

Exploring the Intersection of Psychological Features and Language Proficiency in Seamen's Activity: A Qualitative Analysis of Maritime Cadets at Maritime Institute Jakarta (STIP Jakarta)

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Abstract. *This research delves into the psychological features of seamen's activity during emergency situations as perceived by 240 cadets in their third semester at the Maritime Institute Jakarta (STIP Jakarta). The study employs a qualitative descriptive approach to unravel the cognitive, emotional, and behavioural responses exhibited by cadets in simulated emergency scenarios. The findings underscore the transformative journey of cadets, transitioning from initial stress and anxiety to a controlled sense of urgency, showcasing the efficacy of the institution's training methodologies. A significant aspect of this research is the examination of the correlation between language proficiency, particularly in English, and effective emergency communication. Cadets recognise English as a shared language that enhances communication efficiency during emergencies. The study reveals the pivotal role of linguistic skills in coordinating actions seamlessly, highlighting the practical implications of language proficiency in emergency management within the global maritime context. The implications for maritime education are profound, emphasising the need for a holistic approach that integrates psychological preparedness and targeted language development initiatives. The research recommends continuous professional development, global collaboration among maritime institutions, and industry partnerships to ensure the adaptability and relevance of education to evolving industry standards. In conclusion, this research contributes valuable insights to the discourse on maritime education, emphasising the importance of cultivating a well-rounded skill set among cadets. The findings inform curriculum development, training methodologies, and strategies to enhance the psychological resilience and linguistic proficiency of future seafaring professionals, positioning them as adept and globally competent officers.*

Keywords: *Emergency Situations, Language Proficiency, Maritime Cadets, Maritime Education, Psychological Features*

INTRODUCTION

Maritime activities constitute a complex interplay of technical expertise, operational precision, and the resilience of seafarers, particularly in the face of emergency situations (de la Peña Zarzuelo et al., 2020; Ghosh et al., 2014). This research undertakes an in-depth exploration into the psychological features that govern seamen's activity during emergencies. The focal point of this investigation is the Maritime Institute Jakarta (STIP Jakarta), an esteemed institution that plays a pivotal role in shaping the next generation of seamen, deck officers, and engine officers. In the vast maritime landscape, where oceans connect nations and facilitate global trade, the role of seafarers is indispensable (Gavalas et al., 2022). The Maritime Institute Jakarta (STIP Jakarta) stands as a beacon of maritime education, with a rich history of producing highly qualified and proficient professionals. The institute's international programme is designed to mould cadets academically, mentally, vocationally, and professionally. As part of this rigorous curriculum, cadets undergo three semesters of intensive

study, preparing them for internships in the dynamic fields of Shipping, Cargo, or any international delivery industry related to their majors - Nautical, Technical, or Port and Shipping Management.

The significance of this research lies in the unique context of the cadets' diverse backgrounds. Hailing from various regions across Indonesia, each cadet brings with them not only linguistic diversity, with Bahasa Indonesia and traditional languages as part of their daily life, but also a cultural tapestry that enriches the fabric of their maritime education. However, as they are poised to become international officers, proficiency in English communication becomes paramount, aligning with the standards set by the International Maritime Organization (IMO) and the Standards of Training, Certification, and Watchkeeping for Seafarers (STCW) (Young, 1995). The maritime domain is inherently unpredictable, subject to the capricious nature of the sea and the challenges posed by ever-evolving technology (Manuel, 2017). Seamen, as the backbone of maritime operations, must not only possess technical competence but also be equipped with the psychological resilience to navigate emergency situations. The urgency of this research is underscored by the gravity of potential consequences in maritime emergencies, where split-second decisions can determine the safety of crew, vessels, and cargo.

Moreover, the transition of cadets into international officers necessitates a thorough understanding of their psychological preparedness. The 240 cadets selected for this research are at a critical juncture in their academic journey, having completed three semesters of comprehensive training. The insights gleaned from their perspectives on seamen's activity during emergencies can inform strategies to enhance their psychological resilience, contributing to the overall efficacy of maritime professionals (de la Peña Zarzuelo et al., 2020). As maritime activities become increasingly globalised, the need for effective cross-cultural communication among seafarers is paramount (Lebeničnik & Starčič, 2020). While the cadets carry the richness of their linguistic and cultural heritage, their ability to communicate fluently in English becomes a defining factor in their success as international officers. Therefore, the urgency of this research is accentuated by the imperative to bridge the gap between linguistic diversity and the global communication standards set by the maritime industry (Zorpas et al., 2021).

The literature pertinent to this research converges on two major themes: the psychological aspects of seamen's activities in emergency situations and the imperative of English literacy in the maritime sector (Balkin, 2006). Numerous studies underscore the unique challenges that seafarers face during emergencies, emphasising the need for psychological

preparedness to mitigate the impact of stress and uncertainty. These studies delve into the cognitive, emotional, and behavioural dimensions of individuals operating in high-stakes maritime environments, shedding light on the intricate interplay of factors that influence decision-making and crisis management. Simultaneously, a parallel body of literature underscores the role of English literacy as a linchpin in international maritime communication. As the lingua franca of the maritime domain, English proficiency is not merely a linguistic skill but a strategic asset for effective collaboration and coordination among seafarers from diverse linguistic backgrounds (Cho & Gulley, 2017; Organization, 2009). The literature reflects a growing recognition within the maritime industry of the need for cadets to master English communication fluently, aligning with the standards prescribed by international regulatory bodies.

In amalgamating these strands of literature, this research seeks to provide a comprehensive understanding of how the psychological features of seamen's activity during emergencies intersect with the imperative of English literacy (Kinging, 2013). By examining the perspectives of Maritime Institute Jakarta (STIP Jakarta) cadets, this study aims to contribute nuanced insights that can inform curriculum development, training methodologies, and strategies to bolster the psychological resilience of future seafaring professionals.

RESEARCH METHOD

This research adopts a qualitative descriptive approach, aiming to explore the psychological features of seamen's activity in emergency situations from the perspective of Maritime Institute Jakarta (STIP Jakarta) cadets. Given the intricate nature of the research focus, a methodological framework is crafted to glean insights into the cadets' experiences and perceptions without direct interviews, ensuring a non-intrusive yet comprehensive exploration (Katz, 2015; Willig, 2014). The research design employs a qualitative descriptive methodology, aligning with the exploratory nature of the study. The goal is to provide a rich and detailed account of the cadets' perspectives on the psychological features associated with seamen's activity during emergency situations (Mallam et al., 2019). This approach facilitates a nuanced understanding of the phenomena under investigation without imposing preconceived notions.

In line with the qualitative descriptive approach, data collection is centred on capturing the perspectives of 240 Maritime Institute Jakarta (STIP Jakarta) cadets who are in their third semester of study. To avoid direct interviews, which may influence responses, a carefully crafted questionnaire is administered. The questionnaire is designed to elicit responses that

reflect the cadets' experiences, insights, and perceptions regarding the psychological dimensions of emergency situations at sea. The questionnaire encompasses a range of open-ended and semi-structured questions. These questions delve into the cadets' cognitive, emotional, and behavioural responses during simulated or real-life emergency scenarios encountered in their academic training (Weisberg, 2016). Additionally, the questionnaire includes items that prompt reflection on the influence of language, specifically English proficiency, in communicating and managing emergencies within the international maritime context.

The questionnaire is distributed digitally to ensure ease of access and completion for the cadets. The questions are formulated to encourage thoughtful responses, allowing for a comprehensive analysis of the psychological aspects of seamen's activity in emergency situations. The qualitative data collected through the questionnaires undergoes a systematic and rigorous analysis (Padgett, 2016). The responses are categorised and coded thematically, enabling the identification of recurrent patterns, trends, and unique perspectives. The thematic analysis approach is instrumental in distilling meaningful insights from the qualitative data, offering a holistic view of the cadets' viewpoints (Willig, 2014).

As a researcher, maintaining a reflexive stance is imperative throughout the analysis process. The qualitative descriptive approach allows for a nuanced interpretation of the data, acknowledging the subjective nature of perspectives without compromising the validity of the findings (Darlington & Scott, 2020; Merriam & Grenier, 2019). This reflexive stance entails a continuous engagement with the data, iterative analysis, and a commitment to represent the cadets' experiences authentically. By adopting this methodological approach, the research endeavours to contribute a robust and contextually rich exploration of the psychological features of seamen's activity in emergency situations, aligning with the overarching goal of enhancing the psychological resilience of future maritime professionals.

RESULTS AND DISCUSSIONS

Results

This section presents the key results and findings derived from the qualitative descriptive analysis of Maritime Institute Jakarta (STIP Jakarta) cadets' perspectives on the psychological features of seamen's activity in emergency situations. The responses of 240 cadets were meticulously analysed, revealing nuanced insights into their experiences and perceptions. Before delving into the main findings, it is pertinent to provide a brief demographic overview

of the cadets involved in the study. The cadets, representing diverse regions of Indonesia, are enrolled in the third semester of their applied bachelor's degree in Nautical, Technical, or Port and Shipping Management Majors. The distribution across these majors is fairly balanced, ensuring a comprehensive representation of perspectives.

Psychological Responses to Emergency Situations

The findings underscore the multifaceted nature of psychological responses exhibited by the cadets during emergency situations. Thematic analysis revealed three overarching categories: cognitive, emotional, and behavioural responses.

1. **Cognitive Responses:** Cadets demonstrated a heightened state of cognitive alertness during emergency simulations. The majority acknowledged the importance of quick decision-making and problem-solving. A recurring theme was the necessity to assess the severity of the situation promptly and prioritise actions. Interestingly, a subset of cadets highlighted the role of language proficiency, specifically English, in facilitating efficient cognitive processing during emergencies.
2. **Emotional Responses:** Emotionally, cadets described a spectrum of feelings ranging from heightened stress and anxiety to focused determination. The qualitative data illuminated the emotional rollercoaster experienced during emergency drills, with many cadets expressing a sense of responsibility for the safety of their team and the vessel. Some reported a shift from fear to a controlled sense of urgency as training progressed.
3. **Behavioural Responses:** Behavioural responses were characterised by a blend of pre-learned protocols and spontaneous actions. Cadets consistently adhered to established emergency procedures, highlighting the efficacy of their training. Notably, the analysis revealed a correlation between language proficiency and the cadets' ability to communicate effectively and coordinate actions seamlessly during simulated emergencies.

Language Proficiency and Emergency Management

A critical aspect explored in this research is the intersection of language proficiency, particularly in English, with the cadets' ability to manage emergencies effectively. The thematic analysis identified several key findings in this regard.

1. **Language as a Facilitator:** A substantial proportion of cadets acknowledged the pivotal role of English proficiency in communication during emergency situations. The ability to convey information accurately and succinctly emerged as a critical factor in

coordinating responses. Cadets emphasised that a shared language, namely English, enhanced the efficiency of communication, reducing the likelihood of misunderstandings.

2. **Challenges in Communication:** While recognising the importance of English, some cadets highlighted challenges, especially in the early stages of their training. The linguistic diversity among cadets, each having Bahasa Indonesia and their traditional language as part of their daily life, posed initial communication hurdles. However, as the training progressed, the cadets adapted, emphasising the need for continuous language development.

Data Presentation

To enhance the comprehension of the findings, the following tables provide a visual representation of the cadets' responses to select questions in the questionnaire:

Table 1: Cognitive Responses in Emergency Situations

Question	Responses
How do you approach decision-making during emergencies?	Quick assessment and prioritisation
	Importance of language proficiency in processing decisions

Table 2: Emotional Responses in Emergency Situations

Question	Responses
Describe your emotional state during emergency drills.	Spectrum from stress to focused determination
	Shift from fear to controlled urgency

Table 3: Behavioural Responses in Emergency Situations

Question	Responses
How do you enact emergency procedures?	Adherence to established protocols
	Correlation between language proficiency and effective coordination

Table 4: Language Proficiency and Communication

Question	Responses
How does language, particularly English, affect your communication during emergencies?	Facilitates efficient communication
	Initial challenges overcome with training

The results elucidate the intricate dynamics of psychological responses to emergency situations among Maritime Institute Jakarta (STIP Jakarta) cadets. The cognitive, emotional, and behavioural dimensions underscore the depth of their training and the significance of psychological preparedness in maritime education.

The notable emphasis on language proficiency, especially English, as a facilitator in emergency communication resonates with the evolving demands of the maritime industry. The findings align with the broader literature, affirming that a common language enhances efficiency and reduces ambiguity during critical scenarios. Moreover, the initial challenges in communication arising from linguistic diversity highlight the importance of ongoing language development initiatives. The adaptation observed among cadets as their training progressed underscores the resilience inherent in their learning process.

This research offers a comprehensive exploration of the psychological features of seamen's activity in emergency situations from the perspective of Maritime Institute Jakarta (STIP Jakarta) cadets. The findings illuminate the cognitive, emotional, and behavioural responses exhibited during simulated emergencies, providing valuable insights for maritime education and training. The intersection of language proficiency, particularly in English, with emergency communication emerges as a critical consideration for curriculum development and training methodologies. The cadets' perspectives contribute to the ongoing discourse on the role of language in enhancing the effectiveness of maritime professionals in emergency scenarios.

As the maritime industry continues to evolve, this research underscores the imperative of holistic training that integrates psychological preparedness and language proficiency. The visual representation of data through tables enhances the accessibility and comprehension of the findings, offering a valuable resource for educators, researchers, and practitioners in the field of maritime education and training.

Discussions

The discussion segment of this research delves into the nuanced aspects of the findings, drawing connections between the cadets' perspectives on the psychological features of seamen's activity in emergency situations and the broader implications for maritime education. Additionally, the discussion explores the practical implications of language proficiency, particularly in English, as a crucial factor in effective emergency communication.

Psychological Preparedness in Maritime Education

The rich insights garnered from the cadets shed light on the intricacies of psychological responses during emergency situations. The cognitive, emotional, and behavioural dimensions revealed through the qualitative descriptive analysis underscore the multifaceted nature of their training at the Maritime Institute Jakarta (STIP Jakarta). The emphasis on quick decision-making, prioritisation, and adherence to established protocols aligns with the exigencies of the maritime profession, where split-second decisions can have profound consequences.

The findings suggest that the cadets undergo a transformative journey in their emotional responses, transitioning from initial stress and anxiety to a controlled sense of urgency. This emotional resilience is a testament to the efficacy of their training, highlighting the importance of simulating realistic emergency scenarios in maritime education.

Language Proficiency as a Facilitator in Emergency Communication

One of the noteworthy aspects illuminated in this research is the pivotal role of language proficiency, specifically English, in facilitating effective communication during emergencies. The cadets' recognition of English as a shared language that enhances communication efficiency is a significant finding. This aligns with the global nature of the maritime industry, where professionals from diverse linguistic backgrounds must collaborate seamlessly.

The correlation between language proficiency and the cadets' ability to coordinate actions seamlessly underscores the practical implications of linguistic skills in emergency management. The findings resonate with the broader literature, reinforcing the industry's recognition of English as the lingua franca of maritime communication. As such, the cultivation of English proficiency becomes a strategic imperative in maritime education to prepare cadets for the globalised nature of their future roles.

Implications for Maritime Education and Training

The integration of psychological preparedness into maritime education emerges as a key implication of this research. The curriculum at Maritime Institute Jakarta (STIP Jakarta) has been instrumental in shaping the cognitive, emotional, and behavioural responses of cadets during emergencies. The immersive training experiences, as reflected in the findings, contribute to the development of a resilient and adaptive mindset among future seafaring professionals.

Furthermore, the emphasis on language proficiency as a crucial component of effective communication underscores the need for targeted language development initiatives in maritime education. Incorporating language proficiency modules, particularly focusing on English, can

enhance the cadets' readiness for international roles. The findings advocate for a holistic approach to education that acknowledges the symbiotic relationship between psychological preparedness and linguistic skills.

Recommendations for Future Research and Practice

The insights derived from this research offer a foundation for future investigations and practical enhancements in maritime education and training. Several recommendations emerge from the findings:

1. **Continued Research on Psychological Resilience:** Future research can delve deeper into the specific aspects of psychological resilience developed during maritime education. Understanding how different training methodologies impact cognitive, emotional, and behavioural responses can inform continuous improvement in curriculum design.
2. **Language Development Initiatives:** Given the significance of language proficiency, future maritime education programmes could incorporate targeted language development initiatives. This could include language immersion programmes, language-specific drills, and real-life communication scenarios to bolster the cadets' linguistic competence.
3. **Global Collaboration in Maritime Education:** Collaboration between maritime education institutions on a global scale can facilitate the exchange of best practices. This can include sharing insights on effective training methodologies, language proficiency initiatives, and psychological resilience development strategies.
4. **Industry Partnerships for Practical Application:** Establishing partnerships with industry stakeholders can provide opportunities for cadets to apply their training in real-world settings. This practical exposure can enhance their ability to translate theoretical knowledge into effective action during emergencies.
5. **Continuous Professional Development:** Recognising that the maritime industry is dynamic, maritime education institutions should offer continuous professional development opportunities for both faculty and cadets. This ensures that curriculum and training methodologies remain aligned with industry standards and evolving challenges.

This research provides a nuanced understanding of the psychological features of seamen's activity in emergency situations from the perspective of Maritime Institute Jakarta (STIP Jakarta) cadets. The implications for maritime education underscore the need for a

holistic approach that integrates psychological preparedness and language proficiency to prepare future seafaring professionals for the challenges of the global maritime industry.

CONCLUSION

This research at the Maritime Institute Jakarta (STIP Jakarta) has provided a comprehensive exploration into the psychological features of seamen's activity in emergency situations, as perceived by cadets in their third semester of study. The findings shed light on the intricate dynamics of cognitive, emotional, and behavioural responses, offering valuable insights for the maritime education sector. The cadets, hailing from diverse regions of Indonesia, undergo a transformative journey in their emotional responses during emergency simulations. From initial stress and anxiety, they evolve into individuals capable of maintaining a controlled sense of urgency. This emotional resilience is a testament to the effectiveness of the training imparted at the Maritime Institute Jakarta, where realistic scenarios are simulated to prepare cadets for the high-stakes environment of maritime operations.

The research has highlighted the pivotal role of language proficiency, particularly English, in facilitating effective communication during emergencies. The cadets' recognition of English as a shared language that enhances communication efficiency resonates with the global nature of the maritime industry. The correlation between language proficiency and the cadets' ability to coordinate actions seamlessly underscores the practical implications of linguistic skills in emergency management. The implications for maritime education and training are profound. The integration of psychological preparedness into the curriculum, coupled with targeted language development initiatives, emerges as a strategic imperative. The findings advocate for a holistic approach that acknowledges the symbiotic relationship between psychological resilience and linguistic proficiency. This holistic education equips cadets not only with technical skills but also with the cognitive and emotional fortitude necessary to navigate the unpredictable nature of maritime emergencies.

As the maritime industry continues to evolve, future research can build upon these insights to delve deeper into specific aspects of psychological resilience and further refine training methodologies. Recommendations for global collaboration, industry partnerships, and continuous professional development underscore the need for a dynamic and adaptive approach in maritime education. In essence, this research contributes not only to the academic discourse on maritime education but also holds practical implications for educators, practitioners, and policymakers. It emphasises the importance of cultivating a well-rounded skill set among

cadets, encompassing both the psychological dimensions of emergency response and the linguistic proficiency required for effective communication in the global maritime arena. Through these endeavours, the Maritime Institute Jakarta and similar institutions can continue to mould future seafaring professionals who are not only technically adept but also resilient, adaptable, and proficient in the language of international maritime communication.

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