Psychological insights into language acquisition: Effects on speaking performance

S. Banupriya, B. R. Aravind*

Kalasalingam Academy of Research and Education, Krishnankoil 626126, Tamil Nadu, India

* Corresponding author: B. R. Aravind, aravind.abur@gmail.com

ABSTRACT: This study looks into how well form-focused instruction coupled with listening-based teaching strategies might improve English as a Second Language (ESL) students' speaking abilities. The relationship between vocabulary proficiency, attentive listening abilities, and active participation in speaking tasks among ESL learners is the main emphasis of the study. Data from the pre- and post-test outcomes of 72 ESL students were analysed quantitatively using statistical techniques. Pre-test results showed a variety of skill levels from basic to intermediate and maybe higher, with participants categorized into "Beginning," "Developing," and "Bridging" groups. The effectiveness of the interventions was demonstrated by the post-test findings, which showed that speaking abilities at all competence levels increased with the use of instructional techniques and speaking practice procedures. The study emphasizes the importance of cognitive and affective components in language acquisition from a psychological standpoint. While form-focused education aids in the internalization of vocabulary and grammatical structures, listening-based teaching strategies activate students' auditory processing talents, which are essential for language learning. These techniques probably lessen cognitive overload and improve recall because they encourage active listening and involvement. A positive attitude toward language acquisition and increased self-efficacy can also be fostered and anxiety reduced in pupils by the organized and encouraging learning environment. The study highlights how important it is to implement effective teaching strategies that blend form-focused education with content-rich, literature-based instruction to enhance ESL students' speaking ability. The findings provide useful data that aids in curriculum designers and language instructors in modifying their pedagogical approaches in accordance with students' proficiency levels, leading to more targeted and efficient language learning experiences. Subsequent research endeavours may explore the enduring consequences on the enhancement of linguistic proficiency and delve more profoundly into specific domains of teaching methodologies. All things considered, this study contributes to the ongoing discussion in language instruction and offers practical guidance to ESL instructors worldwide.

KEYWORDS: speaking abilities; listening-based instruction; form-focused learning; vocabulary proficiency; techniques; instructional strategies; psychological perspective

1. Introduction

Extensive study on teaching English to non-native speakers has been conducted in the past few decades. Since high levels of linguistic competence were increasingly regarded as a strong potential foundation for language learning, a considerable body of research on the impacts of formal teaching on second-language acquisition developed[1]. But in recent years, the focus has turned from language's structural characteristics to the understanding and communication of meaning. Stated differently, a significant challenge in the majority of current foreign and second language instructional approaches is the successful blending of formal education and communicative language teaching[2].

It is uncommon for language learners who receive only form-focused instruction to develop to high levels of communicative competence. Similarly, a communicative syllabus that skips over teaching grammar is insufficient for EFL instruction. According to this viewpoint, learners who receive grammar instruction in addition to communicative language use would benefit greatly from being able to identify language patterns in context and apply them to meaningful communication. It has been hypothesized that when students focus on form during communicative practice, they learn about language form through the form-meaning relationship and apply it to convey ideas.

Form-focused instruction and content-based instruction combined with literature-based classroom discussions, in this sense, provide some of the strongest arguments for the development of grammatical accuracy and the efficient use of the target language, allowing learners to interact and produce more language in meaningful communicative contexts. This teaching method can improve language learners' speaking fluency and accuracy. These two elements work in concert to support students' advancement in speaking competency. Speaking fluency is the capacity to communicate quickly and smoothly, whereas speaking correctness is the capacity to speak without errors[3,4].

Because literature fosters an environment in which language applications can flourish, it can encourage students to recognize linguistic patterns and traits[5]. Unquestionably, literature makes the best use of language available. In addition, literature demonstrates a broad variety of precise application of language qualities that prepare readers for mastering the target language[6]. Organizing literary discussions in the classroom gives students a chance to focus on conversation and knowledge acquisition[7]. Allowing learners' voices to be heard encourages dialogic conversation and starts language development.

Literature conversations in language classes have the potential to teach form and meaning balance in a way that facilitates effective communication. Because it offers a lot of language input that encourages learners to interact with others and pushes them for more language output, which leads to language development, integrating language and content learning into literary discussions in the classroom is a favourable condition for language learning[8]. By combining form-focused and literature-based approaches, the main goal of this study is to create a culture of engagement in class discussions of literature for the acquisition of grammatical features in the target language and use them as a springboard for the production of meaningful discourse. By combining content-based and literature-based methods, the current study also aims to identify the ideal conditions for language acquisition, where students utilize the target language as a communication medium. Finally, because of its obvious benefits for the creation of meaningful conversation, the study offers a way to include form-focused education into a content-enriched language training through the use of literary works. Which study strategy is best for improving speaking abilities has been investigated in this study.

Numerous research conducted in the last few years have shown how crucial language learning

techniques (LLS) are to the acquisition of foreign languages (FLs). Using effective strategies helps students take ownership of their education and develop into self-regulated, self-directed learners[9–12]. A substantial repertoire of foreign language (FL) or second language (L2) learning techniques improves the performance of learners, and adequate strategy use helps students complete specific language tasks more successfully[13–15]. Higher-level language competency can be attained by strategic learners through more adept adaptation and utilization of various techniques, linked skills, progress, and the improvement of strategies[15–17] and defined LLS as "specific actions or techniques that students use, often intentionally, to improve their progress in developing L2 skills" (p. 262). In line with this, one of the most important areas of strategy research falls into the domain of the four language skills: reading, writing, speaking, and listening. Among these, listening comprehension is one of the most important areas of FL/L2 strategy research[18–22].

Despite the fact that a large amount of research has recently dealt with listening in the domain of FL/L2 learning, most of it has been conducted among university or college students[23–25]. While light has been shed on a number of issues, this research is limited to the extent that it can only report on adolescents' reflections on their techniques, habits, and behaviours. It leaves open the question of how young students perform and what strategies they employ when they must comprehend FL/L2 spoken texts. The aim of our study is to fill this gap and build a theoretical model for the FL/L2 listening comprehension process based on the existing literature. To test our model, we investigated certain learning-related factors among English as a foreign language (EFL) learner, such as general English proficiency and attitude towards English in line with their listening proficiency, and the effects of these factors on listening strategy use preferences.

One potential drawback that could arise is psychological issues. Affective states (e.g., feeling joyful, optimistic, content, and interested in life, or feeling gloomy and desperate), memory, and attention span are examples of psychological difficulties that can be understood as the detrimental consequences of OCF on students' psychological domain[26]. It is not unexpected that students experience anxiety from the remedial feedback itself, which hinders their learning[27]. The pupils could feel anxious, demotivated, self-conscious, and hesitant to talk if they look foolish[28–31]. Regretfully, there hasn't been much research done on this topic, so more study on the psychological issues brought on by corrective feedback is required. This focuses on looking at the psychological issues that students have after getting feedback and the psychological issues that get in the way of their ability to communicate in an adult EFL speaking classroom. It makes numerous contributions to the field of teaching English as a second language in speaking classrooms.

There are now more options for language assessment and testing thanks to technology. Automating L2 proficiency testing is made possible by machine learning; nonetheless, spoken language applications have been more prevalent in machine learning applications to far. In the context of second language acquisition, it has become very desired to develop automatic methods for evaluating spontaneous speech since they facilitate teacher training programs and language competency tests while also democratizing and promoting self-regulated learning. Due to the amount of training data, these systems are usually built for languages with a large number of learners; nevertheless, languages with fewer learners, like Tamil, are still at a disadvantage because of the lack of necessary training data. However, recent developments in AI have made it possible to develop automatic speech recognition (ASR) systems with a reasonable amount of training data, which makes it feasible to develop automatic speaking assessment systems for both more commonly taught languages like English and less commonly resourced languages like Tamil[32].

2. Review of literature

It can be challenging for individuals who are learning English to communicate in English, particularly if they do not have a strong grasp of the language's vocabulary. An individual's ability to communicate verbally is a key linguistic skill that enables them to interact and socialize with those who are within their immediate social circle. A speaker is required to conform to the cultural norms of a discourse community in order to be considered a member of that community. These norms include the values, practices, beliefs, and superstitions that are associated with the discourse community. Within the English curriculum of the Malaysian Education System, speaking is considered to be one of the most important components. This curriculum also includes listening, reading, writing, and grammar. When it comes to academic and professional endeavors, English is the language of choice in Malaysia. Verbal communication may be demonstrated by a variety of activities, including but not limited to: attending meetings, trainings, or conferences; discussing daily occupations or commitments; providing verbal presentations; and discussing everyday life circumstances in which the activities are handled through verbal communication. Due to the fact that the local languages are so varied, English was selected as a replacement in order to facilitate efficient communication. The capacity to speak effectively in English has evolved into a common need for graduates of Malaysia who are looking for work. According to Yamashiro[33], speaking is the most fundamental aspect of communication and is considered to be one of the most significant language talents about communication.

Speaking in front of an audience requires people to use language analysis, performance planning, and delivery skills. It's a complex task. Tasks requiring prolonged spoken performance offer important advances in second language evaluation, as noted by Turner[34]. Performance evaluations, as opposed to assessments that are only concerned with accuracy, enable assessors to determine how language is actually utilized in particular situations. According to Yamashiro[35], performance assessment includes both the evaluation activity (giving a speech in front of an audience) and the scoring technique used. In spoken language evaluation, this assessment strategy is gaining traction as researchers work to improve test methods' clarity and authenticity.

3. Research objectives

The purpose of the study is to ascertain the psychological significance of having excellent speaking abilities.

- To investigate the role that precise word articulation and information transmission play in language competency and cognitive development during speaking exercises.
- To investigate the effects of being focused and giving your all throughout verbal communication tests on psychological variables like self-efficacy, attention, and lowered anxiety.

4. Research questions

RQ 1: What long-term effects can vary teaching techniques based on varying competency levels have on the speaking abilities of ESL students?

RQ 2: What are the long-term impacts on speaking proficiency of ESL students of interventions aimed at psychological aspects (such as motivation, self-efficacy, and anxiety reduction)?

5. Methods

To maximize research results, this study used a quantitative methodology that is frequently applied

in a variety of academic fields. The researcher used tried-and-true speaking practice methods to gauge students' development as active ESL speakers. Data gathered from tests given to ESL students was examined using quantitative analysis. In order to gain a thorough knowledge of the impact of instructor corrective feedback on students' psychological issues, the current study employed a quasi-experimental study design. The study's main goal was to identify the psychological issues that the students had following their oral corrective comments from the teacher. The study also aimed to comprehend the ways in which psychological issues impede pupils' ability to talk. It makes sense to employ a quasi-experimental study in this investigation given its objectives.

6. Sample

In this study, 72 B.Com. students who were enrolled in their first semester of undergraduate courses and were learning English as a second language took part as shown in **Figure 1**. The participants, who were all under the age of eighteen, came from different states in order to complete their college education. The students' mother tongues were Tamil, Telugu, Malayalam, and Hindi, and each one represented a distinct cultural background. All of them had taken English as a second language course. The desire of the participants to get better at speaking and listening served as the selection factor. While some people showed basic mistakes in their ability to focus, comprehend the material as a whole, accurately pronounce spoken phrases, and listen for details, others showed mastery in the language. The training and assessment methods were foreign to the participants, and the selection of participants involved quantitative analysis. Based on how well students performed on the pre- and post-tests, the findings were used to evaluate speaking conventions. We selected a random sample of the entire population.
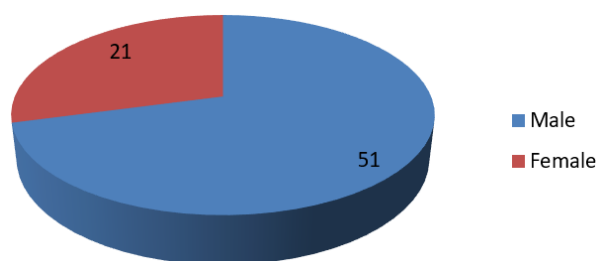

Figure 1. Sample distribution.

7. Research procedure

The approach started with the participants receiving a brief overview of the study's objectives from the researcher, who then concentrated on using spoken language tasks to assess the participants' speaking abilities. The researcher evaluated the speaking skills of the ESL students based on their performance and noted areas that required development. Following this preliminary evaluation, the researcher used PowerPoint presentations and audio recordings to instruct speaking strategies. Speaking techniques were taught via audio recordings and PowerPoint presentations. The PowerPoint presentations had fill-in-the-blank dialogues, pictures that framed short statements, six-word sentences that could be expanded into short stories, and ten- to fifteen-word sentences that could be hurriedly composed into essays. One-word answers to questions were provided in the audio recordings to help with listening comprehension and response practice. Participants were encouraged to respond impromptu to the brief questions. Participants were also required to listen to inspirational lectures from leaders and interviews with well-known people. Audio-lingual, listening to BBC, etc., were the

programs used for assessing experimental and control groups as shown in **Figure 2**. The inclusion and exclusion criteria for selecting the experimental and control groups were following: Age, linguistic ability, technological access, commitment, informed permission, and baseline evaluation were the inclusion criteria. Previous experience with the language learning program, advanced language competency, involvement in other language learning programs, lack of commitment, technological difficulties, and cognitive impairments were among the exclusion criteria. Students worked on tasks designed to improve their attention to detail and speaking abilities. Additionally, the researcher created interactive lessons centred on topic-specific speaking to provide speaking abilities more practice and reinforcement. The results suggest that pupils' speaking abilities gradually improved throughout the session.
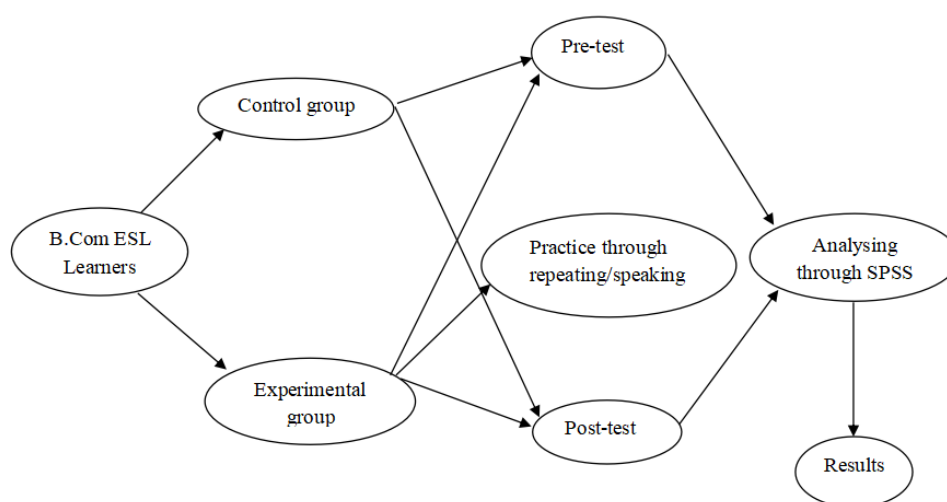
Figure 2. Procedure of research.

8. Results and discussion

The results of the study are summarized here, with statistical information to show how far forward the experimental and control groups were in comparison. Concurrently, both groups were receiving the intervention. The test's findings showed that students in both groups had some difficulty pronouncing and speaking intelligibly while speaking in lengthy sentences. All things considered, the findings show that the experimental group has improved its speaking skills, while the control group has not outperformed the experimental group. 36 students were assigned to the experimental group and the remaining 36 to the control group once the 72 participants had been divided into two groups. Both the experimental and control groups took the pre-test using the identical methodology.

The information shown comes from a speaking pre-test, which was probably used to gauge participants' speaking ability as shown in **Figure 3**. This is a summary of the data that was given: Starting off: This category shows that 60 individuals completed the speaking pre-test with a "Beginning" score. This level usually indicates a rudimentary degree of speaking ability, with restricted vocabulary and grammatical usage, and sometimes some trouble articulating ideas well. Developing: According to the data, 55 participants' speaking pre-test results placed them in the "Developing" category. Although this level represents an improvement over the foundational stage, there are still certain speech-related constraints in terms of accuracy, fluency, and complexity. Individuals at this stage of development could have inconsistent spoken language proficiency. Bridging: Lastly, there are 51 competitors in the "Bridging" category. Generally speaking, this level denotes a higher degree of

proficiency than the preceding levels. Individuals that fit the "Bridging" category may exhibit a higher level of proficiency in vocabulary, syntax, and discourse techniques. They may also be able to carry on longer conversations and express ideas more coherently and clearly. All things considered, the speaking pre-test data shed light on how participants' competency levels varied, from basic skills ("Beginning") to intermediate ("Developing") and possibly higher ("Bridging"). This data can help with curriculum development, targeted support tactics, and instructional planning to meet the various requirements of students with varying speaking skill levels.
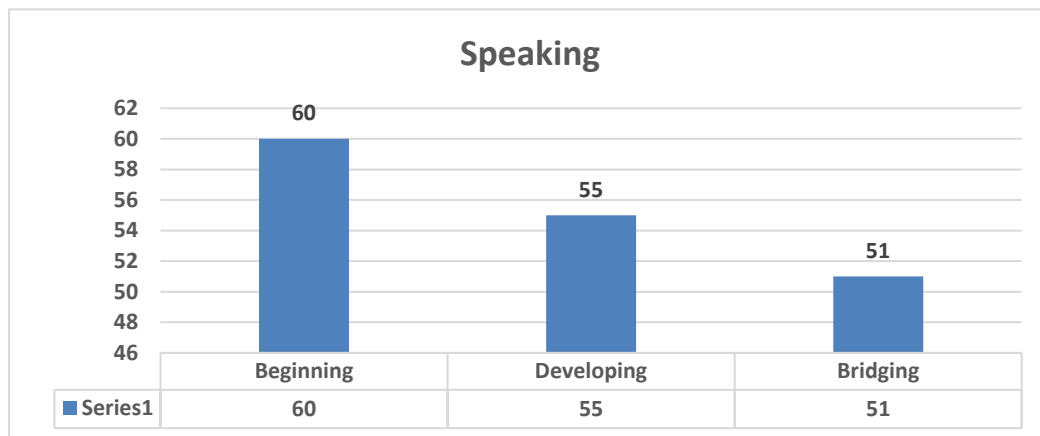

Figure 3. Pre-test result for speaking.

Table 1. One-sample statistics for groups.

One-sample statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Beginning	72	0.89	0.316	0.037
Developing	72	0.72	0.451	0.053
Bridging	72	0.69	0.464	0.055

This offers three groups' one-sample statistics: "Beginning," "Developing," and "Bridging." These divisions most likely reflect varying degrees of expertise or assessment proficiency. N: The number of participants in each group as shown in **Table 1**. Mean: The average score that each group's members received on the test is represented by the mean. As an illustration: The mean score of those categorized as "Beginning" was 0.89. The mean score of those categorized as "Developing" was 0.72. Individuals categorized as "Bridging" averaged a standard deviation of 0.69. Deviation: The standard deviation of the scores within each group is displayed in this column, giving an indication of how widely distributed or variable the scores are around the mean. As an illustration: For the "Beginning" group, the standard deviation is 0.316. For the "Developing" group, the standard deviation is 0.451. For the "Bridging" category, the standard deviation is 0.464. Std. Mean Error: The standard error of the mean for every group is shown in this column. It displays the sample means' standard deviation from the population mean. As an illustration: For the "Beginning" group, the standard error mean is 0.037. For the "Developing" group, the standard error mean is 0.053. For the "Bridging" group, the standard error mean is 0.055. Data for every set of proficiency levels, providing information on the precision, central tendency, and range of results within each category. These data can be used to evaluate the efficacy of treatments or instructional strategies that target various skill levels, as well as to compare performance across groups.

Results from a one-sample test comparing the Beginning, Developing, and Bridging groups are displayed in the table. In this instance, the value being tested against, or the test value, is 0. The table gives the following details for every group: *t*-value: The *t*-statistic, which is a measure of the difference between the sample mean and the population mean divided by the standard error of the mean as shown in **Table 2**. It shows the number of standard errors that separate the sample mean from the population mean. df: Degrees of freedom, or the sample's total number of independent observations minus one. Sig. (2-tailed): The *t*-test *p*-value is represented by this value. It shows the likelihood of finding the data in the event that the null hypothesis—in this example, the mean difference of 0—is correct. A low *p*-value (usually less than 0.05) indicates that it is improbable that the differences that have been noticed are the result of pure chance. The mean difference, or 0 in this instance, is the difference between the sample mean and the test value. 95% Self-Assured Time Between the Differences: This gives us a range that represents the genuine difference between the sample mean and the population mean, within which we have 95% confidence. It is made up of an upper and lower bound. The *t*-values are statistically significant with *p*-values of 0.000 for each of the three groups (Beginning, Developing, and Bridging), suggesting that the observed mean differences are unlikely to be the result of chance. Furthermore, the magnitude and direction of the differences between the means of each group and the test value of 0 are shown by the mean differences and the related confidence intervals.

Table 2. One-sample test for group.

One-sample test						
	Test value = 0					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Beginning	23.833	71	0.000	0.889	0.81	0.96
Developing	13.587	71	0.000	0.722	0.62	0.83
Bridging	12.703	71	0.000	0.694	0.59	0.80
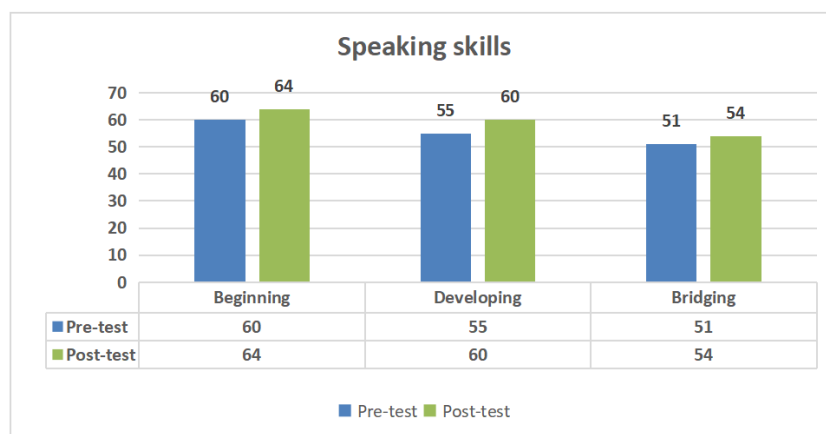
Figure 4. Test result of speaking skills for groups.

Pre- and post-test results for the three groups—Beginning, Developing, and Bridging—are shown in the data as shown in **Figure 4**. Each of the following areas receives 20 points: pronunciation, fluency, vocabulary, grammar, understanding, and reaction. The final score is derived from a possible 100 points. There were three assessments carried out: pre-, mid-, and post-study. A recording, numerous raters, feedback, and an interview style were all part of the assessment process. The mean pre-test score

for the Beginning group was 60, while the post-test score rose to 64. The mean pre-test score for the Developing group was 55, while the post-test score rose to 60. The mean pre-test score for the Bridging group was 51, while the post-test score rose to 54. These findings imply that all three groups improved over time, as seen by an increase in scores from the pre-test to the post-test. However, it's crucial to remember that it's challenging to make firm judgments regarding the efficacy of any intervention or treatment that may have taken place in between the pre-test and post-test measurements in the absence of additional data, such as the variability within each group or the significance of the changes seen.

Table 3. Correlation test results.

Correlations		Pre-test	Post-test
Pre-test	Pearson Correlation	1	−0.189
	Sig. (2-tailed)		0.113
	N	72	72
Post-test	Pearson Correlation	−0.189	1
	Sig. (2-tailed)	0.113	-
	N	72	72

The Pearson correlation coefficients between the pre- and post-test scores for a sample of seventy-two people are displayed in the correlation table as shown in **Table 3**. The linear relationship between two variables' strength and direction are measured by the Pearson correlation coefficient. It has a range of −1 to +1, where a perfect negative linear relationship is represented by a value of +1, a perfect positive linear relationship by a value of +1, and no linear relationship by a value of 0. Since auto-correlation is the correlation of a variable with itself, it is not surprising that the correlation coefficient for the pre-test scores is 1. The results of the pre-test and post-test had a −0.189-correlation coefficient. The pre-test and post-test scores may have a weakly inverse relationship, based on this negative correlation. Stated differently, people with higher pre-test scores also typically had somewhat lower post-test scores, and vice versa. Nonetheless, this correlation's magnitude is not very large. For both correlations, the significance level (Sig. or p-value) is 0.113. This indicates that, at the traditional significance threshold of 0.05, the observed relationships are not statistically significant. As a result, we are unable to say with confidence that the correlations we have seen deviate from zero. According to the available data, there is a slight negative correlation overall between pre-test and post-test scores, although it is not statistically significant.

The table includes information regarding valid and missing data as well as the frequency distribution of pre-test scores for a sample of seventy-two people as shown in **Table 4**. Valid data: The distribution of recorded pre-test scores is displayed in the valid data section. From 0 to 100 is the range of scores. There is a frequency, percent, valid percent, and cumulative percent for every score category. For instance, 45 people, or 61.6% of the sample, received a score of 100 on the pretest. The cumulative percent shows what proportion of people have scores that are at or below a particular level. By the conclusion of the table, for example, all of the individuals have scores of 100 or below. Missing data: One entry with the label "System" is noted as missing in the "Missing" section. This suggests that the data contained one missing value, which was probably the result of a systematic problem. To differentiate the missing data from the observed scores, they are displayed apart from the legitimate data. There were 73 entries in all, comprising both complete and incomplete data. In summary, the

table shows an unambiguous analysis of the pre-test score distribution in the sample, highlighting the frequency of each score and its relative proportion in the dataset. It also draws attention to the dataset's single missing value.

Table 4. Pre-test results.

Pre-test					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	0	2	2.7	2.8	2.8
	33	13	17.8	18.1	20.8
	67	12	16.4	16.7	37.5
	100	45	61.6	62.5	100.0
	Total	72	98.6	100.0	
Missing	System	1	1.4		
Total		73	100.0		

Table 5. Post-test results.

Post-test					
		Frequency	Percent	Valid percent	Cumulative percent
Valid	33	13	17.8	18.1	18.1
	67	12	16.4	16.7	34.7
	100	47	64.4	65.3	100.0
	Total	72	98.6	100.0	
Missing	System	1	1.4		
Total		73	100.0		

The frequency distribution of post-test scores for a sample of seventy-two people is displayed in the table along with details on valid and missing data as shown in **Table 5**. Valid data: The distribution of recorded post-test scores is shown in the valid data section. The scores fall between 33 and 100. There is a frequency, percent, valid percent, and cumulative percent for every score category. For instance, 47 people, or 64.4% of the sample, received a perfect score on the post-test. The cumulative percent shows what proportion of people have scores that are at or below a particular level. By the conclusion of the table, for example, all of the individuals have scores of 100 or below. Missing data: One entry with the label "System" is noted as missing in the "Missing" section. This suggests that one value was missing from the data, most likely as a result of a systematic problem. To differentiate the missing data from the observed scores, they are presented apart from the valid data. There were 73 entries in all, comprising both complete and incomplete data. All things considered, the table offers a transparent analysis of the post-test score distribution in the sample, showing the frequency of every score and the percentage it represents in the dataset. It also draws attention to the dataset's single missing value.

The post-test results for the three groups—Beginning, Developing, and Bridging—as shown in **Figure 5**. The post-test result for the Beginning group was 64. The post-test result for the Developing group was sixty. The post-test result for the Bridging group was 54. These outcomes show how well each group performed following the test or intervention. The results or efficacy of the exercises or therapies given to each group can be inferred from the scores. However, it's difficult to evaluate the importance or consequences of these scores alone without more context or comparison to pre-test
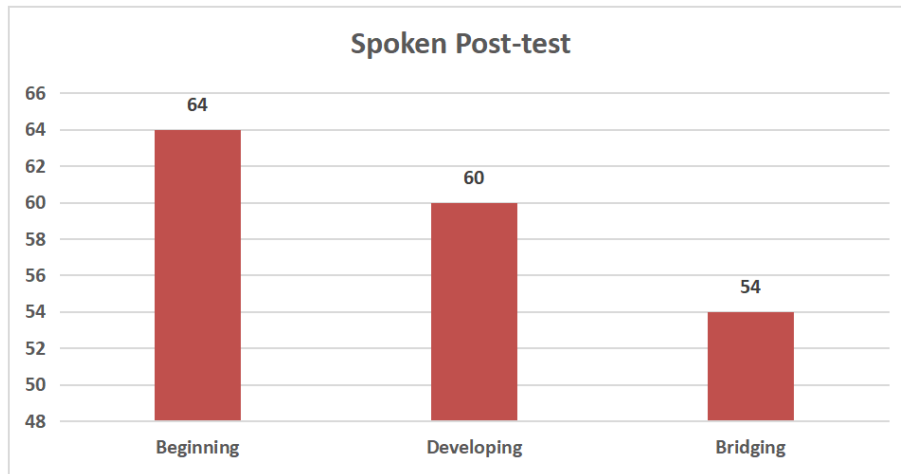
results or other standards.

Figure 5. Post-test result for speaking.

Table 6. One-sample statistics.

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Beginning	72	0.93	0.256	0.030
Developing	72	0.83	0.375	0.044
Bridging	72	0.75	0.436	0.051

One-sample data for the three groups—Beginning, Developing, and Bridging—as shown in **Table 6**. Regarding the Starting group: There were 72 observations, or *N*: Average: 0.93. 0.256 is the standard deviation. Mean Standard Error: 0.030. Regarding the Developing team: *N*: 72. Average: 0.83. Standard Error Mean: 0.044. Standard Deviation: 0.375. Regarding the Bridging group: *N*: 72. Average: 0.75. Standard Error Mean: 0.051. Standard Deviation: 0.436. The central tendency and variability of the data within each category are revealed by these statistics: The average value of the observations within each group is represented by the term "mean." For instance, the average value in the Beginning group is 0.93. The standard deviation shows how much the data vary or are dispersed. Greater variability among the observations is suggested by a higher standard deviation. In comparison to the other groups, the Bridging group has the highest standard deviation (0.436), indicating a higher degree of variability in their ratings. Normal Error Mean: This is the sample mean's standard deviation, which indicates how accurate the mean estimate is. It shows the likelihood of the sample mean deviating from the population mean. For example, the Beginning group's Standard Error Mean is the lowest (0.030), suggesting that this group's mean estimates are more accurate than those of the other groups. The aforementioned statistics provide significant understanding of the features of the data distribution of each group, facilitating the analysis and evaluation of their individual results or achievements.

The Beginning, Developing, and Bridging groups' one-sample test results as shown in **Table 7**. Test value: The value that is being compared to is 0. The table gives the following details for every group: *t*-value: This is the computed *t*-statistic for each group, which is the standard error of the mean divided by the difference between the sample mean and the test value (in this case, 0). It shows the number of standard errors that separate the sample mean from the test result. df: Degrees of freedom, or

the sample's total number of independent observations minus one. Sig. (2-tailed): The *t*-test *p*-value is represented by this value. It shows the likelihood of finding the data in the event that the null hypothesis—in this example, the mean difference of 0—is correct. A low *p*-value (usually less than 0.05) indicates that it is improbable that the differences that have been noticed are the result of pure chance. The mean difference, or 0 in this instance, is the difference between the sample mean and the test value. 95% Self-Assured Time Between the Differences: This gives us a range that represents the genuine difference between the sample mean and the population mean, within which we have 95% confidence. It is made up of an upper and lower bound. The *t*-values are statistically significant with *p*-values of 0.000 for each of the three groups (Beginning, Developing, and Bridging), suggesting that the observed mean differences are unlikely to be the result of chance. Furthermore, the magnitude and direction of the differences between the means of each group and the test value of 0 are shown by the mean differences and the related confidence intervals.

Table 7. One-sample test results.

One-sample test						
	Test value = 0					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Beginning	30.845	71	0.000	0.931	0.87	0.99
Developing	18.841	71	0.000	0.833	0.75	0.92
Bridging	14.595	71	0.000	0.750	0.65	0.85

8.1. Psychological aspects

Psychological factors play a significant role in language acquisition and speaking performance. The improvement observed in the experimental group may be attributed to several psychological mechanisms.

8.2. Motivation

Intrinsic and extrinsic motivation: Motivation in language learning can be both intrinsic (internal desire to learn for personal satisfaction) and extrinsic (external rewards such as grades or praise). The intervention likely enhanced both forms of motivation. For instance, the novelty and structured approach of the intervention could have sparked intrinsic motivation, while positive feedback and visible improvement in speaking skills provided extrinsic rewards.

Goal setting and achievement: Setting clear, achievable goals within the intervention could have kept participants motivated. As students met these goals, their sense of accomplishment would reinforce their motivation, leading to sustained effort and engagement in speaking activities.

8.3. Self-efficacy

Belief in capability: Self-efficacy, or the belief in one's ability to succeed in specific tasks, is crucial in language learning. The intervention might have included elements that built self-efficacy, such as:
- Incremental challenges: Gradually increasing the difficulty of speaking tasks can help students build confidence as they master each level.
- Positive reinforcement: Providing regular, positive feedback can reinforce students' belief in their abilities.

Modeling and peer learning: Observing peers successfully complete speaking tasks or receiving guidance from more proficient speakers can also enhance self-efficacy. The intervention could have included group activities or peer reviews, allowing students to learn from and support each other.

8.4. Anxiety reduction

Supportive environment: Language learning, particularly speaking, can induce anxiety, which can hinder performance. The intervention may have created a supportive environment through:

- Non-judgmental atmosphere: Ensuring that students felt safe to make mistakes and learn from them without fear of ridicule.
- Relaxation techniques: Incorporating relaxation or stress-reduction techniques, such as deep breathing exercises, to help manage anxiety before speaking tasks.

Familiarity and routine: Regular, predictable practice sessions can reduce anxiety by making the learning process more familiar and less intimidating. Structured practice routines within the intervention likely helped students feel more at ease.

8.5. Cognitive load

Scaffolding: The intervention might have used scaffolding techniques to help manage cognitive load. By breaking down speaking tasks into smaller, manageable parts and providing support at each stage, students can focus on specific aspects without feeling overwhelmed.

Chunking information: Organizing information into chunks or groups can make it easier to process and recall. The intervention could have included activities that helped students chunk vocabulary, phrases, and grammar rules, making it easier for them to use these elements in speaking.

Progressive complexity: Gradually increasing the complexity of speaking tasks can help manage cognitive load. Starting with simple sentences and gradually moving to more complex structures allows students to build their skills incrementally.

8.6. Engagement and enjoyment

Interactive and fun activities: Incorporating games, role-playing, and interactive activities can make learning enjoyable, which can enhance engagement and motivation. The intervention might have included such elements to keep students interested and actively participating.

Real-life relevance: Using real-life scenarios and practical applications of language skills can make learning more relevant and meaningful. Students are more likely to engage deeply when they see the practical benefits of what they are learning.

8.7. Feedback and reflection

Timely and constructive feedback: Providing timely and constructive feedback helps students understand their progress and areas needing improvement. The intervention likely included regular feedback sessions to guide students and help them reflect on their learning.

Self-reflection: Encouraging students to reflect on their own progress and set personal goals can foster a deeper understanding of their learning journey. Reflection activities can help students internalize what they have learned and plan for future improvements.

The psychological aspects of motivation, self-efficacy, anxiety reduction, cognitive load management, engagement, and feedback likely played significant roles in the observed improvement in speaking skills in the experimental group. By addressing these factors, the intervention created a

supportive and effective learning environment conducive to language acquisition and performance enhancement.

9. Conclusion

The primary goal of the study was to evaluate how successfully instructional strategies assisted ESL students in improving their speaking abilities from a psychological standpoint. The methodology combined form-focused training with literature-based teaching strategies to create an atmosphere that is both cognitively and emotionally supportive of language learning. Investigating the relationship between active participation during speaking exercises, attentive listening, and vocabulary proficiency—while taking psychological factors like motivation, anxiety, and self-efficacy into consideration—was the main goal of the research aims and questions. The pre-test results indicated that the participants' competence levels ranged from basic to intermediate and possibly higher, as indicated by the "Beginning," "Developing," and "Bridging" categories, which reflect different cognitive and affective demands. The study used instructional approaches and speaking practice techniques intended to improve language anxiety and increase cognitive processing in order to improve speaking ability. The post-test results showed improvement at every ability level, indicating that the treatments were successful in creating a psychologically supportive learning environment. With a better understanding of how students' psychological and linguistic needs differ based on their skill level, curriculum designers may create more specialized and effective teaching strategies. By putting the strategies that have been found into practice—like fusing form-focused instruction with literature-based approaches—teachers can help ESL students become more confident speakers and experience less speaking anxiety. Further investigations could go deeper into the specific aspects of teaching strategies that are most effective in improving speaking abilities on both the cognitive and affective levels. Examining the durability and long-term psychological effects of advancements would also be beneficial. In order to enhance ESL learners' speaking abilities, the study's conclusion highlights the importance of using effective teaching strategies that incorporate form-focused instruction with content-rich and literature-based approaches. These findings underscore the significance of addressing psychological variables in language acquisition and contribute to the continuing discussion concerning language teaching methodologies. They also provide helpful guidance for educators working with a variety of student populations.

Author contributions

Conflict of interest

The authors declare no conflict of interest.

References

1.   Millard DJ. Form-Focused Instruction in Communicative Language Teaching: Implications for Grammar Textbooks. TESL Canada Journal. 2000; 18(1): 47. doi: 10.18806/tesl.v18i1.899
2.   Lyster R. Using form-focused tasks to integrate language across the immersion curriculum. System. 2015; 54: 4-13. doi: 10.1016/j.system.2014.09.022

3. Housen A, Kuiken F. Complexity, Accuracy, and Fluency in Second Language Acquisition. Applied Linguistics. 2009; 30(4): 461-473. doi: 10.1093/applin/amp048

4. Brand C, Götz S. Fluency versus accuracy in advanced spoken learner language. Errors and Disfluencies in Spoken Corpora. 2011; 16(2): 255-275. doi: 10.1075/ijcl.16.2.05bra

5. Lasagabaster D. Literary awareness in the foreign language classroom. Cultura y Educación. 1999; 11(2-3): 5-17. doi: 10.1174/113564002320516740

6. Mart CT. Literature in language teaching: A recipe to maximize learning. L1 Educational Studies in Language and Literature. 2018; 18: 1-25. doi: 10.17239/l1esll-2018.18.01.09

7. Mart C. Reader-Response Theory and Literature Discussions: a Springboard for Exploring Literary Texts. The New Educational Review. 2019; 56(2): 78-87. doi: 10.15804/tner.19.56.2.06

8. Norris JM, Ortega L. Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. Language Learning. 2000; 50(3): 417–528. doi: 10.1111/lang.2000.50.issue-3

9. Spada N. Form-Focussed Instruction and Second Language Acquisition: A Review of Classroom and Laboratory Research. Language Teaching. 1997; 30(2): 73-87. doi: 10.1017/s0261444800012799

10. Habók A, Magyar A. Validation of a Self-Regulated Foreign Language Learning Strategy Questionnaire Through Multidimensional Modelling. Frontiers in Psychology. 2018; 9. doi: 10.3389/fpsyg.2018.01388

11. Oxford R. Language learning strategies: What every teacher should know. New York: Newburry House/Harper & Row; 1990.

12. Oxford RL. Teaching and researching language learning strategies: Self-regulation in context. New York, NY: Routledge; 2016.

13. Anderson NJ. L2 learning strategies. In: Hinkel E (editor). Handbook of research in second language teaching and learning. Mahwah, NJ: Lawrence Erlbaum; 2005. pp. 757–819.

14. Nagy J, Habók A. Attitudes and Behaviors Related to Individual and Classroom Practices: An Empirical Study of External and Internal Factors of ICT Use. Libri. 2018; 68(2): 113-123. doi: 10.1515/libri-2017-0099

15. Habók A, Magyar A. The Effect of Language Learning Strategies on Proficiency, Attitudes and School Achievement. Frontiers in Psychology. 2018; 8. doi: 10.3389/fpsyg.2017.02358

16. Wu YL. Language learning strategies used by students at different proficiency levels. Asian EFL Journal. 2008; 10(4): 75-95. doi: 10.5539/ijel.v1n2p203

17. Green JM, Oxford R. A Closer Look at Learning Strategies, L2 Proficiency, and Gender. TESOL Quarterly. 1995; 29(2): 261. doi: 10.2307/3587625

18. Baker W, Boonkit K. Learning Strategies in Reading and Writing: EAP Contexts. RELC Journal. 2004; 35(3): 299-328. doi: 10.1177/0033688205052143

19. Mokhtari K, Sheorey R. Measuring ESL students' awareness of reading strategies. Journal of Developmental Education. 2002; 25(3): 2-10.

20. Norouzian R, Mehdizadeh M. Reading strategy repertoires in EAP contexts: Students and teachers in academic reading strategy use. The International Journal of Language Learning and Applied Linguistics World. 2013; 3(1): 5-12.

21. Shang HF. Reading strategy use, self-efficacy and EFL reading comprehension. Asian EFL Journal. 2010; 12(2), 18-42.

22. Mokhtari K, Reichard CA. Assessing students' metacognitive awareness of reading strategies. Journal of Educational Psychology. 2002; 94(2): 249-259. doi: 10.1037/0022-0663.94.2.249

23. Sheorey R, Baboczky ES. Metacognitive awareness of reading strategies among Hungarian college students. In: Mokhtari K, Sheorey R (editors). Reading strategies of first- and second-language learners: See how they read. Norwood, MA: Christopher-Gordon Publishers; 2008. pp. 161-173.

24. Preedy VR, Watson RR. Handbook of disease burdens and quality of life measures. Springer; 2010. doi: 10.1007/978-0-387-786650_6466

25. Ellis R. Corrective feedback in teacher guides and SLA. Iranian Journal of Language Teaching Research. 2013; 1(3): 1-18.

26. Agudo JdDM. An investigation into how EFL learners emotionally respond to teachers' oral corrective feedback. Colomb. Appl. Linguist Journal. 2012; 15: 265-319. doi: 10.14483/udistrial.jour.calj.2013.2.a08

27. Elsaghayer M. Affective Damage to Oral Corrective Feedback among Students in Libyan Secondary Schools. IOSR Journal of Research & Method in Education (IOSRJRME). 2014; 4(6): 74-82. doi: 10.9790/7388-04627482

28. Al-Ghezi R, Getman Y, Rouhe A, et al. Self-supervised end-to-end ASR for low resource L2 Swedish. Proceedings Interspeech. 2021; 1429-1433. doi: 10.21437/Interspeech.2021-1710

29. Devlin J, Chang MW, Lee K, Toutanova K. Bert: Pre-training of deep bidirectional transformers for language understanding. In: Proceedings of NAACL-HLT. Association for Computational Linguistics; 2019. pp. 4171-4186.

30. Saleh NS, Murtaza SF. English Language Use in Malaysian Government and Private Civil Engineering

Workplaces. International Journal of Education and Literacy Studies. 2018; 6: 84-91.
31. Turner CE, Upshur JA. Rating Scales Derived from Student Samples: Effects of the Scale Maker and the Student Sample on Scale Content and Student Scores. TESOL Quarterly. 2002; 36(1): 49. doi: 10.2307/3588360
32. Khattri N, Reeve AL, Kane MB. Principles and practices of performance assessment. Mahwah, NJ: Lawrence Erlbaum; 1998.
33. Yamashiro AD. Integrating American speech communication research into EFL. Speech Communication Education. 1999; 12: 111-131.
34. Turner C. Listening to the Voices of Rating Scale Developers: Identifying Salient Features for Second Language Performance Assessment. The Canadian Modern Language Review. 2000; 56(4): 555-584. doi: 10.3138/cmlr.56.4.555
35. Yamashiro AD. Using structural equation modeling for construct validation of an English as a foreign language public speaking rating scale [PhD thesis]. Tokyo: Temple University; 2002.