

## ARTICLE

# The Impact of Neuro-Linguistic Programming on Speaking Skills: An Intervention Study

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## ABSTRACT

This paper tested the impact of Neuro-Linguistic Programming (NLP) on speaking skills. The study was conducted in India. It involved first-year ESP (English for Specific Purposes) learners of MBA at B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, India. It is observed that there is a paucity of empirical research on NLP strategies in the academic speaking environment. Since the integration of applying Neuro Linguistic Programming methods for academic speaking skill enhancement, it had not been studied in-depth by researchers. It creates a knowledge gap and this research provides insights into this unexplored area of study. It used an experimental approach, with 55 participants in the experimental group and 55 in the non-intervention group. The experimental group completed a 30-hour NLP-driven intervention. The t-test result shows a significant statistical effect on the test performance of NLP students. There was a crucial difference between their scores and those of the control group. The findings of the study suggested that NLP

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intervention has a significant effect on the academic speaking skills of the learners. The results of the study may also assist educators in this field in devising more pedagogical strategies that involve NLP learning styles. It will also help to improve the academic application of NLP in L2 contexts.

**Keywords:** NLP Pedagogy; Intervention Study; Speaking Skills; Presentation Skills; Neuro-Linguistic Programming (NLP); English for Specific Purposes (ESP)

## 1. Introduction

Language instructors have recently employed approaches and procedures that place little emphasis on the communicative type of language instruction and the student's speaking abilities. Methods like the Direct Method, CLT, and TBLT do not provide non-native speakers with the linguistic skills they need to become proficient in the language because they do not focus on psychological variables. Neuro-Linguistic Programming (NLP) can effectively assist English language learners in filling this gap by helping them enhance their presentation skills and body language.

In almost every aspect of life, efficient communication is crucial. Verbal efficacy is accomplished in several ways. According to Begum, Paulraj and Banu<sup>[1]</sup>, Neuro-Linguistic Programming is a technique that has been ingrained in many facets of education and learning. Its potential extends across many disciplines, including psychiatry, jurisprudence, management consulting, and education. This research reviews some of NLP's characteristics of successful communication. Presently, scholars and practitioners view NLP as a branch of learning and research that has the promise and future to be crucial for assisting professionals in achieving desired outcomes.

The use of NLP in education and learning has enormous potential. A teacher might use numerous methods and approaches to enhance educational outcomes. Student learning and achievement are directly correlated with effective classroom communication, which mostly relies on effective psychological variables<sup>[2]</sup>. Therefore, NLP facilitates educators in determining the best way to instruct, evaluate, and assess their students. In the history of language instruction, acquisition and quality have long been sought after. Weigang<sup>[3]</sup> argues that researchers and teachers have been active in determining the most effective approach since the inception of language instruction. Therefore, teachers must have up-to-date knowledge of cutting-edge, efficient proce-

dures and practices that improve learning. New strategies are frequently found, which might assist teachers in streamlining the teaching process. NLP is one of these modern educational approaches.

To facilitate learning, NLP focuses on creating connections among linguistic, cognitive, and instructional information. It offers educators a range of tools and techniques for enhancing interpersonal and intrapersonal skills, controlling emotions, and maintaining productive working relationships. NLP is a technique for simulating human interaction and dialogue<sup>[4]</sup>. To improve the efficiency and speed of goal-oriented learning, NLP in education aims to establish a connection that is congruent with scientific learning and teaching. Akshay, Sunny and John<sup>[5]</sup> and Legall and Dondon<sup>[6]</sup> note that NLP is a form of teaching strategy that entails many approaches for enhancing language instruction and convincing individuals that they can influence their thoughts and lifestyles to get better results. Mayne<sup>[7]</sup> and John<sup>[8]</sup> define NLP as a psychodynamic instrument that aids in learners' performance. Mayne<sup>[7]</sup> has studied the impact of NLP on teachers' professional success and motivation. It was discovered that NLP positively impacts teachers' motivation and professional growth. In general, NLP coaching helps people use attention to be more effective, creative, and optimistic in the quest for their values and goals. While various instructional approaches have been explored to enhance learners' academic speaking skills, most rely heavily on traditional language teaching frameworks with limited emphasis on psychological and interpersonal variables. Although Neuro-Linguistic Programming (NLP) has been applied in various educational contexts, empirical research validating its impact on academic speaking, particularly in English for Specific Purposes (ESP) settings at the tertiary level, is notably sparse. Existing literature predominantly comprises conceptual discussions or anecdotal practitioner reports, lacking controlled, data-driven investigations. This study addresses this gap by empirically testing the effect of an NLP-based instruc-

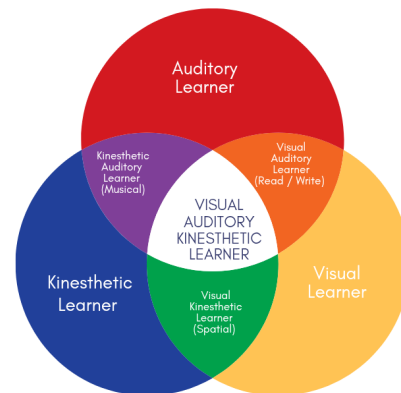
tional intervention on academic speaking proficiency among ESP learners. Specifically, it seeks to evaluate the influence of NLP techniques on speaking performance, paralinguistic competence, and learner confidence.

## 1.1. Theoretical Background

NLP is a method of interpersonal communication that examines and combines three key fields: neurolinguistics, linguistics, and programming. The term neuro refers to neuronal pathways or the communication between the body and mind. The term linguistics describes the way people think and the language they use to communicate with one another. To enhance concentration and accomplish particular objectives, the mind can be programmed by analyzing behavioural patterns and language use<sup>[9, 10]</sup>. NLP uses a set of concepts and a variety of approaches to help people communicate and develop personally. Bandler and Grinder created NLP in 1976<sup>[11]</sup>. Examining the language utilized, the pragmatic method of NLP can provide insight into the learner's thoughts and mental processes. Its goal is to change a language learner's beliefs and behaviour by utilizing NLP approaches. Field<sup>[12]</sup> and John<sup>[13]</sup> state that there are certain underlying assumptions in NLP, but its four pillars, namely outcomes, rapport, sensory acuity, and flexibility, are very helpful in enhancing students' behaviour and communication. Neuro-Linguistic Programming (NLP) operates on the premise that cognitive processes, language, and behavioural patterns are interlinked and can be modified to enhance learning outcomes. In the context of language education, NLP is rooted in constructivist and humanistic paradigms, emphasizing learner-centred instruction, individual perception, and experiential learning<sup>[14, 15]</sup>. These foundations align with Vygotsky's sociocultural theory<sup>[16]</sup>, where language learning is mediated through social interaction and psychological tools<sup>[17]</sup>. Consequently, NLP offers a framework that not only supports linguistic development but also addresses psychological readiness and learner autonomy, both crucial in mastering academic speaking skills.

NLP, which has psychology and neurology as its foundations, is all about how the brain functions and how it can be educated to function better. It includes or is connected to left-right brain functions, learning styles, multiple intelligences, and other areas of research that aim to pinpoint learning modalities while taking the relevance of the indi-

vidual learner into account<sup>[18]</sup>. NLP and allied fields are not without their detractors, especially regarding classroom practices' relevance and how NLP is promoted as a self-improvement technique. Despite being called a quasi-science and receiving criticism for lacking empirical research, NLP is congruent with the methods used in modern classrooms for several good reasons. Instead of the outcome, NLP is more interested in the process. NLP offers a framework for how we talk to ourselves and others. These unmistakably lay the groundwork for what is now known as VAK, which refers to the recognition of visual, auditory, and kinesthetic learners and the necessity of accommodating various learning preferences in the classroom. Students make decisions depending on their values and beliefs. Since their prior learning processes do not align with the current learning environment, they are frequently in a state of conflict. The value of nonverbal communication, notably eye contact, posture, breathing, and movement, is also acknowledged by NLP. When verbal and nonverbal communication is in harmony, the learning outcome is accomplished<sup>[19]</sup>. The three constructs of VAK are given in **Figure 1**.



**Figure 1.** The VAK model adapted for fostering speaking skills.

Neuro-Linguistic Programming (NLP) is an interdisciplinary approach that integrates principles from psychology, linguistics, and cognitive science. Developed by Bandler and Grinder<sup>[11]</sup>, NLP posits that language, behaviour, and neural processes are interconnected and can be consciously modelled to improve communication and learning outcomes<sup>[4, 10]</sup>. Central to NLP are the concepts of sensory acuity, rapport, flexibility, and outcome orientation, which align with learner-centered and constructivist pedagogical frameworks<sup>[12–14]</sup>. These principles support the development of metacognitive awareness, emotional regulation, and interpersonal commu-

nication—key elements in academic speaking.

A core element of NLP's relevance to language education lies in its emphasis on representational systems, particularly the Visual, Auditory, and Kinesthetic (VAK) modalities. These systems guide how individuals perceive and process information and can be leveraged to tailor speaking instruction that accommodates diverse learning preferences<sup>[15, 16]</sup>. Techniques such as anchoring, mirroring, and modelling allow learners to internalize effective communication behaviours, enhancing not only verbal articulation but also non-verbal fluency—which is critical in academic presentation contexts<sup>[20–22]</sup>. In the context of English language teaching (ELT), NLP complements existing communicative methods such as role-play, storytelling, and simulation by adding psychological depth and learner empowerment. Research suggests that NLP-based instruction can foster rapport, reduce language anxiety, and improve motivation, all of which are vital to sustained oral performance<sup>[7, 23]</sup>. Furthermore, NLP's alignment with the principles of flow theory, where learning is viewed as an intrinsically motivated, uninterrupted process, reinforces its potential to create a positive, engaging, and reflective classroom environment<sup>[22]</sup>. While some criticisms label NLP as lacking a unified theoretical framework, its practical applications in language instruction continue to gain traction, particularly when adapted for targeted skill development<sup>[24, 25]</sup>. When implemented within structured, goal-oriented speaking tasks, NLP offers tools for both cognitive restructuring and performance enhancement. Its utility in ESP settings, especially where academic communication demands are high, warrants continued empirical investigation.

## 1.2. Review of Literature

According to Anjomshoa, Esmailzadeh and Keshtidar<sup>[26]</sup>, NLP helped participants develop English language proficiency. The NLP approach has modelling techniques to foster strategic thinking in learners and enhance language learning. It strengthens language skills, thinking strategies, student beliefs, behaviour, and proficiency in accurate communication. NLP tactics correlate positively with teachers' communicative competence, which helps students. Long-term student success may depend on students' ability to develop interaction abilities, enhance their communication tactics, and use alternate forms of communication<sup>[15]</sup>.

According to a survey on problems and opportunities by Yemm<sup>[27]</sup>, students can apply NLP principles to make better judgments and improve their communication abilities. The conclusion drawn from the findings was that word choice is crucial for effective communication. Additionally, body language is also crucial to nonverbal communication. There is a significant relationship between NLP and English language teaching (ELT). NLP could, therefore, help language learners improve their communication skills. According to Hosseinzadeh and Baradaran<sup>[28]</sup>, Neuro Linguistic Programming's multimodal tools make learning easier. They claimed that NLP improves language teachers' and students' performance. The effectiveness of NLP training and the participants' positive attitudes toward communication and language learning were enhanced. The study's findings further supported the idea that NLP improved communication in the classroom and increased students' willingness to engage in language learning activities. Hosseinzadeh and Baradaran<sup>[28]</sup> introduced neurolinguistic programming into their lessons to improve language acquisition and noticed remarkable success.

Masouleh and Jooneghani<sup>[29]</sup> argue that NLP is more of a holistic training ideology than a method since it incorporates more psychological elements crucial for communication. It raises positive self-esteem, which could support language learning. According to Tosey and Mathison<sup>[15]</sup>, learning a language unconsciously helps one become more fluent and accurate in their tongue. They claimed that all facets of language instruction could be taught using the NLP concepts. As a result, including NLP in language instruction may help language learners improve their communication abilities. The field of teaching and learning, known as neuro-linguistic programming, has enormous potential and emphasizes the value of communication in all vocations. NLP supports academic brilliance through various tactics and strategies based on theories and presumptions that influence how our communications turn out. Practical application of neurolinguistic programming enhances communication and learning outcomes in educational settings. According to Alexopoulou et al.<sup>[30]</sup> and John and George<sup>[31]</sup>, NLP in the curriculum promotes efficient communication during the learning process, which results in positive changes. Teachers are, therefore, expected to concentrate on improving the atmosphere for ESL students. The learners' communication abilities will increase due to NLP integration in language

instruction.

Early research on this humanistic strategy was mostly psychotherapeutic. However, over time, therapists, psychiatrists, educators, and other professionals of all kinds eagerly discovered the value of this multidisciplinary instrument to be effective in their field of instruction<sup>[32]</sup>. The field of education has recently become more interested in the practical application of NLP. The study and teaching of second and foreign languages are foremost among them<sup>[33]</sup>. Although widely used as a theoretical foundation for effective communication, personal growth, and learning, NLP has not significantly impacted the academic community. Since Pishghadam and Shayesteh<sup>[34]</sup> added a new perspective to the knowledge of NLP in the context of ELT, it is clear that NLP has enormous value not only in practice but also as a topic for study. The recent interest is because they believe in the vast worth of NLP and have seen the dearth of studies in this area. To find out how much English language teachers use NLP approaches while they teach, they created and standardized an NLP scale using exploratory factor analysis. They highlighted the absolute power of NLP in bringing about change in educational contexts by evaluating its association with teachers' level of success. Regarding the theoretical foundation of NLP, there are several open questions. For instance, Craft<sup>[22]</sup> correctly wonders if NLP can be regarded as having a solid theoretical foundation as opposed to simply being a compilation of models and practices. He argues that NLP might be multidimensional because it draws from academic and extra-academic sources and was developed by application instead of inferred from axioms. Undoubtedly, NLP has to be more extensively theorized to be taken seriously as an academic discipline, especially in light of how it interacts with and differs from other theoretical frameworks like linguistics, epistemology, and semiotics.

Whether NLP has adequately accounted for associated theoretical advancements and how simplistic or out-of-date its models are is debatable. For instance, academics accept the significance of updating NLP's fundamental linguistic models to reflect linguistic advancements<sup>[35]</sup>. As a result, the queries mentioned above have not received much attention. Additionally, there have not been many chances for possible NLP discoveries to refute popular views. If NLP's assertions concerning phenomena are factual, the related question for academia is whether or not current theories can adequately

explain them. This seems to be a conversation that could be useful, but it has not happened yet. NLP research is unquestionably necessary, for instance, to assess practitioners' claims and represent educators' perspectives and experiences. As far as we know, little to no independent research supports the efficacy of NLP. Such an assessment of NLP in language instruction would be of considerable use, even though efficacy studies in domains like counseling and psychotherapy are challenging overall. Otherwise, the discipline can rely too heavily on the practitioner's tales and accumulated experience. What is intriguing is that, in our opinion, using NLP instrumentally goes against systemic assumptions. The researchers have discussed the nature and history of NLP, its theoretical underpinnings, how it relates to notions of education and its strategy for teaching and learning. They have also cited examples from a recent investigation and mentioned concerns that NLP may need to answer to be understood as a theory and practice in the teaching and learning sector.

NLP is widely employed in education, and language teachers have been using its techniques unknowingly for a long time. For instance, educators are already utilizing NLP as it was two decades ago when they included active learning, theatrical, collaborative L2 proficiency, and nonverbal cues in their lessons<sup>[24]</sup>. However, given that the relationship between cognitive science and education is undoubtedly expanding, ESL teacher-training programmes ought to give aspiring educators a chance to comprehend what NLP is and how it functions to make its implementation in language classrooms feasible and successful. As Darn<sup>[24]</sup> noted, several adjustments are required to enhance the research designs for NLP. An experienced NLP practitioner should first train the teaching practitioner. Then, data for the group should be gathered by summing the information obtained at the individual level. Before choosing the efficacy of NLP, research with certified professionals should be conducted.

According to Richards and Rodgers<sup>[36]</sup>, NLP has lately demonstrated to be incredibly prominent in language learning and teaching. Several initiatives to combine NLP and education have been made. As a result, numerous studies have been conducted to understand how NLP fits into the educational process and why educators are so fascinated by it. NLP impacts students' lives since it helps them resolve psychological problems and has a positive attitude-altering

effect<sup>[2]</sup>. It is evident from the analysis of earlier studies that NLP helps people communicate more effectively while increasing their intelligence and memory. It allows teachers to establish trusting bonds with their pupils, which raises their level of job satisfaction. In the classroom, both students and teachers will feel more at ease. Students are also more motivated and able to benefit from higher-quality education. Using NLP techniques and approaches, English language teachers can encourage students' creativity, build self-confidence, and enhance their body language. Additionally, earlier studies have shown that NLP was seen as a tool that enables educators to cultivate special abilities, including rational reflection, consciousness, and rapport-building skills essential for academic success and achievement. Additionally, it has been demonstrated to assist pupils in obtaining excellence in their work. The results showed that implementing NLP in both classroom instruction and learning could promote the growth of verbal proficiency in ESL contexts.

### 1.3. Research Questions

Using the literature gaps identified, this study addresses these research questions.

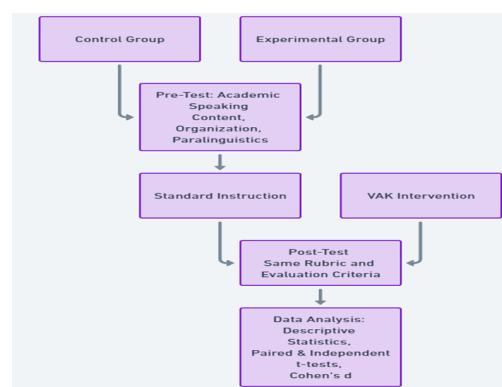
1. Does NLP-based instruction improve academic speaking skills in tertiary-level ESP learners?
2. How does NLP instruction influence the use of paralinguistic features in academic presentations?
3. What is the effect of NLP-based instruction on learners' confidence during academic speaking tasks?

## 2. Methodology

The materials and methods should be described with sufficient details to allow others to replicate and build on the published results. This section followed an experimental design to test the effectiveness of NLP in the instructional process and improve speaking skills. An independent variable, in this case, is verbal competency, a prerequisite for speaking skills. The methodology flowchart is presented as **Figure 2**.

This study involved 146 first-year undergraduate students selected at random. The participants were MBA students at Crescent University in India. They had the option of participating in the study. A written consent form was required of those who agreed. They were thoroughly explained their role in the research before signing the document, and

all their questions were answered. A total of 129 students consented to participate in the study after signing the forms. Two classes of 45 students each were randomly assigned. They were between 21 and 23 years old and spoke English as a second language. Participants in the study had to attend at least 95% of the classes used for experiments. Personal reasons led to a few students withdrawing. Eventually, the post-test was administered to 52 students from the control group and 52 students from the experimental group.

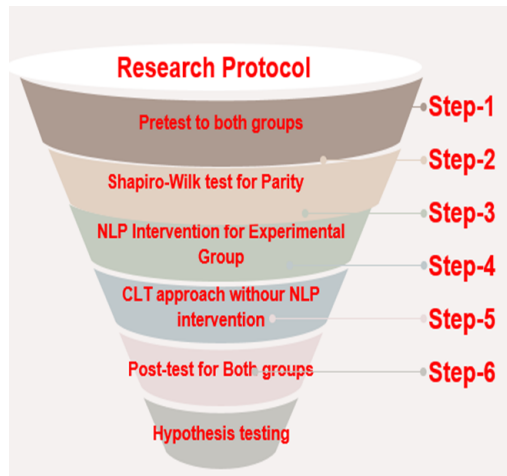


**Figure 2.** Methodology flowchart.

### 2.1. Validity of the Study

Several measures were used to guarantee the accuracy of the investigation. First, participants were continuously informed about the research protocol. Two assessors were used to evaluate student performance to remove bias. Thirdly, the experimental group was established using randomization, and the tasks were selected randomly from a database of activities tested and approved by two applied linguists. Both the control group and the experimental group received the same course materials. Finally, the control and experimental groups completed the pre-test and post-test, which reduced any reactive efficacy of the test. Students from the control group and the experimental group's pre-test results underwent a battery of assessments to determine their homogeneity and proportionality and to look for anomalies and noteworthy differences. The control and intervention cluster homogeneity were ( $F = 0.96, p > 0.01$ ). At  $p = 0.05$ , the outcome was insignificant, indicating commonality between the two groups. The Shapiro-Wilk test was used to determine whether the distribution was normal. While the control group displayed ( $W = 0.810, p = 0.01$ ), the experimental group displayed ( $W = 0.789, p > 0.01$ ). Therefore, it is evident that

both groups were equal before the intervention. The steps associated with the research protocol are given in **Figure 3**.



**Figure 3.** The research process.

## 2.2. Pre- and Post-Test

The 52 students from the control group and 52 students from the experimental groups were asked to give a mini-presentation. The mark allotment was 5 points for content, 5 points for organization and 10 points for paralinguistic features. In the post-test, the learners were expected to give two

macro presentations. It may be recalled that the experimental group was given training on a presentation using the NLP framework.

According to Bachman and Palmer<sup>[37]</sup>, validated rubrics should be utilized. A suite of rubrics from Illinois State University was modified to evaluate students' work. The bands, which resembled CEFR bands and each represented a range among two scores, were developed on the assessment criteria. Both the examiners and the experts contributed to the validation of the rubrics. The pre-test and post-test performances were scored by the evaluators using the rubrics. Two evaluators with more than 20 years of university-level L2 teaching experience evaluated the students' competence in both presentations to guarantee their reliability. Each task's average score was determined and taken into account.

Additionally, two scorers calculated the pre-and post-test scores given to students in the experimental and control groups using Pearson's coefficient of correlation (see **Table 1**). Inter-rater reliability was intended to be strong across all pre-and post-test results, and it was. **Table 1** displays the Pearson's correlation coefficient for the pre-and post-test scores. Bulleted lists look like this:

**Table 1.** Pearson's correlation coefficient for intervention and non-intervention groups.

Pearson's Correlation	Pre-Test-Non Intervention Group	Pre-Test- Intervention Group	Post-Test-Non Intervention Group	Post-Test- Intervention Group
	0.89	0.84	0.90	0.96

## 2.3. The Intervention

The intervention was conducted using the Crescent learning management system for both groups. The same instructor taught academic speaking online to the learners in the experimental and control groups for a total of 30 hours. Participants in the control and experimental groups were taught the subtleties of presentation. However, only the intervention group received instruction using NLP methods. Throughout all of the presentations, the learners were encouraged. The rubrics and evaluation scales guided the students during the presentation.

## 3. Data Analysis

The mean and standard deviation of the non-

intervention and intervention groups' pre-and post-test scores were compared using descriptive statistics. To determine whether there is a statistically significant discrepancy between the pre-test and post-test achievement of the intervention and non-intervention students, just one paired t-test was conducted. Cohen's d was also computed to determine the effect magnitude for each group. The next step was to run an independent sample t-test to identify any statistically significant differences between the two groups' post-test scores. During the intervention period, each student was obliged to turn in two presentations at the start of each fortnight. The speaking performance had to be demonstrated in each of these samples.



### 3.1. Findings

Responses to the research question are used to present the study's findings. Consequently, this section focuses on the effects of NLP treatment as an instructional method on students' academic speaking abilities, and the last section compares the effects of different task types on the academic speaking abilities of experimental students. **Table 2** presents the descriptive data for the students of the control and experimental groups' pre-and post-test results. Regarding intra-group comparisons, both groups' post-test mean scores are much higher than their pre-test averages. However, the gain in the NLP intervention group is noticeably more significant. The only variation was in the highest post-test score, as there was no change in the minimum pre-and post-test scores among the groups.

Both groups' pre-test results did not significantly differ from one another. Even though both groups' post-test scores rose, the experimental group's post-test scores were

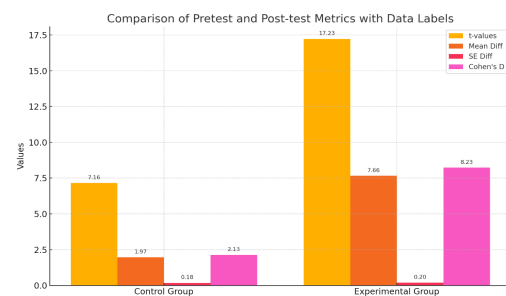
noticeably higher than the control group's. The influence of the intervention on students' academic speaking ability was tracked using paired samples t-tests for both groups' pre-test and post-test scores. An independent sample t-test was used to assess the post-test scores of both groups and ascertain whether there was a statistically significant difference between them. The results of the paired t-test (see **Table 3**) do not indicate a significant difference between both the pre-test and post-test scores of the experimental and control groups (95% confidence interval:  $t = 13.11$ ,  $p = 0.005$ , and  $t = 14.143$ ,  $p = 0.005$ ). Through Cohen's  $d$ , it was possible to determine the effect size of the differences, which was minor for the control group (CG) ( $d = 3.978$ ) and substantial for the intervention class ( $d = 8.761$ ). Due to the sizable extent of the effect size for the intervention group, it can be concluded that NLP integration has a beneficial effect on students' academic speaking abilities. **Table 3** includes the outcomes of the paired t-test.

**Table 3.** Comparison of pre-test and post-test.

	Pretest and Posttest t-Values	P	Mean Difference	SE Difference	Cohen's d
Control group	7.161	<0.002	1.971	0.179	2.131
Experimental group	17.234	<0.000	7.659	0.199	8.231

The NLP group performed significantly better than the control group when the experimental and control groups' post-test results were evaluated using an independent t-test, as shown in **Table 4**. At a 95% confidence level, the EG's performance was significantly superior to the CG's ( $t = 5.174$ ,  $p = 0.003$ ). The graphical representation of the results is shown in **Figure 4**. While the statistical analysis revealed a very large effect size (Cohen's  $d = 8.231$ ) for the experimental group, such magnitudes are atypical in educational intervention studies and warrant cautious interpretation. Several potential sources of bias may have contributed to this outcome. Firstly, the teacher effect may have influenced learner performance, particularly since the same instructor delivered both the control and intervention sessions. Subtle differences in instructional delivery, enthusiasm, or teacher-learner rapport could have unintentionally favoured the experimental group. Secondly, expectancy effects, where learners in the experimental group perceived themselves to be part of a novel or 'enhanced' method, may have affected their motivation

and engagement levels. Finally, motivational differences, particularly due to the novelty or perceived effectiveness of NLP strategies, might have led to increased effort or self-regulation among the intervention participants.



**Figure 4.** Graphical representation of results.

**Table 4.** NLP group t-test result.

Independent Samples t-Test			
	t	df	P
Scores	5.662	52	5.123



**Table 2.** Descriptive statistics.

N	Pre-Test Control Group	Post-Test Control Group	Pre-Test Experimental Group	Post-Test Experimental Group
Mean	9.654	10.132	9.743	17.967
Std. Deviation	2.991	3.125	3.312	4.964
Minimum	3.500	4.000	4.500	4.561
Maximum	17.500	18.000	18.000	21.500

Based on the graphical representation, it is evident that NLP-based instruction significantly improves academic speaking skills in tertiary-level ESP (English for Specific Purposes) learners. The Experimental Group, which received NLP-based instruction, demonstrated a markedly higher mean difference (7.659) between pre-test and post-test scores compared to the Control Group (1.971), supported by a large *t*-value (17.234) and an exceptionally high Cohen's *d* (8.231), indicating a strong effect size. In contrast, the Control Group, which did not receive NLP-based instruction, showed minimal improvement. This suggests that the instructional intervention played a pivotal role in enhancing learners' speaking performance, directly addressing the first research question regarding academic speaking skills. Moreover, the second research question concerning paralinguistic features in academic presentations can be addressed through the notable effect size observed in the experimental group. Paralinguistic features such as intonation, gestures, eye contact, and facial expressions are often implicitly targeted through NLP techniques, which emphasize self-awareness, communication modelling, and sensory acuity. The sharp improvement in performance likely reflects an increased proficiency not only in verbal articulation but also in non-verbal delivery, which is essential in academic presentations. The statistical strength of the findings, particularly the large Cohen's *d*, justifies the conclusion that NLP-based instruction facilitates more impactful and dynamic communication, encompassing both linguistic and paralinguistic competence.

The findings of this study, particularly the significant gains in academic speaking proficiency among the NLP-trained group, align with recent empirical evidence supporting the role of psychologically informed instruction in language learning. Dewaele and Alfawzan<sup>[38]</sup> demonstrated that instruction targeting emotional and interpersonal factors (e.g., anxiety reduction, rapport-building) positively correlated with speaking performance in EFL contexts. These findings suggest that the psychological underpinnings of NLP,

such as self-regulation, anchoring, and sensory awareness, may be instrumental in fostering improved paralinguistic and verbal performance. By drawing these parallels, the present study contributes to a growing body of work advocating for integrative, affect-sensitive approaches to speaking instruction in ESP settings.

## 4. Discussion

The goal of the current study was to determine how using NLP as an educational technique affected the academic speaking abilities of tertiary ESL students. The results show that NLP intervention significantly enhanced students' academic speaking abilities and that EG students' performance improved in both presentations. While the experimental and control groups exhibited progress in their speaking abilities, the present study demonstrated noticeably more success in their academic pronunciation. The researcher could not compare the current study to other studies because there had never been any research on utilizing NLP to improve speaking abilities.

The enhancement observed in the experimental group's post-test results suggests that NLP-based instruction may significantly influence learners' communicative efficacy. This can be attributed to NLP's structured focus on psychological readiness, rapport building, and non-verbal communication, which are essential for effective academic speaking. The intervention appeared to facilitate increased self-regulation and metacognitive awareness among learners, encouraging more strategic engagement with language tasks. Specifically, the modelling of successful speaker behaviour and sensory-based feedback could have helped participants refine both verbal and paralinguistic aspects of their presentations. These findings align with existing literature highlighting NLP's impact on cognitive-affective dimensions of language learning<sup>[7]</sup>. The notable effect size further supports NLP's role in addressing language anxiety and enhancing learner

confidence—factors closely tied to academic speaking performance. By integrating NLP strategies, learners may have also developed a heightened sensitivity to audience engagement, contributing to improved delivery and organization of spoken content. Despite these promising results, contextual factors such as instructor expertise and learner motivation must be acknowledged. Additionally, the absence of qualitative insights limits the interpretation of learners' internal experiences during the intervention. Future studies should consider a mixed-methods design to explore how individual NLP components contribute to sustained improvement in oral academic communication.

Paralinguistic features were assessed using three primary indicators: intonation and vocal variety, gestural appropriateness, and eye contact. For instance, students exhibiting consistent downward gaze, monotonous tone, or rigid posture in the pre-test often demonstrated improved modulation, purposeful gestures, and increased audience engagement in the post-test. These behavioural shifts were particularly evident in the experimental group, where NLP techniques such as anchoring (to regulate confidence states), mirroring (to develop body language awareness), and sensory acuity training (to increase presentational responsiveness) were explicitly integrated into instructional activities. This targeted focus appeared to foster greater learner awareness of non-verbal communication as an essential component of academic speaking, contributing to the notable improvement in paralinguistic performance among NLP-trained participants.

## 5. Conclusions

The goal of the experimental study was to confirm how using NLP as a teaching technique affected undergraduate students' academic speaking abilities. The results show that using NLP significantly improved students' academic speaking abilities and helped them perform better on tasks requiring assurance in academic speaking. The results should open the door for more research into the opportunities presented by NLP in the language classroom. More qualitative data about student interviews, classroom interactions, and student experiences might have been helpful for the study. That, however, was not consistent with the experimental strategy that the study used. In addition to a delayed post-test, an early post-test may have improved the dependability of the

results. It was impossible because administering oral exams to such a large number of pupils presented logistical challenges. Students also expressed a lack of interest in taking further exams. The study does, however, have some implications. First and foremost, the teacher should plan and prepare well in advance when using NLP as a pedagogy.

The implementation can be significantly improved by identifying certain NLP skill areas. However, the study also shows that it is feasible to implement NLP in a comparable-sized, typical university ELT classroom that emphasizes speaking abilities. It might be a good idea to introduce NLP concepts to students before assigning speaking activities to reduce performance anxiety. To sum up, the study also has consequences for teacher preparation in speaking classrooms. Potential researchers can adopt new methodologies for studies with a consistent focus and look into how students interact with speech when NLP integration occurs. It will be intriguing to investigate how students' attitudes affect their performance and how they relate to the usage of NLP in speaking classes. Further research into how NLP research affects students' oral performance is still possible.

Even though NLP has so far had a limited impact on SLA and real-world language education, the application of NLP in the context of language learning presents a wealth of options for developing applications to enhance both language learning and teaching and SLA research. More inter-professional teams between SLA and NLP will be essential to develop trustworthy annotation schemes and analysis approaches that pinpoint the characteristics that are useful and significant for studying language and analyzing language for learners. A relatively new field of study called neurolinguistic programming offers enormous promise and possibility for virtually all occupations where communication is the primary activity<sup>[39, 40]</sup>. Through various approaches and strategies based on particular principles and assumptions that control and influence human communication results, NLP aids in achieving greatness. Excellence may be learned and achieved by utilizing NLP approaches, much like other good traits like beliefs, abilities, etc. In a teaching-learning setting, the proper application of NLP could improve communication and, by extension, the education process and raise the overall standard of the situation.

In addition to emphasizing information acquisition through reciprocal communication, NLP views learning ex-

periences as a component of extensive unconscious learning that is enhanced and modified by the internal representation system. As a result, the student acquires new information, picks up new abilities, and hones his ability to study effectively and shrewdly. According to Bagherkazemi and Zahed Shekarabi<sup>[41]</sup>, understanding the communication process and mastering NLP tactics and procedures will undoubtedly enable the educator to become more innovative and achieve his goals competently and cleverly. The use of its techniques is typically regarded at the level of the general problems of education, even though there is an increasing demand for NLP in education.

Most teacher training or pre-service education programmes do not take significant steps to prepare novice teachers with NLP<sup>[42]</sup>. Teachers are generally interested in how the brain works, but many find it challenging to integrate current neuroscientific findings into the curriculum<sup>[43]</sup>. It could be argued that inclusive training is hard to evaluate<sup>[44, 45]</sup>. Nevertheless, given the ubiquity of NLP (and the number of qualified practitioners), a glaring weakness is the lack of research into comprehensive NLP training. The importance of psychological variables in teaching English as a second language has been recognized in recent years. NLP, an argumentative perspective on personal and interpersonal development, is one of the most significant and relevant psychological disciplines of study in ELT. NLP and reflective teaching may be closely intertwined, and both teachers and students might benefit from using NLP approaches. The learners will be able to study more effectively and smoothly when teachers become more analytical due to NLP approaches. All instructional disciplines could benefit from familiarity with and effective use of NLP approaches. Teachers might realize that becoming more familiar with NLP tasks and using them could make them more reflective. These methods can improve teachers' capacity for inference and deepen their instructional knowledge. To increase their level of reflectiveness, EFL teachers are advised to try to become familiar with psychological ideas, particularly NLP techniques. NLP techniques could help teachers create a more reliable foundation for their decisions about the Teaching-Learning Process, help them gain deeper insights into the profession, and enable them to be reflective practitioners<sup>[46]</sup>.

The results of this study may be helpful to curriculum designers and material writers as they think about how NLP

methods can be used to learn a second or foreign language. The value of NLP approaches could be emphasized in various available resources to teachers and students. For teachers and students to become familiar with the idea of NLP efficiently and effectively through learning materials, material creators are encouraged to integrate information into course materials. In the long run, this will probably assist language teachers in becoming more facilitators of learning, leading to more learning on the part of learners<sup>[47]</sup>.

Regarding the pedagogical consequences, this study was specifically designed to focus on instructors and their key qualities, whose scarcity has consistently been evident throughout the research. If NLP and autonomy are valued, English language training could be streamlined and carried out more effectively. By fully adopting NLP components, teachers can foster a much friendlier and more accepting environment that improves student learning. Although other factors play a critical role in the success of the educational system, teachers' autonomy plays a significantly more significant role. The teacher is best suited to assess classroom situations and make the students' wisest choices, according to Zhang, Frey and Bansal<sup>[48]</sup>. In light of the findings of the present study and the positive relationship between general autonomy and NLP, it can be concluded that English language training owners, directors, and teachers should pay more attention to teachers' internal and mental factors, as well as their autonomy, as this could ultimately lead to higher-quality instruction.

This study presents several limitations that should be acknowledged to contextualize its findings. The sample was drawn from a single institution with relatively homogenous linguistic and cultural backgrounds, which may constrain the generalizability of the results to broader or more diverse ESP contexts. The intervention's limited duration—30 instructional hours—may not have been sufficient to capture the long-term effects of NLP-based instruction, particularly in relation to sustained improvement in academic speaking and paralinguistic competence. Moreover, the absence of a delayed post-test restricts the ability to evaluate the retention and transferability of skills over time. The study also relied exclusively on quantitative measures without incorporating qualitative data such as learner reflections or classroom observations. This could have offered valuable insight into participants' perceptions, motivation, and affective engage-

ment. Additionally, individual learner differences—such as language proficiency, cognitive style, and prior experience with presentation tasks—were not controlled for, and these variables may have influenced outcomes. Finally, while a single instructor delivered the intervention to ensure consistency, familiarity with NLP strategies may have introduced unintentional bias or expectancy effects. Future research should adopt mixed-methods and longitudinal designs, include more diverse participant profiles, and explore teacher training implications to better understand the efficacy and transferability of NLP in academic speaking instruction.

The findings of this study hold practical relevance for the design and enhancement of ESP curricula, particularly in business and management education. Given that participants were enrolled in an MBA program, the demonstrated improvements in academic speaking and paralinguistic competence underscore the value of integrating NLP-based strategies into instructional modules aimed at professional communication. Skills such as structured oral presentations, persuasive speaking, and non-verbal fluency are vital in business contexts where clarity, confidence, and interpersonal effectiveness are essential. ESP curricula could be strengthened by embedding targeted NLP techniques such as anchoring for confidence-building, mirroring for body language awareness, and sensory acuity for audience adaptation within units focused on business presentations and corporate communication. These strategies not only support linguistic development but also align with soft skill competencies required in globalized professional environments. Educators are encouraged to incorporate such approaches into task-based speaking modules to better prepare learners for real-world communicative demands.

## Author Contributions

Methodology, V.S. and S.T.; software, not specified; validation, A.J.; formal analysis, K.K.S.; investigation, V.S.; resources, S.T.; data curation, S.T.; writing—original draft preparation, A.J., V.S., R.P., and S.S.G.; writing—review and editing, A.J. and R.P.; visualization, A.J. and S.A.; supervision, S.A.; project administration, K.K.S. and S.S.G. All authors have read and agreed to the published version of the manuscript.

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## Institutional Review Board Statement

This study is in line with the principles of the Declaration of Helsinki and obtained approval from the institution.

## Informed Consent Statement

Informed consent for participation was obtained from the respondents who participated in the study.

## Data Availability Statement

Not applicable.

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Not applicable.

## Conflicts of Interest

The authors declare no conflict of interest.

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