

English Language Self-Efficacy and Oral Communication Performance of Maritime Students: Implications for Educational Interventions

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ABSTRACT

This research examined the self-efficacy in the English language and oral communication skills of 178 second-year Bachelor of Science in Marine Engineering students. Employing a quantitative descriptive-correlational framework, data were gathered utilizing the modified Questionnaire of English Self-Efficacy (QESE) alongside students' final Oral Communication scores. Descriptive statistics, the Kruskal–Wallis H test, and Goodman and Kruskal's Gamma were employed for the analysis. Research indicated a modest overall degree of self-efficacy in the English language, with listening achieving the greatest average score, although oral communication skills were predominantly assessed as Good. No notable disparity was observed in oral communication efficacy among varying self-efficacy levels ($H = 3.411$, $p = .182$). A notable albeit feeble inverse correlation was identified between self-efficacy in the English language and oral communication ability ($\gamma = -.158$, $p = .035$). The results indicate that self-efficacy by itself does not dictate oral communication proficiency, underscoring the necessity for genuine, interactive, and student-focused Maritime English education.

Keywords: English language self-efficacy, oral communication performance, maritime students, Maritime English, language skills, educational interventions

INTRODUCTION

English is essential in the marine industry, since it enables sailors from many linguistic backgrounds to communicate effectively, hence enhancing safety, operational efficiency, and teamwork. As a result, it is expected that maritime students will develop the English communication competencies required for professional maritime responsibilities, including navigation, vessel operations, and safety protocols (Tan et al., 2020). In diverse marine settings and in equipping students for the international maritime labor market, proficient English communication is essential (Felix, 2022).

Maritime experts must convey information in scholarly and professional environments with accuracy and lucidity, making oral communication critically significant. Recent studies have highlighted the significance of Maritime English and communicative proficiency in equipping students for their forthcoming maritime duties (Posas et al., 2025). Nonetheless, successful communication requires both linguistic competence and confidence in employing English.

Self-efficacy, denoting learners' beliefs in their ability to perform particular tasks successfully, is a component linked to language learning. The four primary language skills—listening, speaking, reading, and writing—can be affected by learners' English language self-efficacy, which in turn influences their engagement, tenacity, strategy utilization, and confidence (Wang et al., 2023). Studies have shown that self-efficacy correlates with language acquisition habits and proficiency across different linguistic areas (Xu et al., 2021).

Nonetheless, the genuine efficacy of communication does not inherently align with an individual's self-assurance in employing English. Classroom engagement, continual practice, educator assistance, constructive criticism,

and genuine communication encounters may also affect oral communication proficiency (Rodero, 2025). This indicates the need of assessing both the genuine oral communication skills of pupils and their perceived proficiency in the English language.

The connection between general self-efficacy in the English language and real oral communication proficiency among maritime engineering students has been minimally explored, even though English communication is crucial in maritime education. This study evaluated the oral communication skills and English language self-efficacy of second-year Bachelor of Science in Marine Engineering students to ascertain if a significant relationship existed between these factors. The findings could provide a basis for developing educational programs that improve students' practical English communication abilities and their self-assurance in marine situations.

METHODOLOGY

Research Design

This research utilized a quantitative descriptive-correlational methodology. The quantitative methodology was suitable as the research entailed the gathering and statistical examination of numerical information. The descriptive element was employed to assess the respondents' self-efficacy in the English language and their oral communication skills, whereas the correlational aspect was utilized to investigate the association between these two factors. A correlational design is suitable when investigators aim to characterize and quantify the extent of relationship between two or more variables without altering the experimental settings (Creswell & Creswell, 2018).

Subject and Respondents of the Study

The sample consisted of 178 second-year Bachelor of Science in Marine Engineering (BSMar-E) students who were matriculated during the academic year 2025–2026. The purpose of selecting them as study participants was to evaluate their oral communication performance and English language self-efficacy.

Population and Sample Size

The study included 320 second-year Bachelor of Science in Marine Engineering (BSMar-E) students who were enrolled during the academic year 2025–2026. A sample size of 178 students was determined using Yamane's formula with a 0.05 margin of error. Consequently, 178 students participated in the study and contributed the data that was used to evaluate their oral communication performance and English language self-efficacy.

Data Gathering Instrument

The participants' perceived ability to execute English language tasks was evaluated by a modified Questionnaire of English Self-Efficacy (QESE) created by Wang et al. (2019). The survey consisted of 32 questions categorized into four linguistic areas: hearing, speaking, reading, and writing. Every domain encompassed eight elements. Responses were assessed using a four-point Likert scale, where a score of 4 indicated Strongly Agree, 3 represented Agree, 2 denoted Disagree, and 1 signified Strongly Disagree. The participants' general proficiency in English language self-efficacy was assessed based on the scores achieved in the four domains.

The participants' proficiency in oral communication was assessed using their final grades in the Oral Communication course, which were acquired from the institution's official academic records following the necessary approval. The participants' scores were classified as Excellent (95–100), Very Good (80–94), Good (70–79), and Satisfactory (60–69) for analytical purposes, indicating their overall achievement in the course.

The original developers previously assessed the validity and reliability of the QESE. The Rasch measurement model was utilized to determine the construct validity of the tool. Furthermore, the convergent validity ($r = .52$) and criterion-related validity ($r = .58$) were both statistically significant at the .01 threshold. Furthermore, the instrument demonstrated remarkable internal consistency, with a cumulative Cronbach's alpha of Ninety-seven. The dependability coefficients for the four domains were .88 for hearing, .92 for speaking, .88 for reading,

and .89 for writing, all surpassing the generally acknowledged standards, Seventy limit. The current research validates the QESE as a credible and dependable assessment of English language self-efficacy thru these results.

Data Analyses

The study employed appropriate statistical tools to analyze the collected data in accordance with the research objectives. Microsoft Excel Version 15.39 and IBM Statistical Package for the Social Sciences (SPSS) Version 2021 were used for data processing and statistical analysis.

To answer Statement of the Problem No. 1, which determined the level of English language self-efficacy of the respondents in terms of listening, speaking, reading, and writing, the mean and standard deviation were used. The mean was computed to determine the average level of self-efficacy, while the standard deviation was used to determine the variability of the respondents' responses.

Mean

The mean was computed using the formula:

$$\bar{X} = \frac{\sum X}{N}$$

Where:

$\bar{M}$ = mean

Σ = summation

X = individual scores

n = number of respondents

Standard Deviation

The standard deviation was used to determine the dispersion of the respondents' scores from the mean.

Where:

SD = standard deviation

X = individual score

M = mean

n = number of respondents

To interpret the mean scores describing the respondents' English language self-efficacy, the following interpretation guide was used:

Scale	Description	Mean Score Range	Interpretation
4	Strongly Agree	3.26–4.00	Very High
3	Agree	2.51–3.25	High
2	Disagree	1.76–2.50	Low
1	Strongly Disagree	1.00–1.75	Very Low

The interpretation was applied to the overall English language self-efficacy and to each of the four language domains: listening, speaking, reading, and writing.

To answer Statement of the Problem No. 2, which determined the oral communication performance of the respondents when grouped according to age and sex, the mean and standard deviation were also used. The respondents' final grades in the Oral Communication course served as the measure of their oral communication performance.

The following classification was used to interpret the respondents' oral communication performance:

Grade Range	Interpretation
95–100	Excellent
80–94	Very Good
70–79	Good
60–69	Satisfactory

To answer Statement of the Problem No. 3, which determined whether there was a significant difference in oral communication performance when respondents were grouped according to their level of English language self-efficacy, the Kruskal–Wallis H test was employed. This nonparametric test was used to compare the oral communication performance of respondents across the different self-efficacy groups. The decision was based on a 0.05 level of significance.

The hypotheses were evaluated using the following decision rule: when the computed p-value was less than or equal to 0.05, the null hypothesis was rejected; when the p-value was greater than 0.05, the null hypothesis was not rejected.

To answer Statement of the Problem No. 4, which determined whether there was a significant relationship between English language self-efficacy and oral communication performance, Goodman and Kruskal's Gamma were employed. This statistical measure was used to determine the direction and strength of the association between the two ordinal variables. The level of relationship was interpreted based on the magnitude and direction of the Gamma coefficient. A positive coefficient indicated a direct relationship, while a negative coefficient indicated an inverse relationship. The closer the coefficient was to ± 1 , the stronger the relationship; a coefficient closer to zero indicated a weaker relationship.

The level of significance was set at 0.05. A p-value less than or equal to 0.05 indicated a statistically significant relationship, while a p-value greater than 0.05 indicated that the relationship was not statistically significant.

RESULTS AND DISCUSSION

This section presents, analyzes, and discusses the findings of the study on English language self-efficacy and oral communication performance among second-year Bachelor of Science in Marine Engineering students. The presentation follows the sequence of the research problems.

Table 1 Demographic Profile of the Respondents

Profile	Category	f	%
Age	20 years and below	103	57.87
	21–23 years	67	37.64
	24–26 years	6	3.37
	27–29 years	1	0.56
	30 years and above	1	0.56
Sex	Male	170	95.51
	Female	8	
Total	178	100.00	

Table 1 shows that most of the 178 respondents were 20 years old and below, with 103 students (57.87%), followed by those aged 21–23 years with 67 students (37.64%). Only six respondents (3.37%) were aged 24–26, while one respondent each belonged to the 27–29 and 30 years and above groups. In terms of sex, the respondents were predominantly male (95.51%), while females comprised only 4.49%. The profile reflects the predominantly young and male composition of the respondents in the maritime engineering program.

Level of Oral Communication Performance

Table 2. Oral Communication Performance of the Respondents According to Age and Sex

Profile	Category	Mean	SD	Interpretation
Age	20 years and below	73.91	9.22	Good
	21–23 years	73.48	8.58	Good
	24–26 years	76.17	14.22	Good
	27–29 years	70.00	—	Good
	30 years and above	62.00	—	Satisfactory
Sex	Male	73.48	9.09	Good
	Female	79.25	8.56	Good

Table 2 presents the oral communication performance of the respondents according to age and sex. Among the age groups, respondents aged 24–26 years obtained the highest mean score ($M = 76.17$, $SD = 14.22$), interpreted as Good. This was followed by respondents aged 20 years and below ($M = 73.91$, $SD = 9.22$) and those aged 21–23 years ($M = 73.48$, $SD = 8.58$). The 27–29 age group obtained a mean of 70.00, also interpreted as Good, while the 30 years and above group obtained the lowest mean of 62.00, interpreted as Satisfactory. The result for the oldest group should be interpreted cautiously because it represents only one respondent.

When grouped according to sex, female respondents obtained a slightly higher mean ($M = 79.25$, $SD = 8.56$) than male respondents ($M = 73.48$, $SD = 9.09$). Nevertheless, both groups were interpreted as Good. This indicates that both male and female respondents demonstrated functional oral communication performance in their academic setting.

The findings suggest that oral communication performance was not substantially determined by age or sex. Rather, communication competence may develop through continued practice, classroom participation, instructional support, and opportunities for authentic communication. Fernández-Río et al. (2022) emphasized the importance of structured instruction, collaborative learning, and repeated communication opportunities in strengthening university students' oral communication competence. Similarly, Rodero (2025) highlighted the role of continuous practice, classroom engagement, and constructive feedback in developing students' oral communication skills.

Level of English Language Self-Efficacy

Table 3. Level of English Language Self-Efficacy According to Language Domain

Language Domain	Mean	SD	Interpretation
Listening	3.40	0.47	Moderate
Speaking	3.37	0.46	Moderate
Reading	3.38	0.47	Moderate
Writing	3.39	0.47	Moderate
Overall	3.38	0.43	Moderate

Table 3 shows that the respondents obtained an overall mean of 3.38 ($SD = 0.43$) in English language self-efficacy, interpreted as Moderate. Among the four language domains, listening obtained the highest mean ($M = 3.40$, $SD = 0.47$), followed by writing ($M = 3.39$, $SD = 0.47$), reading ($M = 3.38$, $SD = 0.47$), and speaking (M

= 3.37, SD = 0.46). The small differences among the domain means indicate relatively balanced self-efficacy across the four macro language skills.

For listening, the highest-rated indicator was the respondents' ability to understand English instructions provided by their language teacher ($M = 3.44$, $SD = 0.62$). In contrast, understanding English movies without subtitles obtained the lowest mean ($M = 3.30$, $SD = 0.63$). This suggests that respondents were more confident when listening to structured classroom English than when processing naturally occurring spoken English.

Speaking obtained an overall mean of 3.37 ($SD = 0.46$). The highest-rated indicator was the ability to introduce oneself in English ($M = 3.44$, $SD = 0.55$), suggesting greater confidence in basic interpersonal communication. However, the moderate ratings across the remaining speaking indicators indicate the need for continued practice in more extended and spontaneous communication tasks.

The results are consistent with Wang et al. (2023), who emphasized that learner engagement, teacher support, and supportive classroom practices contribute to the development of English language self-efficacy. Similarly, Xu et al. (2021) highlighted the importance of instructional experiences in developing listening self-efficacy. Gan et al. (2024) likewise emphasized that self-efficacy influences learners' engagement and persistence in English reading activities.

Overall, the findings indicate that respondents possessed a moderate level of English language self-efficacy across listening, speaking, reading, and writing. Although the students demonstrated reasonable confidence in performing English language tasks, continued development is important given the communication demands of maritime education and professional practice.

Difference in Oral Communication Performance

When Grouped According to Level of English Language Self-Efficacy

Table 4. Difference in Oral Communication Performance According to Level of English Language Self-Efficacy

Test	H	p-value	Decision	Interpretation
Kruskal–Wallis H	3.411	.182	Fail to Reject H_0	Not Significant

Table 4 presents the result of the Kruskal–Wallis H test conducted to determine whether a significant difference existed in oral communication performance among respondents grouped according to their level of English language self-efficacy. The analysis yielded an H value of 3.411 and a p-value of .182.

Since the p-value is greater than the 0.05 level of significance, the null hypothesis was not rejected. Therefore, there was no significant difference in oral communication performance among the respondents when grouped according to their level of English language self-efficacy.

The finding suggests that differences in students' perceived confidence in using English did not result in statistically significant differences in their oral communication performance. This indicates that self-efficacy alone may not be sufficient to explain actual communication performance. Other factors, such as instructional practices, language exposure, communication practice, learning strategies, and authentic opportunities to use English, may contribute to students' oral communication outcomes.

This finding is consistent with Wang et al. (2022), who reported that improvements in English language self-efficacy do not necessarily correspond to statistically significant improvements in language proficiency. Likewise, Mega et al. (2025) found that oral performance is influenced not only by self-efficacy but also by self-regulated learning. Li et al. (2024) further noted that speaking self-efficacy develops progressively through learning experiences and instructional support.

Relationship Between English Language Self-Efficacy and Oral Communication Performance

Table 5. Relationship Between English Language Self-Efficacy and Oral Communication Performance

Variables	Gamma (γ)	p-value	Decision	Interpretation
English Language Self-Efficacy and Oral Communication Performance	-0.158	.035	Reject H_0	Significant, Weak Negative Relationship

Table 5 presents the relationship between English language self-efficacy and oral communication performance. The analysis yielded a Goodman and Kruskal's Gamma coefficient of -0.158 with a p-value of .035.

Since the p-value is less than the 0.05 level of significance, the null hypothesis was rejected. Therefore, there was a statistically significant relationship between English language self-efficacy and oral communication performance. However, the Gamma coefficient of -0.158 indicates that the relationship was weak and negative.

The negative direction indicates that higher levels of English language self-efficacy were associated with a slight tendency toward lower oral communication performance in the present sample. However, the weak magnitude of the coefficient indicates that this relationship was limited. Thus, English language self-efficacy alone does not provide a strong explanation of students' oral communication performance.

This finding highlights the distinction between perceived capability and actual performance. Students may feel confident about their English abilities without necessarily demonstrating correspondingly higher oral communication grades. Actual performance may also depend on language exposure, opportunities for communication, instructional strategies, self-regulated learning, feedback, and the specific requirements of oral communication tasks.

Overall, the findings suggest that strengthening English language self-efficacy remains valuable, but it should be accompanied by opportunities for students to apply their English skills through authentic and repeated communication activities. For maritime students, such activities may include maritime communication simulations, oral presentations, role-playing, collaborative tasks, and other practice-based learning experiences.

CONCLUSION

The study concludes that the second-year maritime engineering students demonstrated a moderate level of English language self-efficacy across listening, speaking, reading, and writing, with listening obtaining the highest mean among the four language domains. Their oral communication performance was generally classified as Good, indicating satisfactory achievement in their Oral Communication course.

The findings further revealed that there was no significant difference in oral communication performance when the respondents were grouped according to their level of English language self-efficacy. However, a statistically significant but weak negative relationship was found between English language self-efficacy and oral communication performance. This suggests that students' perceived confidence in using English does not necessarily correspond to their actual oral communication performance.

Overall, the findings indicate that English language self-efficacy alone may not sufficiently explain students' oral communication performance. Other learning-related factors, such as language exposure, communication practice, instructional support, feedback, and opportunities for authentic English use, may also contribute to the development of oral communication competence. Therefore, maritime English instruction should provide students with meaningful and continuous opportunities to apply English in academic and maritime-related communication contexts.

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