From Exposure to Expression: Evaluating the Impact of English Language Environment on Speaking Fluency in Rural ESL Classrooms of Jhargram District, West Bengal

Author 1

Mr. Pradip Kumar Mahata

Faculty of English at Garhbeta College

Paschim Medinipur,West Bengal

Research Scholar at C V Raman Global University, Bhubaneswar, Odisha.

Author 2
Prof. Dr.Pragyan Paramita Pattnaik

Professor and Head

Department of Humanities and Social Science

C V Raman Global University, Bhubaneswar, Odisha

1. Abstract:

This study investigates the role of English language exposure in enhancing speaking fluency among ESL learners in rural classrooms of Jhargram District, West Bengal. With English increasingly recognized as a global lingua franca, the ability to speak fluently remains a critical skill for students in non-native environments. However, in rural regions like Jhargram, limited access to authentic English-speaking contexts often hampers oral proficiency. The research adopts a mixed-methods approach, combining classroom observations, structured interviews with ESL teachers, and pre- and post-intervention speaking assessments of students. The study introduces targeted exposure strategies—ranging from digital content (e.g., English videos, podcasts) to peer interaction in English-speaking zones—to create a more immersive language environment. Findings reveal a significant correlation between increased English input and improved fluency, confidence, and spontaneity in student speech. The study highlights the importance of integrating

English exposure both inside and outside the classroom to bridge the rural-urban language proficiency gap and suggests practical interventions for ESL educators and policymakers.

Keywords:

English language exposure, speaking fluency, ESL learners, rural education, Jhargram district, immersive language environment, oral proficiency, language input, English as a second language, classroom intervention.

2. Introduction:

In today's interconnected world, the ability to communicate fluently in English is not merely an academic requirement but a vital skill that opens doors to higher education, global employment opportunities, and cross-cultural interactions. For learners of English as a Second Language (ESL), particularly those in rural settings, acquiring fluency in spoken English remains a persistent challenge. The Jhargram District of West Bengal, characterized by its socio-economic diversity and largely vernacular educational landscape, reflects a broader struggle common to rural India—where the lack of English exposure significantly impedes language acquisition, especially in terms of speaking fluency.

While grammar-translation and textbook-driven instruction dominate many rural ESL classrooms, these methods often fail to provide the real-time, contextual, and interactive language input necessary for developing oral proficiency. Research in second language acquisition has consistently shown that language exposure whether through digital media, peer conversation, or environmental immersion is crucial for internalizing linguistic structures and fostering spontaneous speech. However, such exposure is often minimal or inconsistent in the rural schools of Jhargram, leaving students to grapple with fluency in isolation.

This study stems from the growing need to explore practical and scalable ways of enriching the English language environment for rural ESL learners. It seeks to evaluate how increased exposure to English—both in and beyond the classroom can influence students' ability to articulate thoughts confidently, coherently, and fluently. By investigating a range of exposure techniques and analyzing their impact on speaking skills, the research aims to offer actionable insights for

educators, curriculum designers, and policymakers striving to bridge the urban-rural language gap. Through this lens, the study not only reaffirms the importance of input-rich environments in second language learning but also emphasizes the transformative potential of everyday exposure in shaping linguistic expression.

In rural districts like Jhargram, where English is seldom spoken outside the classroom and exposure to the language is largely confined to textbooks, learners often lack the auditory and conversational experiences that foster fluency. The socio-linguistic environment is predominantly native-language centric, limiting students' chances to hear, process, and produce English in meaningful contexts. As a result, despite years of formal instruction, many students struggle with real-time communication, fluency, and confidence. This disconnect between theoretical knowledge and practical usage calls for a paradigm shift in how English is taught and experienced in such settings.

Moreover, with the rapid integration of low-cost digital technologies and increasing smartphone penetration even in rural areas, there exists a largely untapped opportunity to bridge this exposure gap. English-language content—ranging from educational apps and YouTube tutorials to podcasts and social media—can serve as a valuable supplement to traditional classroom teaching. However, without a structured framework or teacher facilitation, these resources often remain underutilized or misaligned with curricular goals. This study, therefore, seeks to examine not just the availability of English exposure, but its **intentional integration** into ESL pedagogy to create immersive, interactive, and engaging learning environments that can significantly enhance speaking fluency among rural learners

3. Literature Review

3.1 Introduction to Speaking Fluency in ESL Contexts

Speaking fluency has long been recognized as one of the most challenging yet crucial components of second language acquisition (SLA), especially in ESL (English as a Second Language) contexts. As Goh and Burns argue, speaking is a complex cognitive process that involves not only linguistic competence but also real-time processing, interactional strategies, and sociocultural awareness (Goh and Burns 14). In rural ESL environments, such as those in Jhargram District, speaking

fluency is often underdeveloped due to limited exposure to authentic English usage and insufficient practice opportunities. This section synthesizes scholarly perspectives on the relationship between language exposure and speaking fluency and how environmental and technological factors shape these outcomes.

3.2. Theoretical Foundations of Language Exposure

The role of input in language learning has been extensively studied, with Krashen's Input Hypothesis serving as a foundational framework. Krashen posits that learners acquire language most effectively when they are exposed to "comprehensible input" slightly above their current proficiency level (Krashen 20). This theory underscores the importance of consistent, meaningful exposure to English through listening and reading activities. In the context of speaking fluency, such exposure helps learners internalize syntactic patterns, vocabulary, and pronunciation, which they later reproduce in speech.

Swain's Output Hypothesis further complements Krashen's view by emphasizing the importance of language production. Swain contends that exposure alone is insufficient; learners must also be given opportunities to use language output, particularly spoken output, in varied contexts (Swain 163). These twin theories—input and output—form the backbone of many contemporary ESL speaking pedagogies that advocate immersive and communicative environments.

3.3 Environmental Exposure and Fluency Development

Environmental exposure refers to the degree to which learners are surrounded by and interact with the target language in their day-to-day lives. In countries like India, where English is a second language and not commonly spoken in rural communities, such exposure is often minimal. Cummins' theory of linguistic interdependence suggests that language proficiency in a second language is closely tied to the quality and quantity of language experiences (Cummins 80). In urban areas, students might encounter English in billboards, public announcements, and media, whereas rural learners may have no such incidental exposure, creating a disparity in fluency outcomes.

Studies in rural Indian settings have revealed a direct correlation between the lack of English-rich environments and poor communicative competence. Roy and Das (2021) conducted a study across multiple districts in West Bengal and found that students in rural government schools often lacked confidence and fluency due to insufficient English interaction both in and out of school (Roy and Das 218). The researchers emphasized that classroom instruction alone could not compensate for the broader absence of English language exposure in students' environments.

3.4. Digital Exposure and Technology Integration

With the proliferation of mobile devices and affordable internet, digital platforms have emerged as potent tools for language exposure. According to Warschauer and Kern, the use of digital media—such as YouTube, podcasts, and mobile learning apps—has the potential to simulate immersive English environments, particularly for learners in remote or under-resourced areas (Warschauer and Kern 35). These platforms offer authentic input in native-like contexts, which aids in improving pronunciation, intonation, and conversational skills.

In a quasi-experimental study conducted in rural Tamil Nadu, Prasad (2020) found that students who engaged with English-language videos and audio content on a regular basis showed significant improvement in fluency and self-expression compared to those who relied solely on textbooks (Prasad 97). Similarly, Singh and Thakur (2022) observed that rural learners who used English-learning apps like Duolingo or Hello English were more comfortable initiating conversations in English, often displaying better lexical range and reduced hesitation (Singh and Thakur 153).

However, it is crucial to note that technology-driven exposure must be guided and contextualized by educators. Learners without proper scaffolding may struggle to extract meaning from digital content, especially when the input is not tailored to their proficiency level. As Mishra and Sharma caution, unguided digital immersion may lead to passive consumption rather than active language engagement (Mishra and Sharma 244).

3.5. Speaking Fluency: Components and Assessment

Fluency, as described by Nation and Newton, is not merely about speed but also about coherence, smoothness of delivery, and the ability to negotiate meaning (Nation and Newton 151). A fluent speaker can produce connected speech with minimal pauses, self-corrections, and hesitations. In ESL contexts, fluency is often impeded by anxiety, vocabulary limitations, and lack of practice opportunities.

One of the key findings in fluency research is the role of **automaticity**—the learner's ability to produce language chunks without conscious effort. This automaticity is largely developed through repeated exposure and practice, especially in interactional settings (Levelt 103). In rural classrooms, where teacher talk dominates and student output is minimal, the development of automaticity is often stunted.

To assess fluency, researchers often use tools such as the Fluency Rating Scale or analyze speech for metrics like words per minute, pause length, and number of false starts. A study by Gupta and Banerjee (2021) applying these metrics to students in tribal schools of West Bengal found that structured exposure—through group discussions, role plays, and multimedia content—led to statistically significant gains in all fluency parameters (Gupta and Banerjee 188).

3.6. Exposure in CLT and TBLT Frameworks

Communicative Language Teaching (CLT) and Task-Based Language Teaching (TBLT) both emphasize real-world language use and meaningful communication. According to Richards, CLT thrives on interaction, negotiation of meaning, and exposure to varied language functions (Richards 31). These methodologies inherently require environments rich in English input and interaction. In classrooms where such methods are employed, exposure becomes both a medium and a method of learning.

In a case study by Dey and Sen (2020) conducted in West Bengal, rural secondary school students who engaged in communicative tasks like group storytelling and debates within a CLT framework demonstrated marked improvements in fluency compared to those following a grammar-

translation approach (Dey and Sen 104). The researchers concluded that structured exposure, embedded in communicative contexts, is more effective than passive exposure or rote learning.

3.7. Sociocultural and Affective Factors in Fluency Development

Fluency development does not occur in a vacuum; it is deeply influenced by socio-cultural and psychological factors. Learners from rural areas often struggle with **language anxiety**, **fear of judgment**, and **lack of motivation**, which inhibit spontaneous speech. Kruk's research on affective factors highlights the importance of a supportive and exposure-rich environment to reduce anxiety and encourage risk-taking in speaking (Kruk 72).

In addition, peer influence and classroom culture play a significant role. Peer conversations in English, exposure to teacher modeling, and collaborative speaking tasks can normalize English usage and reduce the stigma often attached to speaking it imperfectly. As Chaudhury and Roy (2019) argue, establishing a positive **language ecology**—where English is seen as a tool for expression rather than a test of accuracy—can dramatically shift student attitudes and outcomes in fluency (Chaudhury and Roy 199).

3.8. Studies Specific to West Bengal and Jhargram Region

There is limited but growing research focused specifically on English exposure in the rural schools of West Bengal. A recent field survey conducted by Bhattacharya and Mukherjee (2023) across several blocks of Jhargram district revealed that most ESL classrooms lacked functional English exposure beyond the textbook. Teachers often defaulted to Bengali as the medium of instruction, and speaking activities were rare (Bhattacharya and Mukherjee 212). However, schools that experimented with exposure-enhancing techniques—such as English morning assemblies, language corners, or digital storytelling—reported higher student engagement and improved speaking fluency over time.

The researchers advocate for localized language policies that promote low-cost but high-impact exposure strategies tailored to rural learners. Their findings strongly support the hypothesis that environmental exposure to English, when systematically integrated into rural ESL education, can serve as a powerful accelerator of speaking fluency.

The review of existing literature underscores a consistent theme: speaking fluency in ESL learners is closely linked to the quality, quantity, and context of English language exposure. From theoretical models to practical interventions, researchers across disciplines agree that fluency cannot develop in isolation. For rural learners in districts like Jhargram, where organic exposure is limited, intentional, guided, and multifaceted exposure strategies—both digital and interpersonal—must be woven into the educational fabric. The current study builds upon these insights to evaluate how such exposure, when applied in real rural classrooms, can transform hesitant learners into confident speakers.

4. **The Problem Statements**

Despite years of English instruction, ESL learners in the rural classrooms of Jhargram struggle with speaking fluency due to limited exposure to the language beyond textbooks. The absence of an immersive English environment restricts opportunities for real-time communication and expression. Traditional teaching methods often fail to bridge this gap, resulting in hesitant and underconfident speakers. While digital tools and media offer new possibilities for exposure, their potential remains largely untapped in these settings. This study addresses the need to evaluate how structured English language exposure can enhance speaking fluency in rural ESL learners.

5. Research Gaps

1. Limited Regional Focus: While several studies have explored the role of English exposure in urban or semi-urban areas, there is a significant lack of research focusing on rural districts like Jhargram, where socio-linguistic conditions and resource availability differ greatly.

2. Underrepresentation of Speaking Skills: Most existing studies in West Bengal emphasize reading and writing skills, often neglecting the development of speaking fluency, which is a crucial component of communicative competence.

3. Lack of Empirical Evaluation: Although exposure to English is widely acknowledged as important, few empirical studies have systematically measured its direct impact on speaking fluency among rural secondary-level ESL learners.

4. Insufficient Integration of Technology: Digital tools and multimedia platforms are increasingly accessible in rural areas, yet research on their effective integration to create an English-rich environment in rural ESL classrooms remains sparse.

5. Gap between Theory and Classroom Practice: While theoretical models support immersive language exposure, there is limited research on how these theories translate into practical, low-cost strategies that can be sustainably implemented in resource-constrained rural schools.

6. Research Questions

1. What is the current level of English language exposure available to ESL learners in rural classrooms of Jhargram?

2. How does increased exposure to an English-rich environment affect the speaking fluency of rural ESL students?

3. What types of exposure (digital, peer interaction, teacher input, etc.) are most effective in improving speaking skills among rural learners?

4. How do learners and teachers perceive the role of English language exposure in developing speaking fluency?

5. What are the challenges and limitations in implementing exposure-based strategies in resource-constrained rural ESL classrooms?

7. Research Objectives

1. To assess the current level of English language exposure in rural ESL classrooms of Jhargram, focusing on both formal and informal sources of exposure.

2. To evaluate the impact of increased exposure to English on the speaking fluency of ESL learners in rural schools, examining improvements in fluency, confidence, and self-expression.

3. To identify the types of exposure (e.g., digital resources, peer interactions, teacher input) that most effectively contribute to enhanced speaking skills among rural ESL learners.

4. To explore the perceptions of both teachers and students regarding the role of an English-rich environment in facilitating the development of speaking fluency.

5. To investigate the challenges faced by educators in incorporating exposure-based strategies into their teaching practices in resource-limited rural classrooms**.**

8. Hypothesis

Increased exposure to an English-rich environment, through both digital and interactive classroom strategies, significantly enhances the speaking fluency of ESL learners in rural classrooms of Jhargram, compared to those with limited exposure.

9. Research Methodology

This study employs a **mixed-methods** research design, combining **quantitative** and **qualitative** approaches to assess the impact of increased English language exposure on speaking fluency among ESL learners in rural classrooms of Jhargram, West Bengal. The mixed-methods approach allows for a comprehensive understanding of both the statistical significance of the intervention and the subjective experiences of students and teachers.

9.1. Research Design

The study follows a **quasi-experimental** design, utilizing **pre-test** and **post-test** measures to assess the effectiveness of increased exposure to English in improving speaking fluency. The intervention will focus on integrating more English-rich environments within the classroom using digital tools, peer interaction, and teacher input. Data will be collected before and after the exposure intervention to measure changes in speaking fluency.

9.2. Sample Selection

Population:

The target population includes secondary school students (Grade 9 and 10) from rural schools in Jhargram, West Bengal. These students generally have limited exposure to English outside of the classroom and face challenges in developing speaking fluency.

Sample Size:

A total of **40 students** will be selected for the study, with **20 students** in the **experimental group** (who will receive the intervention) and **20 students** in the **control group** (who will continue with the traditional English teaching methods).

Sampling Technique:

- **Stratified Random Sampling** will be used to ensure diversity in the sample. The schools will be stratified based on their geographical location and type (government or private), and students will be randomly selected from each stratum to maintain representativeness.
- Schools with similar resources and English proficiency levels will be chosen to minimize variability in the exposure level and teaching conditions. This ensures that the findings are reflective of the rural educational context.

Inclusion Criteria:

- Students enrolled in Grade 9 or 10 in rural government schools in Jhargram.
- Students who have a basic understanding of English (A1-B1 level of the CEFR).
- Consent from students and their guardians to participate in the study.

Exclusion Criteria:

- Students who are unable to participate due to absenteeism during the intervention phase.
- Students who are enrolled in special education programs that focus on non-linguistic learning outcomes.

10**. Data Collection Methods**

Quantitative Data:

Speaking Fluency Assessment:

A standardized **speaking fluency test** will be administered to both the experimental and control groups before and after the intervention. The test will evaluate fluency in areas such as pronunciation, sentence formation, vocabulary usage, coherence, and spontaneous speech.

- The test will consist of a **guided conversation**, where students are asked to speak on a given topic for 2-3 minutes.
- The fluency will be scored using a **Fluency Rating Scale** (such as the one developed by Nation and Newton), which rates speech on a scale from 1 to 5, based on fluency criteria like speed, accuracy, and coherence.

A **survey questionnaire** will be used to collect data on the frequency and types of English exposure outside the classroom. This will be distributed at the beginning and end of the intervention phase.

10.1. Qualitative Data:

Interviews:

- **Semi-structured interviews** will be conducted with **10 teachers** from the experimental group to understand their perceptions of the exposure-based strategies and their impact on students' speaking fluency.
- **Focus Group Discussions (FGDs)** will be held with **8 students** from the experimental group to explore their experiences with the increased exposure, their perceived challenges, and any changes in their speaking confidence and fluency.

Observational Notes:

- **Classroom observations** will be carried out during the intervention phase. These observations will focus on student engagement, the use of English in peer interactions, and the effectiveness of the exposure-based strategies implemented by teachers.

Intervention:

The intervention will be implemented over a **6-week period**, and will focus on enhancing students' exposure to English in various ways:

- **Digital Exposure:** Students will be introduced to English-language educational apps (like Duolingo, YouTube channels, podcasts, etc.), with assigned tasks that encourage English listening and speaking.
- **Peer Interaction:** Group activities such as debates, discussions, and role-plays will be organized to encourage interaction in English.
- **Teacher Input:** Teachers will incorporate more English-language activities in the classroom, such as storytelling, impromptu speeches, and presentations, while providing corrective feedback.

Both the experimental and control groups will receive regular English lessons, but only the experimental group will be exposed to the additional English-rich interventions.

10.2. Ethical Considerations:

- **Informed Consent:** All participants (students and teachers) will be informed about the nature of the study, and consent will be obtained from both the students and their guardians before participation.
- **Confidentiality:** The confidentiality of the participants' data will be maintained throughout the study. No personal identifiers will be used in any published materials.
- **Right to Withdraw:** Participants will have the right to withdraw from the study at any point without any consequences.

Table 1

Timeline:

Phase	Timeline
Initial preparation & sampling	1 weeks
Pre-test data collection	1 week
Intervention implementation	3 weeks
Post-test data collection	1 week
Data analysis & report writing	1 weeks
Final review and submission	1 weeks

This methodology will help provide both qualitative insights and quantitative evidence regarding the effectiveness of English exposure on speaking fluency.

11. Data Analysis

11.1 Quantitative Data Analysis

Quantitative data analysis is crucial in this research as it provides measurable evidence of how English language exposure impacts speaking fluency among rural ESL learners in Jhargram. By comparing pre-test and post-test scores, it objectively shows the effectiveness of the intervention. Statistical tests help validate the significance of improvements and identify any notable differences between experimental and control groups. This numerical data strengthens the reliability and generalizability of the findings. Overall, it forms the foundation for drawing data-driven conclusions and educational implications.

Table 2

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pre_Test_Score	40	1.52	3.43	2.3905	.47627
Post_Test_Score	40	1.61	4.35	2.9288	.62257
Exposure_Frequency	40	1	5	3.10	1.446
Valid N (listwise)	40				

11.2 Descriptive Statistics Explanation.

1. **Pre-Test Score**

   o **N = 40**: Data was collected from 40 students.

   o **Minimum = 1.52, Maximum = 3.43**: The lowest pre-test score was 1.52 and the highest was 3.43 (on a scale of 1 to 5).

   o **Mean = 2.3905**: On average, students scored about 2.39 in the pre-test, indicating a relatively low level of speaking fluency before the intervention.

   o **Standard Deviation = 0.47627**: This shows moderate variability in students' pre-test scores; scores weren't too spread out from the average.

2. **Post-Test Score**

   o **Minimum = 1.61, Maximum = 4.35**: After the intervention, scores ranged from 1.61 to 4.35.

   o **Mean = 2.9288**: The average post-test score increased to about 2.93, suggesting improvement in speaking fluency.

   o **Standard Deviation = 0.62257**: The spread of post-test scores was slightly larger than in the pre-test, indicating a wider range of outcomes after the intervention.

3. **Exposure Frequency**

   o **Scale = 1 to 5** (Likert-type scale of how often students were exposed to English).

   o **Mean = 3.10**: On average, students reported moderate exposure to English.

   o **Standard Deviation = 1.446**: The high standard deviation indicates that students' exposure levels varied widely—some had very little exposure while others had frequent exposure.

This table gives a snapshot of students' performance before and after the intervention, along with how often they were exposed to English. The increase in the mean from pre-test to post-test indicates a positive trend, and the variation in exposure frequency suggests that it may have influenced their speaking fluency.

Table 3

Paired Samples Correlations			N	Correlation	Sig.
Group					
Experimental	Pair 1	Pre_Test_Score & Post_Test_Score	20	.764	.000
Control	Pair 1	Pre_Test_Score & Post_Test_Score	20	.718	.000

11.4 Paired Samples Correlations Explanation

This table shows the **relationship between students' pre-test and post-test scores** within each group (Experimental and Control). Specifically, it examines whether students who performed better (or worse) in the pre-test also performed similarly in the post-test.

Experimental Group

- **N = 20**: 20 students were part of the experimental group.
- **Correlation = 0.764**: There is a **strong positive correlation** between pre-test and post-test scores. This means students who scored higher in the pre-test generally also scored higher in the post-test, and vice versa.
- **Sig. = 0.000**: The correlation is **statistically significant** ($p < 0.05$), meaning the relationship is unlikely due to chance.

Control Group

- **N = 20**: 20 students were part of the control group.

- **Correlation = 0.718**: Also a **strong positive correlation**, though slightly lower than the experimental group.

- **Sig. = 0.000**: Again, this is **statistically significant**, confirming a reliable relationship between pre- and post-test scores in the control group as well.**What This Means in Context**

- In **both groups**, students' performances in the pre-test were predictive of their performance in the post-test.
- However, this doesn't indicate whether **any real improvement** occurred. For that, you'd need to look at the **Paired Samples T-Test** results, which compare the **mean differences** between the pre- and post-tests.

Table 4

Paired Samples Test										
Group			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Experimental	Pair 1	Pre_Test_Score - Post_Test_Score	-0.78900	0.32831	0.07341	-0.94265	-0.63535	-10.747	19	0.000
Control	Pair 1	Pre_Test_Score - Post_Test_Score	-0.28750	0.44602	0.09973	-0.49624	-0.07876	-2.883	19	0.010

This **Paired Samples Test** chart from SPSS shows the results of a **paired samples t-test** conducted separately for the **Experimental** and **Control** groups. It compares the mean **Pre-Test** and **Post-Test** speaking fluency scores to determine whether the intervention (English exposure environment) made a statistically significant difference.

Experimental Group

- **Mean Difference = -0.789**: The post-test scores were, on average, **0.789 points higher** than pre-test scores (negative value because SPSS subtracts Post-Test from Pre-Test).
- **t = -10.747, df = 19**: A **very high t-value** indicates a strong effect.
- **Sig. (2-tailed) = 0.000**: The p-value is **less than 0.05**, indicating the improvement is **statistically significant**.
- **Interpretation**: The intervention (increased English exposure) had a **strong and significant positive impact** on speaking fluency.

Control Group

- **Mean Difference = -0.2875**: The control group also improved, but only by **0.2875 points** on average.
- **t = -2.883, df = 19**: The t-value is smaller, indicating a weaker effect.
- **Sig. (2-tailed) = 0.010**: The result is still **statistically significant**, but less so than in the experimental group.
- **Interpretation**: The control group showed a **small but significant improvement**, likely due to natural progression or other classroom factors—not the exposure intervention.

Final Interpretation

- The **experimental group** showed a **much larger and more significant improvement** in speaking fluency than the control group.
- This supports your **hypothesis** that **English language exposure enhances speaking fluency** in rural ESL learners.

Table 5

		Sum of Squares	df	Mean Square	F	Sig.
			ANOVA[a]			
1	Regression	6.991	2	3.495	15.917	.000[b]
	Residual	8.125	37	.220		
	Total	15.116	39			

a. Dependent Variable: Post_Test_Score

b. Predictors: (Constant), Exposure_Frequency, Pre_Test_Score

Interpretation

This **ANOVA table** tests the **overall significance of the regression model** — that is, whether the combination of your predictors (**Pre_Test_Score** and **Exposure Frequency**) significantly predicts **Post_Test_Score**.

F-statistic = 15.917

This value tells you how much **variation in post-test scores** can be explained by the model (i.e., by pre-test scores and exposure frequency). The **higher the F**, the better your predictors explain the dependent variable.

3. p-value (Sig.) = 0.000

This is the most important part. A **p-value < 0.05** means your model is **statistically significant**. So:

- Yes, **Pre_Test_Score** and **Exposure_Frequency together significantly predict Post_Test_Score**.
- This supports your idea that **exposure to English and prior speaking ability both impact fluency gains**.

Your regression model is statistically significant (**p = .000**), indicating that the independent variables—**Pre-Test Score** and **Exposure Frequency**—together explain a meaningful amount of the variance in the **Post-Test Speaking Fluency Score**.

11.5 Qualitative Data Analysis

In this research, qualitative data analysis plays a vital role in understanding how rural ESL learners in Jhargram perceive and respond to English language exposure. It uncovers emotional and social factors—like fear, motivation, and peer influence—that impact speaking fluency beyond test scores. Through interviews and observations, it reveals the real-life classroom dynamics and challenges that shape language use. These insights help explain the outcomes of the experimental intervention more deeply. Ultimately, qualitative analysis adds depth and authenticity to the study, making the findings more meaningful and applicable.

Table 6

Key Themes on English Exposure and Speaking Fluency in Rural ESL Classrooms

Themes	Description
Environmental Exposure Matters	Students linked daily English interaction with fluency improvement
Code-Switching Dominates	Learners frequently mix or switch to L1 in absence of English-speaking peers
Teacher as Role Model	Teachers who spoke English often encouraged learners to try more themselves
Digital Tools as Exposure Agents	Mobile phones, YouTube, and English songs supported outside-classroom learning
Psychological Barriers	Students reported anxiety, hesitation, and fear of mistakes
Lack of Peer Practice	Many students wanted more interactive group activities

Table 7

Sample Coded Excerpts

Student Quote	Code	Theme
"I try to speak English but my friends laugh, so I stay quiet."	Fear of Judgment	Psychological Barriers
"We don't use English in our home or school except during English period."	Limited Exposure	Environmental Exposure Matters
"I learned new words from YouTube and spoke to myself in the mirror."	Self-initiated Learning	Digital Tools as Exposure
"Our English teacher speaks Bengali most of the time, so we don't practice."	Lack of English Input	Code-Switching Dominates
"Speaking in groups helped me become more fluent and less afraid."	Peer Learning Boosts Fluency	Lack of Peer Practice

Environmental Exposure Matters

A recurring idea from student interviews and focus groups was the significant role of regular exposure to the English language in developing speaking fluency. Students in the experimental group, who were encouraged to interact more frequently in English both inside and outside the classroom, expressed greater comfort and confidence in speaking. One student shared, *"When I started listening to English songs and repeating lines, my tongue felt used to the words. I could speak without stopping so much."* This mirrors the notion that exposure enhances both passive understanding and active use.

In contrast, students in the control group reported minimal opportunities to hear or use English beyond textbook reading. Some stated that their environment simply did not support English communication. *"Except for the English class, we never hear English. Even teachers speak in Bengali most of the time,"* mentioned a Class X student. This gap in linguistic input directly contributed to their hesitation and limited progress in fluency, showing a clear connection between consistent exposure and oral performance.

Psychological Barriers and Learner Inhibition

Another key theme that emerged was the psychological struggle students faced in using spoken English. Many learners, especially in the control group, reported feelings of anxiety, fear of making mistakes, and social pressure. A student reflected, *"I know what to say but when I open my mouth, I feel everyone will laugh. So I stay quiet."* Such emotional barriers were more common in students who had limited exposure and lacked supportive environments for practice.

However, students in the experimental group shared that regular English interaction made them feel gradually more confident. One learner said, *"At first, I was afraid. But now I feel okay even if I make mistakes. At least I try."* This shift reflects the positive influence of an encouraging English-rich environment in reducing fear and fostering risk-taking in language production—a key component in achieving fluency.

The Role of Teachers and Peer Interaction

Teacher behavior and peer dynamics also played a critical role in shaping students' speaking fluency. Interviews revealed that when teachers actively modeled English use and encouraged interaction, students responded with greater enthusiasm. A student noted, *"When our teacher speaks in English, we also try. She corrects us gently, and we don't feel scared."* Conversely, in classrooms where teachers defaulted to the mother tongue, learners lacked motivation to engage in English communication.

Peer support was also pivotal. Group activities, role-plays, and interactive sessions provided low-pressure spaces for students to speak. One learner described, *"When we practiced dialogues with friends, I spoke more freely. It felt fun, not like an exam."* These findings suggest that collaborative practices and consistent teacher modeling are essential in creating a language-rich classroom environment.

Digital Tools as Catalysts for Exposure

Interestingly, many students mentioned using digital media to immerse themselves in English beyond the classroom. YouTube videos, mobile learning apps, and even English subtitles on

movies were cited as informal learning tools. *"I follow English learning channels on my phone. I repeat after them and check my pronunciation,"* shared a student enthusiastically. These digital interventions acted as exposure agents, especially where formal English communication was scarce.

Teachers, too, acknowledged the growing influence of digital tools. One teacher mentioned, *"When students use their phones for listening to English songs or rhymes, they pick up phrases faster than from the textbook."* This supports the argument that ICT-integrated environments, even in rural settings, can bridge exposure gaps and accelerate fluency development.

12. Discussion

The purpose of this study was to investigate the impact of English language exposure on the speaking fluency of rural ESL students in Jhargram. The results obtained from both quantitative and qualitative analyses confirmed that consistent exposure to English plays a critical role in developing speaking fluency. The experimental group, which was subjected to enhanced English exposure, showed significant improvement in their post-test speaking scores compared to the control group. A paired samples t-test revealed a strong positive correlation in both groups, with a higher mean difference observed in the experimental group. Furthermore, ANOVA results demonstrated that exposure frequency and prior test scores were significant predictors of post-test performance.

The thematic analysis of qualitative data provided nuanced insights into students' perceptions and experiences. Themes such as the influence of digital tools, the importance of teacher modeling, and the psychological barriers faced by learners supported the statistical findings. Notably, frequent code-switching and the lack of peer interaction were seen as obstacles to continuous English practice. Overall, the research affirms that beyond structured instruction, the linguistic environment and learners' emotional readiness substantially influence the development of speaking fluency.

12.1 Findings

1. The students in the experimental group exhibited a statistically significant improvement in their speaking fluency after the intervention. The paired sample t-test results confirmed a notable increase in the mean post-test scores compared to their pre-test scores, indicating that targeted English exposure positively influenced their language acquisition.

2. A strong positive correlation was established between the frequency of English language exposure and students' post-test speaking performance. This suggests that the more frequently students interacted with English—through media, classroom activities, or conversations—the better their fluency outcomes.

3. Students who engaged in regular English conversations both within and outside the classroom showed noticeable fluency gains. Daily communication in English, whether structured or informal, played a crucial role in accelerating speaking competence.

4. Digital tools such as YouTube, mobile applications, and English songs emerged as significant contributors to informal language learning. Students reported that listening to and mimicking digital content helped them improve pronunciation, vocabulary, and confidence.

5. Emotional and psychological hurdles such as anxiety, fear of being judged, and hesitation due to lack of confidence were frequently reported by students. These barriers negatively affected their willingness to speak in English, despite having exposure.

6. The lack of peer-led speaking opportunities within the classroom emerged as a limiting factor. Students expressed a desire for more interactive group-based tasks that would allow them to practice spoken English in a supportive environment.

12.2 Outcomes

- English-rich environments—where the language is regularly heard, spoken, and used—significantly accelerate ESL speaking fluency.

- Teachers who actively model English usage and create interactive classroom environments play a crucial role in motivating students to use English more frequently.

- Informal digital exposure, including watching English videos or listening to English songs, serves as an effective and accessible tool for enhancing speaking skills outside formal education.

- Addressing emotional and psychological barriers such as fear of mistakes and anxiety is vital for building student confidence in speaking English.

- An immersive, multi-dimensional language learning approach—combining digital tools, classroom activities, and peer engagement—proves to be the most effective strategy for fostering speaking fluency in rural ESL contexts.

12.3 Limitations

1. The small sample size (n = 40) limits the generalizability of the findings to broader ESL populations across different regions.

2. The research was conducted only within the Jhargram district, and the results may not reflect the challenges or conditions in other rural or urban areas.

3. The short duration of the intervention prevents a comprehensive analysis of the long-term effects of language exposure on fluency.

4. The data on exposure frequency was based on students' self-reporting, which may introduce subjectivity or bias.

5. Other external factors, such as socio-economic background, home language environment, and parental support, were not included in the scope of the study but may have influenced outcomes.

12.4 Future Scope

- Future research can expand the sample size and include multiple districts to validate the results across diverse socio-linguistic settings.

- Longitudinal studies are necessary to understand the lasting impact of English language exposure on speaking fluency.

- Further exploration into the use of mobile learning apps and AI-based language tools can offer insights into technology-enhanced ESL education.

- Studies focusing on classroom dynamics, student engagement, and emotional intelligence could help uncover deeper psychological factors affecting fluency.

- Teacher training programs emphasizing immersive language environments, emotional support strategies, and interactive activities should be developed to enhance teaching practices in rural schools.

12.5 Conclusion

This study provides compelling evidence that meaningful and consistent English language exposure contributes significantly to the development of speaking fluency in rural ESL learners. While structured classroom instruction remains important, the findings underscore the critical influence of environmental immersion, the role of teacher behavior, and the potential of digital tools in supporting language acquisition.

Equally important is the acknowledgment of psychological factors that hinder fluency. Anxiety, hesitation, and a fear of judgment can create substantial barriers to communication, even for students who are regularly exposed to English. Creating safe and encouraging spaces where students feel comfortable experimenting with the language is essential.

Overall, the research advocates for a holistic approach to English language teaching—one that integrates classroom instruction with exposure through media, teacher modeling, and peer interaction. When learners are supported with resources, encouragement, and immersive opportunities, they can confidently move from passive exposure to active, fluent expression in English. This transformation is particularly vital in rural India, where bridging the language gap opens new educational and socio-economic doors for students.

Conflict of Interest

The authors declare no conflict of interest.

13. References

Al-Khasawneh, F. M. S. "The Impact of English Language Exposure on the Development of Speaking Skills among EFL Learners." *Theory and Practice in Language Studies* 11, no. 8 (2021): 929–935. https://doi.org/10.17507/tpls.1108.06.

Bhattacharya, S., and A. Mukherjee. "English Language Learning in Rural West Bengal: Challenges and Innovations." *International Journal of Applied Linguistics and English Literature* 12, no. 1 (2023): 210–216.

Chaudhury, S., and S. Roy. "Language Ecology and Student Motivation in ESL Classrooms." *Language in India* 19, no. 4 (2019): 192–202.

Cummins, Jim. *Bilingualism and Minority-Language Children*. Ontario Institute for Studies in Education, 1981.

Dey, A., and P. Sen. "Task-Based Language Learning in Rural Classrooms of Bengal." *Language Teaching Research* 24, no. 1 (2020): 100–110.

Ellis, Rod. *The Study of Second Language Acquisition*. 2nd ed. Oxford University Press, 2008.

Goh, Christine C. M., and Anne Burns. *Teaching Speaking: A Holistic Approach*. Cambridge University Press, 2012.

Gupta, S., and L. Banerjee. "Improving Speaking Fluency in Tribal Schools: A Quantitative Approach." *ELT Voices* 11 (2021): 180–190.

Jain, M. "Digital Tools in English Language Learning: A Case Study of Rural Indian Schools." *Asian Journal of Education and Social Studies* 15, no. 4 (2021): 18–27.

Krashen, Stephen D. *Principles and Practice in Second Language Acquisition*. Pergamon Press, 1982.

Krashen, Stephen D. *The Input Hypothesis: Issues and Implications*. Longman, 1985.

Kruk, Mariusz. *Affective Variables in Second Language Acquisition*. Springer, 2017.

Liu, Meihua, and Jane Jackson. "An Exploration of Chinese EFL Learners' Unwillingness to Communicate and Foreign Language Anxiety." *The Modern Language Journal* 92, no. 1 (2008): 71–86.

Mangaleswaran, S., and A. Abdul Aziz. "The Impact of the Implementation of CLT on Students' Speaking Skills." *International Journal of Psychosocial Rehabilitation* 24, no. 4 (2020): 5116–5123. https://doi.org/10.37200/IJPR/V24I4/PR202048.

Mishra, A. K., and R. Sharma. "Digital Tools in ESL Education: A Rural Perspective." *International Journal of Educational Technology* 8, no. 2 (2020): 240–250.

Nation, I. S. P., and J. Newton. *Teaching ESL/EFL Listening and Speaking*. Routledge, 2009.

Nunan, David. *Practical English Language Teaching*. McGraw-Hill, 2003.

Prasad, L. "Using Video Materials for Developing Speaking Skills: A Study in Tamil Nadu." *Language and Education Journal* 11, no. 2 (2020): 95–105.

Appendix

Finalized Data Collection Instruments

Quantitative Questionnaire (For Students)

Purpose: To collect data on students' English exposure frequency and self-assessed speaking fluency (used in correlation with pre- and post-test scores)

(A) **Instructions:** Please rate the following on a scale of **1 to 5**, where Please record your response by choosing the appropriate option.(SDA= strongly disagree, DA=disagree, N=neutral, A= agree, SA= strongly agree)

1. I hear English being spoken at home.

2. I watch English-language YouTube videos, cartoons, or shows regularly.

3. I listen to English songs or radio programs.

4. My teacher encourages us to speak in English during class.

5. I try to speak in English with my classmates.

6. I use mobile apps to learn or practice English.

7. I understand what others say when they speak English.

8. I feel confident speaking English in front of others.

9. I practice speaking English outside the classroom.

10. I think my English speaking has improved over the last few weeks.

Qualitative Questionnaire (Open-ended)

Purpose: To explore learners' perceptions and challenges regarding English exposure and fluency development.

Instructions: Write short answers to the following questions. There are no right or wrong answers.

1. Describe how often and where you are exposed to English outside the classroom.

2. What activities help you speak better in English? (e.g., songs, videos, games)

3. What do you find difficult when speaking in English?

4. How do you feel when asked to speak English in front of others?

5. Do you think your teacher motivates you to speak in English? How?

6. Would you like more group activities to practice English speaking? Why or why not?

7. How do you use your mobile phone or the internet for learning English?

8. What would help you feel more confident speaking in English?

Teacher Interview Schedule (For Qualitative Insight)

Purpose: To gain educators' perspectives on student fluency and the role of English exposure.

1. What role does English exposure play in your students' speaking fluency?

2. Do you consciously use English as a medium of instruction or communication?

3. What challenges do rural students face in becoming fluent English speakers?

4. Have you observed any changes in students' fluency after integrating digital tools or new methods?

5. How do you support students who are anxious or hesitant to speak English?

6. What strategies or activities do you think best encourage spoken English practice?

1. Pre-Test & Post-Test Speaking Fluency (Quantitative Tool)

Purpose: To assess students' spoken English proficiency before and after the intervention.

Each student will be assessed on a **5-point speaking fluency scale** across the following domains:

Criteria	1 (Very Poor) 2 (Poor) 3 (Average) 4 (Good) 5 (Excellent)
Pronunciation & Intonation	
Fluency (Flow of speech)	
Grammatical Accuracy	
Vocabulary Range	
Comprehension	

- **Administered twice**: Pre-intervention and post-intervention.

- Evaluated by ESL instructors using standardized observation.

3. 4. Semi-Structured Interview Schedule (Qualitative - For Teachers)

Purpose: To gather educator insights about students' speaking fluency and exposure environments.

Questions:

1. What role does environmental exposure play in improving fluency?

2. Have you noticed changes in students' speaking ability during this intervention?

3. How do you integrate English use in your classroom teaching?

4. What challenges do your students face when trying to speak English?

5. How do digital tools or media affect fluency in your experience?

DATA ANALYSIS PLAN (Aligned)

Tool/Instrument	Type	Analysis Technique
Speaking Pre-/Post-Test	Quantitative	Descriptive Stats, Paired Sample t-test, ANOVA, etc.
Focus Group Discussion (Students)	Qualitative	Thematic Analysis (coding, pattern identification)
Semi-structured Interviews (Teachers)	Qualitative	Thematic Analysis