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The Influence of The Soft Skill Competence of STIP Cadets on International Seafarer Competition

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Abstract: Effectively implemented maritime education and training (MET) is essential to improve the competence of Indonesian seafarers in the international arena. This research examines the influence of STIP cadets' soft skills competencies. The two methods used were surveys and interviews with respondents from foreign shipping companies and maritime agents. These companies expect cadets who graduate from STIP as officers to be not only experts in hard skills competencies, but also capable of soft skills, which include the ability to manage crew, adaptability, problem solving and communication skills, as well as the ability to make presentations and give good explanations in English as communication skills. The research method used was a quantitative approach. It was found that adaptability 4.583 and teamwork 4.419 played a big role compared to problem solving 4.360 and communication 4.272. Changes in the adaptation of habits and daily activities in English in the STIP campus environment to support MET improvement are expected to increase the absorption of STIP cadets in international shipping companies.

Keyword: Soft Skills, Leadership, Problem Solving, Creativity, Communication Skill.

INTRODUCTION

Soft skills, which include personal, social, communication, and self-management behaviors, complement hard skills and are essential for success in the workplace. They include traits like self-awareness, trustworthiness, conscientiousness, adaptability, critical thinking, attitude, initiative, empathy, confidence, integrity, self-control, organizational awareness, likability, influence, risk-taking, problem-solving, leadership, and time management. Without these skills, one may struggle to sell ideas, get along with others, and complete tasks on time (Albahsan, 2019). Companies are increasingly valuing soft skills, as studies show they can be as reliable as traditional qualifications like technical mastery or experience. Research shows that people skills account for 75% of long-term job success, while only 25% depend on technical knowledge (Bruce Tulgan, 2004). Communication and

motivation are also deemed necessary attributes for positively impacting the bottom line. despite spending over \$50 billion on employee training programs, many corporations fail to offer soft skills programs, often exclusively for high-potential employees or senior executives (Maria Chala & Bouranta, 2021). Soft skills training, focusing on communication and leadership, is provided "as needed" primarily for top executives (Wulandari et al., 2021). College and university curriculums are doing little more than corporations in teaching soft skills, with lacking in strategic thinking, communication, leadership, and adaptability (Maria Chala & Bouranta, 2021). Increasing workplace diversity and business globalization have heightened the need for strengthening soft skills competency (Bouzón et al., 2023).

The STIP of Jakarta, also known as Maritime Education and Training Institute (METI) in Jakarta, is the uncontested the first METI of Indonesian found in 1953 and inaugurated on 27 February 1957 by the Presiden of The Republic of Indonesia Ir. Soekarno (STIP Jakarta, 2019). Every year in STIP Jakarta has graduated alumni amounted to 1.815 officers in 2019. This total amounted also unmatched with the total demand of 155.574 officers globally (Unctadstats.unctad.org, 2022). STIP annually collects data on its graduates who get jobs both nationally and internationally, based on data collected from 2015 to 2022 there was a decrease in 2016 and 2017 and a slight increase in 2018, in 2019 there was an increase and even during the peak of the pandemic in 2020 there was a slight decrease. In 2021 and 2022 there was a significant decrease in STIP graduates who worked internationally as shown in Figure 1 and Table 1 (STIP Jakarta, 2019).

Table 1. Number of STIP Graduates

No	Faculty	2015		2016		2017		2018		2019	
		Natio	Inter	Natio	Inter	Natio	Inter	Natio	Inter	Natio	Inter
1	Nautical	83	82	110	98	142	73	101	82	110	77
2	Engineering	73	101	97	99	107	69	103	70	76	56
3	Port Management	44	9	66	17	88	15	125	9	66	23
Total		200	192	273	214	337	157	329	161	252	156

No	Faculty	2020		2021		2022	
		Natio	Inter	Natio	Inter	Natio	Inter
1	Nautical	96	87	72	37	136	17
2	Engineering	63	58	91	21	118	18
3	Port Management	110	21	78	28	180	0
Total		269	166	241	86	434	35

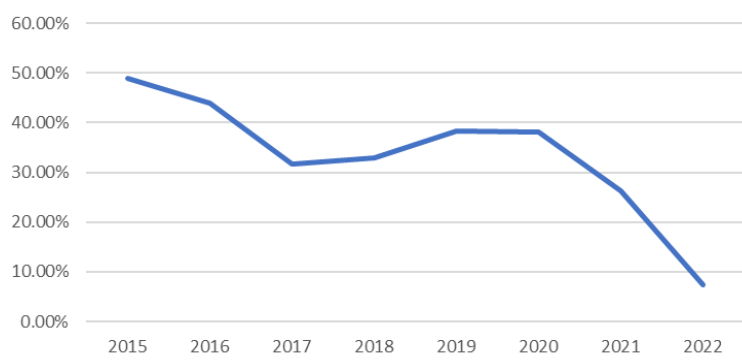


Figure 1. STIP Graduates In International Companies

In 2022 UNCTAD Stats announced that globally seafarers in the world around 1.892.725 seafarers with the explanation 857.544 officers and 1.035.181 ratings (Unctadstats.unctad.org, 2022). With the condition in METI like STIP Jakarta had graduated

1.815 officers. If we calculated and made a comparison between officer global with officers STIP in measure $155.574/1.815 = 907$ officers (measure by author).

METHOD

1. Research design quantitative.
2. Population of the respondents. Known population are STIP graduated.
3. Sample design and data collection questioner by google form.
4. Questionnaire design (team work with 7 factors, adaptability 4 factors, problem solving 4 factor and communication skill with 5 factors) in likert scale.
5. Data analysis with simple descriptive analysis (mean and standar deviation)

The data that will be used in conducting this research is data obtained from questionnaires from graduates from STIP Jakarta from both diploma and officer students (Wulandari et al., 2021). The results of the answers respondents are then categorized into 5 (five) classes according to the following table.

Table 2. categorized respondents

weight	description
1	Almost Never
2	Sometimes
3	Often
4	Very Often
5	Always

Data collection methods were carried out by means of a questionnaire instrument, using a google form sent via social media. At This research used descriptive analysis in the form of average, standard deviation, standard error.

RESULTS AND DISCUSSION

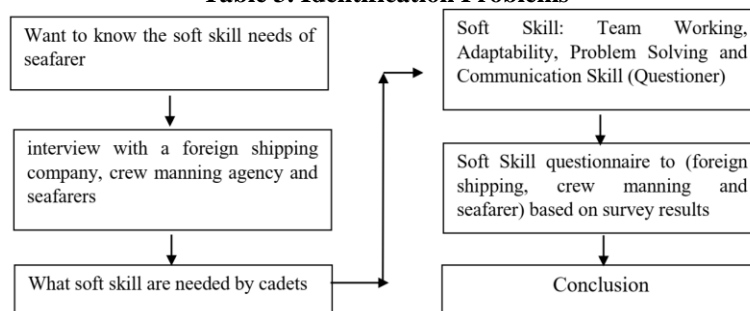
Results

Identification of Problems

The life of a seafarer at sea involves many difficulties including harsh sea tidal waves, the loneliness of being far from the family, living in a small room sometime with inadequate air supply and a low quality of food to mention a few (Fan & Yang, 2024). Seafarers experience mental abuses due to isolation, lack of amenities for social interaction and cultural insensitivity (ILO, 2019). Similarly, lack or delay of seafarers' wages or other mandatory entitlements to send their families and even abandonment are additional abuses that to large extent contributes to the suffering of seafarers (ILO, 2019). Most major ports across the world in one way or another have hosted abandoned ships and their crews on board ships.

The daily life as a seafarers need more than just hard skill. The adaptability, team work, problem solving and communication skill are needed (Maria Chala & Bouranta, 2021). The author want to know the soft skill need of cadets. These are the table.

Table 3. Identification Problems



Literature Review

In contrast to "hard skills," which are technical, the word "soft skills" is used to refer to a broad variety of nontechnical skills, from "self-awareness" to "people skills" to "problem solving" to "teamwork," because most people understand what it means (Amanda Ngcobo, 2018). Despite being less obvious and more difficult to describe and quantify than many "hard skills," these abilities are critically necessary for any worker to succeed or fail in the job (Wang & Tae Yeo, 2016). The issue is that these archaic fundamentals—professionalism, critical thinking, and followership—are no longer in vogue, thus they are no longer discussed nearly enough (Lušić et al., 2019). These archaic fundamentals are not being taught to today's young talent at home or school (Oksavik et al., 2020). By the time they arrive at work, employers typically decide it is too late to pay attention to them. Without a doubt, the majority of managers believe they are not equipped with the necessary time, resources, or expertise to address the soft skill deficiencies of their staff. The soft skills gap in the workforce has been progressively growing for decades, much as the technical skills gap (Klaus, 2008). However, there is a soft skills gap across the entire workforce, affecting both those with highly sought-after technical talents and those without them. Additionally, the disparity in soft skills has grown significantly worse in recent year (Bruce Tulgan, 2004).

Professional life development relies on hard and soft skills. Hard skills are necessary for tasks and can be achieved through instruction and training, while soft skills are related to behavior and require specific training. Competency-based training became relevant in Europe after the emergence of the European Higher Education Area (EHEA) (Bouzón et al., 2023). It aims to teach knowledge, practical and communicative skills, and teamwork to suit the needs of the global economic globe. The Organisation for Economic Co-operation and Development (OECD) has collaborated with institutions to establish key competencies through the PISA program. Soft skills, such as communication and teamwork, are of great interest in education and are at the foundation of project-based learning methodologies. Researchers have studied factors that have the most decisive impact on education and professional training in terms of soft skills training, including the culture of learners and the conditions of the training environment. The Manila Amendments have introduced two new certificates for seafarers, "Engine Resource Management" (ERM) and "Bridge Resource Management" (BRM), which require a course called the STCW course. These certificates aim to provide greater safety in teamwork in the engine room and navigation bridge, focusing on the optimal use of human and technological resources for safe navigation. The number and type of soft skills required depend on the type of navigation and vessel, functions performed, and position held. The most demanded soft skills in the general working world include effective communication, organizational skills, decision-making, teamwork, creativity, leadership, and time management (Torre et al., 2019). Rebeca's literature review investigates the perception of different crewmembers of Spanish flag vessels regarding the influence of different soft skills in their work environment. A quantitative study was conducted on 120 crewmembers, assessing their perceptions of communicative skills, team effectiveness, and long-range planning skills. The results showed that all participants gave very high ratings, especially in team effectiveness (Bouzón et al., 2023).

Significant differences were also identified in the perception of communicative skills and long-range planning skills when differentiated by position held and the type of vessel. Competency-based training became relevant in Europe following the emergence of the European Higher Education Area (EHEA), which led universities to reform their training projects to adapt to the competency demands of a globalized world of work. The study highlights the importance of soft skills in the labor market and higher education training.

The global economy is experiencing changes in production models and work organization systems, such as automation and digitalization, which are directly affecting labor, jobs, and tasks. These transformations require workers to integrate heterogeneous experiences and adaptability, influencing both the demand and supply side of the labor market. The maritime and logistics industry is an interesting context to deepen, as it imposes growing flexibility and higher adaptability for employees. The unique nature of maritime labor, including detachment from land life and risks, prompts seafarers to search for potential job opportunities ashore. The number of masters and officers holding valid certificates of competencies (CoCs) at the EU level is significant, with 3.59% holding CoCs entitling them to serve both deck and engine departments. The study analyzes the soft skills of seafarers in both deck and engine departments. It identifies 22 soft skills, which are less numerous than hard skills but more homogeneous and equally distributed among these departments due to their transversal nature. These skills are unique due to the daily life spent aboard, a small, confined work environment, and the 24-hour relationships among departments and crew. This demonstrates how soft skills, particularly in the marine industry, are tied to the class they belong to (e.g., officers, petty officers), and how they are, in turn, founded on the capacity to manage others. When all competencies indicated for each professional profile are taken into account, it appears that all seafarers in the deck and engine departments possess the same four soft skills: attention to detail, organization skills, ability to work under pressure and time management, and teamwork.

According to the literature review, the author made an purpose about: The Influence of The Soft Skill Competence of STIP Cadets on International Seafarer Competition.

Purpose of The Study

The purpose of this paper is to evaluate the seafarers' Soft Skill competence on international of seafarers competition (Maria Chala & Bouranta, 2021). This paper seeks to achieve the following specific objectives daily life of seafarers from **Soft Skill Competence** (Bruce Tulgan, 2004):

1. Analyze the **Teamwork** of seafarers on watchkeeping seafarers on navigation and engines;
2. Evaluate the **Adaptability** of seafarers in daily activity;
3. Evaluate the **Problem Solving** seafarers in condition watchkeeping and daily activity;
4. Evaluate the **Communication Skill** of seafarers to make opinion and argument.

Discussion

The results of sending questionnaires through social media accommodated in google form, with a total of 75 (seventy five) respondents, can be seen in table 2. independent variables include gender, age, length of work experience, type of ship where working, type of work being undertaken and for the statement material about soft skills given is about teamwork, adaptability, problem solving, and communication skills (Kumar et al., 2022).

Tabel 4. Independen variabel of questionnaires

Characteristic	Values	Total	Percentage (%)
Gender	Male	69	92
	Female	6	8
Ages	22 – 30 years old	44	58.67
	31- 40 years old	16	21.33
	40 -56 years old	15	20
Works Year Experience	0 – 3 years old	24	32
	5 -10 years old	28	37.3
	10 – 15 years old	18	24
	20 – 25 years old	5	6.7

Type of Vessel	Tanker	19	25.3
	Bulk Carrier	14	18.7
	Container	5	6.7
	Other	37	49.3
Type of Company	International Shipping Company	11	14.7
	National Shipping	15	20
	Crew Manning Agency	4	5.3
	Seafarer	45	60

For each variable of the soft skill item there are several questions summarized in the Table 4. Based on the recapitulation of the results of the questionnaire obtained with the highest average value that in carrying out duties as a sailor must have mental strength and resilience, have self-motivation to be better and more efficient and have the ability to learn new things in the form of skills, tools, etc (Oksavik et al., 2020). These soft skills really need to be trained early on so that Indonesian sailors can fight with international sailors (Law Maritime of Republic Indonesia Number 17, 2008). Technological changes that will affect the world of shipping are something that needs to be owned in the future for STIP cadets according to the results of the questionnaire because the shipping industry will continue to change in accordance with technological development (Herbert De Vera, 2022).

Table 5. Variable Soft Skills

Variable	Item	Mean
Team Work	a. Capability of team cooperation with the crew both on deck and engine	4.41
	b. Capability to team co-operation with crew at the time of the deck watch ships and engines	4.39
	c. Capability to work team collaboration with ship crews at the moment of the watch when the ship is landing	4.45
	d. Capacity to work in team with the ship crew during the watch while the ships are backing.	4.37
	e. Capability to work with the team crew in the watch time the ship moves in arrival and departure from the port	4.43
	f. Capability to work in team with the crew at the time of the shipping service when the ship is disembarking	4.47
	g. Capability in team work with the ship's crew during the service of the ship receiving or dropping guides	4.41
Adaptability	a. Have mental strength and stamina as a professional sailor	4.59
	b. Have motivation to be better and more efficient	4.59
	c. Be able to adapt to changes in the shipping industry	4.57
	d. Have the ability to learn new things both skills, tools, etc	4.59
Problem Solving	a. Have the ability to give a consideration in decision-making	4.37
	b. Have the capacity to discuss	4.43
	c. Have a critical thinking ability whenever necessary	4.29
	d. Have multi-task ability (multi tasking)	4.35
Communication Skill	a. Have the ability to summarize and/or conclude communication in English maritime	4.00
	b. Have a ability to communicate with customers and stakeholders	4.23
	c. Have writing skills including reports or emails	4.33
	d. Have an ability to listen actively and understand speech	4.45
	e. Have ability to answer and argue correctly	4.35

Anova test analysis shows that the calculation results of F and Fcrit show that for Team Work, adaptability, problem solving obtained F is smaller than Fcrit while for Communication skills F is greater than Fcrit (Table 5), this indicates that the influence of Communication skills is very large in the world of shipping industry (Bartuseviciene, 2021).

Table 6. analysis result

	F	P-value	F crit
Team Work	0.097	0.997	2.116
Adaptability	0.006	0.999	2.635
Problem Solving	0.259	0.855	2.635
Communication Skill	2.506	0.042	2.396

The results of the overall survey data processing in Table 6, show that adaptability is most highly frequent followed by teamwork, problem solving and communication skills (Wulandari et al., 2021). Adaptability and teamwork have the lowest standard deviation,

which means that respondents show agreement and clarity of ideas in this regard (Tamsah et al., 2023).

Table 7. analysis result

	Mean	Standard Deviation	Standard Error
Team Work	4.419	0.783	0.090
Adaptability	4.583	0.717	0.083
Problem Solving	4.360	0.851	0.098
Communication Skill	4.272	0.826	0.095

Result From Interview With Manning Agency

Team Work and Communication Skill

As for what foreign companies want or expect in absorbing ship crew, the main thing is competence, in terms of knowledge. If they have this competency, they hope that graduates from the best institutions, especially ones like STIP as the best shipping institution in Indonesia, they also see that. And in terms of competency, they actually don't have a problem with hard skills.

But the problem here is actually soft skills or those related to communication in English because they are assumed to already have the knowledge. But they can't explain it in English, mainly these soft skills can be determined, right? That's based on interviews at their time. To get a job in a foreign company like that. So, this interview is what determines whether the person concerned has the ability to communicate in English or not. And from there they also saw that their English skills were lacking and their knowledge was also lacking. Even though maybe they don't lack knowledge, they just can't explain it in English. The company toled that the Indonesian crew had no question about their skills, they were good at maneuvering and the crew was diligent, the only problem was that they communicated in English and there was still a feeling of a lack.

Problem Solving and Adaptability

The hope is that the company can do it. Especially for officers such as masters or chief engineers where they have responsibilities, whether in education or on machines, they really feel that this is our face and we have to maintain and manage and also we have to manage your crew. The principal want them not to just maneuver like that, but they really felt that this is your face. The exact about the crew how to manage the crew. So don't let the master ask if a crew member is sick and then the master answers that he doesn't know.

So its happened to have one of those experiences where a bosun from India died on a ship and coincidentally the cover was our person, but the master was also an Indian because the boss thought the master was a fellow Indian, so the company's expectations were that the master would definitely know, boss. Why is this like that and when asked by this bored master, I answered that I don't know, even though our chief officer, who is an Indonesian, actually knew that the condition in question when he boarded the ship was like that.

He wasn't fit and his legs were swollen. So what do we say, just Fisher? Don't worry, don't have diabetes, but it's not detected at medical time, so because something like that happened, the company told us that like the flying master, we have to be aware with our crew on board, because he is one of the responsible person you take care of everything instead of operational institute of crew management, so that's also important, that's why I always say not even if he's a master, but try it once and go down too.

To the engine room? Asking like a chef is there a problem with the engineer, your everything is good or black, it's just small talk, so yesterday the company reminded me like that, a captain must also remain aware of the entire crew. How does he manage the ship so that there are no crew members who don't like each other?.

CONCLUSION

Soft skills cannot be given to everyone but must start with oneself and must be learned and cared for so that the drive from within will enable adaptability. the selected soft skills have a statistically significant influence on seafarer performance, adaptability has a greater influence on performance, followed by teamwork then problem solving and communication skills. the survey focuses on the highly competitive environment and highlights the importance of soft skills needed. Thus,

Seafarers should analyze the soft skills required for each position and Companies should foster soft skills through training, and provide them with opportunities during on-the-job activities to practice. Colleges should enhance soft skills in their curriculum to prepare cadets for the major changes in the labor market.

A study of 75 respondents via social media questionnaires revealed that soft skills such as teamwork, adaptability, problem-solving, and communication are crucial for sailors. The results showed that mental strength, resilience, self-motivation, and the ability to learn new skills are essential for success in the shipping industry. Technological changes and adaptability are also essential for future STIP cadets. The survey data showed that adaptability, teamwork, problem-solving, and communication skills are the most frequently used, with the lowest standard deviation indicating agreement and clarity, communication skills have a huge influence.

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