

The Impact of Implementing Cadet English Language Skills on Preventing Miscommunication

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Abstract.

Amid rapid maritime industry growth in Indonesia, effective English communication is vital for cadet safety on ships, regulated by IMO's Standard Marine Communication Phrases (SMCP) to prevent miscommunication. This study aims to analyze the influence of cadet English skills implementation (X) on miscommunication prevention (Y) aboard KM Sabuk Nusantara 101. Employing a quantitative approach with simple linear regression design, the research targeted a population of 23 crew members, using total sampling (n=21). Instruments included Likert-scale questionnaires, observation, and documentation, analyzed via SPSS for validity, reliability, classical assumptions, and regression ($Y=23.728+0.509X$). Results reveal a significant positive effect ($t=13.500$, $p=0.000$, $R=0.952$, $R^2=90.6\%$), with high mean scores for English skills (40.57) and prevention (44.38). In conclusion, enhanced cadet English proficiency substantially reduces miscommunication risks, recommending targeted Maritime English training.

Keywords: Cadet, English Proficiency, Maritime Communication and Miscommunication Prevention and SMCP.

I. INTRODUCTION

In the era of industry 4.0 and towards 5.0, the development of maritime transportation in Indonesia as an archipelagic country is increasingly rapid, demanding an increase in the quality of human resources through mastery of hard skills and soft skills, including English language skills for effective communication on board. The use of English has been regulated in the Standard Marine Communication Phrases (SMCP) by the IMO to prevent misunderstandings between multinational crews, where cadets as the lowest position in the ship's organizational structure must master it in order to understand instructions accurately. However, reality shows that the lack of implementation of these skills still often leads to miscommunication, as in the case of the collision of KMP Bahuga Jaya with MT Norgas Cathinka in the Sunda Strait in 2013 due to a lack of understanding of English.

English communication in the maritime sector is not only a tool between countries, but also crucial for the operational safety of ships, where failure to understand technical terms can lead to workplace accidents. Cadets often face linguistic challenges such as Indonesian language interference, a lack of maritime vocabulary, and mispronunciations, which impair the effectiveness of SMCP in VHF or internal crew communications.

Although SMCP is designed to standardize communication, its implementation by Indonesian cadets remains low, especially on domestic routes where only about 70% of interactions with foreign vessels use these standard phrases. Previous research has highlighted that miscommunication often arises from a lack of practice speaking under pressure, differences in foreign crew accents, and cadets' fear of clarifying instructions to avoid embarrassment. On KM Sabuk Nusantara 101, common types of miscommunication included misunderstandings about navigation, work instructions, and emergency responses, which contributed up to 90.6% to the risk of accidents due to cadets' weak English skills.

Cadet Indonesian maritime students face specific challenges such as low listening comprehension among non-native speakers and a lack of confidence in speaking, exacerbated by a Maritime English curriculum that is not fully contextualized. External factors such as shipboard noise and organizational

hierarchies exacerbate the risk, with cadets tending to remain silent rather than ask questions, leading to potentially fatal ambiguous instructions. This reflects the gap between academic training and real-world maritime practice.

KNKT data and recent studies confirm that language miscommunication is a major factor in maritime incidents in Indonesia, with native speakers contributing to the failure to use plain English or SMCP consistently.

This study aims to analyze the effect of cadet English language skills implementation on miscommunication prevention on KM Sabuk Nusantara 101 using simple linear regression, identify common types of miscommunication, and evaluate daily English language practices. The urgency lies in the urgent need to improve shipping safety in Indonesia as a maritime nation, where miscommunication contributes to a high proportion of accidents, in line with the STCW and IMO mandates for Maritime English proficiency. Its novelty is the empirical focus on cadets as entry-level officers with quantitative data from specific vessels, complementing previous, more general studies, and providing task-based learning curriculum recommendations for institutions such as the Surabaya Shipping Polytechnic.

II. METHODS

This study uses a quantitative approach with a simple linear regression design to examine the relationship between the independent variable of cadet English language skills implementation (X) and the dependent variable of miscommunication prevention (Y) at KM. Sabuk Nusantara 101, in accordance with the principle of positivism which emphasizes numerical measurement and objective hypothesis testing. This approach was chosen because it is able to produce valid and reliable data through statistical analysis to predict causal influences, as explained in the quantitative paradigm that relies on representative samples and standardized instruments. The research location was carried out during a 12-month sea practice at KM. Sabuk Nusantara 101, with a focus on maritime operations in the waters of East Nusa Tenggara to ensure contextual relevance.

Data Analysis Instruments and Techniques

The main instrument was a closed-ended questionnaire with a Likert scale distributed to respondents to measure indicators of English language skills (such as SMCP mastery, pronunciation, and word choice) and miscommunication prevention (such as clarification of instructions and emergency response), supplemented by direct observation and documentation for triangulation of primary and secondary data. The questionnaire was tested for validity and reliability using statistical tests such as Shapiro-Wilk for normality, linearity, and Pearson correlation coefficients before the main analysis, ensuring data accuracy and bias-free. Data analysis techniques included statistical descriptions (mean, distribution), classical assumption tests, and simple linear regression with the equation $Y = a + bX$ to measure the coefficient of determination (R^2) and the significance of the influence, processed using SPSS software to predict the contribution of variables precisely.

Population and Sample

The study population consisted of all 23 crew members of KM. Sabuk Nusantara 101 (13 deck and 10 engine), which included cadets and related crew during the sea practice period, as a representation of the Indonesian domestic maritime community. The sample was taken by total sampling ($n = 21$ respondents) because the population was small and affordable, with dominant age characteristics of 20-30 years and various positions (deck officers, engine crew, etc.), according to the Slovin formula or saturation approach for limited ship research. This technique ensures limited but in-depth generalization to the specific context of the ship, avoiding non-response bias through direct distribution during observation.

Research Procedures

The procedure begins with a preliminary study through field observations to identify miscommunication issues, followed by the development of a questionnaire based on the SMCP theoretical foundation and variables from a literature review, as described by Andi Ernie Zaenab Musa (2021), and distribution to the sample during the sea practice. Next, primary data collection via questionnaires and secondary data collection via documentation are conducted in parallel with data quality testing (validity,

reliability, and normality). Then, simple linear regression analysis along with t- and F-tests are used to interpret the results. The final stage includes evaluation of the findings, discussion of implications for accident prevention, and validation through observational data convergence for robust conclusions and practical recommendations.

III. RESULTS AND DISCUSSION

Research result

The analysis and discussion of the research entitled "The Effect of Cadet English Language Skills Implementation on Miscommunication Prevention" are presented in this chapter. The research data were obtained from the results of field data collection during the implementation of on-board practice, which included observation and documentation as supporting data. In addition, the main data source in this study came from questionnaires distributed to respondents. The population in this study amounted to 21 crew members, all of whom were male. Therefore, all members of the population were used as research respondents, so the sampling technique used was total sampling or saturated sampling, namely a sampling technique that involves the entire population as a research sample. The use of the total sampling technique was carried out because the population was relatively small and allowed researchers to obtain comprehensive data.

The 21 respondents are expected to provide a comprehensive and accurate picture of the impact of implementing cadet English language skills on preventing miscommunication on board. The characteristics of the study respondents will be explained in the following section.

Table 1. Respondent Characteristics Based on Age

		Age			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	< 30 years	11	52.4	52.4	52.4
	30 - 39 years old	5	23.8	23.8	76.2
	40 - 49 years	2	9.5	9.5	85.7
	> 50 years	3	14.3	14.3	100.0
	Total	21	100.0	100.0	

Based on Table 1, the majority of respondents were under 30 years old (11 people) (52.4%). Furthermore, there were 5 respondents aged 30-39 years (23.8%), 2 respondents aged 40-49 years (9.5%), and 3 respondents aged 50 years and above (14.3%). This indicates that the majority of respondents were of productive age and actively involved in ship operations.

Table 2. Respondent Characteristics Based on Position on Ship

		Frequency	Percent	Valid Percent	Cumulative
					Percent
Valid	Master	1	4.8	4.8	4.8
	Chief engineer	1	4.8	4.8	9.5
	Deck Officer	3	14.3	14.3	23.8
	Engine Officer	3	14.3	14.3	38.1
	Deck Crew	8	38.1	38.1	76.2
	Engine Crew	5	23.8	23.8	100.0
	Total	21	100.0	100.0	

Based on the table of respondent characteristics according to their ship position, the majority of respondents came from the Deck Crew group, amounting to 8 people (38.1%). Furthermore, respondents with the position of Engine Crew numbered 5 people (23.8%). Respondents who served as Deck Officer and Engine Officer each numbered 3 people (14.3%). Meanwhile, respondents with the position of Master and Chief Engineer each numbered 1 person (4.8%).

Description of Research Variables

This study consists of one independent variable (X) and one dependent variable (Y). The independent

variable in this study is Cadet English Skills (X), while the dependent variable is Miscommunication Prevention (Y). To provide an overview of the characteristics of the data and to support the analysis of the influence between the independent and dependent variables, it is necessary to present a description of each variable based on data obtained from the results of field research.

Table 3. Descriptive Statistics Results

	N	Minimum	Maximum	Mean	Standard Deviation
Cadet English Skills	21	30	49	40.57	7,600
Miscommunication Prevention	21	36	49	44.38	4,066
Valid N (listwise)	21				

1. Cadet English Skills Variable (X)

Based on the results of descriptive statistical analysis, the Cadet English Skills variable has a total of 21 respondents (N). The minimum score obtained is 30, while the maximum score is 49. The average score (mean) of this variable is 40.57 with a standard deviation of 7.600. This average score indicates that in general the level of cadet English skills is in the fairly high category. The relatively large standard deviation indicates variations in English language skills among respondents, which reflects differences in levels of understanding, use of maritime terms, and the ability to communicate in English during activities on board.

2. Variables Miscommunication Prevention (Y)

In the Miscommunication Prevention variable, the number of respondents (N) was also 21 people. The minimum score obtained by respondents was 36, while the maximum score was 49. The average (mean) score for this variable was 44.38, with a standard deviation of 4.066. These results indicate that the level of miscommunication prevention on board is relatively high, meaning that most respondents considered that communication on board was running quite well. The smaller standard deviation value compared to variable X indicates that respondents' answers to this variable are relatively more homogeneous, so that respondents' perceptions of miscommunication prevention tend to be uniform.

Hypothesis Testing

The t-test is used to determine the extent to which the independent variable partially influences the dependent variable. This test is carried out by comparing the values T_{count} with T_{table} , and by paying attention to the significance value. The testing criteria state that if the significance value is less than 0.05 and the value $T_{count} > T_{table}$, then the alternative hypothesis is accepted and the null hypothesis is rejected. The determination of the T_{table} value is done using the degree of freedom formula. ($df = n - k$), where:

n = number of respondents

k = number of independent variables

In this study, the number of respondents was 21 people with 1 independent variable, so that the df value obtained was 20. At a significance level of 0.05 with two-way testing, the value obtained was T_{table} of 2.08.

Table 4. T-Test Output

Variables	T_{count}	T_{table}	Significance	Information
Cadet English Skills (X)	13,500	2.08	0.00	Influential

Source: (Processed Primary Data, 2026)

Based on the analysis results, the T value was obtained T_{count} of 13,500 with a significance value of 0.00. This value indicates that T_{count} greater than T_{table} ($13,500 > 2.08$) and the significance value is less than 0.05 ($0.000 < 0.050$). Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, which means that cadets' English skills have a significant effect on preventing miscommunication on board.

Data analysis

1. Research Instrument Test

Testing of this research instrument included validity and reliability tests, which aimed to ensure that

the instrument used was able to measure the research variables accurately and consistently. All data processing was carried out using IBM SPSS Statistics version 2 software. *6for Windows*.

A. Item Validity Analysis

The item validity test was conducted to determine the level of validity of each statement item in the questionnaire. The research instrument initially consisted of 20 statement items, each of which was divided into two variables, namely Cadet English Skills (X) and Miscommunication Prevention (Y). The item validity test was conducted by looking at the Corrected Item-Total Correlation value in the SPSS output. The criteria used in this test was that the calculated R value must be greater than R table at a significance level of 5%. With 21 respondents, the R table value was 0.433. If the Corrected Item-Total Correlation value is greater than 0.433 and has a positive value, then the statement item is declared valid. Based on the results of the item validity analysis, all statement items in the research instrument showed a Corrected Item-Total Correlation value that was greater than R table and did not have a negative value. Thus, all 20 statement items were declared valid and suitable for use as a research instrument.

B. Validity Test

The validity test in this study was conducted to test the validity of each research variable, namely Cadet English Skills (X) and Miscommunication Prevention (Y). The validity test was conducted using Pearson Product Moment correlation through correlation analysis between the score of each item and the total score of the variable. The validity test criteria were set at a significance level of 5% ($\alpha = 0.05$). With 21 respondents, the Rtable value was obtained at 0.456. An item or variable is declared valid if the Rcount value is greater than Rtable ($R_{count} > R_{table}$) and the significance value is less than 0.05.

Table 5. Questionnaire Validity Test Results

Variables	Item	Rhitung	Rtable	Status
Cadet English Skills (X)	1	0.952	0.456	Valid
	2	0.813	0.456	Valid
	3	0.884	0.456	Valid
	4	0.943	0.456	Valid
	5	0.933	0.456	Valid
	6	0.871	0.456	Valid
	7	0.844	0.456	Valid
	8	0.930	0.456	Valid
	9	0.853	0.456	Valid
	10	0.932	0.456	Valid
Miscommunication Prevention (Y)	11	0.506	0.456	Valid
	12	0.759	0.456	Valid
	13	0.906	0.456	Valid
	14	0.498	0.456	Valid
	15	0.687	0.456	Valid
	16	0.805	0.456	Valid
	17	0.685	0.456	Valid
	18	0.827	0.456	Valid
	19	0.841	0.456	Valid
	20	0.801	0.456	Valid

Source: (Processed Primary Data, 2026)

Based on the results of the validity test that has been conducted, all statement items in the Cadet English Skills (X) and Miscommunication Prevention (Y) variables have a calculated R value $>$ R table and a significance value of less than 0.05. Therefore, it can be concluded that both research variables are declared valid and can be used in further analysis.

C. Reliability Test

Reliability testing was conducted to determine the level of consistency of the research instrument in measuring the variables studied. Reliability testing in this study was conducted using the Cronbach's Alpha

coefficient. The testing criteria state that an instrument is reliable if the Cronbach's Alpha value is greater than 0.60.

Table 6. Questionnaire Reliability Test Results

Variables	Cronbach's Alpha	Status
Cadet English Skills (X)	0.977	Reliable
Miscommunication Prevention (Y)	0.921	Reliable

Source: (Processed Primary Data, 2026)

Based on the results of the reliability testing conducted, the Cronbach's Alpha values for each research variable were all above the minimum threshold of 0.60. This indicates that the questionnaire instrument used has a good level of consistency. Therefore, it can be concluded that all variables in this study are reliable and suitable for use as measuring instruments in research data collection.

2. Classical Assumption Test

The classical assumption test is a testing step that must be performed before conducting a simple linear regression analysis. This test aims to ensure that the research data meets statistical assumptions, including normality, linearity, and other supporting assumptions, so that the regression analysis results can be interpreted accurately.

A. Normality Test

Researchers conducted a normality test to obtain regression analysis results that could be interpreted accurately. The test criteria state that if the significance value is greater than 0.05, the data are considered normally distributed. If the significance value is less than or equal to 0.05, the data are considered non-normally distributed. In this study, the normality test was conducted using the Shapiro-Wilk test because the sample size was less than 50 respondents.

Table 7. Results of the Shapiro-Wilk Normality Test

	Tests of Normality					
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Unstandardized Residual	.210	21	.017	.924	21	.105

a. Lilliefors Significance Correction

Source: (Processed Primary Data, 2026)

Based on the results of the Shapiro-Wilk test, a significance value of 0.105 was obtained, which is greater than 0.05 ($0.105 > 0.05$). Thus, it can be concluded that the residual data in the regression model is normally distributed, so the normality assumption in simple linear regression analysis has been met.

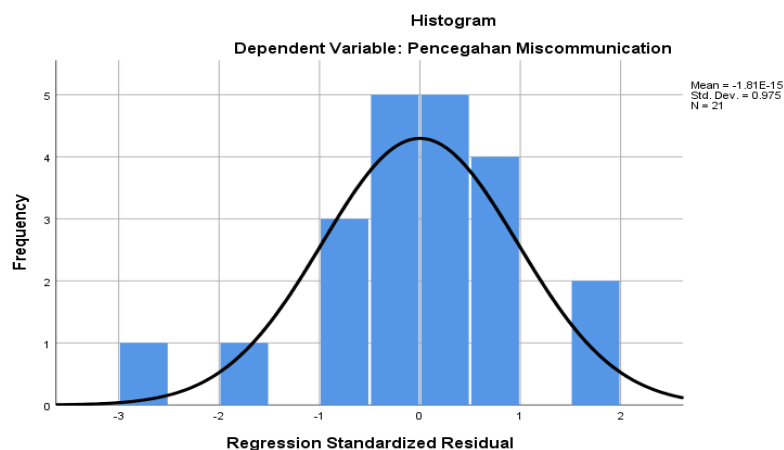


Fig. 1. Histogram of Normality Test

The normality test in this study was also supported by a graphical analysis of the standardized residual histogram. The residual histogram is used to determine whether the residual distribution pattern approximates a normal distribution. Figure 1 shows that the standardized residual distribution forms a bell-shaped pattern and is relatively symmetrical around the zero value. This indicates that the residuals do not deviate significantly to the left or right. Therefore, it can be concluded that the residual data in the regression

model visually meets the assumption of normality, allowing for simple linear regression analysis.

B. Linearity Test

In this study, the basis for decision-making in the linearity test is to look at the significance value in the Deviation from Linearity row. If the significance value is greater than 0.05, the relationship between the variables is declared linear. If the significance value is less than 0.05, the relationship between the variables is declared non-linear.

Table 8. Linearity Test Results

ANOVA Table							
Miscommunication Prevention * Cadet English Skills	Between Groups	(Combined)	Sum of Squares	df	Mean Square	F	Sig.
		Linearity	299,377	1	299,377	166,421.000	
		Deviation from Linearity	15,019	10	1,502		.835.611
	Within Groups		16,190	9	1,799		
	Total		330,586	20			

Based on the results of the linearity test, the significance value in the Deviation from Linearity row was 0.611, where the value is greater than 0.05 (0.611 > 0.05). Thus, it can be concluded that the relationship between cadets' English skills and miscommunication prevention is linear, thus fulfilling the requirements for a simple linear regression analysis.

Simple Linear Regression Analysis

After the classical assumption test showed results that met the requirements for simple linear regression, the next step was to conduct a simple linear regression analysis. This analysis aimed to determine the direction and magnitude of the influence of cadets' English skills on preventing miscommunication on board. Using IBM SPSS Statistics software, the analysis was conducted. *version 26 for Windows*, the researcher calculated the regression coefficient, determination coefficient (R Square), and significance values of the t-test and F-test. The results of the regression analysis will show whether the cadet's English language skills variable has a significant effect on preventing miscommunication and how large that influence is.

Table 9. Correlation Coefficient

Coefficient Interval	Relationship Level
0.00 – 0.199	Very low
0.20 – 0.399	Low
0.40 – 0.599	Strong
0.60 – 1.00	Very strong

Source: (Semaun, 2016) Source: Sugiyono (2015:184)

Table 10. Model Summary

Model Summary					
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson
1	.952a	.906	.901	1,282	1,849

a. Predictors: (Constant), Cadet English Skills

b. Dependent Variable: Miscommunication Prevention

Based on the Model Summary Table above, the correlation coefficient (R) value is 0.952. When associated with the correlation coefficient interpretation table, this value is in the interval of 0.90-1.00 which is included in the very strong category. This indicates that the relationship between the cadet English language skills variable and the prevention of miscommunication on board is classified as very strong. Furthermore, the coefficient of determination (R Square) value of 0.906 indicates that the cadet English language skills variable is able to explain 90.6% of the variation in the miscommunication prevention variable. Meanwhile, the remaining 9.4% is influenced by other factors outside the variables examined in this study.

Table 11. Simple Linear Regression Equation

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1(Constant)	23,728	1,555			15,257.000	
Cadet English Skills	.509	.038	.952		13,500.000	

Dependent Variable: Miscommunication Prevention

Based on the results of processing the table data above, the following simple linear regression equation is obtained:

$$Y = 23.728 + 0.509X$$

Information:

Y = Miscommunication Prevention

X = Cadet English Skills

The coefficients table shows that the constant value (a) is 23.728, while the regression coefficient X(b) or cadet English skills is 0.509, indicating that every increase in cadet English skills will increase miscommunication prevention by 0.509 units, assuming other variables are held constant. A positive coefficient value indicates a unidirectional relationship between the two variables, meaning that the better the cadet English skills, the higher the miscommunication prevention efforts on board. Furthermore, in the coefficients table, a significance value of 0.000 is obtained which is smaller than the significance level of 0.05 ($0.000 < 0.05$) which means that cadet English skills have a significant effect on miscommunication prevention on board.

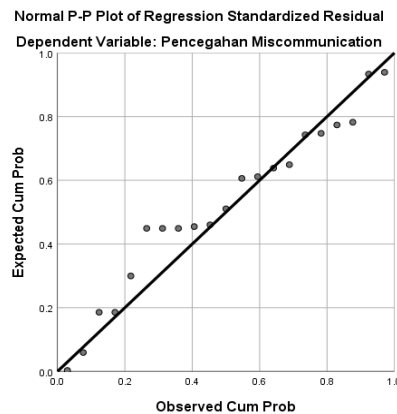


Fig. 2. Normal P–P Plot

Based on the Normal P–P Plot of Regression Standardized Residuals, it can be seen that the residual points mostly follow and are located around the diagonal line and do not form a specific pattern. This indicates that the residual distribution approaches a normal distribution. Thus, the simple linear regression analysis used in this study has met the classical assumptions, so the results of the regression and hypothesis testing are interpreted validly.

IV. DISCUSSION

Conditions for Cadet English Use in Work Activities on Ships



Fig. 3. Use of English when communicating using VHF

Source: Researcher Document

The Influence of Cadet English Skills on Miscommunication Prevention

Based on the results of a questionnaire distributed to 21 respondents, it was found that cadets' English skills were influential in preventing miscommunication on board. This was evident from the majority of respondents who agreed or strongly agreed with statements related to clarity of instructions, work safety, and effective team communication.

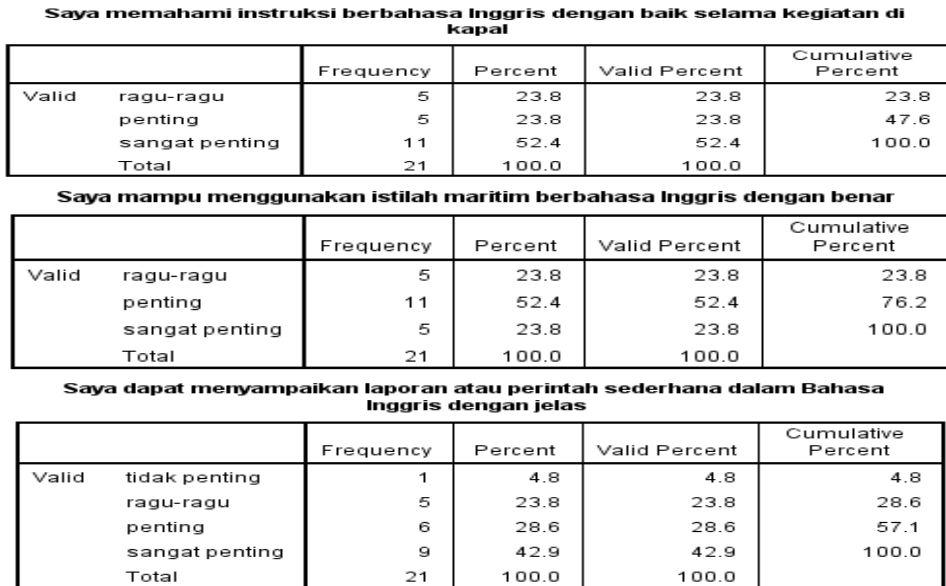


Fig. 4. Aspects of English Usage

Regarding clarity of instructions and task execution, most respondents agreed to strongly agree that work instructions are easier to understand when delivered in English, and the use of English maritime terms helps clarify the intent of the commands. This indicates that English has become the primary working language used in delivering instructions on board ships, especially in operational and technical contexts. Clarity of instructions is crucial in a shipboard work environment with its fast pace and high level of risk. Small errors in understanding instructions can result in procedural errors, delays in task completion, and even potential accidents. Therefore, cadets' ability to understand and use English technical terms is a crucial factor in supporting the smooth execution of tasks on board ships.

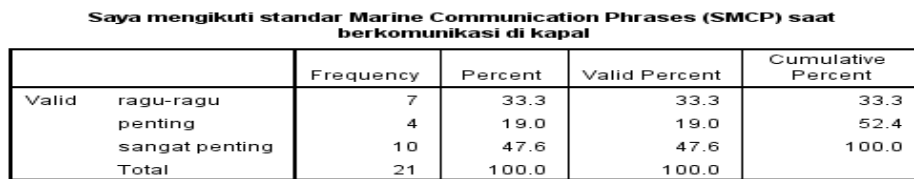


Fig. 5. SMCP

Furthermore, the majority of respondents stated that they adhere to the Marine Communication Phrases (SMCP) standard when communicating. The implementation of SMCP aims to reduce linguistic ambiguity and ensure that messages convey a clear and consistent meaning. With these communication standards, the possibility of differing interpretations can be reduced, thereby minimizing the risk of miscommunication. However, some respondents still expressed doubts about the use of SMCP and the effectiveness of English in understanding instructions. This could be due to differences in English proficiency among cadets or the habit of using other languages in informal communication. This situation indicates that although English skills are generally quite good, there is still a need to improve the consistency of English use across all work activities on board.

Pekerjaan tidak sesuai dengan arahan yang diberikan dikarenakan tidak memahami perintah yang disampaikan dalam Bahasa Inggris

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid setuju	6	28.6	28.6	28.6
sangat setuju	15	71.4	71.4	100.0
Total	21	100.0	100.0	

Kesalahan komunikasi dapat mengganggu keselamatan kerja di kapal

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid setuju	2	9.5	9.5	9.5
sangat setuju	19	90.5	90.5	100.0
Total	21	100.0	100.0	

Fig. 6. Errors in Communication

Regarding occupational safety, the majority of respondents stated that communication errors can disrupt safety on board ships, and that cadets' English skills influence their preparedness for emergency situations. These results indicate that respondents recognize the importance of fast, clear, and accurate communication, especially in situations requiring an immediate response, such as emergencies or operational disruptions. In emergency situations, there is insufficient time for lengthy clarifications, so messages must be understood correctly from the first time they are delivered. If misunderstandings occur, actions taken may not comply with applicable safety procedures. Therefore, English language skills are crucial as the primary communication tool for conveying safety instructions.

Kemampuan Bahasa Inggris cadet berpengaruh terhadap kesiapan menghadapi situasi darurat

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid setuju	8	38.1	38.1	38.1
sangat setuju	13	61.9	61.9	100.0
Total	21	100.0	100.0	

Fig. 7. Influence of English Proficiency

Furthermore, most respondents stated that they found it easier to understand safety instructions delivered in English. This indicates that English has become the standard language for conveying safety information on ships, both through direct instructions and written procedures. Therefore, good English skills contribute directly to preventing errors that could jeopardize crew safety. These results reinforce the notion that English language skills serve not only as a means of communication but also as part of the occupational safety system in the maritime environment.

Penggunaan Bahasa Inggris meningkatkan efektivitas kerja tim di kapal

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ragu-ragu	5	23.8	23.8	23.8
setuju	14	66.7	66.7	90.5
sangat setuju	2	9.5	9.5	100.0
Total	21	100.0	100.0	

Pemahaman istilah teknis Bahasa Inggris membantu saya berkomunikasi dengan awak kapal asing

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ragu-ragu	5	23.8	23.8	23.8
setuju	3	14.3	14.3	38.1
sangat setuju	13	61.9	61.9	100.0
Total	21	100.0	100.0	

Keterampilan Bahasa Inggris mendukung komunikasi lintas budaya di kapal internasional

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ragu-ragu	3	14.3	14.3	14.3
setuju	9	42.9	42.9	57.1
sangat setuju	9	42.9	42.9	100.0
Total	21	100.0	100.0	

Fig. 8. Effectiveness of English Use

This study also showed that the majority of respondents stated that the use of English improves teamwork effectiveness and supports cross-cultural communication on international ships. This indicates that English serves as a liaison language between crew members from different nationalities and cultures. In a multinational work environment, using English as the primary working language helps reduce communication barriers that can arise due to differences in mother tongues. If communication is not running smoothly, coordination between departments can be disrupted and potentially lead to errors in task execution.

Therefore, cadets' English skills are a supporting factor in creating effective teamwork, where each team member understands their respective roles and coordinates well. This demonstrates that improving English skills impacts not only individuals but also overall team performance.

Saya selalu memastikan pesan yang disampaikan sudah dimengerti sebelum melaksanakan perintah

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid setuju	3	14.3	14.3	14.3
sangat setuju	18	85.7	85.7	100.0
Total	21	100.0	100.0	

Saya menerima koreksi atau arahan menggunakan Bahasa Inggris dari senior atau perwira kapal

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid ragu-ragu	8	38.1	38.1	38.1
penting	2	9.5	9.5	47.6
sangat penting	11	52.4	52.4	100.0
Total	21	100.0	100.0	

Fig. 9. Communication Clarification

Regarding communication clarification, most respondents stated that they always ensured that the message conveyed was understood before carrying out an order, and accepted corrections or directions from seniors in English. This demonstrates an awareness of the importance of two-way communication in preventing misunderstandings. Re-confirming understanding of instructions is a crucial step in preventing errors due to erroneous assumptions. Furthermore, accepting corrections also demonstrates an open attitude towards learning and improving communication skills. This demonstrates that English skills are used not only to receive orders but also as a means to ask questions, clarify, and correct communication errors. Thus, the potential for miscommunication can be minimized through active interaction between cadets and officers or seniors on board.

Table 12. Recapitulation of Questionnaire Data Processing on the Implementation of Cadet Skills in English in Preventing Miscommunication

NO	Formulation of the problem	Result Indicators	Mark
1.	The effect of implementing cadet English skills on preventing miscommunication	Constant (a) $a = \frac{\sum Y_i - b \sum X_i}{n}$ $a = \frac{932 - 0,509 (852)}{21}$ $a = \frac{498,332}{21}$ $a = 23,728$	23,728
		$\text{Regression coefficient (b)}$ $b = \frac{n (\sum X_i Y_i) - (\sum X_i) (\sum Y_i)}{n \sum X_i^2 - (\sum X_i)^2}$ $b = \frac{21 (38.402,02) - (852)(932)}{21 (35.722) - (852)^2}$ $b = \frac{12.368,72}{24.258}$ $b = 0,509$	0.509
		Regression equation	$Y = 23.278 + 0.509X$
2	Miscommunication which often occurs on KM. Sabuk Nusantara 101	Contribution of English factors $r = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}$ $r = 0,952$ $R^2 = r^2$ $R^2 = (0.952)^2$ $R^2 = 0.906$	90.6%
		Contribution of other factors	9.4%
3.	Implementation of cadet English skills in KM. Sabuk Nusantara 101	Implementation coefficient Direction of influence	0.509 Positive

Table 1. Description of table 12

Component	Mark
Number of respondents (n)	21
$\sum X$ (sum of X scores)	852
$\sum Y$ (sum of Y scores)	932
$\sum X^2$ (sum of X scores)	35,722
$\sum XY$ (sum of the products of X and Y)	38,402.02

Based on the discussion above, it shows that cadets' English skills play a crucial role in various aspects of work communication on board, from clarity of instructions, operational safety, teamwork, to the process of clarifying orders. This is consistent with the results of a simple linear regression statistical analysis, which indicates a significant influence of cadets' English skills on preventing miscommunication on board. Therefore, improving cadets' English skills can be an important strategy in enhancing operational safety and effectiveness in the maritime work environment.

V. CONCLUSION

This study found that the implementation of cadet English language skills significantly influenced miscommunication prevention on KM Sabuk Nusantara 101, with a regression coefficient of 0.509, a very strong correlation ($R=0.952$), and a contribution of 90.6% to the variation in miscommunication prevention, as evidenced by a simple linear regression of 21 respondents. This finding is supported by the high average

cadet English language skills (40.57) and miscommunication prevention (44.38), with the majority of respondents being of productive age (<30 years, 52.4%) and holding deck crew positions (38.1%), highlighting the effectiveness of SMCP in VHF communication, work instructions, and emergency response. The practical implications include recommendations for intensive task-based learning Maritime English training for the Surabaya Shipping Polytechnic to improve domestic shipping safety.

However, the study's limitations lie in its small sample size (n=21) from a single vessel, limiting generalizability to the East Nusa Tenggara route context and failing to incorporate qualitative factors such as foreign crew accents or real-time emergency simulations. Suggestions for future research include a mixed-methods approach with an international multi-vessel sample, longitudinal analysis, and the integration of AI for language assessment to enhance a holistic understanding of maritime communication dynamics in Indonesia.

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