

Phonological Errors in Sex and Gender-Based Analysis of Speaking Style of Junior High School Students'

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ABSTRACT

This study investigates the phonological errors in the speaking performance of junior high school students, analyzed through the lens of sex and gender differences. As phonological competence is crucial for effective oral communication, the research focuses on identifying and categorizing pronunciation errors—such as segmental (individual sound) errors and suprasegmental (stress, intonation, and rhythm) inaccuracies—and determining how these vary between male and female learners. Data were collected through audio-recorded speaking tasks involving students from diverse linguistic and social backgrounds. The analysis revealed that male students tended to produce more substitution and stress-related errors, while female students exhibited fewer errors overall but demonstrated greater sensitivity to suprasegmental features. These patterns suggest that both biological sex and socially constructed gender roles may influence pronunciation development and speaking style. The findings highlight the importance of adopting a gender-responsive approach in teaching pronunciation, emphasizing the need for differentiated instructional strategies to support more equitable language learning outcomes.

Keywords: Phonological Errors, Pronunciation, Speaking Style, Gender-Based Analysis, Discourse

1. INTRODUCTION

Effective oral communication is essential in second language acquisition, particularly for junior high school students who are at a pivotal stage of linguistic and cognitive development. Phonological competence, which involves the accurate production and comprehension of sounds, is a fundamental component of spoken language. According to Diehl, et al (1996), phonological errors comprising flaws in the pronunciation of segmental components (such as vowels and consonants) and suprasegmental factors (such as stress, intonation, and rhythm), may inhibit intelligibility and negatively affect students' self-confidence and performance in both academic and social settings. Although many studies have explored phonological challenges faced by EFL (English as a Foreign Language) learners, there is a lack of research examining the differential manifestation of these errors based on sex and gender-specific speaking patterns, notably among junior high school students in Indonesia.

This study aims to investigate the types and patterns of phonological errors produced by male and female junior high school students in their spoken English, as well as the influence of their sex and perceived gender-specific speaking styles. The primary aim is to examine whether systematic variations exist in the frequency and categories of phonological errors influenced by these factors. As well as Whiteside (1995), Whiteside (1996), Simpson (2000), Simpson (2001) and Simpson (2003) researches in comprehending these variances

enhances theoretical frameworks in applied linguistics and sociophonetics while also informing educational practices that better address students' unique requirements.

Prior studies have recognized the impact of biological sex and gender identification on linguistic usage, encompassing vocabulary selection, syntactic inclinations, and intonation patterns. Research conducted by Holmes (2013) and Tannen (1990) indicates that gendered communication styles are evident even in second language usage. Nonetheless, a limited number have tried to integrate this viewpoint into the domain of phonological analysis concerning teenage learners. Moreover, the majority of phonological research is either broad or concentrated on advanced learners, resulting in insufficient evidence for younger student populations.

This study implements a qualitative methodology, supported by phonological analysis, using audio-recorded speaking performances of male and female students as primary data. Every tape is transcribed and examined to detect both segmental and suprasegmental inaccuracies. The students' speech patterns are analyzed via the framework of gendered discourse, determining if error types correlate with stereotypically masculine or feminine speaking styles, including assertiveness, politeness, or expressiveness.

This research introduces a unique perspective by combining phonological analysis with a focus on sex and gender, a combination seldom examined in junior high school environments. The innovation is in the effort to reveal not only the phonological faults committed but also the influence of learners' social identities on these errors. This provides a comprehensive picture of language development in young EFL learners and argues for differentiated instruction, prompting educators to consider both linguistic proficiency and sociolinguistic factors in their pedagogical approaches. The project aims to enhance pronunciation instruction in language classes and add to the conversation on the relationship between language and identity.

According to the preceding explanation, three research questions are well-aligned with the present study.

1. What categories of phonological mistakes (segmental and suprasegmental) are frequently observed in the speaking performance of junior high school students?
2. In what ways do the number and categories of phonological errors vary between male and female students?
3. To what extent do sex and gender affect students' pronunciation accuracy and speaking style in English as a second language?

2. METHODS

2.1 Research Design

This study employed a qualitative approach with elements of comparative analysis to examine the phonological errors in students' speaking performance based on sex and gender differences.

2.2 Participants

The participants consisted of 20 junior high school students (10 male and 10 female) aged between 13 and 15 years, selected purposively from SMP Al Islah with a diverse linguistic background. All participants were English as a Foreign Language (EFL) learners and had received a similar level of English instruction.

2.3 Data Collection

Data were collected through structured speaking tasks, which included a short monologue (self-introduction or descriptive topic) and a dialogue-based role-play. These sessions were audio-recorded in a controlled classroom environment to ensure consistent recording quality. Prior consent was obtained from participants and their guardians.

2.4 Data Analysis

The audio recordings were transcribed. Phonological errors were identified and categorized into two main types, there are Segmental errors (e.g., substitution, omission, addition of sounds) and Suprasegmental errors (e.g., incorrect stress patterns, intonation, rhythm). Each error was coded and quantified. Comparative analysis was conducted to determine differences in error types and frequencies between male and female students. Inter-rater reliability was ensured by involving two trained linguists to review and confirm the error classifications.

3. RESULTS AND DISCUSSIONS

This section presents and interprets the findings based on the three research questions, such as identifying the types of phonological errors made by junior high school students, analyzing how these errors differ between male and female students, and exploring how sex and gender influence pronunciation and speaking styles.

3.1 Types of Phonological Errors

In English as English Foreign Language (EFL) contexts, pronunciation frequently presents significant challenges for learners, related to the disparities between the phonological systems of their native language (L1) and English. Phonological errors—variations in speech sounds—can considerably impact learners' intelligibility, despite their grammar and vocabulary being generally correct. The data from the current investigation revealed two primary groups of phonological errors: segmental and suprasegmental. Segmental errors refer to individual phonemes (consonants and vowels), whereas suprasegmental errors concern overall speech characteristics such as stress, intonation, and rhythm. Both categories of errors were noticeable in learners' speech; however, segmental errors occurred with greater frequency.

Substitution was the most frequent type of segmental mistake identified. This occur when a student substitutes a target English phoneme with another, frequently one that exists in their first language phonemic inventory. For instance, numerous learners replaced the voiceless dental fricative /θ/ in "think" with the voiceless alveolar stop /t/, resulting in

"tink." Likewise, the voiced labiodental fricative /v/ in "very" was frequently articulated as /f/, resulting in "ferry." Such substitutes illustrate the phonological limitations of the learners' native language, particularly when their L1 lacks fricative or interdental sounds phonemes. Meyer et al. (2024) emphasized that such substitutions are prevalent among EFL learners and signify a normal, however problematic, transition from the L1 phonetic system to English.

Alongside substitution, omission errors were also widespread. This entails the elimination of sounds, particularly in word-final places. For example, pupils were observed pronouncing "wan" in lieu of "want" and "hep" instead of "help." Such omissions can be linked to the learners' native phonotactic regulations, which may prevent complicated ends consonant clusters. Conversely, addition errors involved the insertion of additional sounds, frequently to facilitate pronunciation. An illustrative instance was the pronunciation of school as eskul, when learners inserted a vowel sound preceding the consonant cluster /sk/. These modifications presumably arise from learners attempting to align English phonology with the rules of their original language, especially if their L1 prohibits consonant clusters at the onset of words. Errors of omission and addition demonstrate how learners unintentionally employ L1 methods when faced with unfamiliar English phonetic structures.

Suprasegmental errors, nevertheless less frequent than segmental errors, had a more significant effect on speech intelligibility and naturalness. Suprasegmental features—such as emphasis, intonation, and rhythm—are essential for transmitting meaning that beyond the exact words articulated. Meyer et al. (2024) observed that although learners may articulate individual sounds correctly, their speech can remain unintelligible if prosodic aspects are not utilized effectively. This corresponds with prior research by Derwing and Munro (2005), which highlighted that suprasegmental correctness frequently serves as a superior predictor of comprehensibility compared to segmental precision. The manner of expression can be as significant as the content itself, especially in verbal communications.

One of the most frequently noted suprasegmental difficulties was improper word emphasis. Students frequently misapplied stress in multisyllabic words, so compromising their intelligibility. For instance, certain students emphasized the second syllable in "company" (comPAny) instead of the first (COMpany). They similarly emphasized the second syllable in "present" (preSENT) even when it functioned as a noun, where the accurate pronunciation is PREsent. Improper emphasis placement may result in misconceptions or cause listeners to pause while trying to figure out the message being conveyed. The errors associated with stress indicate that numerous learners lack awareness of English stress patterns, which are frequently irregular and unmarked in written form, rendering them particularly challenging for non-native speakers to acquire without direct teaching.

Additional suprasegmental mistakes connected with intonation and rhythm. Several learners had repetitive intonation, maintaining an identical pitch throughout their speech. The absence of pitch variation impaired the ability to differentiate between various phrase kinds, such as statements and inquiries, or to distinguish the speaker's emotional state (e.g., excitement, uncertainty, irony). Moreover, an inconsistent rhythm was noted, characterized by incorrect timing between syllables and inconsistent pauses. Certain students articulated

their thoughts too rapidly, neglecting to pause appropriately, whilst others spoke at a sluggish pace, thereby impairing the flow and coherence of their discourse. Such difficulties can impede listeners' comprehension of the speaker's message and frequently lead to communication failures, even when individual words are articulated accurately.

In conclusion, the statistics clearly indicate that both segmental and suprasegmental errors present substantial obstacles to EFL learners' oral communication. Although segmental errors, including replacement, omission, and addition, occurred more frequently, suprasegmental errors—especially those related to stress, intonation, and rhythm—significantly impacted comprehensibility. These findings emphasize the necessity for comprehensive pronunciation education that encompasses both accurate sound articulation and the rhythm and intonation of English speaking. Meyer et al. (2024), Derwing and Munro (2005), and Alya, Nurul Ismah & Mairi, Salam (2025) assert that effective pronunciation training must involve both segmental and suprasegmental components; ignoring one in favor of the other may result in insufficient or ineffective communication abilities in practical situations.

3.2 Differences in Phonological Errors Based on Sex and Gender

The examination of phonological errors in EFL learners, analyzed through the perspectives of sex and gender, uncovered significant patterns in the pronouncing approaches and experiences of male and female students. Although all groups faced difficulties in developing precise English phonology, the characteristics and prevalence of these obstacles differed significantly. According to Al-khresheh, M. H. (2024), the disparities are not exclusively based on biological sex, instead, they are influenced by a comprehensive social comprehension of gender roles, expectations, and actions, which affect language acquisition processes and communicative styles. The data in present study indicated that male students typically committed more frequent errors at the segmental level, particularly regarding the substitution of unique consonant sounds and the deletion of ending consonants. In contrast, female students had superior accuracy and flexibility in both segmental and suprasegmental domains, indicating more accurate articulation and expressive diversity in their speech.

In line with the results of Clopper, C. G., & Smiljanic, R. (2011), male students exhibited a tendency to replace phonemes with more familiar ones, frequently derived from their first language. A recurrent instance was the substitution of /θ/ with /t/ (e.g., think articulated as tink) or /ʃ/ with /s/ (e.g., she rendered as see), which are prevalent developmental inaccuracies in EFL environments. Moreover, numerous male students frequently omitted final consonants, leading to truncated or indistinct speech (e.g., want as wan, cold as col), which adversely impacted intelligibility. These findings indicate that male learners, in this situation, may have demonstrated diminished attention to articulatory precision and phonotactic accuracy. More notable, however, was their restricted responsiveness to fault rectification. Several male students continued to mispronounce words despite repeated corrections, suggesting a diminished capacity for self-monitoring or potentially a lack of drive to refine their spoken English in formal educational settings.

Male students experienced significant challenges suprasegmentally. Their intonation frequently exhibited insufficient variation, leading to a monotone delivery that inhibited listeners' ability to figure out the emotional tone or communication meaning of their words. According to Huang (2023), erroneous word stress and irregular rhythm exacerbated listener disorientation. Suprasegmental errors may arise from both linguistic interference from the first language and gendered social conditions. In numerous cultural situations, male students are sometimes not encouraged to emphasize expressive or sophisticated communication (speaking) to the same degree as female, potentially cultivating a communication style that favors speed or efficiency over clarity and expressiveness. The linguistic patterns of male learners may mirror broader gender norms that shape language socialization and the perceived importance of verbal accuracy.

On the other hand, female students exhibited superior phonological control and displayed greater self-awareness during speech activities. Their segmental accuracy was superior, with fewer substitutions or omissions. Errors frequently shown an ability for mid-sentence self-correction, signifying an elevated degree of phonological awareness and metacognitive regulation. In spontaneous discourse, female students exhibited a propensity to strategize and modify their pronunciation for clarity, indicating both cognitive involvement and a motivation to deliver clear, precise speech. These inclinations correspond with prior studies indicating that female learners are more inclined to employ affective and verbal techniques, actively pursue feedback, and exhibit receptiveness to correction in their communicative development.

In addition to segmental accuracy, female students surpassed male students in the utilization of suprasegmental traits. Their discourse typically exhibited more suitable intonation patterns, notably the employment of rising intonation in inquiries and contrastive stress to emphasize significant terms. In terms of Nuraini et al (2024) stated that the female students' speaking pattern was more fluid, and pauses were more appropriately positioned, enhancing clarity and overall listener satisfaction. It is very related with the present study shows that significant number of female students demonstrated more comprehensive preparation for speaking activities, reflecting an intense internal motivation and greater understanding of speech perception. These habits align with societal expectations that frequently link articulate and expressive speaking to femininity, generating social pressure that may create female learners to pursue linguistic accuracy and verbal clarity.

These findings are not isolated; they are greatly influenced by the cultural and social settings that define gender identity and behavior. Gender is not only a biological categorization but a fluid and socially formed aspect of identity that affects how individuals engage in language learning contexts. Female students may have cultural pressures to "speak correctly" or exhibit "greater expressiveness," but male students may face alternative criteria that may not prioritize communication proficiency to the same extent. Diverse social messages can influence students' interest, readiness to engage in corrective feedback processes, and drive to attain phonological accuracy. The observed disparities in pronunciation are not merely language occurrences but sociocultural results influenced by gendered experiences and expectations.

In conclusion, the comparative examination of phonological errors concerning sex and gender reveals significant differences in learners' approaches to English pronunciation. Male learners demonstrated a higher frequency and persistence of segmental and suprasegmental errors, whereas female learners shown superior control, enhanced self-correction abilities, and heightened sensitivity to prosodic characteristics. These disparities probably result from a multidimensional interaction of cognitive, motivational, and social elements that affect language acquisition behavior. Identifying and comprehending these patterns can assist educators in implementing more inclusive and adaptive teaching practices that consider the varied requirements and identities of all students. Instead of viewing gender as a static category, educators should cultivate a classroom atmosphere that appreciates expressive variation, promotes self-regulation, and assists each student in attaining confident and articulate spoken English.

3.3 Influence of Sex and Gender on Pronunciation and Speaking Style

The differences noted in the phonological performance of male and female students are not just due to biological sex; they are also significantly influenced by societal gender stereotypes. Biological differences could clarify specific developmental or neurocognitive tendencies; nonetheless, they do not entirely account for the speech behavior patterns identified in this study. Conversely, learners' speech patterns and pronunciation abilities are significantly shaped by their social condition in language use, a process that frequently mirrors wider societal conventions concerning masculinity and gender. For example, masculine students may have adopted a communication style that emphasizes aggressiveness, quickness, or conciseness rather than linguistic accuracy. This corresponds with sociolinguistic findings indicating that boys are frequently taught to prioritize outcomes and exhibit less expressiveness in verbal communication, potentially leading to decreased awareness of suprasegmental elements such as intonation or stress patterns in speech.

Conversely, female students frequently engaged in speech tasks with heightened attention to detail and emotional involvement, resulting in more precise segmental production and more authentic suprasegmental expression. This distinction aligns with Deborah Tannen's (1990) genderlect theory, which claims that women typically employ language in a more rapport-oriented manner, seeking to create connection and empathy in discourse. Tannen asserts that female speakers tend to view language as a mechanism for social connection, while male speakers frequently regard it as a method for transmitting information or establishing dominance. This theoretical framework clarifies why female participants in the study exhibited greater awareness to the communicative details of pronunciation—such as tone, rhythm, and stress—and why they were more responsive to feedback and engaged in self-correction more often.

Chaffee, J., et al. (2024) stated that the biased tendencies in language usage affect learners' engagement with pronunciation teaching and underscore the insufficiency of exclusively "gender-neutral" methodologies in the classroom. Although all students should have equitable access to superior instruction, acknowledging the variation in learning styles and motives associated with gender identity might result in more effective and equitable teaching practices. It can be seen from the data that male students may gain from

kinesthetic, competitive, or performance-oriented pronunciation tasks—such as role-playing, debates, or pronunciation games—that leverage their propensity for active engagement and aggressive communication. Structured peer modeling and specific articulation exercises can assist male learners by providing clear, objective-oriented direction.

In contrast, female students may have a more favorable response to methodologies that prioritize introspection, collaboration, and constructive feedback. Activities that use guided repetition, small group discussions, or peer correction can offer female learners opportunity to practice intonation and rhythm in context, while simultaneously creating a secure environment to examine linguistic variety and enhance accuracy. Their elevated self-awareness and emotional receptiveness to feedback indicate that they may also gain from comprehensive instructor evaluations about speech patterns and pronunciation efficacy. In both instances, individual variance must be acknowledged; yet, the overarching gendered trends underscore the importance of customized instruction in speech pedagogy.

This viewpoint corresponds with the tenets of gender-responsive pedagogy, which advocates for teaching methods that recognize and address the varied socio-emotional and cognitive requirements of students according to gender and other identity factors. According to UNESCO (2015), gender-responsive pedagogy advocates for classroom methods that are inclusive, participative, and egalitarian, enabling all students to succeed irrespective of their social background. Teachers must be acutely cognizant of the influence of gender norms on classroom behavior and learning preferences, and adapt their methodologies to prevent the reinforcement of stereotypes while effectively meeting genuine learner requirements.

Numerous empirical studies substantiate this method. Viriya, C., & Sapsirin, S. (2014) emphasize that gendered expectations in classroom discourse might influence learners' propensity to engage in speaking and their impression of achievement in oral activities. Fitri, Y., & Hamzah, H. (2022) demonstrated that language learners' identities are dynamic and socially created, with gender significantly influencing their self-positioning and external perceptions in multilingual contexts. These insights highlight that pronunciation, as a fundamental aspect of spoken language proficiency, is not merely a technical talent but also a profoundly social act that expresses the learner's identity, confidence, and social standing within the educational community.

Given these findings, pronunciation education must increase an identical approach. Educators have to encourage a school atmosphere that acknowledges varied communication styles and promotes all students—irrespective of gender identity—to enhance both fluency and clarity in their spoken English. It may provide diverse multidisciplinary resources for pronunciation proficiency, employing diversified resources and activities that serve to distinct learners, and delivering personalized feedback that honors each student's communicative objectives and educational progression. By using gender-responsive pedagogy, instructors increase phonological development and build a more equitable and empowering language learning experience for all students.

Table 1. Data Findings

Classifications	Male Students	Female Students
Segmental Errors	High (particularly in substitution and omission)	Moderate
Suprasegmental Errors	Frequent and Repetitive (Stress, monotone intonation)	Less Frequent (more rhythmic, varied intonation)
Self-Monitoring	Low	High
Speaking Style	Flat and Assertive	Fluent and Expressive

4. CONCLUSION

In conclusion, the phonological errors in junior high school EFL learners demonstrated that both segmental and suprasegmental errors are prevalent and substantially impact learners' spoken intelligibility. Segmental errors, including replacement, omission, and addition, were more prevalent, mostly affected by the learners' L1 phonology. Suprasegmental problems, such as improper stress placement, monotonous intonation, and irregular rhythm, significantly affect speech naturalness and listener comprehension, highlighting the necessity for comprehensive pronunciation education that covers both dimensions.

Moreover, distinct disparities were observed between male and female students regarding their pronunciation behaviors. Male students exhibited a higher frequency of segmental and suprasegmental errors, shown reduced self-correction, and appeared to be less responsive to prosodic elements. In contrast, female students exhibited superior self-regulation, more fluid speech patterns, and greater receptiveness to feedback. These distinctions correspond with sociolinguistic research indicating that gendered communication styles, influenced by social norms and classroom dynamics, affect learners' engagement in language acquisition and oral performance.

These findings emphasize the necessity of implementing a gender-responsive approach in pronunciation pedagogy. Educators must acknowledge that students exhibit varied identities, motives, and learning styles in the classroom. By implementing diverse and inclusive pedagogical approaches that acknowledge these variances, educators can more effectively assist all students in developing articulate, self-assured, and proficient spoken English. Addressing both technical and social dimensions of pronunciation will eventually lead to more equal and successful language learning results.

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