

## A Comparative Study of Private Sector Tenth Grade Learners' Ability in the Placement of Word Stress in Pronunciation

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### Abstract

*This study investigated the effectiveness of different teaching methods in improving the ability of private sector tenth-grade learners to place word stress correctly in English pronunciation. The study was conducted at Dumfries High School of Excellence, Mandi Ahmad Abad, District Okara, Punjab. A quasi-experimental design was used with 120 students divided into four groups: Control, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM). Pre-tests and post-tests consisting of written and oral sections were administered. The results showed no significant differences in the pre-test, but the post-test revealed significant improvement, with the Audio-Lingual Method group achieving the highest scores. The findings indicate that listening, repetition, and oral practice significantly improve learners' word stress placement.*

**Keywords:** *word stress, pronunciation, Audio-Lingual Method, Communicative Language Teaching, Grammar-Translation Method.*

### Introduction

In the field of second language acquisition and applied linguistics, pronunciation has increasingly been recognized as a fundamental component of communicative competence. Effective communication in English depends not only on grammatical accuracy and vocabulary knowledge but also on the ability of speakers to produce intelligible speech. In recent years, research has shifted from focusing solely on native-like pronunciation to emphasizing intelligibility and comprehensibility as the primary goals of pronunciation teaching (Kostromitina & Kang, 2021; Jiang et al., 2024). Pronunciation therefore plays a

crucial role in enabling learners to communicate successfully in academic, professional, and social contexts.

Pronunciation in English involves both segmental and suprasegmental features. Segmental features refer to individual consonant and vowel sounds, whereas suprasegmental features include stress, rhythm, and intonation patterns that organize speech at a higher level. Recent research has emphasized that suprasegmental features play a particularly important role in intelligibility because they affect how listeners interpret spoken language and identify lexical items within continuous speech (Duris et al., 2024; Jiang et al., 2024; Hussain et al., 2024; Perveen & Hussain, 2023; Hussain, & Abbas, 2023). Among these suprasegmental features, word stress has been identified as one of the most important elements of English pronunciation.

Word stress refers to the relative prominence assigned to one syllable within a word through variations in pitch, loudness, duration, and vowel quality. Accurate word stress allows listeners to recognize words more easily and contributes to the natural rhythm of English speech. Research has demonstrated that incorrect placement of stress can lead to misunderstanding, even when individual sounds are pronounced correctly (Duris et al., 2024). In English, stress patterns are often variable and sometimes unpredictable, which makes the acquisition of correct stress placement particularly challenging for learners of English as a second or foreign language.

For learners of English as a Foreign Language (EFL), mastering word stress has been widely reported as one of the most difficult aspects of pronunciation. English is considered a stress-timed language, meaning that stressed syllables occur at relatively regular intervals, whereas many other languages follow different rhythmic patterns. When learners whose native languages follow syllable-timed patterns attempt to speak English, they often transfer the rhythmic structure of their first language into English pronunciation, resulting in incorrect stress placement and reduced intelligibility (Vásconez & Vásconez, 2024; Hussain & Khoso, 2021; Hussain & Khoso, 2022; Hussain, & Bhatti, 2024).

Another challenge faced by learners is that stress in English is not always predictable through simple rules. Instead, it may depend on morphological structure, word class, and phonological patterns. As a result, learners often struggle to determine which syllable should receive prominence in multisyllabic words. Studies have shown that even advanced learners frequently produce incorrect stress patterns when speaking English, which can negatively affect communication and comprehension (Li et al., 2025).

Despite the importance of stress in English pronunciation, pronunciation instruction has historically received limited attention in many language classrooms. Language teaching has traditionally emphasized grammar, reading, and writing, while pronunciation particularly suprasegmental features has often been neglected. Recent reviews of pronunciation pedagogy have indicated that although pronunciation research has expanded in recent decades, classroom instruction in pronunciation remains inconsistent and sometimes insufficient (Levis, 2021).

This lack of emphasis on pronunciation instruction has significant consequences for learners. When students do not receive explicit training in pronunciation, they may develop persistent errors that are difficult to correct later. In particular, insufficient instruction in suprasegmental features such as stress and intonation may hinder learners' ability to communicate effectively. Scholars have therefore emphasized that pronunciation instruction should address both segmental and suprasegmental features to improve learners' overall oral proficiency (Wang, 2022).

Recent research has also explored innovative approaches to pronunciation teaching that focus specifically on stress and other prosodic features. For instance, studies on computer-assisted pronunciation training (CAPT) have demonstrated that technology-supported instruction can significantly improve learners'

perception and production of suprasegmental features such as word stress and intonation (Almasifar & Heidari, 2023). Similarly, studies using corpus-based pronunciation learning and digital tools have reported improvements in learners' pronunciation accuracy and fluency when both segmental and suprasegmental features are taught systematically (Zhang & Chen, 2024).

Other recent studies have emphasized the effectiveness of shadowing, repetition, and listening-based techniques in developing pronunciation skills. For example, Phan et al. (2024) found that video-based shadowing significantly improved learners' pronunciation of suprasegmental features, including stress and intonation. Similarly, research using podcasts and audio materials has demonstrated that exposure to authentic spoken English can enhance learners' ability to recognize and produce correct stress patterns (Benrabah, 2023).

These findings suggest that teaching approaches that emphasize listening practice, repetition, and oral interaction may be particularly effective in helping learners acquire accurate stress patterns. Instructional methods such as the Audio-Lingual Method, which focuses on repetition, pattern drills, and auditory exposure, may therefore be especially useful in teaching pronunciation. At the same time, communicative approaches such as Communicative Language Teaching (CLT) provide opportunities for learners to use pronunciation in meaningful communication, which can also contribute to pronunciation development.

In many developing countries, however, pronunciation instruction remains limited due to various institutional and pedagogical constraints. Public sector schools often face challenges such as large class sizes, limited teaching resources, and insufficient teacher training in phonetics and phonology. As a result, pronunciation teaching may receive little systematic attention in the classroom. These limitations can prevent learners from developing adequate pronunciation skills, including correct word stress placement.

In the Pakistani educational context, English functions as an important language of education, administration, and professional communication. Nevertheless, many students studying in public sector schools experience difficulties in speaking English fluently and accurately. Pronunciation problems, particularly those related to stress patterns, are frequently observed among secondary school learners. These difficulties may arise from the influence of learners' first language, limited exposure to spoken English, and insufficient pronunciation practice in the classroom.

At the secondary school level, particularly in Grade 10, students are expected to have developed a basic level of English proficiency after several years of formal instruction. However, research and classroom observations suggest that many learners continue to struggle with aspects of pronunciation, including word stress placement. Since accurate stress placement contributes directly to intelligibility and effective communication, it is important to investigate learners' ability to produce correct stress patterns.

The present study therefore aimed to examine the ability of public sector tenth-grade learners to place word stress correctly in English pronunciation and to compare the effectiveness of different teaching methods in improving this skill. By investigating the impact of different instructional approaches specifically the Grammar-Translation Method, Communicative Language Teaching, and the Audio-Lingual Method the study sought to identify which method most effectively enhanced learners' pronunciation of word stress. The findings of the study were expected to contribute to improving pronunciation teaching practices and to provide useful insights for teachers, curriculum developers, and researchers interested in second language pronunciation.

### Statement of the Problem

Correct placement of word stress is an essential component of English pronunciation because it contributes to speech clarity, intelligibility, and effective communication. However, many learners studying English

as a second or foreign language experience difficulty in identifying and producing appropriate stress patterns, particularly in multisyllabic words. In public sector schools, where English is often taught primarily through traditional, grammar-focused approaches, learners usually receive limited exposure to systematic pronunciation practice and authentic spoken input. As a result, students may complete several years of English study without developing sufficient ability to place word stress accurately in pronunciation. This issue becomes more critical at the secondary school level, especially in Grade 10, where learners are expected to demonstrate a functional level of spoken English. Differences in teaching methods may influence learners' pronunciation development, yet there is limited empirical evidence regarding which instructional approaches are most effective for improving word stress placement among public sector students. Therefore, it became necessary to investigate the ability of public sector tenth-grade learners to place word stress correctly in pronunciation and to examine how different teaching methods affect their performance in this important aspect of spoken English.

### Objectives of the Study

1. To explore significant differences in the ability of private sector tenth-grade learners to place word stress in pronunciation taught through the traditional method compared to those taught through CLT, GTM, and ALM methods.
2. To identify significant differences in the ability of private sector tenth-grade learners to place word stress in pronunciation assessed through written and oral tests.

### Research Questions

1. What are the significant differences in the ability of private sector tenth-grade learners to place word stress in pronunciation when taught through the traditional method compared to those taught through CLT, GTM, and ALM methods?
2. What are the significant differences in the ability of private sector tenth-grade learners to place word stress in pronunciation when assessed through written tests and oral tests?

### Significance of the Study

1. This study contributes to improving learners' pronunciation competence by highlighting the importance of accurate word stress placement in English communication.
2. The findings help English language teachers understand which teaching methods are more effective in developing learners' pronunciation skills, particularly in placing word stress correctly.
3. The study provides practical guidance for teachers in public sector schools to incorporate pronunciation-focused activities in their classroom practices.
4. It offers useful insights for curriculum developers to integrate systematic pronunciation instruction, especially word stress, into English language textbooks and syllabi.
5. The research helps identify common difficulties faced by tenth-grade learners in stress placement, enabling educators to design targeted instructional strategies.
6. The study encourages greater attention to suprasegmental features such as stress, rhythm, and intonation, which are often neglected in traditional language teaching.

7. The results serve as a valuable reference for future researchers who wish to explore pronunciation teaching methods and stress placement in second language learning contexts.

### Research Design

The present study adopted an experimental research design to investigate the effectiveness of different teaching methods in improving the ability of private sector tenth-grade learners to place word stress correctly in English pronunciation. Experimental research is commonly used in educational studies to determine causal relationships between instructional interventions and learning outcomes (Creswell & Creswell, 2018). The study specifically aimed to explore significant differences in learners' ability to place word stress when taught through the traditional method, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM).

The population of the study consisted of tenth-grade students from Dumfries High School of Excellence, Mandi Ahmad Abad, Tehsil Depalpur, District Okara, Punjab, which is a private sector educational institution. To determine learners' initial level of proficiency in word stress placement, a pre-test was administered to the students. Based on the results of this test, only average-performing students were selected for the experiment to ensure homogeneity among the participants. Selecting participants with relatively similar ability levels before the treatment is considered an important step in experimental research to reduce variability and ensure the validity of the results (Fraenkel et al., 2019).

A total of 120 students who fell within the average performance range were selected as the sample for the study. In experimental research, a sample size of approximately 30 participants per group is often considered adequate for statistical analysis and for maintaining the reliability of experimental comparisons (Biau et al., 2008; Bujang et al., 2021). After selecting the participants, they were randomly assigned to four groups using the fishbowl random sampling technique, a simple randomization method that provides equal opportunity for each participant to be placed in any group and helps reduce selection bias (Etikan & Bala, 2017). Each group consisted of 30 students.

Among these four groups, one group was designated as the control group, which received instruction through the traditional teaching method without any specialized pronunciation-focused intervention. The remaining three groups were treated as experimental groups, each receiving instruction through a different teaching methodology: Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM). The purpose of this grouping was to compare the effectiveness of the traditional teaching approach with these three instructional methods in improving learners' ability to place word stress correctly in pronunciation.

The experimental treatment was conducted over a period of two months, during which each group was taught according to its assigned teaching method. At the end of the treatment period, a post-test was administered to evaluate learners' improvement in word stress placement. The post-test included both written and oral assessments to measure learners' ability to recognize and produce correct stress patterns in different contexts.

The collected data were analyzed using descriptive and inferential statistical techniques, including mean scores, standard deviation, and Analysis of Variance (ANOVA). Mean and standard deviation are commonly used descriptive statistics for summarizing the central tendency and variability of data, while ANOVA is an appropriate inferential statistical method for determining whether significant differences exist among the means of multiple groups (Field, 2018). The use of ANOVA in this study allowed the researcher to examine whether the differences in learners' performance among the four instructional groups were statistically significant.

The results of the statistical analysis were interpreted to determine the most effective teaching method for improving the placement of word stress among private sector tenth-grade learners and to identify significant differences in learners' performance on written and oral tests

**Table 1: Sample of the Study**

School	Class	G1	G2	G3	G4	Total Sample
Dumfries High School of Excellence Mandi Ahmad Abad	10 <sup>th</sup>	30	30	30	30	120

### Data Collection and Data Analysis

For the purpose of data collection, a self-developed achievement test was designed to measure the ability of private sector tenth-grade learners to place word stress accurately in English pronunciation. The participants were students from Dumfries High School of Excellence, Mandi Ahmad Abad, Tehsil Depalpur, District Okara, Punjab. Achievement tests are commonly used in experimental educational research to measure learners' performance and learning outcomes after instructional treatments (Fraenkel et al., 2019).

The test consisted of two main components: a written test and an oral test, in order to assess both the learners' recognition and production of correct stress patterns. The inclusion of both written and oral assessments ensured a more comprehensive evaluation of learners' pronunciation abilities and helped improve the reliability and validity of the collected data (Brown & Abeywickrama, 2019). The instrument contained three sections, each carrying 10 marks, making a total of 30 marks. The first section focused on correct stress placement in individual words, the second section assessed correct stress placement in complete sentences, and the third section evaluated correct stress placement in context through more complex sentences.

Before the actual data collection, the instrument underwent content validation by an expert panel, consisting of specialists in English language teaching and phonetics. Expert validation is an important step in test development because it ensures that the instrument adequately measures the intended learning outcomes (Creswell & Creswell, 2018). The panel also suggested specific paragraphs for the oral test to assess students' pronunciation performance more effectively and to provide authentic language contexts for evaluating stress placement.

After validation, the instrument was pilot-tested with a small group of students similar to the target population to examine its reliability. Pilot testing is commonly used in educational research to refine instruments and ensure consistency in measurement (Fraenkel et al., 2019). The reliability of the instrument was calculated using a reliability coefficient, which reached 0.92 during the second testing, indicating a high level of reliability and internal consistency. According to measurement standards, reliability values above 0.80 are generally considered strong for educational research instruments (Field, 2018).

Once the reliability and validity of the instrument were established, the test was administered to the selected participants. After data collection, each student's responses were scored separately for the written and oral sections. The marks from the three sections were then combined to produce a total score out of 30 marks for each participant. This scoring method allowed for a

clear and systematic comparison of learners' performance across the different instructional groups.

The collected data were analyzed using descriptive and inferential statistical techniques. Mean scores and standard deviation were calculated to summarize the central tendency and variability of learners' performance. To determine whether there were significant differences among the four groups taught through the traditional method, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM), Analysis of Variance (ANOVA) was applied. ANOVA is widely used in experimental research when comparing the mean scores of more than two groups (Field, 2018). All statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS), which is commonly employed in educational research for data management and statistical analysis.

### Results of the Study

**Table 2: Pre-test (ANOVA)**

		N	Mean	SD	F	Sig.
Stress in Pronunciation	Control Group	30	5.80	.761		
	Grammar-Translation Method	30	5.50	.731		
	Communicative Language Teaching	30	5.57	.679	1.169	.325
	Audio-Lingual Method	30	5.53	.571		
	Total	120	5.60	.691		
Sentence Stress Placement	Control Group	30	5.80	.714		
	Grammar-Translation Method	30	5.73	.785		
	Communicative Language Teaching	30	5.77	.728	.437	.727
	Audio-Lingual Method	30	5.60	.675		
	Total	120	5.73	.721		
Stress in Context	Control Group	30	5.60	.675		
	Grammar-Translation Method	30	5.70	.750	.680	.566
	Communicative Language Teaching	30	5.73	.785		

Audio-Lingual Method	30	5.50	.572
Total	120	5.63	.697

Table 2 presents the results of the pre-test ANOVA analysis conducted to determine whether any significant differences existed among the four groups Control Group, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM) before the experimental treatment. For stress in pronunciation, the mean scores were very close across the groups: Control Group (M = 5.80, SD = .761), GTM (M = 5.50, SD = .731), CLT (M = 5.57, SD = .679), and ALM (M = 5.53, SD = .571), and the ANOVA result showed no statistically significant difference among them (F = 1.169, p = .325). Similarly, for sentence stress placement, the Control Group obtained a mean score of 5.80 (SD = .714), the GTM group 5.73 (SD = .785), the CLT group 5.77 (SD = .728), and the ALM group 5.60 (SD = .675), with the ANOVA indicating no significant difference (F = .437, p = .727). In the case of stress in context, the mean scores were also comparable: Control Group (M = 5.60, SD = .675), GTM (M = 5.70, SD = .750), CLT (M = 5.73, SD = .785), and ALM (M = 5.50, SD = .572), and the ANOVA result again showed no statistically significant difference among the groups (F = .680, p = .566). Overall, the pre-test results indicate that all four groups had nearly the same level of ability in placing word stress before the instructional treatment, confirming that the groups were homogeneous at the beginning of the experiment.

**Table 3: Post-test (ANOVA)**

		N	Mean	SD	F	Sig.
Stress in Pronunciation	Control Group	30	5.97	.765	27.805	.000
	Grammar-Translation Method	30	6.57	.504		
	Communicative Language Teaching	30	7.30	.651		
	Audio-Lingual Method	30	7.80	1.243		
	Total	120	6.91	1.085		
Sentence Stress Placement	Control Group	30	5.90	.712	18.829	.000
	Grammar-Translation Method	30	6.40	.563		
	Communicative Language Teaching	30	6.87	.776		
	Audio-Lingual Method	30	7.60	1.380		
	Total	120	6.69	1.098		

	Control Group	30	5.60	.621		
	Grammar-Translation Method	30	6.47	.507		
Stress in Context	Communicative Language Teaching	30	7.07	.740	35.295	.000
	Audio-Lingual Method	30	7.70	1.236		
	Total	120	6.71	1.126		

Table 3 presents the post-test ANOVA results comparing the performance of the four groups Control Group, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM) after the instructional treatment. For stress in pronunciation, the Control Group obtained a mean score of 5.97 (SD = .765), the GTM group scored 6.57 (SD = .504), the CLT group achieved 7.30 (SD = .651), and the ALM group obtained the highest mean score of 7.80 (SD = 1.243). The ANOVA results showed a statistically significant difference among the groups ( $F = 27.805$ ,  $p = .000$ ). Similarly, for sentence stress placement, the mean scores increased across the groups with the Control Group scoring 5.90 (SD = .712), GTM 6.40 (SD = .563), CLT 6.87 (SD = .776), and ALM 7.60 (SD = 1.380), and the ANOVA results indicated a significant difference among the groups ( $F = 18.829$ ,  $p = .000$ ). In the case of stress in context, the Control Group obtained a mean score of 5.60 (SD = .621), the GTM group 6.47 (SD = .507), the CLT group 7.07 (SD = .740), and the ALM group again achieved the highest mean score of 7.70 (SD = 1.236), with the ANOVA results showing a statistically significant difference among the groups ( $F = 35.295$ ,  $p = .000$ ). Overall, the post-test results indicate that significant differences existed among the groups after the treatment, with the Audio-Lingual Method showing the greatest improvement in learners' ability to place word stress, followed by CLT and GTM, while the Control Group demonstrated the lowest improvement.

### Findings of the Study

1. The pre-test results indicated that there were no statistically significant differences among the Control Group, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM) groups in stress in pronunciation, sentence stress placement, and stress in context. This showed that all groups had a similar level of ability before the experimental treatment.
2. The post-test results revealed statistically significant differences among the four groups in all three areas of assessment: stress in pronunciation, sentence stress placement, and stress in context.
3. The Audio-Lingual Method (ALM) group achieved the highest mean scores in all three categories in the post-test, indicating that this method was the most effective in improving learners' ability to place word stress correctly.
4. The Communicative Language Teaching (CLT) group also demonstrated considerable improvement, performing better than the Grammar-Translation Method group and the Control Group.

5. The Grammar-Translation Method (GTM) group showed moderate improvement, but its effectiveness was lower than that of CLT and ALM.
6. The Control Group, which was taught through the traditional method, showed the least improvement, indicating that traditional instruction without focused pronunciation activities was less effective for developing learners' word stress placement skills.

### Discussion of the Results

The primary objective of the present study was to examine the effectiveness of different teaching methods Traditional Method, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM) in improving the ability of private sector tenth-grade learners to place word stress correctly in English pronunciation. The findings of the study revealed that although the groups did not differ significantly in the pre-test, significant differences emerged in the post-test after the instructional treatment. These findings indicate that the teaching methods applied during the experimental period had a substantial influence on learners' ability to place word stress in pronunciation.

The pre-test results showed no statistically significant differences among the four groups in stress in pronunciation, sentence stress placement, and stress in context. This result indicates that all groups had nearly the same level of ability in placing word stress before the experimental treatment. Such homogeneity among groups is essential in experimental research because it ensures that any differences observed in the post-test are attributable to the treatment rather than to initial differences in learners' abilities. Similar patterns have been observed in recent pronunciation intervention studies where comparable groups were established before the treatment phase. For example, Yenkimaleki and van Heuven (2021) reported homogeneous pre-test performance among EFL learners before pronunciation training, which allowed researchers to attribute improvements to instructional intervention rather than pre-existing differences.

The post-test results revealed statistically significant differences among the four groups, demonstrating that instructional methods had a clear impact on learners' ability to place word stress accurately. Among the four groups, the Audio-Lingual Method group achieved the highest mean scores in all three categories stress in pronunciation, sentence stress placement, and stress in context. These results suggest that the Audio-Lingual Method was the most effective approach for improving learners' pronunciation performance in the context of this study.

The effectiveness of the Audio-Lingual Method can be explained by its strong emphasis on listening practice, repetition, and pattern drills. These features are particularly relevant for pronunciation learning because learners must develop accurate auditory perception and motor production of stress patterns. Recent pronunciation research has emphasized that repeated exposure to correct pronunciation models and opportunities for imitation and rehearsal are essential for developing accurate prosodic features such as stress and rhythm. Duris et al. (2024) noted that word stress perception and production depend on multiple acoustic cues such as pitch, duration, and intensity, and learners benefit from repeated auditory input and guided practice to internalize these patterns.

The findings of the present study are consistent with recent research demonstrating the effectiveness of practice-based pronunciation instruction. Yenkimaleki and van Heuven (2021) found that pronunciation training that included explicit attention to prosodic features significantly improved learners' intelligibility and comprehensibility. Similarly, Phan et al. (2024) reported that shadowing techniques involving repeated listening and imitation improved learners' pronunciation of suprasegmental features such as stress and intonation. These findings support the present study's conclusion that methods emphasizing

oral repetition and auditory exposure, such as the Audio-Lingual Method, can effectively improve learners' word stress placement.

The Communicative Language Teaching group also showed considerable improvement in the post-test results, although its performance remained lower than that of the Audio-Lingual Method group. CLT emphasizes meaningful communication, interaction, and authentic language use, which can provide learners with opportunities to practice pronunciation in real communicative contexts. Research has shown that communicative practice can support pronunciation development when learners are exposed to meaningful input and interactive speaking tasks. Kostromitina and Kang (2021) reported that learners in communicative ESL environments showed measurable improvement in prosodic features, including prominence and fluency. Their findings suggest that communicative interaction may contribute to the development of pronunciation skills, although improvements may occur more gradually compared with methods that provide explicit pronunciation drills.

The Grammar-Translation Method group demonstrated moderate improvement in the post-test results but performed lower than both the CLT and ALM groups. This finding can be explained by the characteristics of GTM, which primarily focuses on grammar rules, reading, and translation activities rather than oral communication or pronunciation practice. Recent research has highlighted the limitations of grammar-focused teaching methods in developing learners' pronunciation abilities. Almusharraf (2024) observed that pronunciation instruction often receives limited attention in traditional language teaching contexts, where instructional time is mainly devoted to grammar and vocabulary. Consequently, learners may develop strong reading and writing skills but weak pronunciation abilities. The moderate improvement observed in the GTM group may therefore reflect incidental learning rather than systematic pronunciation training.

The control group, which was taught through the traditional method without special pronunciation-focused instruction, showed the lowest level of improvement in the post-test results. This finding is consistent with recent research indicating that pronunciation rarely improves significantly without explicit instructional attention. Jiang et al. (2024) found that both segmental and suprasegmental phonological awareness contribute to reading and speaking development, but learners require targeted instruction to develop these phonological skills effectively. Without such instruction, learners may continue to rely on first-language phonological patterns when speaking English.

Another important aspect of the present study is the improvement observed in stress in context, which involved more complex sentences rather than isolated words. This finding suggests that learners who received effective pronunciation training were able not only to identify stress in individual words but also to apply stress patterns in connected speech. Recent pronunciation studies have emphasized the importance of contextualized pronunciation practice for developing communicative competence. Sardegna and Jarosz (2022) demonstrated that learners who practiced word stress using authentic speech examples improved their ability to recognize and produce stress patterns in natural communication contexts.

The results of the present study are also relevant to the broader field of second language phonology. Recent research has highlighted the importance of suprasegmental features such as stress and intonation in determining speech intelligibility. While earlier language teaching approaches often focused primarily on individual sounds, contemporary pronunciation research emphasizes that suprasegmental features play a crucial role in communication. According to Levis (2021), modern pronunciation pedagogy increasingly prioritizes intelligibility-focused instruction that integrates both segmental and suprasegmental aspects of pronunciation.

In the Pakistani context, pronunciation challenges are often associated with differences between the stress systems of English and local languages such as Urdu and Punjabi. Riaz et al. (2023) reported that Pakistani ESL learners frequently misplace stress in English nouns and verbs due to first-language interference. Such findings highlight the importance of explicit pronunciation instruction in Pakistani classrooms, particularly in public and private sector schools where learners may have limited exposure to authentic English pronunciation outside the classroom.

### Conclusions of the Study

Based on the analysis of the data and the discussion of the findings, several conclusions were drawn regarding the effectiveness of different teaching methods in improving the ability of private sector tenth-grade learners to place word stress correctly in English pronunciation.

First, the pre-test results confirmed that there were no significant differences among the Control Group, Grammar-Translation Method (GTM), Communicative Language Teaching (CLT), and Audio-Lingual Method (ALM) groups before the experimental treatment. This indicates that the participants in all four groups possessed nearly the same level of ability in placing word stress at the beginning of the study. The homogeneity of the groups ensured that any differences observed in the post-test were the result of the instructional methods applied during the experiment.

Second, the post-test results revealed statistically significant differences among the four groups in stress in pronunciation, sentence stress placement, and stress in context. These results demonstrate that instructional methods play a crucial role in developing learners' pronunciation abilities, particularly in the placement of word stress.

Third, the Audio-Lingual Method proved to be the most effective teaching approach among the methods examined in the study. Learners who received instruction through the Audio-Lingual Method achieved the highest mean scores in all three categories of stress placement. This finding indicates that teaching techniques that emphasize listening practice, repetition, imitation, and oral drills are highly beneficial for improving learners' pronunciation skills.

Fourth, the Communicative Language Teaching approach also contributed positively to learners' pronunciation development. Although its results were lower than those of the Audio-Lingual Method, the CLT group showed substantial improvement compared with the Grammar-Translation Method group and the Control Group. This suggests that communicative activities and interactive speaking tasks can support the development of pronunciation skills when learners actively use language in meaningful contexts.

Fifth, the Grammar-Translation Method showed limited effectiveness in improving learners' word stress placement. Since this method mainly focuses on grammar rules, translation, and written language rather than oral communication, it did not provide sufficient opportunities for learners to practice pronunciation.

Finally, the Control Group, which was taught through traditional teaching methods without specific pronunciation-focused instruction, demonstrated the least improvement among all groups. This finding highlights the importance of incorporating systematic pronunciation instruction into English language teaching, particularly at the secondary school level.

### Recommendations

1. English teachers should adopt the Audio-Lingual Method for teaching pronunciation, as it proved most effective in improving learners' word stress placement.
2. Pronunciation practice, especially word stress and sentence stress activities, should be regularly integrated into English language lessons.
3. Schools should provide teacher training in phonetics and pronunciation teaching techniques to improve classroom instruction.
4. Curriculum developers should include specific exercises on stress patterns and oral practice in English textbooks.
5. Students should be given more listening and speaking opportunities, such as drills, dialogues, and oral activities, to strengthen their pronunciation skills.

### References

1. Almasifar, N., & Heidari, F. (2023). The effect of computer-assisted pronunciation training on EFL learners' use of suprasegmental features and speaking anxiety. *English Teaching & Learning*. <https://doi.org/10.1007/s42321-023-00159-4>
2. Almusharraf, A. (2024). Pronunciation instruction in the context of world English: exploring university EFL instructors' perceptions and practices. *Humanities and Social Sciences Communications*, 11(1), 1-11.
3. Biau, D. J., Kernéis, S., & Porcher, R. (2008). Statistics in brief: The importance of sample size in the planning and interpretation of medical research. *Clinical Orthopaedics and Related Research*, 466(9), 2282–2288. <https://doi.org/10.1007/s11999-008-0346-9>
4. Brown, H. D., & Abeywickrama, P. (2019). *Language assessment: Principles and classroom practices* (3rd ed.). Pearson Education.
5. Bujang, M. A., Adnan, T. H., Mohd Hatta, N. K., Ismail, M., & Lim, C. J. (2021). Sample size determination: A practical guide for health researchers. *Journal of General and Family Medicine*, 22(2), 90–95. <https://doi.org/10.1002/jgf2.600>
6. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
7. Duris, M., Levis, J. M., Neiriz, R., & Silpachai, A. (2024). Methodological influences on word stress identification: Implications for research and teaching. *Speech Prosody Proceedings*.
8. Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 00149. <https://doi.org/10.15406/bbij.2017.05.00149>
9. Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.
10. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw-Hill Education.

11. Hussain, S. (2024). An Experimental Study on the Impact of Digital Textbooks on the Academic Achievement of Elementary School Students. *International Research Journal of Education and Innovation*, 5(1), 16-27.
12. Hussain, S., & Abbas, Q. (2023). Examine the Secondary Level Administration Quality of Public and Foundation Funded Schools by the Punjab Education Foundation. *International Research Journal of Education and Innovation*, 4(4), 45-59.
13. Hussain, S., & Bhatti, F. A. (2024). Teaching Challenges and Educators' Perceptions on STEM Implementation in Schools in Punjab, Pakistan. *International Research Journal of Education and Innovation*, 5(4), 8-13.
14. Hussain, S., & Khoso, A. A. (2021). Examining the Relationship Between Having a Dedicated Study Space at Home and Secondary Students' Academic Achievement. *International Research Journal of Education and Innovation*, 2(3), 337-345.
15. Hussain, S., & Khoso, A. A. (2021). Examining the Relationship Between Access to Home Amenities and Students' Academic Achievement at the Secondary Level. *International Research Journal of Education and Innovation*, 2(3), 325-336.
16. Hussain, S., & Khoso, A. A. (2022). Examining the Relationship Between Homeownership Status and Secondary Students' Academic Achievement. *International Research Journal of Education and Innovation*, 3(1), 398-407.
17. Hussain, S., & Khoso, A. A. (2022). Investigating the Relationship Between Parents' Education and Students' Academic Achievement at the Secondary Level. *International Research Journal of Management and Social Sciences*, 3(1), 352-363.
18. Hussain, S., Khan, Z., & Khan, R. M. A. (2024). Building Students Creative Thinking Ability Through STEM Integrated Curriculum: An Experiment on Elementary School Students. *International Research Journal of Management and Social Sciences*, 5(1), 12-24.
19. Jiang, Y., Gai, X., Wang, Z., & Thomson, J. (2024). The influence of segmental and suprasegmental phonological awareness on English word reading. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1214197>
20. Kostromitina, M., & Kang, O. (2021). The effects of ESL immersion and proficiency on learners' pronunciation development. *Frontiers in Communication*, 6. <https://doi.org/10.3389/fcomm.2021.636122>
21. Levis, J. (2021). L2 pronunciation research and teaching: The importance of many languages. *Journal of Second Language Pronunciation*, 7(2), 141-153.
22. Li, D., Noordin, N., Ismail, L., & Cao, D. (2025). A systematic review of corpus-based instruction in EFL classroom. *Heliyon*, 11(2).
23. Perveen, F., & Hussain, S. (2023). Enhancing Teaching Effectiveness: The Significance of Subject Matter Proficiency in Alignment with Pakistan's National Professional Standards for Teachers. *International Research Journal of Management and Social Sciences*, 4(4), 624-633.

24. Phan, T. T. V., Ly, K. L., & Nguyen, D. K. (2024). Effects of video-based shadowing on suprasegmental features: EFL learners' pronunciation performance and attitudes. *rEFlections*, 31(3), 896-924.
25. Riaz, S., Arshad, M., & Khalil, B. (2023). Impact of stress patterns on the pronunciation of English nouns and verbs among Pakistani ESL learners. *Pakistan Social Sciences Review*.
26. Sardegna, V. G., & Jarosz, A. (2022). Exploring how YouGlish supports learning English word stress. In *Second Language Learning and Teaching*. Springer.
27. Vásconez, S., & Vásconez, D. (2024). From syllable-timed to stress-timed patterns: Challenges in teaching English pronunciation.
28. Wang, X. (2022). Segmental versus suprasegmental: Which one is more important to teach?. *RELC Journal*, 53(1), 194-202.
29. Yenkimaleki, M., & van Heuven, V. J. (2021). Effects of attention to segmental vs suprasegmental features on speech intelligibility. *System*, 100, 102557.