

# The Level of Proficiency in Verbal and Non-Verbal Interpersonal Communication Among Undergraduate Technology Students at FPTV, UTHM

Azita Ali<sup>1\*</sup>, Hakim Ahmad<sup>2</sup>

<sup>1</sup> Faculty of Technical and Vocational Education,  
Universiti Tun Hussein Onn Malaysia, Batu Pahat, 86400, MALAYSIA

\*Corresponding Author [azita@uthm.edu.my](mailto:azita@uthm.edu.my)  
DOI: <https://doi.org/10.30880/ritvet.2024.04.02.011>

## Article Info

Received: 3 February 2024  
Accepted: 22 December 2024  
Available online: 30 December 2024

## Keywords

Interpersonal, communication,  
verbal, non-verbal.

## Abstract

Communication represents an indispensable skill for every student. The active engagement of students in both verbal and non-verbal communication significantly influences their academic performance. Nonetheless, certain students fail to attain mastery in verbal and non-verbal communication skills, impacting their employability after graduation. Consequently, this study aims to identify the proficiency levels of verbal and non-verbal communication among Bachelor of Technology students at FPTV. The study employed a survey design utilizing a quantitative approach, employing a questionnaire to collect data from 252 technology undergraduate students across three cohorts. The data was analyzed through descriptive statistical methods, including mean values and standard deviation, alongside the Mann-Whitney U test to identify the difference between genders. The study's results indicate a high level of proficiency in verbal and non-verbal communication among students. Furthermore, the findings reveal no significant difference in the mastery of verbal and non-verbal communication based on gender. Ultimately, most Bachelor of Technology students at FPTV demonstrate adeptness in both verbal and non-verbal communication. This study is hoped to inform future research endeavors exploring the broader landscape of verbal and non-verbal communication mastery.

## 1. Introduction

Communication is one of the most demanding interpersonal skills for individuals to interact with others. Additionally, it is a skill that every student should possess (Ngadiman & Jamaluddin 2018). Communication is also crucial in assisting students to meet their needs while studying and in preparing for the working environment. According to Noor & Abdullah, (2020), communication skills also help individuals carry out daily activities because almost every day, interaction processes occur when two individuals are involved. Besides that communication skills can also help individuals express their opinions and influence the environment effectively (Bakar, 2020). In the context of Technical Vocational Education and Training (TVET), especially in vocational colleges (KV), communication skills are widely applied in daily teaching and learning sessions.



A study conducted by Ibrahim & Mahbob (2021), most subjects in the *Kurikulum Standard Kolej Vokasional (KSKV)* included elements that required students to communicate, either during project presentations or when undergoing *Sijil Kemahiran Malaysia (SKM)* supervision. In both theoretical and practical learning, one of the criteria for assessing TVET students is their verbal communication skills, including brainstorming ideas, making presentations, and chairing simulated meetings (Kenayathulla et al., 2019). This perspective aligns with Ali (2023), that contended all these verbal communication skills are crucial in assessing TVET students' confidence and preparing them for effective communication in completing assignments.

## 2. Literature Review

### 2.1 Verbal and Non-Verbal Communication among Students

Communication refers to the process of exchanging information or ideas among individuals or within groups. Interpersonal communication specifically involves the interaction between two individuals who hold significant roles in each other's lives (Azman et al., 2016). This perspective aligns with Omar & Ali (2021), in which it encompasses various aspects such as personal matters, business affairs, education, and social interactions. There are several communication methods commonly employed by all parties, including verbal communication, which entails public speaking and idea contribution. Non-verbal communication, on the other hand, involves conveying information through writing, body language, gestures, and facial expressions. According to Ismail et al., (2019), both these communication approaches are highly effective in delivering specific messages to the intended audience. Interpersonal communication is the process of conveying messages, exchanging ideas, or writing from a sender to a recipient. This form of communication requires the involvement of two individuals, one acts as the informant or message sender, and the other as the information receiver. This perspective aligns with Subali et al., (2020), during a teaching and learning session, the teacher assumes the role of an informant by presenting teaching topics, while the students act as receivers of information. The students, in this context, are the party that receives all the information provided by the teacher during the teaching and learning process.

According to Yussof & Ismail, (2012) in today's professional landscape, employers emphasize both verbal and non-verbal communication skills. Graduates who are unable to demonstrate effective communication and articulate their ideas may encounter challenges when seeking a job, even if their academic performance is excellent. Graduates from Institutes of Higher Education (IPT) or Technical Vocational Education and Training (TVET) are not only evaluated based on their academic achievements. The ability to communicate verbally is also considered, and it is observed that some graduates, despite having good academic results, may still exhibit communication skills at a moderate level (Hamid & Mohd Matore, 2022). This perspective aligns with Zaini et al., (2021), that students with diplomas from KV, who undergo industrial training often encounter challenges in expressing ideas and socializing effectively within an industrial environment. This issue leads to difficulties for students during their industrial training, affecting their ability to socialize and express their true performance. Consequently, this difficulty may hinder employers from considering them for regular employment.

Impak & Mustapha, (2020) state many graduates from TVET institutions lack essential interpersonal skills, including both verbal and non-verbal communication. This deficiency highlights the need for TVET college graduates to acquire additional knowledge in oral and non-verbal communication. Moreover, these graduates should also develop collaborative skills and the ability to solve problems and make decisions, aspects that are often challenging to cultivate. This perspective aligns with Zaini et al., (2021) that TVET graduates in Malaysia still face challenges in effective communication and working collaboratively in groups. This issue contributes to some unemployed TVET graduates opting not to apply for jobs, thereby choosing unemployment for themselves. Impak & Mustapha, (2020) also agree with that statement, During the presentation activity, students tasked with presenting assignments often encounter challenges in their communication skills. Some face difficulties articulating arguments effectively and presenting well-thought-out ideas. Additionally, some students experience nervousness and a lack of confidence when interacting in public. At times, certain students may struggle to provide satisfactory answers to questions posed during the presentation.

Communication problems among students not only pertain to verbal communication but also encompass non-verbal communication, which is also a noteworthy concern. According to Omar & Ali, (2021), the challenge faced by new graduates in securing employment often stems from their deficiency in non-verbal communication skills, including aspects like self-appearance and body language. A graduate with poor body posture may hinder their conduct during meetings and gatherings. For instance, weak body posture during an interview and avoiding eye contact can convey a lack of confidence in the graduates or students (Che Pa et al., 2014). Another non-verbal communication challenge involves facial expressions and voice. Students should be taught non-verbal communication elements such as proxemics and voice to develop these essential skills within

themselves. A lack of clear and assertive voice during informal meetings to present work findings may directly indicate a lack of confidence in one's own abilities.

### 3. Methodology

This study employs a quantitative research method through survey research design. According to Zaini et al., (2021) the study design can be understood as a process of gathering information and data through a survey method, utilizing a quantitative approach that will be analyzed descriptively. This survey aims to collect data through the distribution of questionnaires. Subsequently, the information for the study will be obtained from the predefined population. The findings obtained through the survey method will be systematically and comprehensively processed and analyzed. This meticulous analysis ensures the extraction of accurate information, allowing the researcher to gauge the level of communication among Bachelor of Technology students.

#### 3.1 Population and Sample

The population for this study comprises of Bachelor of Technology students at the Faculty of Technical and Vocational Education (FPTV) in UTHM, who are enrolled in the seven offered programs, namely Food Service Technology, Technology in Building Construction, Technology in Refrigeration and Air Conditioning, Technology in Industrial Electronic Automatic, Technology in Electrical Maintenance Systems, Technology in Welding and lastly is Technology Industrial Machining.

Sample size used in this study was determined by the Krejcie Sample Size Table & Morgan (1970). Based on the Sample Size by Krejcie & Morgan (1970), the required sample size is 226 students out of the actual total population of 558 students.

#### 3.2 Research Instrument

A research instrument is a tool employed to gather, measure, and analyze information from respondents to derive results. In this study, the researcher used an online questionnaire instrument. The choice of an online instrument is driven by its efficiency in saving time and reducing survey costs. Once the instrument was prepared, the questionnaire was distributed to respondents through WhatsApp groups, enabling them to express their confidence levels in communication thoughtfully. According to Ismail et al., (2019), an online survey study is an efficient method that can be conducted within a short period. Consequently, the research questionnaires were distributed to students at FPTV, encompassing the seven programs offered under the Bachelor of Technology.

For this study, the questionnaire was created using the Google Form application, and divided into three parts: A, B, and C. A total of 24 items were utilized to assess the proficiency of students in both verbal and non-verbal communication within the Bachelor of Technology program. Part A focuses on the demographic information of the respondents, Part B addresses the verbal communication skills of B.Tech students, and Part C comprises a set of questions related to non-verbal communication

#### 3.3 Pilot Study

Shaleh, (2018) defines a pilot study as an initial investigation conducted on a small scale, typically preceding the actual quantification of the study. Before the main research, this pilot study is undertaken. For this phase, a sample of 30 students from the seven Bachelor of Technology programs was randomly selected as respondents. The purpose of this pilot study is to assess the reliability of the research instrument. The researcher utilizes Statistical Package for the Social Sciences (SPSS) version 27.0 to analyze the data obtained and determine the reliability level of each item. According to Othman & Kassim (2018) if the alpha Cronbach value is 0.90 or higher, it is good, but if the value is 0.00 to 0.39 is rejected, and alpha Cronbach values from 0.40 to 0.59 are doubted. The analysis results revealed that the reliability score for verbal communication items was 0.903, while for non-verbal communication items, it was 0.904.

### 4. Findings and Discussion

The results of the descriptive analysis are displayed in the form of a table involving frequency distribution, percentage, mean score, and standard deviation to identify the level of mastery of oral communication and non-verbal of B.Tech students. While inferential analysis using the Mann-Whitney U test was conducted to study the differences in the level of mastery of verbal and non-verbal communication between the genders of B.tech students.

### 4.1 Demographics of Respondents

The respondents who were involved and successfully collected were a total of 252 undergraduate students of technology at FPTV in 7 main programs namely Bachelor of Technology Food Service (BBS), Bachelor of Refrigeration and Air Conditioning Technology Udara (BBZ), Bachelor of Industrial Electronic Automation Technology (BBN), Bachelor of Electrical System Maintenance Technology (BBJ), Bachelor Welding Technology (BBX), Bachelor of Industrial Machining Technology (BBO), and also a Bachelor of Building Construction Technology (BBY). Results from the descriptive analysis that has been done indicated that the number of male respondents was 177 people (75%), while the number of female respondents was 75 people (29.8%). Among all the students, the study revealed that 171 individuals were aged between 20 and 22 years (67.9%), while 81 students were aged between 23-25 (32.1%). There were no students aged 26 years and above, which is 0% of the total.

The results of the analysis that has been made found that the largest cohort is cohort 4 which is a total of 116 students (46.0%). Next, followed by cohort 3 of 82 students (32.5%), the rest are students from cohort 5 which is a total of 54 students (21.4%). Among all the students 252 people, a total of 68 people (27.0%) from Food Service Technology, 46 people (18.3%) from Building Construction Technology, 45 people (17.9%) from Refrigeration and Air Conditioning Technology, 38 people (15.1%) from Welding Technology, 15 people (6.0%) from Building Construction Technology, and the remaining 14 people (5.6%) from Maintenance Electrical System. Table 1.0 displays the details of the analysis.

**Table 1.0:** Analysis Demographic Analysis of Respondents

Item	Frequency (n)	Percents (%)
Genders	Male	177
	Female	75
	Total	252
Age	20 and 22 years	171
	23-25 years	81
	26 years and above	0
	Total	100
Program Course	BBS	68
	BBZ	45
	BBJ	14
	BBX	38
	BBN	26
	BBO	15
	BBY	46
	Total	252
Cohort	Cohort 3	82
	Cohort 4	116
	Cohort 5	54
	Total	252

### 4.2 Mastery of verbal communication among B.Tech students in FPTV

Based on Table 2.0 and the results of the analysis of verbal communication mastery level, the mean value and standard deviation at the highest level are, item 5 "I can communicate well when interacting with a friend" with a mean value of 4.61 and a standard deviation of .503. Followed by the second highest item is the Group Discussion construct, item 7 "I can have discussions with friends while doing indoor activities group" with a mean value of 4.57 and a standard deviation of .541. For items the second last is the contract Give Feedback, item 2 "I can give feedback during the question-and-answer session with the lecturer" with a value mean of 4.42 and a standard deviation of .678. Next followed by the lowest item is a construct Making a Presentation, item 13 "I can change the intonation voice in my conversation" with a mean value of 4.41 and a standard deviation of .665. In conclusion, the study shows the mean value of the level of communication mastery among technology undergraduate students is at a high level with a mean average of 4.51

**Table 2.0** Descriptive analysis of verbal communication mastery level

Bil	Item	N	Sd	Interpretation
1	I can clearly communicate verbally	4.55	.557	High
2	I can give feedback during a question-and-answer session with the lecturer	4.55	.678	High
3	I can convey ideas in a way verbally to friends well.	4.42	.621	High
4	I can give feedback on the opinions of friends well.	4.52	.496	High
5	I can communicate with good when interacting with friends.	4.61	.503	High
6	I can communicate with good when interacting with the lecturer	4.49	.553	High
7	I can discuss with friends while doing group activities.	4.57	.5411	High
8	I can make group presentations	4.49	.524	High
9	I can answer the question proposed by the lecturer.	4.49	.575	High
10	I can answer that question proposed by a friend.	4.52	.553	High
11	I can give an example to help in my explanation.	4.43	.679	High
12	I can explain the work instructions to friends clearly	4.56	.504	High
13	I can change the intonation of the voice in my conversation	4.41	.665	High
Total		4.51		High

### 4.3 Matery of non-verbal communication among B.Tech students in FPTV

Based on Table 3.0 the findings of the analysis carried out, the mean value and standard deviation that are at the highest level are Writing Skills construct, item 3 "I can produce a report according to the standard determined by the lecturer" with a mean value of 4.61 and deviation standard .494. Followed by the second highest item is the Facial Expression construct, item 5 "I use eye contact when interacting with the lecturer" with a mean value of 4.55 and a standard deviation of .521. The second lowest item is the Posture Body construct, item 1 "I use hand gestures when communicating" with a mean value of 4.31 and a standard deviation of .599. While the item the lowest, is the Posture Body construct, item 2 "I use gestures hands to help in emphasizing the issues presented" with value mean of 4.30 and a standard deviation value .679. In conclusion, the findings of the study showing the level of mastery of non-verbal communication among students bachelor of technology is at a high level, 4.46 as in Table 3.0.

**Table 3.0:** Descriptive analysis of non-verbal communication level

Bil	Item	N	Sd	Interpretation
1	I use hand signals when communicating.	4.31	.599	High
2	I use hand signals to help in emphasizing the issue which is delivered	4.30	.679	High
3	I can generate reports according to the standards determined by lecturer	4.61	.494	High
4	I use eye contact when interact with friends	4.56	.496	High
5	I use eye contact when interact with the lecturer.	4.55	.521	High
6	I can give a reaction when the lecturer presents an argument.	4.48	.546	High
7	I can react when friends presents an argument.	4.46	.522	High
8	I can maintain my posture when making a presentation	4.44	.644	High
9	I gave a smile when make a presentation.	4.47	.523	High
10	I use hand signals polite when communicating with friends	4.56	.530	High
11	I use hand signals polite when communicating with the lecturer.	4.48	.574	High
Total		4.46		High

#### 4.4 Differences in verbal and non-verbal communication levels among B.Tech students in FPTV

Table 4.0 shows the results of data analysis using the Mann-Whitney U test to examine the differences in the level of mastery of verbal communication between genders. Based on Table 4.0 the results of the Mann-Whitney U test show the value of the level of mastery of oral communication based on gender (N=252) is U(4499.000), Z=-4.067. The significance value is .000 (p<.05) showing that there is a significant difference between the level of mastery of verbal communication between the genders. Therefore, the research hypothesis  $H_{a1}$  is that there is a difference in the level of verbal communication between genders among undergraduate students of technology in FPTV.

Meanwhile, Table 4.9 shows the results of data analysis using the Mann-Whitney U test to examine differences in non-verbal communication mastery levels between the genders. Based on Table 4.7, the results of the Mann-Whitney U test show the value of the level of mastery of non-verbal communication based on gender (N=252) is U (6482.500), Z=-.296 The significance value is .767 (p>.05) shows that there is no significant difference between the levels of mastery of non-verbal communication between the genders. Therefore, the research hypothesis  $H_0$  that is, there is no difference in the level of non-verbal communication between the genders among technology undergraduate students at FPTV.

**Table 4.0** Differences in verbal and non-verbal communication level among B.tech students

	Gender	N	Mean	Mann-Whitney U	Z	Asymp. Sig. (2-tailed)
Verbal Communication	Male	117	114.42	449.00	-4.067	.00
	Female	75	155.01			
	Total	252				
Non-Verbal Communication	Male	117	127.83	6482.500	-.296	.767
	Female	75	124.43			
	Total	252				

The findings of the study show that technology undergraduate students show a high level of mastery of oral communication. Based on the results of the study, most undergraduate students mastered verbal communication with the highest mean value which is item 5 "I can communicate with good when interacting with friends" This is because students have more time with friends, which makes them not feel awkward to communicate with each other. This opinion is supported by Buntat & Hassan, (2003), group activities among students will form communication skills well. This is because, in group activities, they need to communication with each other to complete the assignment given by the lecturer. Even though this statement is supported by Guat (2013), communication is very important for students, especially. When they graduate and work in a certain sector, communication skills are very important to ensure that the message is delivered to colleagues or superiors more clearly and accurately

In addition, the findings of the study show that the level of mastery of non-verbal communication among undergraduate technology students is at a high level. Non-verbal communication such as the aspect of writing is very important. Non-verbal communication such as the aspect of body movement and facial expression are among the elements that must be present in the student. These skills can be formed through activities in the classroom involving the presentation and reporting of group work. This statement is supported by Taher & Razak (2022), students who master non-verbal aspects such as writing and listening skills are not only able to perfect a task however, but they are also actually preparing themselves to work on skills in placing themselves in the workplace, especially after the end of the Lesson. Even according to Taher & Abdul Razak (2022), student-centered learning such as presentations and work groups can give exposure to students and make the learning process more interesting.

## 5. Conclusion

In conclusion, this study has been successful in identifying the level of mastery of verbal and non-verbal communication among undergraduate students' technology especially in cohorts 3,4,5. The findings of the study also show that the majority of undergraduate technology students have mastered oral communication skills and non-verbal well. Although initially expecting problems in verbal and non-verbal communication among technology undergraduate students, the results collected by the researcher show the results that vice versa. Therefore, overall, the findings of the study have answered all the research questions. The researcher also hopes that the results of this study will be used as well as possible perhaps by future researchers as a reference and understanding details about the level of mastery of verbal and non-verbal communication among undergraduate students of technology, even the researcher hopes that this study will also be a reference to the MTUN university network to make studies this as a reference for conducting better studies in the future.

## Acknowledgment

The authors would like to thank the Research Centre Management, Universiti Tun Hussein Onn Malaysia for supporting this research. Special thanks are also dedicated to all research members and personnel for continuous effort in completing and contributing input for this research.

## References

- Azman, Nor'Ain, & Najihah. (2016). Amalan Komunikasi Mentor Membangunkan keyakinan Diri Menti. *Jurnal Personalia Pelajar*, 19(2), 49–57.
- Ali, R. (2023). Hubungan Kemahiran Insaniah dengan Kebolehgajian Pelajar TVET. *Jurnal Pemikir Pendidikan*, 11(1), 13–22. <https://doi.org/10.51200/jpp.v11i1.4277>
- Bakar, K. A. (2020). Gaya Komunikasi Kepimpinan Pentadbir Akademik: Satu Kajian Gender Dan Wacana. *Malim: Jurnal Pengajian Umum Asia Tenggara (Sea Journal of General Studies)*, 21(1), 182–198. <https://doi.org/10.17576/malim-2020-2101-15>
- Che Pa, N. S., Kasdan, J., Sulaiman, S., & Said, S. (2014). Makna Tanpa Kata-Kata : Peranan Bahasa Badan Dalam Pengajaran Dan Pembelajaran Bahasa. *Proceeding of Symposium of International Language & Knowledge (SiLK 14)*, 14-16 Februari 2014, Hydro Hotel, Penang, Cil, 1–5.
- Hamid, N. M., & Mohd Matore, M. E. @ E. (2022). Isu dan Cadangan Terhadap Penilaian Pembentangan Komunikasi dalam Kalangan Pelajar TVET: Suatu Pemerhatian Awal. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(3), e001359. <https://doi.org/10.47405/mjssh.v7i3.1359>
- Ibrahim, N. A. N., & Mahbob, M. H. (2021). Students' personal skills as a form of communication skills and their importance in the job market. *Jurnal Komunikasi: Malaysian Journal of Communication*, 37(1), 209–226. <https://doi.org/10.17576/JKMJC-2021-3701-12>
- Impak, S., & Mustapha, H. A. (2020). Perspektif majikan terhadap keupayaan pelajar dalam menunjukkan kemahiran komunikasi secara berkesan dalam persekitaran kerja global. *ANP Journal Of Social Sciences And Humanities*, 1(1), 34–38. <https://doi.org/10.53797/anpjssh.v1i1.6.2020>
- Ismail, Z. S., Arifin, K., Muhammad, M., & Juhari, M. L. (2019). Analisis Keberkesanan Komunikasi dalam Meningkatkan Keselamatan dan Kesihatan Pekerjaan di Universiti Penyelidikan di Malaysia. *Akademika*, 89(3), 183–194. <https://doi.org/10.17576/akad-2019-8903-15>
- Kenayathulla, H. B., Ahmad, N. A., & Idris, A. R. (2019). Gaps between competence and importance of employability skills: evidence from Malaysia. *Higher Education Evaluation and Development*, 13(2), 97–112. <https://doi.org/10.1108/heed-08-2019-0039>
- Ngadiman, M. F. J. (2018). Kalangan Pelajar Semester Akhir Politeknik the Relationship Between Teamwork Skills and Communication Skills Among Polytechnic ' S Final. *International Journal of Education , Psychology and Counseling*, 1–18.
- Noor, M., & Abdullah, N. (2020). Persepsi Majikan Terhadap Pelajar Kolej Komuniti Jempol semasa Menjalani Latihan Industri [Employer Perception of Kolej Komuniti Jempol Students during Industrial Training]. *BITARA International Journal of Civilizational Studies and Human Sciences (e-ISSN: 2600-9080)*, 3(4), 26–35.
- Omar, N., & Ali, S. M. (2021). Non-Verbal Communication in the Context of Social Presence in Virtual Space. *Jurnal Komunikasi: Malaysian Journal of Communication*, 37(4), 273–294. <https://doi.org/10.17576/JKMJC-2021-3704-16>
- Shaleh, M. (2018). Kepemimpinan dan Organisasi. *Lembaga Penerbit Kampus IAIN Palopo*, 88. <https://www.kompasiana.com/agunbinmadik/562269907097731a058b4567/kekuasaan-dan-pengaruh%0Ahttps://dx.doi.org/10.1016/j.intman.2016.11.002%0Ahttps://doi.org/10.1>

016/j.tele.2017.10.007%0Ahttp://ilp.ut.ac.id/index.php/JOM/article/view/432%0Ahttp://dx.doi.org

Subali, E., Hendrajati, E., & Rintaningrum, R. (2020). Forms of Online Learning Communication during the Covid-19. *Indonesian Journal of Development Studies (IJDS)*, 2020, 94–100.

Yussof, I., & Ismail, R. (2012). Analisis perbandingan persepsi majikan sektor awam dan swasta terhadap prestasi graduan UKM. *Jurnal Ekonomi Malaysia*, 46(2), 85–92.

Zaini, M. I. H. M., Selamat, A. Z., & Mohd Fauzi Ali, M. H. A. H. (2021). Tahap Kemahiran Generik Dalam Melahirkan Kepimpinan Mahasiswa Berwibawa Di Politeknik. *International Journal of Islamic and Humanities Research*, 1(1), 78–91.