

INVESTIGATING THE LEVEL OF COMMUNICATION APPREHENSION AMONG TVET STUDENTS: A QUASI-EXPERIMENTAL STUDY

INVESTIGAÇÃO DO NÍVEL DE APREENSÃO COMUNICATIVA ENTRE ESTUDANTES DE TVET: UM ESTUDO QUASE-EXPERIMENTAL

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Abstract

This quasi-experimental study examined the communication apprehension among students in the Technical and Vocational Education and Training (TVET) course. Specifically, it investigated apprehension levels before and after interventions, identified gender differences, and analyzed the relationship between communication apprehension and willingness to communicate. Thirty-eight TVET undergraduates were participated in both pre-and post-tests, utilizing the PRCA and WTC questionnaires. Paired-samples t-tests, independent-samples t-tests, and Pearson's

Resumo

Este estudo quase-experimental examinou a apreensão comunicativa entre estudantes de cursos de Educação e Treinamento Técnico e Profissional (TVET). Especificamente, investigou-se os níveis de apreensão antes e depois das intervenções, identificaram-se diferenças de gênero e analisou-se a relação entre a apreensão comunicativa e a disposição para se comunicar. Trinta e oito estudantes de cursos técnicos e profissionais participaram tanto dos pré-testes quanto dos pós-testes, utilizando os questionários PRCA e WTC. Para a análise dos dados, foram empregados testes t



correlation analysis were used to analyze the data. The results showed that the undergraduates' communication apprehension decreased significantly after the interventions. Gender analysis indicated that males were significantly more prone than females to experience communication apprehension. The findings also showed a moderate negative relationship between communication apprehension and the willingness to communicate. Undergraduates who reported greater communication apprehension are also reported to have a lower willingness to communicate. These results demonstrate the importance of incorporating the communicative confidence paradigm into pedagogical approaches in TVET learning contexts.

Keywords: Communication Apprehension. Willingness to Communicate. Quasi-Experimental. Gender.

para amostras pareadas, testes t para amostras independentes e a análise de correlação de Pearson. Os resultados mostraram que a apreensão comunicativa dos estudantes diminuiu significativamente após as intervenções. A análise por gênero indicou que os homens eram significativamente mais propensos do que as mulheres a vivenciar a apreensão comunicativa. Os achados também revelaram uma relação negativa moderada entre a apreensão comunicativa e a disposição para se comunicar. Estudantes que relataram maior apreensão comunicativa também apresentaram menor disposição para se comunicar. Esses resultados demonstram a importância de incorporar o paradigma da confiança comunicativa às abordagens pedagógicas em contextos de ensino e aprendizagem de TVET.

Palavras-chave: Apreensão Comunicativa. Disposição para se Comunicar. Quase-experimental. Gênero.

1 INTRODUCTION

Communication skills are vital for academic success and employability in the 21st century (Tushar & Sooraksa, 2023). For Technical and Vocational Education and Training (TVET) students, developing effective communication is crucial as they must acquire both technical knowledge and confidence in workplace communication (Massi *et al.*, 2026). Despite their importance, many TVET learners struggle with communication apprehension (CA), which negatively affects academic performance, workplace readiness, and participation in collaborative learning activities (Farrah Diebaa, Mohd Azrul Azlen, & Khalilullah Amin, 2025).

CA is defined as the fear or anxiety associated with actual or anticipated communication with others (McCroskey, 1985) and is recognised as a primary barrier to oral communication and communicative competence development in educational contexts (Zulida, Nurul 'Ain, & Iza Nurhidayah, 2025).

Numerous studies in language and communication education have examined CA (Hesti, 2017; Mat Husin & Khamis, 2017; Olam & Rodriguez, 2024). Findings consistently show that higher CA levels correlate with lower willingness to communicate

(WTC) and reduced communicative competence (Ramachandran & Kaur, 2021). Individuals experiencing high apprehension tend to avoid interactive communication, limiting skill development opportunities (Nurul 'Ain, Zulida, & Rosmahalil Azrol, 2025). Additionally, psychological factors such as anxiety and self-efficacy significantly influence students' WTC, demonstrating that affective variables play a vital role in determining communicative behaviour (Ngo, Han, & Pill, 2025).

Although prior research has established the prevalence and consequences of CA among university students, few empirical studies focus on TVET learners, who face distinct communicative demands tied to workplace readiness. Existing Malaysian studies primarily sample general or discipline-based undergraduate populations, leaving it unanswered whether the nature, antecedents, and effects of CA differ in TVET contexts where hands-on tasks, team projects, and industry placements are core components. This gap limits understanding of how CA interacts with vocational learning environments and sector-specific communication requirements.

In response, this study employs a quasi-experimental design to (i) examine CA levels among TVET students, (ii) investigate gender differences in CA, and (iii) analyse the relationship between CA and WTC.

Hypotheses:

H1: There is a significant difference between pre-test and post-test PRCA scores.

H2: There is a significant difference between male and female students in their CA levels.

H3: There is a significant relationship between CA and WTC among TVET undergraduates.

2 LITERATURE REVIEW

Empirical studies indicate that elevated CA correlates with reduced engagement and poorer communication outcomes (Zeqiri, 2022; Ulfah, 2024). Malaysian studies among undergraduates show that moderate CA combined with low self-perceived communicative competence undermines oral performance (S. H. & A. N., 2021), while psychological and socio-cultural factors such as fear of negative evaluation and limited self-confidence contribute to CA (Wan Nur Fazliza & Nor Syamimi, 2021). Research

specifically examining CA within TVET settings remains scarce, despite TVET curricula emphasising practical communication, teamwork, and industry-related interactions.

CA has been associated with self-confidence, self-esteem, fear of negative evaluation, WTC, speaking anxiety, and perceived communicative competence (McCroskey, 1985; Ulfah, 2024). WTC refers to an individual's tendency to initiate communication when given the opportunity, reflecting readiness and confidence to engage with others (McCroskey, 1985). This construct is closely related to CA and communicative competence (CC) (Zulida, Nurul 'Ain, & Iza Nurhidayah, 2025). Literature suggests that CA, WTC, and CC are interdependent: higher CA levels associate with lower WTC, whereas reduced apprehension encourages greater communicative engagement, supporting competence and confidence development (Zulida, Nurul 'Ain, & Iza Nurhidayah, 2025).

In Malaysian higher education, CA is negatively correlated with WTC, indicating that students experiencing higher anxiety are less likely to participate actively in classroom discussions (Ramachandran & Kaur, 2021). Similarly, research involving Indonesian EFL learners shows that internal factors such as low confidence and fear of negative evaluation reduce students' WTC during speaking activities (Masrurotul Ajiza *et al.*, 2024). Rahmatollahi and Khalili (2023) examined intermediate-level language learners and reported a significant negative correlation, suggesting that CA may predict WTC in academic settings. Although much existing literature focuses on language learning contexts, CA is likely to constrain communicative behaviour in settings requiring interpersonal interaction, including TVET classrooms and vocational learning environments.

Theoretical Underpinnings and Measurement

McCroskey's theoretical framework on CA and WTC proposes that self-perceived communication competence mediates the relationship between apprehension and actual communicative behaviour. In the context of second language, the Pyramid Model by MacIntyre was utilized to support this study. Individuals with greater confidence in their communicative abilities are more likely to engage in communication and are less affected by communication anxiety (Muhammad Shahbaz *et al.*, 2016). This perspective supports correlational research examining the CA-WTC relationship and explains how anxiety influences participation in communicative activities.

The Personal Report of Communication Apprehension (PRCA) and the WTC questionnaire are the most commonly used instruments in quantitative research. Recognised for their reliability, these tools have been extensively employed in correlational and experimental studies to assess CA and WTC levels.

3 METHODOLOGY

This section outlines the study's methodology, including the research design, participants, instruments, data collection procedures, and the statistical analyses used to address the research objectives.

3.1 Research design

3.1.1 Research design

The study employed a one-group pretest-posttest design, appropriate for naturally occurring groups such as intact classrooms (Campbell & Stanley, 1963). Participants were assessed before (pretest) and after (posttest) the intervention, allowing evaluation of changes attributable to the intervention. Baseline data were collected through a pretest, the intervention was implemented, and a posttest measured its effects.

This design is justified as participants were pre-existing groups, making random assignment impractical. It enables tracking changes within the same participants over time, which is valuable in educational research for assessing instructional intervention impact.

Table 1*One Group Pre-test and Post-test Design (Martin, 1996).*

Time 1	Time 2	Time 3
Pretest	Apply Interventions	Post-test
O	X	O

Questionnaires assessed communication competence, WTC, and CA levels, distributed at the semester's beginning and end, with three intervention sessions conducted between pre-test and post-test.

3.2 Participants

Thirty-eight undergraduates from the Faculty of Technical and Vocational Education participated, all enrolled in "English for Technical Communication." Participants were selected from an intact group assigned by faculty management.

3.3 Instruments

This study employed McCroskey's Personal Report of Communication Apprehension (PRCA-24) and the WTC questionnaire. Part A collected demographic information; Part B included 24 items assessing feelings about communicating with others; Part C comprised 20 items measuring WTC.

3.4 Data collection procedures

Data were collected from 38 TVET undergraduates at Universiti Tun Hussein Onn Malaysia (UTHM) during the 2024/2025 academic year using Google Forms. Students received detailed instructions on completing the scales accurately and were assured that all information and responses would be kept strictly confidential. The survey took

approximately 20 minutes. Interventions were conducted in class, and at semester's end, the same questionnaires were administered to determine significant changes in CA and examine the CA-WTC relationship.

3.5 Validity and reliability

Both PRCA and WTC are well-established instruments with high reliability (Cronbach's $\alpha = 0.92$). The PRCA-24 is the latest version, widely used in communication research.

4 FINDINGS AND DISCUSSION

The findings and discussion presented in this chapter are organised according to the research objectives.

4.1 To identify the level of communication apprehension before and after attending the language activities

The participants in this study were second-year students, comprising 21 males (55.3%) and 17 females (44.7%), with an average age of 21 years. A normality test was conducted to determine whether parametric statistical analyses were appropriate. The results indicated that the data were normally distributed, with skewness values between -1 and +1 and kurtosis within acceptable limits. Furthermore, the instruments used in this study demonstrated high reliability ($\alpha = 0.92$).

Objective 1:

Table 2

Paired Sample Statistics

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Post PRCA	1.7368	38	0.50319	0.08163
Pre PRCA	2.2105	38	0.47408	0.07691

Table 3*Paired Samples Correlations***Paired Samples Correlations**

	N	Correlation	Sig.
Post PRCA & Pre PRCA	38	0.352	0.030

Table 4*Paired Samples Test***Paired Samples Test**

				Lower	Upper	t	df	Sig. (2-tailed)
Post PRCA – Pre PRCA	-0.47368	0.55687	0.09034	-0.65672	-0.29065	-5.244	37	0.000

A paired-samples t-test was conducted to examine whether the intervention produced a significant change in communication apprehension, as measured by PRCA scores, among the 38 participants. Descriptive statistics indicated that the mean PRCA score decreased from the pre-test ($M = 2.21$, $SD = 0.47$) to the post-test ($M = 1.74$, $SD = 0.50$), suggesting a reduction in participants' levels of communication apprehension following the intervention (Table 2).

The paired-samples t-test revealed that this difference was statistically significant, $t(37) = -5.244$, $p < .001$. The mean difference was -0.47 , with a 95% confidence interval ranging from -0.66 to -0.29 (Table 4). These results indicate that the intervention had a significant effect on reducing participants' communication apprehension.

The practical significance of this effect was assessed using Cohen's d , which yielded a value of 0.85 . According to conventional benchmarks, this represents a large effect size, demonstrating that the intervention had a substantial impact on lowering PRCA scores.

In addition, a Pearson correlation analysis indicated a significant positive relationship between pre-test and post-test PRCA scores ($r = .352$, $p = .030$; Table 3). This suggests that participants who reported higher levels of communication apprehension before the intervention tended to report relatively higher levels after the intervention, despite the overall reduction in scores.

4.2 To investigate the difference between males and females in their level of communication apprehension

An independent-samples t-test was conducted to examine whether there was a significant difference in communication apprehension between male and female students, with the post-test total PRCA score as the dependent variable.

Table 5

Descriptive statistics between male and female students on their post-test total score

Group Statistics					
GENDER		N	Mean	Std. Deviation	Std. Error Mean
Post PRCA	1	21	77.0952	14.78142	3.22557
	2	17	64.2353	13.65892	3.31278

Table 6

Independent Sample T-test between Male and Female Students with Total Post-test Score

Independent Samples Test

			t-test for Equality of Means							
			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper	
Post PRCA	Equal variances assumed	0.538	0.468	2.758	36	0.009	12.85994	4.66331	3.40232	22.31757
	Equal variances not assumed			2.781	35.321	0.009	12.85994	4.62372	3.47634	22.24355

An independent-samples t-test was conducted to determine whether there was a significant difference in communication apprehension between male and female participants. The analysis included 21 male and 17 female students.

Descriptive statistics indicated that male participants ($M = 77.10$, $SD = 14.78$) reported higher post-test PRCA scores than female participants ($M = 64.24$, $SD = 13.66$), suggesting greater levels of communication apprehension among males. Levene's test for

equality of variances was not significant ($p = .468$), indicating that the assumption of homogeneity of variance was satisfied. Consequently, the results from the “equal variances assumed” row were interpreted.

The independent-samples t-test revealed a statistically significant difference between genders, $t(36) = 2.758$, $p = .009$. The mean difference of 12.86 had a 95% confidence interval ranging from 3.40 to 22.32. These findings indicate that gender significantly influences communication apprehension, with male participants reporting higher levels of apprehension than females.

The findings of the present study are contradicted by Benni Ichsanda (2022), who reported that female students exhibited higher levels of communication apprehension than their male counterparts. In contrast, the present findings are consistent with those of Nik Fauzi et al. (2025), who found that female students exhibited lower levels of communication apprehension. These mixed findings suggest that the relationship between gender and communication apprehension may vary across different educational settings, participant groups, and communication contexts. Such inconsistencies indicate that gender alone may not be a strong or stable predictor of communication apprehension, and other contextual or psychological factors may also play an important role.

4.3 To analyse the relationship between communication apprehension and willingness to communicate among TVET undergraduates

To address this research objective, a Pearson correlation analysis was conducted.

Table 7

The descriptive table between Post PRCA and Post WTC

Descriptive Statistics			
	Mean	Std. Deviation	N
Post PRCA	71.3421	15.51682	38
Post WTC	68.4677	15.84620	38

Table 8

Pearson Correlation between Post PRCA and Post WTC

Correlations		Post PRCA	Post WTC
Post PRCA	Pearson Correlation	1	-.463**
	Sig. (2-tailed)		0.003
	N	38	38
Post WTC	Pearson Correlation	-.463**	1
	Sig. (2-tailed)	0.003	
	N	38	38

** . Correlation is significant at the 0.01 level (2-tailed).

Descriptive statistics for the 38 participants indicated that the mean post-test communication apprehension score was 71.34 (SD = 15.52), while the mean post-test willingness to communicate score was 68.47 (SD = 15.85).

A Pearson correlation analysis was conducted to examine the relationship between communication apprehension and willingness to communicate. The results revealed a moderate, negative, and statistically significant correlation, $r(38) = -.463$, $p = .003$. This finding suggests that participants who reported higher levels of communication apprehension were more likely to exhibit lower levels of willingness to communicate.

This study is similar to Fitriana and Syahri (2021), who found that communication apprehension was negatively related to willingness to communicate. However, it differs from Amirul & Fuzirah (2024), who reported that higher speaking anxiety was linked to lower willingness to communicate among Malaysian undergraduates.

These results support the alternative hypothesis (H_1) and lead to the rejection of the null hypothesis (H_0), confirming that communication apprehension is significantly associated with willingness to communicate among TVET undergraduates.

5 CONCLUSION

The findings of this study indicate that the intervention effectively reduced participants' communication apprehension. The significant decrease in PRCA scores from pre-test to post-test demonstrates that participants experienced lower levels of

anxiety related to communication after completing the intervention. Moreover, the large effect size suggests that this reduction was not only statistically significant but also practically meaningful, highlighting the intervention's impact on enhancing communicative confidence.

The positive correlation observed between pre-test and post-test PRCA scores suggests that individual differences in communication apprehension remained relatively stable over time. Participants who initially exhibited higher levels of apprehension tended to maintain relatively higher scores even after the intervention, although at a reduced level. This pattern indicates that while the intervention effectively lowered overall communication apprehension, underlying individual tendencies toward communication anxiety may persist. These findings underscore the importance of continued or supplementary strategies for participants with higher baseline levels of apprehension to ensure sustained improvement.

Regarding gender differences, the study found that male participants reported significantly higher levels of communication apprehension than female participants, achieving the second research objective. The substantial mean difference indicates that gender plays an important role in shaping communication apprehension within this context. This difference may reflect variations in communication styles, socialisation patterns, or exposure to communicative tasks between male and female learners. Although both groups benefited from the intervention, the persistence of higher PRCA scores among males suggests that targeted support strategies may be necessary to address the specific needs of male learners. These results highlight the importance of considering gender when designing interventions to reduce communication apprehension.

Finally, the analysis revealed a significant moderate negative relationship between communication apprehension and willingness to communicate among TVET undergraduates. Students with higher levels of communication anxiety were less willing to engage in communicative situations. This finding is consistent with previous research indicating that anxiety inhibits individuals from initiating or participating in communication activities.

From a practical perspective, these results underscore the value of interventions that reduce communication apprehension, thus enhancing students' willingness to communicate. Strategies such as confidence-building exercises, guided practice in

communicative contexts, and targeted instructional support may help students overcome anxiety and participate more actively in communication tasks. The moderate strength of the correlation ($r = -.463$) further suggests that while other factors may also influence willingness to communicate, communication apprehension is a meaningful predictor of communicative behaviour in this population.

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REFERENCES

- Amirul Aiman Mohd Yusuf Bahadur & Fuzirah Hashim. (2024). From Fear to Fluency: Exploring English Speaking Anxiety and Communication Willingness in UKM Undergraduates. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 9(11), e003106. <https://doi.org/10.47405/mjssh.v9i11.3106>
- Arasu, K. & Durailimgam, S. (2025). Speaking up in TVET: A Review of Oral Presentation Difficulties Faced by Malaysian Polytechnic Students. *Politeknik & Kolej Komuniti Journal of Life Long Learning*, Vol.9, Year 2025 eISSN 2600-7738
- Benni Ichsanda Rahman Hz, "Exploring Students' Public Speaking Anxiety: Introvert vs Extrovert," *Journal of English Language Studies* 7, no. 1 (2022): 107–20, <https://doi.org/10.30870/jels.v7i1.14412>
- Campbell, D.T & Stanley, J.C. (1963). *Experimental and Quasi- experimental Designs for Research*. Library of Congress Catalogue Card Number 81-80806 ISBN: 0-395-30787-2 Y-BBS-IO 09 08
- Farrah Diebaa Rashid Ali1, Mohd Azrul Azlen Abd Hamid, Khalilullah Amin Ahmad. (2025). Enhancing TVET Education Through Communication Skills (2015–2025): A Systematic Review of Workplace Needs. *International Journal of Research and Innovation in Social Science (IJRISS)*. DOI: <https://dx.doi.org/10.47772/IJRISS.2025.903SEDU0712>
- Martin, R.J. (1996). 15 Spatial Experimental Design. *Handbook of Statistics Volume 13*, 1996, Pages 477-514. [https://doi.org/10.1016/S0169-7161\(96\)13017-0](https://doi.org/10.1016/S0169-7161(96)13017-0)
- Masrurotul Ajiza, Arum Rahayu, Setiawati Setiawati, & Dini Deswarni. (2024). EFL Students' Anxiety in Speaking English: Factors and Strategies. *Journal of English Language Learning*. 8(1):565-572. DOI: 10.31949/jell.v8i1.8502

- Massi, J. W., Anangisye, W. A. L., & Sarakikya, A. M. (2026). Examining the alignment of vocational education curricula with labour market demands for youth employability in Tanzania: bridging the skills gap. *Cogent Education*, 13(1). <https://doi.org/10.1080/2331186X.2026.2626623>
- Mat Husin, M. Z., & Khamis, N. Y. (2024). English Oral Communication Apprehension: A Quantitative Inquiry on Malaysian Administrative Staff in an Educational Institution. *International Journal of Language Education and Applied Linguistics*, 14(1), 27-39. <https://doi.org/10.15282/ijleal.v14i1.9800>
- Marlia Fitriana, Indawan Syahri, (2021). The Correlation Among Communication Apprehension, Willingness to Communicate and Speaking Ability of the Ninth Grade Students of SMP Negeri in Banyuasin I. *Proceedings of the International Conference on Education Universitas PGRI Palembang (INCoEPP 2021)* doi: 10.2991/assehr.k.210716.239
- McCroskey, J.C., Beatty, M.J., Kearney, P. (1985). The Content Validity of the PRCA-24 as a Measure of Communication Apprehension Across Communication Contexts. *Communication Quarterly*. 33(3):165-173. DOI: 10.1080/01463378509369595
- McCroskey, J.C.; B, J. Elaine. (1985). *Willingness to Communicate: The Construct and Its Measurement*. ERIC Number: ED265604
- Ngo Nhat Thanh Tra, Weifeng Han, Shane Pill (2025). Willingness to Communicate, L2 Self-Confidence, and Academic Self-Concept: A Mixed-Methods Study of Vietnamese University Students in the UK. *Behav. Sci.* 2025, 15(9), 1176; <https://doi.org/10.3390/bs15091176>
- Nik Fauzi, Sheela Faizura and Morni, Affidah and Ak Joe, Saira and Lendik, Lisbeth Sinan (2025) Gender-based analysis of public speaking anxiety among university students. *GADING (Online) Journal for the Social Sciences*, 28 (1): 8. pp. 86-95. ISSN e-ISSN 2600-7568
- Nurul 'Ain Othman, Zulida Abdul Kadir, Rosmahalil Azrol Abdullah (2025). Communication Apprehension: Development of Conceptual Framework. *QUANTUM JOURNAL OF SOCIAL SCIENCES AND HUMANITIES* 6(SI2): 253-259.eISSN: 2716-6481 <https://doi.org/10.55197/qjssh.v6si2.1023>
- Olam, N., Arceo, L. M., & Rodriguez, E. (2024). Communication Apprehension and Coping Strategies of the English Language Learners: Basis for Interactive Activities Enrichment. *Sprin Journal of Arts, Humanities and Social Sciences*, 3(10), 47–51. <https://doi.org/10.55559/sjahss.v3i10.405>
- Rahmatollahi, M. & Khalili, G. F. (2015). Relationship between Intermediate EFL Learners' Communication Apprehension, Willingness to Communicate, and Speaking Ability. Vol 4, No 6 (2015).

- Shahbaz, M., Khan, M. S., Ishtiaq Khan, R. M., & Mustafa, G. (2016). Role of Self-Perceived Communication Competence and Communication Apprehension for Willingness to Communicate in L1 and L2. *Journal of Educational and Social Research*, 6(1), 158.
<https://www.richtmann.org/journal/index.php/jesr/article/view/8791>
- Siti Haslina, H & Andi Noraisya, M. (2021). Speaking in English: Oral Communication Apprehension and Self-Perceived Communication Competence among Marketing Undergraduates in Malaysia. *Human Behavior, Development and Society*. Vol. 22 No. 3 (2021): September - December 2021
- Tushar, H. & Sooraksa, N. (2023). Global Employability Skills in the 21st Century Workplace: A Semi-systematic Literature Review.
<https://doi.org/10.1016/j.heliyon.2023.e21023>
- Ulfah, B. (2024). A Comparative Investigation of Communication Apprehension among Undergraduate, Graduate, and Postgraduate Students in the EFL Context. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 9(2), 267-288
- V. Ramachandran, P. Kaur (2021). The Relationship between Willingness to Communicate and Communication Confidence. *The European Proceedings of Social and Behavioural Sciences EpSBS*. e-ISSN: 2357-1330. DOI: 10.15405/epsbs.2021.06.02.55
- Wan Nur Fazliza W. Z. & Nor Syamimi Iliani C. H. (2021). Communication Apprehension among Part One Business Students in Universiti Teknologi Mara (UiTM) Kelantan. *Researchers World - International Refereed Social Sciences Journal*, 6(1), 31–39. Retrieved from <https://researchersworld.com/index.php/rworld/article/view/552>
- Wardani, Hesti Eka, Universitas Negeri Semarang, Indonesia. The effect of communication apprehension and Communication competence on students' speaking Skill performance: A Case of Maritime High School Students. Vol 1 (2017): 1st ELLiC Proceedings: `Innovation, Trends, and Challenges in English Language Learning in the 21st Century` - Language Teaching.
- Zeqiri, Luiza. (2022). The Influence of Communication Apprehension on Students' Spoken Performance. 214-221. Gender-based analysis of public speaking anxiety among university students
- Zulida Abdul Kadir, Nurul 'Ain Othman, Iza Nurhidayah Ismail. Communication Apprehension, Willingness to Communicate, and Communication Competence: A General Review. *DEVELOPMENT IN LANGUAGE STUDIES* e-ISSN: 2811-3845 DILS Vol. 5 No. 1 (2025)46-51
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