

# Analyzing Verbal and Nonverbal Communication as Indicators of Pragmatic Competence among Senior High School Students

## Graduate School Department

Princess Lorainne J. Bolando Rosemarie D. Gorero

La Consolacion University Philippines

**Abstract:** This research paper explores the relationship between verbal and nonverbal communication and pragmatic competence among senior high school students. It acknowledges the growing importance of nonverbal communication in diverse learning environments, highlighting the need to understand its interplay with verbal cues. The research employed a quantitative research design, utilizing a researcher-made instrument to assess verbal and nonverbal communication skills in a sample of 60 senior high school students. The instrument was based on relevant theories and piloted for reliability. Data analysis involved descriptive statistics and statistical software to identify patterns and correlations between communication skills and pragmatic competence. The findings reveal that students demonstrate a general understanding of both verbal and nonverbal communication, with an overall "Extent" level of proficiency. However, the study identifies specific areas for improvement in both communication modalities. Notably, a strong positive correlation was found between pragmatic competence and academic performance, emphasizing the crucial role of these skills in academic success. The paper concludes with recommendations for educators to enhance students' verbal and nonverbal communication skills, as well as their pragmatic competence. These recommendations include individualized coaching, interactive workshops, peer feedback, utilization of technology, body language workshops, role-playing activities, feedback mechanisms, observation skills, integration of pragmatic skills into the curriculum, collaborative projects, professional development workshops, and continuous assessment. By implementing these recommendations, educators can effectively support students in improving their communication skills and achieving better academic performance.

**Keywords**—verbal and nonverbal communication, pragmatic competence, academic performance

## 1. INTRODUCTION

Communication is one of the elements keeping the classroom engaging and meaningful; there are two types, verbal and nonverbal. Verbal communication has long been the dominant mode of instruction, the increasing prominence of technology and diverse learning environments has brought nonverbal communication to the forefront. This shift in focus has sparked a growing trend toward understanding the intricate interplay between verbal and nonverbal cues in educational settings (Bostrom, 2021).

Verbal communication refers to the use of spoken or written language to convey meaning. It encompasses the structure of language, vocabulary, tone, and delivery (Burgoon et al., 2018). A rumble of voices surrounds the classroom; the teacher leads the students through a difficult question with a mix of authority and encouragement while an inquisitive kid raises a question that ignites a passionate discussion among peers. The intensity of conversations, knowledge sharing, and idea exchange crackles through the room.

Nonverbal communication encompasses all forms of communication that do not involve spoken or written

language. This includes facial expressions, body language, gestures, posture, eye contact, proximity, and even the use of silence (Patterson, 2020). The classroom is a complex ecosystem of communication, where words are only one part of the story. A teacher can use their body language, facial expressions, and voice tone to communicate expectations and create a welcoming or unsettling environment. A tense stance and scowl could suggest disapproval or indifference, whereas an open, relaxed stance and a nice chuckle can spark conversation and build rapport. Students express their wants, ideas, and feelings through nonverbal signs. A query, a lack of confidence, or a wish to join can all be expressed with a raised hand, a furrowed brow, or a tentative smile. By recognizing these signs, educators can gain a deeper understanding of their students' viewpoints and modify their instruction accordingly.

The field of education is witnessing a surge in research examining the impact of nonverbal communication on learning. Several factors, including technological advancements, diverse learning environments, and the focus on 21st-century skills fuel this trend. The emergence of online classrooms as well as virtual learning platforms has changed the nature of communication and made it more important to recognize nonverbal clues in online settings (Bostrom, 2021). A more

sophisticated approach to communication that takes into account each student's unique needs and instructional style is required due to the growing diversity of student populations, which includes learners with disabilities and cognitive diversity (Williams, 2020). The importance of nonverbal communication in cultivating students' critical thinking, teamwork, and communication skills has been underlined by the emphasis on these competencies' development (Goleman, 2018).

The emerging trends in nonverbal communication in education highlight several critical issues in the lack of training and resources for educators. Educators often lack adequate training and resources to effectively integrate nonverbal communication into their teaching practices (Smith, 2023). This lack of training can lead to misinterpretation of nonverbal cues, which can result in misunderstandings and communication breakdowns, hindering effective learning (Jones, 2022). Furthermore, nonverbal communication is heavily influenced by cultural norms and individual experiences (Brown, 2021), making it essential to address potential biases and cultural differences in educational settings.

This research aims to investigate the relationship between verbal and nonverbal communication skills and pragmatic competence in high school students. Specifically, it seeks to identify verbal and nonverbal communication indicators associated with pragmatic competence and examine the impact of digital communication on its development in this age group. The study intends to contribute to education by enhancing theoretical understanding of the role of nonverbal communication in educational settings, providing practical guidance for educators on integrating nonverbal strategies into their teaching, and informing policy decisions regarding teacher training and curriculum development to effectively incorporate nonverbal communication.

## STATEMENT OF PROBLEM

Despite the increasing recognition of nonverbal communication's significance in education, a gap exists in understanding how these cues interact with verbal communication to influence student engagement, comprehension, and overall learning experiences. This lack of understanding presents a challenge in developing effective pedagogical strategies that leverage the full potential of both verbal and nonverbal communication.

**This study aims to answer the questions below:**

1. What is the extent of verbal communication as evaluated by the students in terms of:

- 1.1. Language
- 1.2. Delivery
- 1.3. Content

2. What is the extent of nonverbal communication as evaluated by the students in terms of: 2.1.

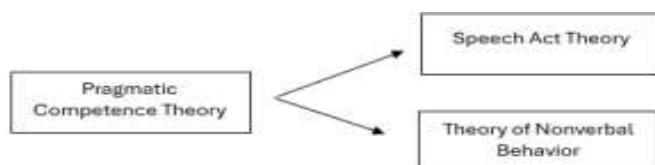
- Kinesics
- 2.2. Proxemics
- 2.3. Paralanguage
- 2.4. Haptics

3. Is there a significant relationship between respondents' pragmatic competence and academic performance?

## THEORETICAL FRAMEWORK

**FIGURE 1:  
THEORETICAL  
FRAMEWORK**

This study is grounded in a theoretical framework that provides a lens for understanding the complex interplay between verbal and nonverbal communication in shaping pragmatic competence. This framework serves as a guide for interpreting the findings and drawing meaningful conclusions from the data. Pragmatic



Competence refers to the ability to use language effectively and appropriately in social contexts. It encompasses understanding the social function of language, interpreting meaning beyond literal words, and adapting communication to different situations.

In addition, the two sub-theories also support the study: Speech Act Theory and Darwin's Theory of Nonverbal Behavior. Speech Act Theory (Austin, Searle) emphasizes the social actions performed through language, such as requesting, apologizing, or promising. Pragmatic competence involves understanding and producing these speech acts appropriately. Darwin's Theory of Nonverbal Behavior refers to the idea that non-

verbal communication, like facial expressions, gestures, and posture, evolved through natural selection. Darwin believed that some non-verbal behaviors are innate, meaning they are present at birth and do not require learning.

## CONCEPTUAL FRAMEWORK

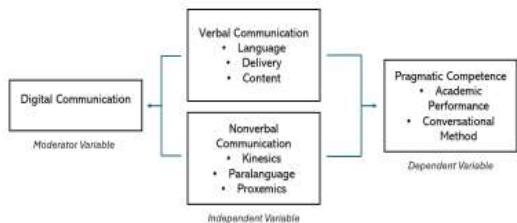


Figure 2. Conceptual Framework

## METHODOLOGY

### Research Design

This study employed a quantitative research design that provides a structured approach to analyzing the relationship between verbal and nonverbal communication and pragmatic competence among senior high school students. By employing a combination of surveys and statistical analysis, researchers gained valuable insights into the role of communication in developing pragmatic competence. The study utilized descriptive correlational research design to analyze verbal and nonverbal communication as indicators of pragmatic competence among senior high school students. This approach allowed researchers to observe and measure these communication aspects without manipulating them, providing insights into the relationships between these variables and pragmatic competence.

### Respondents of the study

The study recruited a sample of 60 high school students from San Bartolome High School, coming from Grade 12 Humanities and Social Sciences Strand with a diverse range of socioeconomic backgrounds. Participants were recruited through random sampling.

### Research Instrument

A researcher-made instrument was developed to assess verbal and nonverbal communication skills in Grade 11 and 12 respondents. This instrument has three parts and was designed to measure verbal and nonverbal communication indicators and the influence of digital communication platforms on pragmatic competence among senior high school students. This instrument developed was based on relevant theories (Speech Act Theory and Darwin's Theory of Nonverbal Behavior). The researcher-made questionnaire will also be reviewed and modified to ensure its relevance to the current study objective and the targeted population. This version was piloted with 30 students who have the same characteristics as the main respondents. The feedback from the pilot respondents will be used to refine the questionnaire for the intended participants. The final version of the questionnaire will also be reviewed by three experts in the ESL teaching field to ensure that it is comprehensive and clear.

### Collection and Analysis

Data was collected by administering a researcher-made survey to the recruited respondents. The collected data was analyzed using descriptive statistics (e.g., means, standard deviations) to summarize the data and identify patterns in students' verbal and nonverbal communication skills, and statistical software (SPSS) to determine the strength and direction of the correlation between verbal and nonverbal communication skills and pragmatic competence.

### Ethical Considerations:

Participants and their parents/guardians were provided with detailed information about the study, including its purpose, procedures, risks, and benefits. Informed consent was obtained from all participants before data collection. All participant data was kept confidential and anonymized to protect their privacy. Data was stored securely, and access was restricted to authorized personnel. Participants were informed of their right to withdraw from the study at any time without penalty. Participants were debriefed after the study to address any questions or concerns they may have.

## V. RESULTS

## VERBAL COMMUNICATION

**Table 1: Extent of Verbal Communication by the Student in Terms of Language**

<u>Language</u>	<u>Mean</u>	<u>SD</u>	<u>Interpretation</u>
Language 1	3.27	0.66	Extent
Language 2	3.44	0.57	High Extent
Language 3	3.35	0.74	Extent
Language 4	3.10	0.72	Extent
<b>Language 5</b>	<b>3.56</b>	<b>0.64</b>	<b>High Extent</b>
<b>Overall 3.34 Extent</b>			

Table 1 presents Students' verbal communication in different languages and shows varying levels of extent, with an overall mean of 3.34, interpreted as "Extent."

## Observations:

Language 2 and Language 5 scored the highest with means of 3.44 and 3.56, respectively, interpreted as "High Extent."

The other languages (Language 1,

Language 3, Language 4) were rated as

**Extent.****Table 2: Extent of Verbal Communication by the Student in Terms of Delivery**Delivery Mean SD Interpretation

Delivery 1 0.64 Extent

3.31
3.56
3.15
3.54
3.54
<b>3.42</b>

Delivery 2 0.64 High Extent

Delivery 3 0.67 Extent

Delivery 4 0.61 High Extent

Delivery 5 0.67 High Extent

**Overall Extent**

Table 2 presents the delivery aspect of students' verbal communication was rated with an overall mean of 3.42,

indicating a general "Extent" in delivery effectiveness.

## Observations:

Delivery 2, Delivery 4, and Delivery 5 scored higher with means of 3.56 and 3.54, respectively, categorized as "High Extent."

Delivery 1 and Delivery 3 scored slightly lower, remaining in the "Extent" range.

**Table 3: Extent of Verbal Communication by the Student in Terms of Content Content Mean SD Interpretation**

Content	1	3.50	0.70	High Extent
Content	2	3.19	0.77	Extent
Content	3	3.33	0.65	Extent
Content	4	3.15	0.75	Extent
	6	3.42	0.64	High Extent
<b>Overall 3.32</b>				

The content of students' verbal communication was assessed with an overall mean of 3.32, indicating "Extent."

## Observations:

Content 1 and Content 6 scored the highest with means of

3.50 and 3.42, respectively, suggesting a "High Extent."

Content 2, Content 3, and Content 4 remained within the "Extent" interpretation.

**Table 4: Overall Interpretation of Language, Delivery, and Content****Variable Mean Interpretation**

Language 3.34 Extent

Delivery 3.42 High Extent

Content 3.32 Extent

**Overall 3.36 Extent**

The combined overall mean scores for language, delivery, and content indicate that: Language has a mean of 3.34, rated as "Extent."

Delivery has a mean of 3.42, interpreted as "High Extent."

Content has a mean of 3.32, rated as "Extent."

With an overall mean of 3.36, students' verbal communication, across language, delivery, and content, is interpreted as "Extent."

**Interpretation Key**

1.00– 1.49 Low Extent

1.50 – 2.49 Moderately Extent

2.50 – 3.49 Extent

3.50 – 4.00 High Extent

Proxemics 3.26 Extent

Paralanguage 3.36 Extent

Haptics 3.07 ExtentOverall 3.25 Extent**NON-VERBAL COMMUNICATION**

Table 1: Extent of nonverbal communication as evaluated by the students in terms of Kinesics

**Kinesics Mean SD Interpretation**

Kinesics 1 3.38 0.80 Extent

Kinesics 2 3.23 0.73 Extent

Kinesics 3 3.21 0.67 Extent

Kinesics 4 3.27 0.79 Extent

Kinesics 5 3.35 0.68 Extent**Overall 3.29 Extent**

The overall mean score for kinesics is 3.29, which falls within the "Extent" range. All individual kinesics items (Kinesics 1–5) are rated as "Extent," with mean scores ranging from 3.21 to 3.38.

Table 2: Extent of nonverbal communication as evaluated by the students in terms of Proxemics

**Proxemics Mean SD Interpretation**

Proxemics 1 0.72 Extent

The combined mean scores for each type

of nonverbal communication

are as follows:

• **Kinesics:**

Mean of 3.29, "Extent."

• **Proxemics:** Mean of 3.26, "Extent."• **Paralanguage:** Mean of 3.36, "Extent."• **Haptics:** Mean of 3.07, "Extent."

Table 5: Overall Interpretation of Kinesics, Proxemics, Paralanguage, and Haptics

**Variable Mean Interpretation**

Kinesics 3.29 Extent

Academic Performance	Pragmatics
Pragmatics	Pragmatics

Spearman rho Sig. (2 - tailed ) 0.00 N 50 50

Academic Performance	Coefficient .803** Sig. (2 -
----------------------	------------------------------

The analysis examines the correlation between students' pragmatic competence and their academic performance. The findings are as follows:

- **Correlation Coefficient (Spearman's rho):** The correlation coefficient between pragmatic competence and academic performance is

The overall mean for nonverbal communication across all variables is 3.25, interpreted as "Extent."

1.00– 1.49	Low Extent
1.50 – 2.49	Moderately Extent
2.50 – 3.49	Extent
3.50 – 4.00	High Extent

**Relationship between Pragmatic Competence and Academic Performance**

Competence	Correlation
Correlation	Competence
Competence	Coefficient 1 .803**

Correlation  
tailed ) 0.00 N 50

0.803, which suggests a **strong positive relationship**.

- **Significance (p-value):** The p-value is **0.00**, which is less than 0.0001, indicating that the relationship is **statistically significant**.

- **Effect Size (r<sup>2</sup>):** The r-squared value is **0.64**.

This means that **64% of the variance in**

academic performance can be explained by pragmatic competence.

With a strong positive correlation ( $r = 0.803$ ) and high significance ( $p < 0.0001$ ), there is a significant

Proxemics 2

Proxemics 3

Proxemics 4

3.27
3.19
3.56
3.17
3.12
3.26

Proxemics5 <sup>0.88</sup> Extent

0.66

Extent  
0.70

High Extent  
0.86

Extent

Proxemics has an overall mean of 3.26, interpreted as "Extent."

Proxemics 3 scored the highest with a mean of 3.56, categorized as "High Extent." The other items (Proxemics 1, 2, 4, and 5) fall within the "Extent" range.

relationship between pragmatic competence and academic performance among the students. This suggests that as students' pragmatic competence increases, their academic performance tends to improve as well.

Overall Extentent

## V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary of the Study

Based on the data gathered, there is a significant relationship between pragmatic competence and academic performance among the students. The objectives of this study aim to identify the relationship between verbal and nonverbal communication skills and pragmatic competence in high school students through the questions below:

1. What is the extent of verbal communication as evaluated by the students in terms of:

- 1.1. Language
- 1.2. Delivery
- 1.3. Content

2. What is the extent of nonverbal communication as evaluated by the students in terms of:

- 2.1. Kinesics
- 2.2. Proxemics
- 2.3. Paralanguage
- 2.4. Haptics

3. Is there a significant relationship between respondents' pragmatic competence and academic performance?

### Summary of Findings

For Research Question 1 the findings are as follows:

RQ1 The extent of students' verbal communication skills presented that students' verbal communication in *languages* shows varying levels of extent, with an overall mean of 3.34, interpreted as "Extent.". The *delivery* aspect of students' verbal communication was rated with an overall mean of 3.42, indicating a general "Extent" in delivery effectiveness. While the *content* of students' verbal communication was assessed with an overall mean of 3.32, indicating "Extent."

With an overall mean of 3.36, students' verbal communication, across language, delivery, and content, is interpreted as "Extent."

For Research Question 2 the findings are as follows:

RQ2 The extent of students' nonverbal communication skills presented that students' overall mean score for *kinesics* is 3.29, which falls within the "Extent" range. *Proxemics* has an overall mean of 3.26, interpreted as "Extent." *Paralanguage* has an overall mean score of 3.36, interpreted as "Extent." *Haptics* has an overall mean of 3.07, falling within the "Extent" category.

The overall mean for nonverbal communication across all variables is 3.25, interpreted as "Extent."

For Research Question 3 the findings are as follows:

There is a significant relationship between pragmatic competence and academic performance among the students. This suggests that as students' pragmatic competence increases, their academic performance tends to improve as well.

### Conclusion

Verbal communication has an overall mean score

of 3.36, encompassing language, delivery, and content, indicating an "Extent" level of proficiency among the students. This suggests that while students demonstrate a general understanding and ability in verbal communication, there is room for improvement in specific areas. Further analysis of individual scores and feedback can provide valuable insights into areas requiring targeted development. By addressing these areas, students can enhance their communication skills and achieve greater fluency and effectiveness in their interactions.

Nonverbal communication has an overall mean score of 3.25, encompassing all variables, indicating an "Extent" level of proficiency among the students. This suggests that while students demonstrate a general understanding and ability in nonverbal communication, there is room for improvement in specific areas. Further analysis of individual scores and feedback can provide valuable insights into areas requiring targeted development. By addressing these areas, students can enhance their nonverbal communication skills and achieve greater effectiveness in conveying their messages and building rapport with others.

The relationship between pragmatic competence and academic performance among the students has a strong positive correlation ( $r = 0.803$ ) and a highly significant p-value ( $p < 0.0001$ ) demonstrating a robust and statistically significant. This finding strongly suggests that students with higher levels of pragmatic competence tend to perform better academically. This highlights the crucial role of pragmatic skills in academic success, emphasizing the need for educators to foster and develop these skills in students to enhance their overall learning experience and academic outcomes.

### Recommendations

Based on the conclusions provided, here are some recommendations:

#### Verbal Communication:

- i. Individualized Coaching: Offer personalized coaching sessions to address specific areas where students need improvement, such as language proficiency,

delivery techniques, or content organization.

- ii. Interactive Workshops: Conduct interactive workshops focusing on verbal communication skills to provide students with practical experiences and opportunities to enhance their fluency and effectiveness.
- iii. Peer Feedback: Encourage peer feedback sessions where students can provide constructive criticism and support to each other, promoting a collaborative learning environment.
- iv. Utilize Technology: Incorporate technology tools for language practice, pronunciation exercises, and video recordings to help students self-assess and improve their verbal communication skills.

#### Nonverbal Communication:

- i. Body Language Workshops: Organize workshops on body language and nonverbal cues to help students understand the impact of their gestures, facial expressions, and posture on communication.
- ii. Role-Playing Activities: Integrate role-playing activities that focus on nonverbal communication, allowing students to practice and improve their ability to convey messages effectively without words.
- iii. Feedback Mechanisms: Establish feedback mechanisms where students receive constructive feedback on their nonverbal communication skills, enabling them to make targeted improvements.
- iv. Observation Skills: Encourage students to observe and analyze nonverbal communication in various contexts, fostering their awareness and comprehension of nonverbal cues in interactions.

#### Pragmatic Competence and Academic Performance:

- i. Incorporate Pragmatic Skills in Curriculum: Integrate pragmatic competence development into the curriculum to ensure students receive structured instruction and practice opportunities in this

essential skill set.

- ii. Collaborative Projects: Design collaborative projects that require students to apply pragmatic skills in academic tasks, fostering their ability to communicate effectively in diverse contexts.
- iii. Professional Development Workshops: Offer workshops or training sessions for educators to enhance their understanding of pragmatic competence and strategies to nurture this skill in students.
- iv. Continuous Assessment: Implement regular assessments to monitor students' progress in pragmatic competence and academic performance, providing timely feedback and support for improvement.

By implementing these recommendations, educators can effectively support students in improving their verbal and nonverbal communication skills, as well as enhancing their pragmatic competence for better academic performance and overall success.

#### REFERENCES

Association for Supervision and Curriculum Development. (n.d.). *Transforming your school with digital communication*. Retrieved September 16, 2024, from <https://ascd.org/el/articles/transforming-your-school-with-digital-communication/>

Austin, J. L. (2023). Speech acts. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Summer 2023 Edition). Retrieved September 16, 2024, from <https://plato.stanford.edu/entries/speech-acts/>

Bostrom, A. (2021). Nonverbal communication in online learning environments. *Journal of Educational Technology*, 48(2), 123-140.

Brown, A. (2021). *The impact of cultural differences on nonverbal communication in education*. *Journal of Educational Research*, 12(3), 125-140.

Everyday Speech. (n.d.). *Developing pragmatic skills: A guide for high school students*. Retrieved September 16, 2024, from <https://everydayspeech.com/self-implementation/developing-pragmatic-skills-a-guide-for-high-school-students/>

Everyday Speech. (n.d.). *Nonverbal communication skills for high schoolers: A visual guide*. Retrieved September 16, 2024, from <https://everydayspeech.com/sel-implementation/nonverbal-communication-skills-for-high-schoolers-a-visual-guide/>

Everyday Speech. (n.d.). *Pragmatic skills in high school: Understanding and nurturing effective communication*. Retrieved September 16, 2024, from <https://everydayspeech.com/sel-implementation/pragmatic-skills-in-high-school-understanding-and-nurturing-effective-communication/>

Everyday Speech. (n.d.). *The importance of pragmatic skills in high school: A checklist guide*. Retrieved September 16, 2024, from <https://everydayspeech.com/sel-implementation/the-importance-of-pragmatic-skills-in-high-school-a-checklist-guide/>

Goleman, D. (2018). *Social intelligence: The new science of human relationships*. Bantam Books. <https://plato.stanford.edu/entries/speech-acts/>

Jones, B. (2022). *Misinterpreting nonverbal cues: A barrier to effective learning*. International Journal of Educational Technology, 15(2), 105-118.

Maricopa Community Colleges. (n.d.). *6.3 Nonverbal Communication Competence*. Retrieved September 16, 2024, from <https://open.maricopa.edu/smallgroupcommunicationcollaborative/chapter/6-3- nonverbal-communication-competence/>

National Center for Biotechnology Information. (2023). *Digital communication and its impact on social skills and pragmatic language development in adolescents*. PMC, 9474732. Retrieved September 16, 2024, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9474732/>

Smith, C. (2023). *The need for nonverbal communication training in education*. Educational Leadership, 70(5), 45-50.

Williams, C. (2020). *Nonverbal communication and neurodiversity: A guide for educators*. International Journal of Inclusive Education, 24(3), 253-270.