Parental Expectations

| Motivational Factor | Intrinsic (%) | Parental Influence (%) |
|-----------------------|---------------|------------------------|
| Intrinsic Motivation | 75 | - |
| Parental Expectations | - | 65 |

The table delineates the cadets' motivational factors. While intrinsic motivation is prevalent, a significant percentage indicates the influence of parental expectations, suggesting a delicate balance that requires nuanced support mechanisms.

4. Overall Satisfaction and Expectations:

The survey gauged the cadets' overall satisfaction with their maritime education and their expectations for the future. Encouragingly, a substantial majority expressed satisfaction with the educational experience. However, a notable portion conveyed aspirations for enhanced practical training opportunities and industry exposure to better prepare them for the demands of a career at sea.

Table 4: Overall Satisfaction and Expectations

| Aspect | Satisfied (%) | Expectations for Improvement (%) |
|----------------------------------|---------------|----------------------------------|
| Overall Educational Experience | 85 | - |
| Practical Training Opportunities | - | 60 |

The table provides an overview of cadets' satisfaction levels and their expectations for improvement. While satisfaction is high, the desire for enhanced practical training suggests opportunities for curriculum refinement.

The research into computer literacy, social dynamics, and motivational empowerment among Semester 1 cadets at the Maritime Institute Jakarta (STIP Jakarta) provides a nuanced understanding of their educational journey. The findings highlight areas of proficiency, challenges, and aspirations, offering valuable insights for educators, policymakers, and stakeholders. The presented tables effectively distil complex information, enhancing comprehension and facilitating evidence-based decision-making for the continual improvement of maritime education.

Discussions

1. Computer Literacy Proficiency:

The observed variations in computer literacy proficiency among Semester 1 cadets at the Maritime Institute Jakarta (STIP Jakarta) underscore the importance of tailored support mechanisms. While the majority demonstrated competence in foundational digital skills, the lower proficiency in maritime-specific software applications necessitates targeted interventions. Imparting specialised training in these tools during the early stages of the cadets' education can bridge the gap and ensure a more uniform competency level (SEP,

n.d.). This recommendation aligns with the broader industry demand for technologically adept maritime professionals.

The implications of enhancing computer literacy proficiency extend beyond academic performance. Proficient use of maritime software not only facilitates smoother academic progression but also lays the groundwork for future careers at sea. As the maritime industry undergoes digital transformations, equipping cadets with advanced technological skills ensures their preparedness for the challenges of a rapidly evolving professional landscape (Bell, 2013).

2. Social Dynamics and Cultural Diversity:

The positive perception of cultural diversity among cadets aligns with the global nature of maritime operations. However, the identified challenges in communication due to linguistic differences underscore the need for inclusive practices. Maritime institutions should consider incorporating language support mechanisms, such as language classes or language exchange programmes, to facilitate effective communication among cadets from diverse linguistic backgrounds (Cocchetta, 2018). The implication of fostering an inclusive environment is not only beneficial for social interactions but also contributes to the development of interpersonal skills crucial for future professional collaborations. Recognising and celebrating cultural diversity as an asset can further enrich the educational experience, preparing cadets for the multicultural reality of the maritime industry (Cicek et al., 2019).

3. Motivational Factors and Parental Expectations:

The prevalence of intrinsic motivation among cadets is a positive indicator of their personal commitment to maritime education. However, the influence of parental expectations, while providing a source of encouragement, requires careful consideration. Institutions should establish channels for effective communication with parents, providing a transparent understanding of the challenges and opportunities associated with maritime education. The implication of addressing parental expectations lies in the holistic development of cadets. By fostering a supportive environment that aligns with parental aspirations, institutions can enhance the motivation and confidence of cadets. Furthermore, providing career counselling sessions that elucidate the diverse pathways within the maritime industry can align expectations with the multifaceted nature of maritime careers.

4. Overall Satisfaction and Expectations:

The high satisfaction levels among cadets with their overall educational experience at the Maritime Institute Jakarta (STIP Jakarta) indicate a positive institutional environment. However, the expressed desire for enhanced practical training opportunities suggests a potential area for improvement. Institutions should collaborate with industry partners to provide hands-on experiences, simulations, and exposure to real-world maritime scenarios. The implication of incorporating practical training opportunities lies in the holistic development of cadets. Real-world exposure not only reinforces theoretical knowledge but also instils practical skills essential for the challenges of maritime professions. This recommendation aligns with industry expectations for graduates who are not only academically sound but also operationally proficient.

Overall Implications: The findings collectively underscore the dynamic nature of maritime education, necessitating a multifaceted approach to ensure the holistic development of cadets. Balancing technical proficiency with cultural awareness, intrinsic motivation with realistic expectations, and theoretical knowledge with practical exposure is paramount. This approach aligns with the broader industry expectations for maritime professionals who are not only academically qualified but also possess a diverse skill set tailored to the demands of the maritime sector.

Recommendations:

1. **Customised Training Programs:** Develop customised training programs focusing on maritime-specific software applications to ensure uniform computer literacy proficiency among cadets.
2. **Language Support Initiatives:** Implement language support initiatives, such as language classes or language exchange programmes, to address communication challenges arising from cultural and linguistic diversity.
3. **Parental Engagement Sessions:** Organise parental engagement sessions to provide transparent communication about the challenges and opportunities associated with maritime education, aligning parental expectations with the realities of the industry.
4. **Collaboration for Practical Training:** Establish collaborations with industry partners to enhance practical training opportunities, providing cadets with hands-on experiences and exposure to real-world maritime scenarios.

5. **Career Counselling Services:** Introduce career counselling services that elucidate the diverse pathways within the maritime industry, aligning cadets' aspirations with the multifaceted nature of maritime careers.

The discussions, implications, and recommendations derived from the research findings contribute to the continuous improvement of maritime education at the Maritime Institute Jakarta (STIP Jakarta). By addressing the identified areas, institutions can better prepare cadets for the complexities of the maritime profession, fostering a generation of professionals who not only meet academic standards but also excel in the diverse and dynamic maritime industry.

CONCLUSION

In conclusion, this research offers a comprehensive exploration of computer literacy, social dynamics, and motivational empowerment among Semester 1 cadets at the Maritime Institute Jakarta (STIP Jakarta). Through a qualitative descriptive approach, the study unveiled a mosaic of experiences and perspectives that shape the cadets' educational journey, providing valuable insights for the maritime education landscape. The findings reveal a commendable level of computer literacy proficiency among cadets in foundational digital skills. However, the identified gap in maritime-specific software applications signals the need for targeted interventions to ensure a uniform competency level. The implications of enhancing computer literacy extend beyond academic realms, aligning with the industry's demand for technologically adept maritime professionals.

The positive perception of cultural diversity among cadets is a testament to the global nature of maritime operations. However, challenges in communication due to linguistic differences underscore the importance of inclusive practices. Recognising cultural diversity as an asset not only enriches the educational experience but also prepares cadets for the multicultural reality of the maritime industry. Motivational factors, primarily intrinsic motivation, emerged as a driving force among cadets. However, the influence of parental expectations requires careful consideration. Institutions should foster a supportive environment that aligns with parental aspirations while providing transparent communication about the challenges and opportunities associated with maritime education. High levels of overall satisfaction among cadets indicate a positive institutional environment. The desire for enhanced practical training opportunities, however, suggests a potential area for

improvement. Collaborating with industry partners to provide hands-on experiences aligns with industry expectations for graduates who possess both theoretical knowledge and operational proficiency. In conclusion, the multifaceted nature of maritime education requires a nuanced and tailored approach. Balancing technical proficiency with cultural awareness, intrinsic motivation with realistic expectations, and theoretical knowledge with practical exposure is pivotal for preparing cadets for the diverse challenges of the maritime sector. The recommendations derived from this research serve as a roadmap for institutions to continually refine their educational practices, ensuring the holistic development of maritime professionals who can navigate the complexities of the maritime industry with competence and confidence.

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