



## ANALYZING THE RELATION BETWEEN LEARNER CLASS PARTICIPATION AND ENGLISH-SPEAKING PROFICIENCY

Elisabeth Marsella\*<sup>1</sup>, Ratna Mustika Dewi<sup>2</sup>

<sup>1</sup>elisabeth.marsella@uajy.ac.id, <sup>2</sup>ratna.mustika@uajy.ac.id

<sup>1</sup>Universitas Atma Jaya Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia

<sup>2</sup>Universitas Atma Jaya Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia

### ABSTRACT

Non-English major students often face problems in practicing speaking English due to their reluctance. To overcome this, participation scores are used to motivate learners to participate in class discussions. Therefore, this study examines the relationship between learners' participation scores and their English-speaking proficiency. To answer the question, this study implements a quantitative method by collecting learners' participation scores and speaking proficiency. Additionally, data on learners' gender and attendance were included to examine the correlation. The data were collected from 255 students majoring in Information Systems who enrolled in the English for Business Communication class during the academic years 2022–2024. The finding shows that gender has a weak correlation with learners' speaking proficiency. Meanwhile, attendance and participation scores show a positive correlation at the medium level with learners' speaking proficiency.

*Keywords:* Participation score, Speaking Proficiency, Non-English major, Quantitative method, Correlation

### A. INTRODUCTION

English has been denounced as the global language that is used for much global communication. The widespread use of English in the business and academic sectors is strongly reliant on the language. As a consequence, the language not only facilitates communication but also provides economic benefits, as speaking English opens more opportunities in the professional world. A study by Hidayat (2024) demonstrated that the English language is a crucial factor in career development, as it provides a competitive advantage for businesses. Proficient English skills enable the company to cooperate with international clients, communicate business complexities, and manage projects more effectively. Furthermore, English skills are strongly correlated with promotion, salary increase, and job satisfaction (Prasetya, 2023). At the national level, a study by Li et al. (2022) showed that English



proficiency has a significant impact on economic development in Asian countries, with mediating effects of economic policy.

Regarding the advantages the English language offers in the professional world, learning English has become one of the most popular courses in Indonesian universities. It is common for non-English programs to offer this course, enabling students to learn how to communicate effectively in English. However, teaching English subjects to non-English majors is not always easy. Students often lack motivation because they do not see the immediate benefits of learning English and consider the language irrelevant to their current study (Muliastari, 2023). Therefore, students are reluctant to practice the language in the classroom (Ahmad, 2021; Al-Wossabi, 2024; Nety, 2022; Ngan, 2022). The studies generally mentioned two reasons for the students' reluctance: a low English proficiency level and psychological aspects, such as shyness and a fear of making mistakes.

It is understandable when students with low proficiency are not confident to speak English. To speak a language, one must have a vocabulary to use. When they have a limited vocabulary, it will be difficult for them to express their thoughts. Similar problems also occur to students with good proficiency. It can be seen when they answer questions or explain things through writing. Unfortunately, what they can do through writing cannot be easily transferred into speaking. Students often feel stressed, nervous, and tense when teachers ask them to answer questions or speak in front of the class (Ahmad, 2021). The students are worried that if they make mistakes in pronunciation or grammar, it will show their incompetence.

To face the challenges, the endeavors from students and teachers should be integrated. Students can implement effective strategies by thinking carefully before participating, seeking input from friends, and using written notes to prepare for discussions (Ahmad, 2021). Improving their linguistic knowledge, such as listening and pronunciation, can also help them increase their confidence to speak English (Özdemir & Seçkin, 2025). From the teacher's side, they can give positive feedback, compliment accomplishment, make pair work/group work, and avoid immediate correction. Among the strategies, the last-mentioned strategy is preferred by students and teachers (Özdemir & Seçkin, 2025). This is related to the students' anxiety. When they get immediate correction, they will get distracted and fail to share their thoughts.

To facilitate learners in practicing the language, especially their speaking skills, classes are usually structured to encourage students to use the language in class. Behavior analysts opine that language skills are usually taught by focusing on the purpose or function of

communication (functional verbal behavior) and derived relational procedures (Melvin-Brown et al., 2023). Functional verbal behavior refers to any utterances that are strengthened by the response of other people. Skinner (1957) also points out that one of the operants is intraverbal training, which can be in the form of engaging conversations, answering questions, or interacting verbally with other people (Virues-Ortega & Froján-Parga, 2015). For university students, this approach is more suitable since they can relate the activity to their reality, where they need to converse or negotiate in daily life. For them, it is like having a daily conversation. Based on the literature review on second language acquisition and verbal behavior analysis, interverbal training can be effective for training basic second language skills and the emergence of responses that have never been taught before. To clarify, the approach enables learners to apply the language by generating the knowledge they have learned. Therefore, creating a classroom where learners can practice the intraverbal training is very important.

Considering two conditions, which are the implementation and the challenges of English practice in the classrooms, gamification can be implemented to help motivate students during learning. Gamification refers to the use of game elements in a non-game context (Gini et al., 2025; Misara et al., 2025), specifically in the context of English language learning. Gini et al.'s (2025) study findings also suggest that integrating gamification elements into learning creates unique, engaging environments that effectively motivate and satisfy the learning needs of adults. Furthermore, Hellberg and Moll (2023) specify the term pointsification, which refers to rewards in the form of points or badges used to recognize the learners' efforts. Although there are differences between pointsification and gamification, their study shows that both concepts are beneficial and associated with learners' motivation.

The literature has extensively investigated ways to motivate learners to participate more in class discussions, particularly by rewarding points or scores based on their initiation rather than grammatical accuracy. This strategy reduces learners' anxiety and encourages contributions and engagement, thereby creating a more relevant learning environment for university students. Rewarding points for learners' participation, a key component of gamification, has been shown to have a positive effect on increasing motivation. As a result, their speaking performance also increases. However, despite the positive effect of the strategy, a study gap remains. Few quantitative and longitudinal studies have examined the correlation between learners' participation in speaking practice and their English-speaking proficiency.









This study aims to fill this gap by examining quantitative correlations between participation and speaking proficiency over more than one semester.

## **B. METHOD**

This study employed a quantitative method that collects numerical data to investigate the correlation between students' participation scores and their speaking performance. The primary advantage of this method is its objectivity, as it places a heavy emphasis on facts and data. By employing this method, the researcher's bias in data collection and analysis can be eliminated (Xiong, 2022). Brown (cited in Plonsky, 2015) also stated that advanced quantitative methods can measure variables more precisely, which often raises some concerns.

The data were collected from 255 Information Systems students, comprising 71 female and 184 male students enrolled in the English for Business Communication class during the academic years 2022–2024. This study collects data on four types: gender, attendance, participation scores, and speaking scores. The gender and attendance data were obtained by downloading the data from the university system. The participation score was determined by recording their participation based on the initiation or contribution made during the class. The score recording was conducted manually in the classroom in every meeting. Students receive scores when they ask and answer questions during class discussions, ranging from 1 to 5 points. The scores are recorded in a spreadsheet file that can be viewed by students and updated in every meeting. The score will be marked in colors green, yellow, red, and black, which represent their participation level. The colors respectively indicate that the students contribute very well, well enough, and not good enough in the class discussion. This color is used to indicate students' level of participation in the classroom. If they still get red color, for instance, they need to be more active in the following meeting. Figure 1 shows the participation score of one English for Business Communication class.

Names	Meetings																TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Student 1	2	5	5	5	5	0	0		3	2	5	0	3	0	0		35
Student 2	1	0	0	0	3	1	0		1	2	5	0	0	0	0		13
Student 3	2	5	1	1	1	0	0		1	0	0	0	0	0	0		11
Student 4	1	1	1	0	0	0	0		0	0	0	0	0	0	0		3
Student 5	3	5	3	5	5	3	0		3	5	5	0	0	0	0		37
Student 6	2	1	2	0	4	3	0		3	3	2	0	2	0	1		23

**Figure 1. Participation Score Record**

Then, the speaking score data was obtained from the average of several speaking assignments, such as presentations, negotiations, and interviews. The assignments were assessed based on their content, fluency, and delivery. The average score of the three assignments was then used as the speaking score data for this study.

After the data were obtained, they underwent a comprehensive analysis using descriptive statistics followed by correlational analysis. Descriptive statistics, including measures of means and dispersion, provided an initial overview of the distribution and variability across key variables, such as participation score and speaking score. Subsequently, @Risk software was employed to visualize the data through Boxplot Data and Trend View.

Next, to examine the relationships between these variables, correlational analysis was conducted using Pearson's correlation coefficient ( $r$ ) in Microsoft Excel. This method quantifies the strength and direction of linear associations between variables. The resulting correlation coefficients are presented in Table 1, with interpretations based on standard benchmarks

**Table 1. Correlation Coefficient (Schober et al., 2018)**

Correlation Coefficient ( $r$ )	Interpretation
0.90 to 1.00	Very strong
0.70 to 0.89	Strong
0.40 to 0.69	Moderate
0.10 to 0.39	Weak
0.00 to 0.09	No or negligible correlation

### C. FINDINGS AND DISCUSSION

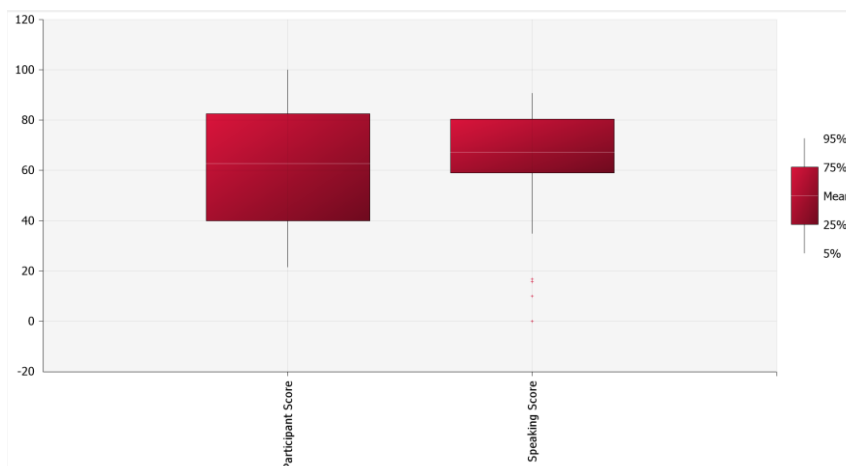
#### Findings

The demographic data shows that 72.2% of the participants were male and 27.8% were female. Among the participants, 83.1% show high class attendance, with 81% to 100%. This means that, out of the 16 meetings the participants enrolled in, they attended at least 13 meetings. The detailed data are presented in Table 2.

**Table 2. Demographic Data**

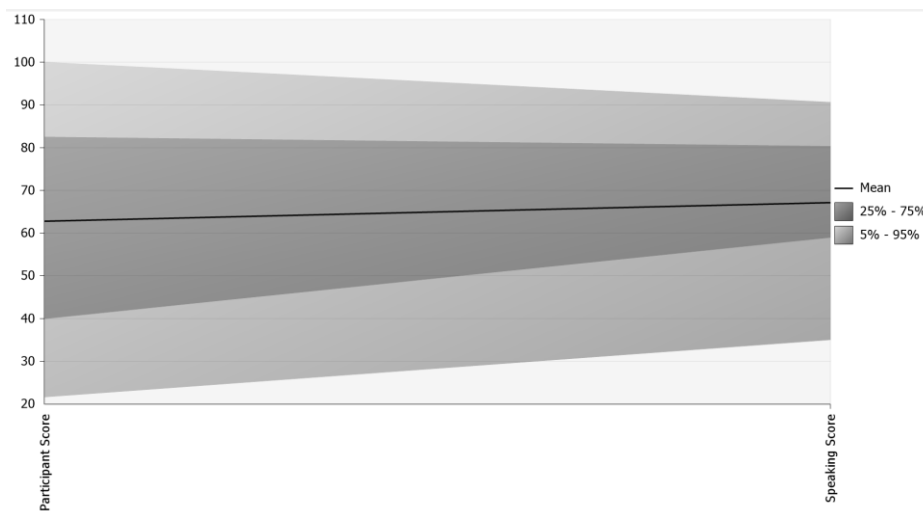
Demographic Variables		Percentage (%)
Gender	Male	72.2%
	Female	27.8%
Attendance (%)	0-20	0.4%
	21-40	1.6%
	41-60	1.6%
	61-80	13.3%
	81-100	83.1%

Figure 2 and Figure 3 show the distribution of the participation score and speaking score from the @RISK simulation. The boxplot visualized in Figure 2 shows that the participation score range is quite wide, from 40 to more or less 80, with a median in the middle, indicating a large variation in participation. In other words, some learners are very passive, and some others are very active. For the speaking proficiency score, the distribution is not as wide as the participation score. This range is from 60-80 and higher median. It translates to the speaking proficiency level, which is concentrated in the medium and high levels.



**Figure 2. Boxplot Data**

The Trend view shows that learners' participation scores have a more varied data distribution compared to the speaking score. The mean line shows a slight increase to the right. This implies the speaking score mean tends to rise when the participation increases. In line with the boxplot data, the graph also shows that the variation is quite wide, but most of the learners are in the middle area. This means that the students' speaking skills are at the middle-upper level. In addition, learners also participate well in the class discussions, although there is still room for improvement due to the wide score range.



**Figure 3. Trend View**

The correlation results, as shown in Table 3, reveal that the gender variable indicates a weak relationship with speaking score ( $r = 0.207$ ). There is a slight tendency for the speaking score to differ based on the gender variable, but the association is not strong. It implies that gender is not significantly correlated with the speaking score. The attendance and participation score variables show a stronger correlation. Attendance indicates a strong correlation with speaking score ( $r = 0.664$ ), and participation score correlates positively at a moderate level with speaking score ( $r = 0,516$ ).

**Table 3. Correlation Analysis**

	<i>participation score</i>	<i>attendance</i>	<i>gender</i>	<i>speaking score</i>
participation score	1			
attendance	0.419	1		
gender	0.053	0.087	1	
speaking score	0.516	0.664	0.207	1

The results from @RISK, shown in Figure 4, display Multivariate Data Viewer from 2 variables, namely participation score and speaking score. It can be seen how the correlation exists between the participation score variable and the speaking scores of the students. The graph shows that the points tend to scatter and form an upward pattern from bottom-left to top-right. This indicates a moderate positive correlation between participation score and speaking score. In other words, the higher the participation score, the higher their English-speaking proficiency. The picture also displays a scatter plot diagram between each variable.

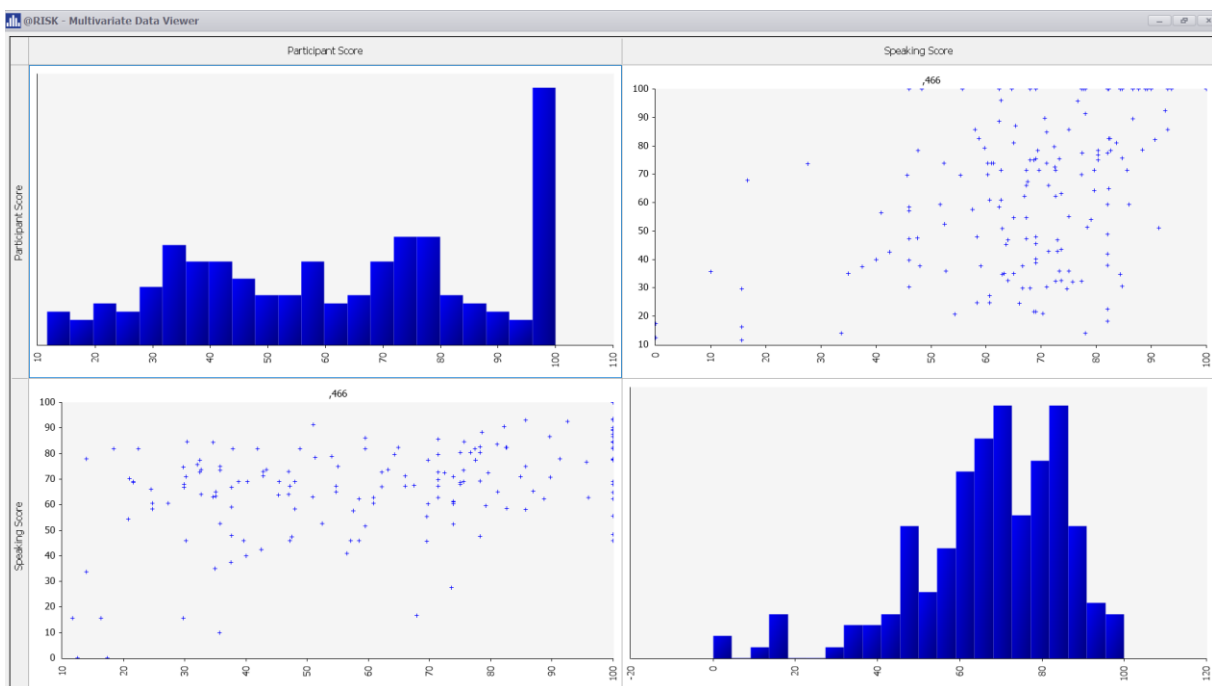


Figure 3. Multivariate Data Viewer

### Discussions

This study investigates the association between some variables (gender, attendance, and participation score) and learners' speaking proficiency. The results show that attendance and participation correlate positively with speaking proficiency.

The results show that the correlation between gender and speaking proficiency is weak, which aligns with some studies. A study of Serquina & Batang (2018) stated that gender, among other demographic factors (age, nature of curriculum, etc.), is not related to respondents' English proficiency. A similar result is also shown in a study by Hoesny et al. (2023), stating that gender



did not influence speaking skills. The study also mentioned that female self-efficacy was higher than that of males, but the t-test showed that it was not significantly different. In contrast to the aforementioned studies, San Jose et al. (2024) found that gender showed a significant correlation to English language proficiency of Japanese elderly. The study showed that males had higher proficiency scores compared to females. It infers that gender does not correlate to language proficiency at a young age, but for the third-age learners, gender shows a positive correlation.

The correlation between attendance and the speaking score indicates a medium positive correlation. It aligns with the study of Karabiyik (2016) in Turkey and Ancheta et al. (2021) in Oman. The studies imply that attendance is a good predictor of academic performance. The higher the frequency of absence, the bigger the decrease. This is related to the learner's motivation for attending the class. One of the biggest reasons learners are willing to attend the meeting is for professional development (Endah et al., 2024). Learners see the benefits of achieving better English proficiency for their careers. It motivates them to attend the class and to learn more. As a consequence of attending the class regularly, they learn more and perform better. The same study also revealed that one of the biggest hindrances to attending classes is the mismatched schedule, since the respondents of the study were professionals. Other than that, the reasons are acceptable, such as health problems and personal or family affairs.

Like the studies concerning the correlation between attendance and speaking performance, students' participation in the class activity also correlates positively at the moderate level. It means that the more students participate in the class activity and discussions, the higher their speaking performance is going to be. During the class discussion, students practice using English when answering and asking questions, sharing opinions, and explaining things. By practicing the language, the students are building the self-esteem that can help them express their opinion (Gultom & Oktaviani, 2022; Sanchez & Saranza, 2023). Students often hesitate to practice the language in class because of anxiety, lack of confidence, and fear of peer pressure (Tauchid et al., 2024; Wahyuningsih & Afandi, 2020). By practicing regularly in the class, they practice how to deal with mistakes and anxiety. This practice improves their self-esteem and confidence in speaking English. As a result, during the speaking assessment, they can focus more on the linguistic performance rather than the non-technical problems.



The moderate correlation is very understandable, because speaking skills should be equipped with linguistic skills. However, participation score should be considered as a tool to overcome the non-linguistic problems such as anxiety, peer pressure, confidence, and others. On many occasions, the non-linguistic problems affect students' linguistic performance. Therefore, the educators, teachers, or trainers should give more room to the students to practice the language. Making students speak English is not easy since they need an environment that does not focus on mistakes. In the context of English as a foreign language, a classroom is the ideal place to practice speaking, where everyone is situated to use the language. When the students leave the classroom, they will not use English to communicate since everyone speaks Indonesian. Therefore, class participation should be encouraged to improve their self-esteem and confidence, and to increase their exposure to the English language.

#### D. CONCLUSION

To conclude, the findings reveal distinct results among the variables. Gender showed a weak correlation with English-speaking performance, indicating minimal influence from this factor. In contrast, attendance and class participation exhibit a positive correlation with speaking score at a moderate level. This suggests that learners who attend class regularly and actively participate in discussions tend to exhibit better speaking performance.

Based on the study, these findings suggest that learners who maintain regular attendance and actively engage in class discussions achieve notably higher speaking proficiency. Thus, teachers should encourage students to attend and participate more actively in class discussions. The implication extends to class activity designs that allow learners to practice speaking worry-free. Teachers should provide interactive class activities that facilitate learning, such as discussions, role-playing, and collaborative speaking tasks.

#### REFERENCES

- Ahmad, C. V. (2021). Causes of Students' Reluctance to Participate in Classroom Discussions ASEAN Journal of Science and Engineering Education. *ASEAN Journal of Science and Engineering Education*, 1(1), 47–62.  
<https://doi.org/10.17509/ajsee.v1i1.32407>



- Al-Wossabi, S. A. (2024). Saudi Students' Reluctance to Engage in English Communication: Critical Issues and Considerations. *International Journal of Learning, Teaching And Educational Research*, 23(8), 57–75. <https://doi.org/doi.org/10.26803/ijlter.23.8.4>
- Ancheta, R. F., Daniel, D., & Ahmad, R. (2021). Effect of class attendance on academic performance. *European Journal of Education Studies*, 8(9). <https://doi.org/10.46827/ejes.v8i9.3887>
- Endah, D. N., Purwandari, J. D., & Almanar, M. A. (2024). Factors Affecting Students' Attendance in English Language Programs: A Case Study at Two English Language Institutions in Indonesia. *Sintaksis : Publikasi Para Ahli Bahasa Dan Sastra Inggris*, 2(6), 173–187. <https://doi.org/10.61132/sintaksis.v2i6.1507>
- Gini, F., Bassanelli, S., Bonetti, F., Mogavi, R. H., Bucchiarione, A., & Marconi, A. (2025). The role and scope of gamification in education: A scientometric literature review. *Acta Psychologica*, 259. <https://doi.org/10.1016/j.actpsy.2025.105418>
- Gultom, S., & Oktaviani, L. (2022). The correlation between students' self-esteem and their English proficiency test result. In *Journal of English Language Teaching and Learning (JELTL)* (Vol. 3, Issue 2). <http://jim.teknokrat.ac.id/index.php/english-language-teaching/index>
- Hellberg, A. S., & Moll, J. (2023). A point with pointsification? clarifying and separating pointsification from gamification in education. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1212994>
- Hidayat, M. T. (2024). English Language Proficiency and Career Opportunities: Perceptions of Indonesian University Graduates. *Language Value*, 17(1), 85–107. <https://doi.org/10.6035/languagev.7933>
- Hoesny, M. U., Setyosari, P., Praherdhiono, H., & Suryati, N. (2023). The Correlation of Speaking Self-Efficacy, Speaking Proficiency and Gender in ESP Context. *Pegem Egitim ve Ogretim Dergisi*, 13(2), 191–199. <https://doi.org/10.47750/pegegog.13.02.23>
- Karabiyik, C. (2016). The relationship between attendance and English Achievement at Ufuk University Preparatory School. *Journal of Ufuk University Institute of Social Sciences*, 9(5), 131–133. [www.ufuk.edu.tr](http://www.ufuk.edu.tr)
- Li, Y., Teng, W., Tsai, L., & Lin, T. M. Y. (2022). Does English proficiency support the economic development of non-English-speaking countries? The case of Asia. *International Journal of Educational Development*, 92(Juli), 102623. <https://doi.org/10.1016/j.ijedudev.2022.102623>
- Melvin-Brown, R., Garcia, Y., Rosales, R., Mahoney, A., & Fuller, J. (2023). A Review of Second Language Acquisition in Verbal Behavior Analysis. *Journal of Behavioral Education*, 32(4), 617–640. <https://doi.org/10.1007/s10864-022-09471-8>
- Misara, R., Verma, D., & Mishra, S. (2025). Gamification and personality: Exploring the impact on consumer engagement and purchase intention. *Entertainment Computing*, 55, 101038. <https://doi.org/10.1016/j.entcom.2025.101038>
- Muliasari, D. (2023). Challenges and strategies in teaching English to non-English majors in business and accounting programs. *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal*, 7(4), 1521–1530. <https://jurnal.stie-aas.ac.id/index.php/IJEBAR>
- Nety. (2022). A study of students' reluctance to speak at English Department of Unidayan. *English Education Journal*, 51. <https://www.ejournal.lppmunidayan.ac.i>
- Ngân, P. T. H. (2022). Causes of the first-year students' reticence in English speaking lessons at Namdinh University of Nursing. *TNU Journal of Science and Technology*, 227(04), 109–114. <https://doi.org/10.34238/tnu-jst.5657>



- Özdemir, O., & Seçkin, H. (2025). Exploring foreign language anxiety in higher education: Multifaceted insights into causes, impacts, and coping strategies. *Social Sciences and Humanities Open*, 11. <https://doi.org/10.1016/j.ssaho.2025.101364>
- Plonsky, L. (2015). Advancing quantitative methods in second language research. In *Advancing Quantitative Methods in Second Language Research*. Taylor and Francis. <https://doi.org/10.4324/9781315870908>
- Prasetya, R. E. (2023). Assessing the Impact of English Language Skills and TOEIC Performance on Career Development. *Scripta : English Department Journal*, 10(2), 281–294. <https://doi.org/10.37729/scripta.v10i2.3397>
- San Jose, D. B. S., Guitche, M. Q., & Madrigal, D. V. (2024). English Proficiency of Japanese Third-Age Learners in the English Foreign Language Program: An Explanatory-Sequential Inquiry. *3L: Language, Linguistics, Literature*, 30(4), 220–240. <https://doi.org/10.17576/3L-2024-3004-16>
- Sanchez, I. A., & Saranza, C. S. (2023). Class Participation and Proficiency in English Subject: Basis for English Curriculum Development. *European Journal of Humanities and Educational Advancements (EJHEA)*, 4(10), 1–13. <https://www.scholarzest.com>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763–1768.
- Serquina, E. A., & Batang, B. L. (2018). Demographic, Psychological Factors and English Proficiency of ESL Students. In *TESOL International Journal* (Vol. 182).
- Skinner, B. F. (1957). *Verbal Behavior*. Prentice Hall.
- Tauchid, A., Barata, A., Wafa, K., & Wijayanti, R. (2024). Navigating Challenges in Remote Speaking Tasks: Unveiling Technical and Non-Technical Problems Faced by Students. In *International Review of Research in Open and Distributed Learning* (Vol. 25).
- Virues-Ortega, J., & Froján-Parga, M. X. (2015). A translational approach to the functional analysis of language in psychotherapy. *International Journal of Clinical and Health Psychology*, 15(1), 69–75. <https://doi.org/10.1016/j.ijchp.2014.10.001>
- Wahyuningsih, S., & Afandi, M. (2020). Investigating English speaking problems: Implications for speaking curriculum development in Indonesia. *European Journal of Educational Research*, 9(3), 967–977. <https://doi.org/10.12973/EU-JER.9.3.967>
- Xiong, X. (2022). *Critical Review of Quantitative and Qualitative Research*. 956–959. <https://doi.org/10.2991/assehr.k.220704.172>