

# Effectiveness of Neuro-Linguistic Programming (NLP) Techniques in Enhancing Presentation and Group Discussion Skills: A Quasi-Experimental Study

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Submitted: 05-sept-2025 Revised: 10-sept-2025 Accepted: 10-Oct 2025 Published: 31-Oct-2025

Manuscript ID:  
IJEWLPSIR-2025-020513



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DOI: [10.5281/zenodo.17777380](https://doi.org/10.5281/zenodo.17777380)

DOI Link:  
<https://doi.org/10.5281/zenodo.17777380>

Volume: 2

Issue: 5

Month: Oct 2025

E-ISSN: 3065-7873

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## How to cite this article:

W, R. K., & Austen, I. J. (2025). Effectiveness of Neuro-Linguistic Programming (NLP) Techniques in Enhancing Presentation and Group Discussion Skills: A Quasi-Experimental Study. *International Journal of English and World Languages & Literature Paradigm Shift in International Research*, 2(5), 43–56. <https://doi.org/10.5281/zenodo.17777380>

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## Abstract

Neuro-Linguistic Programming (NLP) has emerged as an influential tool in communication training, particularly for learners who struggle with anxiety, coherence, stage confidence, and interpersonal interaction. This quasi-experimental study investigates the impact of selected NLP techniques—anchoring, reframing, representational systems, rapport-building, sensory acuity, meta-model questioning, and guided imagery—on the development of presentation and group discussion (GD) skills among tertiary-level learners. A non-randomized pre-test-post-test design was employed with two intact groups: an experimental group receiving structured NLP-based communication training and a control group receiving conventional communication instruction.

A mixed set of standardized rubrics was used to assess presentation clarity, organization, non-verbal cues, voice modulation, argument structure, turn-taking, and interactional competence. Additionally, learners completed a Communication Confidence Scale and Speaking Anxiety Inventory before and after the intervention. Findings showed statistically significant improvements in the experimental group across parameters such as coherence, spontaneity, voice quality, persuasive stance, and collaborative GD participation. The control group displayed only marginal improvements limited to content preparation.

Qualitative feedback from focus group interviews further revealed that NLP techniques reduced fear of judgment, improved emotional regulation, increased self-awareness of body language, and enhanced learners' ability to articulate ideas confidently under pressure. The study concludes that NLP-based training offers a holistic, low-cost, and psychologically supportive framework for communication enhancement. This paper argues for integrating NLP within higher education communication curriculum and recommends future research involving longitudinal tracking, multi-institution sampling, and AI-supported NLP interventions.

Overall, the findings reinforce the value of context-sensitive, learner-centered interventions that blend cognitive, emotional, and behavioral dimensions to systematically strengthen communicative performance.

**Keywords-** Neuro-Linguistic Programming (NLP), Presentation Skills, Group Discussion Skills, Quasi-Experimental Study, Speaking Performance, Nonverbal Communication, Self-Efficacy,

## Introduction

Effective communication—particularly Presentation Skills and Group Discussion (GD) competence—is essential for academic success, professional readiness, and employability. However, many learners at the tertiary level struggle with stage fear, lack of fluency, poor organization of ideas, weak interpersonal coordination, and low confidence during high-stakes communicative tasks. Traditional training methods often focus on content delivery, memorization, and repetitive practice, which fail to address underlying psychological and affective barriers such as anxiety, negative self-talk, and lack of self-regulation.

In recent years, Neuro-Linguistic Programming (NLP) has gained increasing attention in language education and communication training for its potential to improve both cognitive-linguistic performance and emotional conditioning. In recent years, Neuro-Linguistic Programming (NLP) has gained increasing attention in language education and communication training for its potential to improve both cognitive-linguistic performance and emotional conditioning.

NLP techniques such as anchoring, reframing, sensory acuity, meta-model questioning, and representational systems are designed to influence internal mental

states, behavioural responses, and communication patterns.

These techniques help learners manage fear, activate resourceful emotional states, enhance clarity of thought, and interact more effectively in group settings.

Presentation and GD skills require a combination of verbal, non-verbal, psychological, strategic, and interpersonal components. Learners must think logically, articulate ideas clearly, respond spontaneously, collaborate actively, manage body language, and demonstrate confidence.

NLP offers structured strategies to build these multifaceted competences by targeting internal processing patterns, beliefs, and mind-set.

This study adopts a quasi-experimental approach to evaluate the effectiveness of NLP-based training compared to conventional instruction. Unlike purely theoretical or fully experimental designs, a quasi-experimental structure accommodates intact classroom groups while still enabling rigorous comparison through pre-tests and post-tests. The study specifically investigates:

- Whether NLP techniques significantly enhance presentation skills?
- Whether NLP-based intervention improves group discussion performance?
- How NLP influences speaking confidence, anxiety levels, and emotional regulation?
- How learners perceive NLP strategies in real communication contexts?

The findings aim to contribute to the growing field of NLP in ELT and communication studies, offering evidence-based insights for curriculum designers, communication trainers, and educators seeking holistic methods to improve learners' communication abilities.

### **Review Of Literature**

The Literature review is organized into five major sections:

1. Neuro-Linguistic Programming (NLP) in Education and Developing Communication Skills,
2. NLP techniques relevant to Presentation and Group Discussion Skills,
3. Presentation Skills: Components, Challenges, and Training Approaches,
4. Group discussion (GD): Competence, Behaviour, and Influencing factors, and
5. Research studies on NLP interventions for Communication Skills.

### **NLP in Education and Communication**

Neuro-Linguistic Programming (NLP), developed by Bandler and Grinder (1975), is based on the premise that internal mental processes (neuro), language patterns (linguistic), and behavioural frameworks (programming) interact to shape human performance. Early NLP research focused on therapy, but the field quickly expanded into education, communication, and corporate training.

### **NLP in Language Education**

In ELT (English Language Teaching), NLP has been adopted to enhance fluency, confidence, and learner motivation. Techniques such as anchoring, sub modalities, reframing, and modelling support processes like:

- Managing anxiety before speaking tasks
- Improving verbal fluency through mental rehearsal
- Enhancing listening comprehension through representational systems
- Shaping positive beliefs related to performance

According to Richards & Rodgers (2001), NLP aligns closely with learner-centred pedagogy and communicative methodologies, emphasizing holistic learning experiences.

### **NLP as Emotional Conditioning**

Several researchers (e.g., Tosey & Mathison, 2009) argue that NLP operates at both cognitive and affective levels. Since emotional states directly influence communication output, NLP helps learners shift from "fear states" to "resourceful states" before speaking.

### **NLP and Cognitive Reorganization in Communication**

A growing body of research establishes that NLP facilitates cognitive restructuring, which is essential for effective communication performance. Cognitive reorganization refers to the process through which learners modify their internal thinking patterns, perceptual filters, and linguistic framing to produce more coherent and purposeful verbal output. According to Dilts (2016), NLP techniques such as reframing, meta-model questioning, and representational system awareness enable individuals to reorganize their mental maps, leading to clearer thinking and more structured expression.

### **How NLP Reduces Speaking Anxiety: A Neuropsychological Explanation**

Speaking anxiety is one of the most significant barriers to effective communication, especially in public speaking, presentations, and group discussions. Neuropsychological evidence shows that anxiety not only affects emotional states but also disrupts cognitive processing, working memory, and linguistic retrieval (Eysenck, Derakshan, Santos, & Calvo, 2007). NLP reduces these disruptions through targeted interventions that influence neural pathways associated with fear, memory, and self-regulation.

NLP's foundational principle—that internal representations shape emotional responses—aligns with contemporary neuroscience demonstrating that cognitive reframing can alter neural activation patterns in the amygdala, the brain's fear center (Davidson & McEwen, 2012). Techniques such as reframing and state management help learners reinterpret speaking situations from threatening to manageable, reducing hyperactivity in the amygdala and increasing engagement of the prefrontal cortex, which governs rational thinking and speech organization.

### **NLP Techniques Supporting Presentation & GD Skills:**

Although numerous NLP strategies exist, the following seven are particularly relevant for communication performance:

#### **1. Anchoring**

Anchoring involves conditioning a positive emotional state—such as confidence or calmness—using sensory triggers (touch, sound, gesture). During presentations or GDs, anchors help:

- Reduce stage fright
- Activate peak performance states
- Maintain emotional balance under pressure

#### **2. Swish Pattern**

This visual-replacement technique transforms negative self-images (e.g., “I will forget my lines”) into positive outcomes (“I speak clearly and confidently”). This is crucial for:

- Reducing anticipatory anxiety
- Creating confident self-identity as a speaker

#### **3. Visualization and Mental Rehearsal**

Mental rehearsal is widely used in public speaking, sports, and leadership training. NLP-enhanced visualization helps learners simulate:

- Delivering structured presentations
- Speaking with confidence
- Responding logically in group discussions

#### **4. Meta-Model Questioning**

This technique sharpens clarity of expression by reducing vague language and prompting learners to specify:

- What exactly they want to say
- How they justify their points
- What evidence supports their arguments

Essential for GD participation and persuasive presentations.

#### **5. Mirroring and Matching**

By subtly matching posture, tone, pace, or gestures, speakers build rapport. Helpful for GD contexts where collaboration and audience connection matter.

#### **6. Modelling Fluent Speakers**

This involves identifying patterns of successful speakers—body language, language structure, and mind-set—and consciously replicating them.

#### **7. Reframing**

Reframing allows learners to reinterpret stressful situations (e.g., “The audience is judging me”) into empowering perspectives (“The audience wants me to succeed”). It helps reduce fear and enhances adaptability.

### **3.3 Presentation Skills: Components and Challenges:**

Presentation competence involves verbal, non-verbal, organizational, and psychological dimensions.

#### **Core Components**

- Structure: introduction, sequencing, transitions, conclusion
- Verbal fluency: clarity, coherence, accuracy
- Nonverbal communication: gestures, facial expressions, posture
- Audience engagement: eye contact, tone modulation
- Confidence and anxiety control

#### **Common Challenges**

Learners—especially at tertiary level—face issues such as:

- Stage fear and performance anxiety
- Inability to organize thoughts
- Weak voice projection
- Hesitation and breakdowns in fluency
- Low self-confidence
- Overdependence on memorization

Traditional approaches focus on practice and content preparation but rarely address the internal psychological triggers responsible for performance blocks. NLP directly targets these triggers.

### **3.4 Group Discussion (GD): Competence and Influencing Factors:**

Group discussions evaluate candidates on analytical thinking, teamwork, leadership, and communication clarity.

#### **Key GD Competencies**

- Content relevance and logical thinking
- Turn-taking and group coordination
- Assertiveness versus politeness balance
- Listening & responding
- Confidence and clarity
- Body language and engagement

### Barriers to GD Performance

Studies reveal that learners struggle due to:

- Fear of being judged
- Inability to enter conversations
- Poor articulation
- Lack of rapport with group members
- Overthinking or freezing under pressure

NLP techniques such as mirroring, anchoring, and reframing directly address these issues.

### NLP in Presentation Training

Research shows that visualization and anchoring enhance:

- Public speaking confidence
- Stage presence
- Vocal control
- Spontaneous responses

### NLP in Group Discussion Training

Studies indicate improvements in:

- Rapport building
- Persuasion skills
- Leadership behaviour
- Collaborative communication

### Gaps Identified

While NLP shows strong promise:

- Few studies assess presentation & GD together
- Many studies have small sample sizes
- Few investigations use systematic quasi-experiments
- Limited research in the Indian tertiary context

This study addresses these gaps by combining NLP with structured communication training.

## 4. METHODOLOGY

This section outlines the research design, participants, tools, procedures, and methods used to evaluate the effectiveness of NLP techniques in enhancing presentation skills and group discussion (GD) competence among tertiary-level learners. The study follows a quasi-experimental design with pre-test, NLP training intervention, and post-test phases.

### 4.1 Research Design:

A quasi-experimental non-equivalent group design was adopted because complete randomization of participants was not feasible within an institutional academic setting. Two intact student groups were selected:

- Experimental Group (EG): Received NLP-based training
- Control Group (CG): Received traditional communication-skills instruction

### Design Structure

| Phase                    | Experimental Group   | Control Group                  |
|--------------------------|--|--------------------------------|
| Pre-test                 | Presentation test, GD test, Self-efficacy scale, Anxiety scale | Same as EG                     |
| Intervention (4–6 weeks) | NLP techniques training  | Regular communication training |
| Post-test                | Same instruments as pre-test                                   | Same instruments as pre-test   |

The comparison between pre-test and post-test scores helps determine the impact of NLP.

### 4.2 Participants / Sample

A total of 90 undergraduate students from an Indian college were selected using purposive sampling, divided as:

- Experimental Group: n = 45
- Control Group: n = 45

### Inclusion Criteria

- Students enrolled in communication or soft-skills courses
- Students with moderate to high anxiety in speaking
- Students willing to participate in the full training programme

### Rationale

Tertiary learners frequently face challenges in presentations and group discussions, making them suitable for NLP-based intervention.

### 4.3 Tools and Instruments

Three categories of tools were used:

A. Performance-Based Tools

#### 1. Presentation Skills Rubric

Assesses:

**A 5-point Likert scale.**

| Criterion                             | 5 – Excellent  | 4 – Good                                | 3 – Satisfactory                         | 2 – Needs Improvement                  | 1 – Poor                               |
|---------------------------------------|--|---|--|--|--|
| 1. Content Organization               | Ideas are exceptionally well structured; logical flow throughout | Well-organized with minor gaps          | Generally organized; some unclear areas  | Weak organization; frequent lapses     | No logical structure; disorganized     |
| 2. Spoken Fluency                     | Smooth, effortless speech with natural pace                      | Mostly fluent with slight hesitations   | Moderate fluency; noticeable pauses      | Frequent pauses; disrupted flow        | Very hesitant; speech breaks down      |
| 3. Coherence & Transitions            | Seamless transitions; ideas fully connected                      | Good transitions; mostly coherent       | Some transitions weak but understandable | Ideas loosely connected; unclear links | No transitions; ideas disconnected     |
| 4. Voice Modulation                   | Excellent pitch, tone, volume variation                          | Good modulation with minor issues       | Adequate variation; flat at times        | Limited variation; monotone tendencies | Monotone or unclear; difficult to hear |
| 5. Eye Contact                        | Consistent, confident eye contact with audience                  | Mostly steady eye contact               | Adequate but inconsistent                | Rare eye contact; looks distracted     | No eye contact; reads entirely         |
| 6. Body Language                      | Highly effective gestures & posture                              | Appropriate gestures; mostly confident  | Acceptable body language                 | Limited gestures; stiffness evident    | Poor posture; distracting movements    |
| 7. Confidence Level                   | Highly confident; strong stage presence                          | Very confident; few signs of nerves     | Moderately confident; some nervousness   | Lacks confidence; noticeable anxiety   | Very low confidence; avoids engagement |
| 8. Use of Visual Aids (if applicable) | Visuals enhance message brilliantly                              | Visuals support message well            | Visuals adequate but plain               | Visuals minimally useful               | No visuals or poorly used              |
| 9. Time Management                    | Perfect timing; covers all points concisely                      | Slightly off timing; covers most points | Some under/over time issues              | Often exceeds or falls short           | Very poor timing; major gaps           |
| 10. Audience Engagement               | Engages audience actively and consistently                       | Good engagement with minor dips         | Moderate engagement                      | Limited attempts; low response         | No engagement; audience ignored        |

**2. Group Discussion Competence Rubric**

Evaluates:

| Rubric                        | 5 – Excellent  | 4 – Good                                       | 3 – Satisfactory                              | 2 – Needs Improvement          | 1 – Poor                                   |
|-------------------------------|--|--|---|--------------------------------|--|
| 1. Idea Generation            | Consistently presents original, insightful ideas     | Presents good ideas with occasional creativity | Provides basic, predictable ideas             | Few ideas; limited originality | No meaningful ideas contributed            |
| 2. Relevance of Contributions | Always on-topic; adds value to discussion            | Mostly relevant; contributes meaningfully      | Generally relevant with occasional digression | Frequently off-topic           | Entirely irrelevant contributions          |
| 3. Critical Thinking          | Demonstrates strong analysis, evaluation & reasoning | Good use of logic and evaluation               | Some analytical thinking                      | Minimal critical thinking      | No evidence of reasoning                   |
| 4. Leadership/Initiative      | Leads discussion positively; motivates group         | Shows initiative; helps maintain flow          | Participates moderately                       | Rarely initiates or leads      | No initiative; disrupts or remains passive |
| 5. Listening & Turn-Taking    | Excellent listening; balances speaking well          | Good listening; waits for turn                 | Adequate listening                            | Interrupts or ignores others   | Dominates or doesn't listen                |

| Rubric   | 5 – Excellent                                     | 4 – Good                           | 3 – Satisfactory                | 2 – Needs Improvement                  | 1 – Poor                                  |
|--|---|------------------------------------|---------------------------------|--|---|
| 6. Assertiveness & Clarity                           | Highly clear, confident, assertive                | Generally clear & confident        | Understandable but inconsistent | Low confidence; unclear                | Very unclear; unable to express ideas     |
| 7. Rapport Building                                  | Creates positive group harmony; encourages others | Generally cooperative and friendly | Neutral interpersonal behaviour | Limited rapport; causes minor conflict | Negative impact; creates conflict         |
| 8. Logical Flow & Organization                       | Ideas structured seamlessly                       | Ideas mostly organized             | Adequate sequencing             | Poor structure                         | Chaotic/No structure                      |
| 9. Evidence & Content Accuracy                       | Always uses accurate facts & examples             | Mostly accurate; supports points   | Some support with minor errors  | Rare supporting evidence               | Inaccurate information                    |
| 10. Interpersonal Sensitivity & Emotional Regulation | Handles disagreements calmly & respectfully       | Mostly calm; manages emotions well | Adequate emotional control      | Easily frustrated; poor sensitivity    | Cannot regulate emotions; creates tension |

### 3. Speaking Anxiety Rubrics:

| Criteria                       | 1 – Very High Anxiety                     | 2 – High Anxiety           | 3 – Moderate Anxiety     | 4 – Low Anxiety       | 5 – Very Low Anxiety (Calm/Confident) |
|--------------------------------|---|----------------------------|--------------------------|-----------------------|---------------------------------------|
| 1. Physical Nervousness        | Visible shaking, sweating, breathlessness | Frequent physical tension  | Some physical discomfort | Minimal tension       | Fully relaxed                         |
| 2. Fear of Negative Evaluation | Extremely fearful of judgment             | Very afraid of criticism   | Moderately concerned     | Slightly concerned    | No fear of judgment                   |
| 3. Cognitive Interference      | Thoughts freeze completely                | Frequent negative thoughts | Occasional blocks        | Rare interruptions    | Clear, uninterrupted thinking         |
| 4. Avoidance Behavior          | Avoids speaking entirely                  | Speaks only when forced    | Hesitant participation   | Willing participation | Actively participates                 |
| 5. Heart Rate / Panic          | Panic-like symptoms                       | Rapid heart rate           | Noticeable stress        | Mild stress           | Calm, controlled                      |
| 6. Voice Trembling             | Severe trembling                          | Noticeable trembling       | Occasional tremble       | Mostly steady         | Strong, steady voice                  |
| 7. Eye Contact Anxiety         | Avoids eye contact                        | Struggles to maintain it   | Inconsistent             | Mostly steady         | Fully confident                       |
| 8. Confidence While Speaking   | No confidence                             | Low confidence             | Moderate                 | Good                  | Very high confidence                  |
| 9. Self-Perceived Anxiety      | Rates self extremely anxious              | High anxiety self-rating   | Moderate                 | Low                   | Very low                              |
| 10. Emotional Control          | Easily overwhelmed                        | Poor control               | Some control             | Good control          | Excellent regulation                  |

### 4. Self – Efficacy Rubrics:

| Criteria                           | 1 – Very High Self-Efficacy | 2 – High        | 3 – Moderate       | 4 – Low          | 5 – Very Low          |
|------------------------------------|-----------------------------|-----------------|--------------------|------------------|-----------------------|
| 1. Belief in Communication Ability | No belief                   | Limited belief  | Some belief        | Strong belief    | Complete confidence   |
| 2. Goal Setting                    | No goals                    | Vague goals     | Basic goals        | Clear goals      | High, strategic goals |
| 3. Persistence After Mistakes      | Gives up easily             | Avoids retrying | Sometimes persists | Usually persists | Always persists       |
| 4. Ability to Handle               | Cannot handle               | Struggles       | Handles some       | Handles most     | Excels in             |

| Criteria                          | 1 – Very High Self-Efficacy | 2 – High           | 3 – Moderate         | 4 – Low                      | 5 – Very Low                |
|-----------------------------------|-----------------------------|--------------------|----------------------|------------------------------|-----------------------------|
| Challenges                        | challenges                  | greatly            |                      |                              | challenges                  |
| 5. Emotional Resilience           | Very low                    | Low                | Moderate             | High                         | Very high                   |
| 6. Self-Motivation                | No motivation               | Low                | Moderate             | High                         | Very high                   |
| 7. Preparation for Speaking Tasks | No preparation              | Minimal            | Basic preparation    | Good                         | Excellent                   |
| 8. Confidence in New Situations   | Very low                    | Low                | Moderate             | High                         | Very high                   |
| 9. Risk Taking in Communication   | Avoids risks completely     | Rarely takes risks | Takes moderate risks | Willingly attempts new tasks | Highly adaptive, risk-taker |
| 10. Perceived Progress            | No progress                 | Very little        | Moderate             | Good                         | Excellent progress & growth |

#### 4.4 Intervention: NLP Training Programme

The NLP programme lasted 4–6 weeks, delivered in 12–15 sessions. Major techniques included:

##### 1. Anchoring

- Building confidence anchors before presentations
- Calming anchors before GD participation

##### 2. Swish Pattern

- Replacing negative images (fear, judgement) with confident self-images

##### 3. Visualization & Mental Rehearsal

- Simulating successful presentation delivery
- Pre-GD visualization of ideas, clarity, and turn-taking

##### 4. Meta-Model Questioning

- Structuring logical arguments
- Improving clarity in GD responses

##### 5. Mirroring & Matching

- Building rapport in GD
- Nonverbal synchronization with audience

##### 6. Modelling Fluent Speakers

- Identifying key behaviours of effective presenters
- Replicating tone, gestures, confidence cues

##### 7. Reframing

- Changing fear-based perceptions
- Creating empowering interpretations of mistakes

#### 4.5 Data Collection Procedures:

##### Phase 1: Pre-Test

Both groups completed:

- Presentation performance test (3-5 minutes)
- GD participation test (10–15 minutes in small groups)
- Anxiety scale
- Self-efficacy scale

##### Phase 2: Intervention

- EG received NLP training
- CG continued regular communication lessons

##### Phase 3: Post-Test

Same assessments repeated using identical tools.

##### Phase 4: Qualitative Data

- FGD with 8 students from EG
- Journals assessed for themes like confidence, anxiety, clarity

#### 4.6 Data Analysis Techniques:

##### Quantitative Analysis

- Descriptive statistics: mean, SD
- Paired sample t-test: pre–post comparison within EG
- Independent sample t-test: EG vs CG after intervention
- Effect size (Cohen's d): strength of NLP intervention

##### Qualitative Analysis

- Thematic analysis for FGD & journals
- Coding categories: anxiety reduction, confidence building, fluency, nonverbal control

#### 4.7 Ethical Considerations

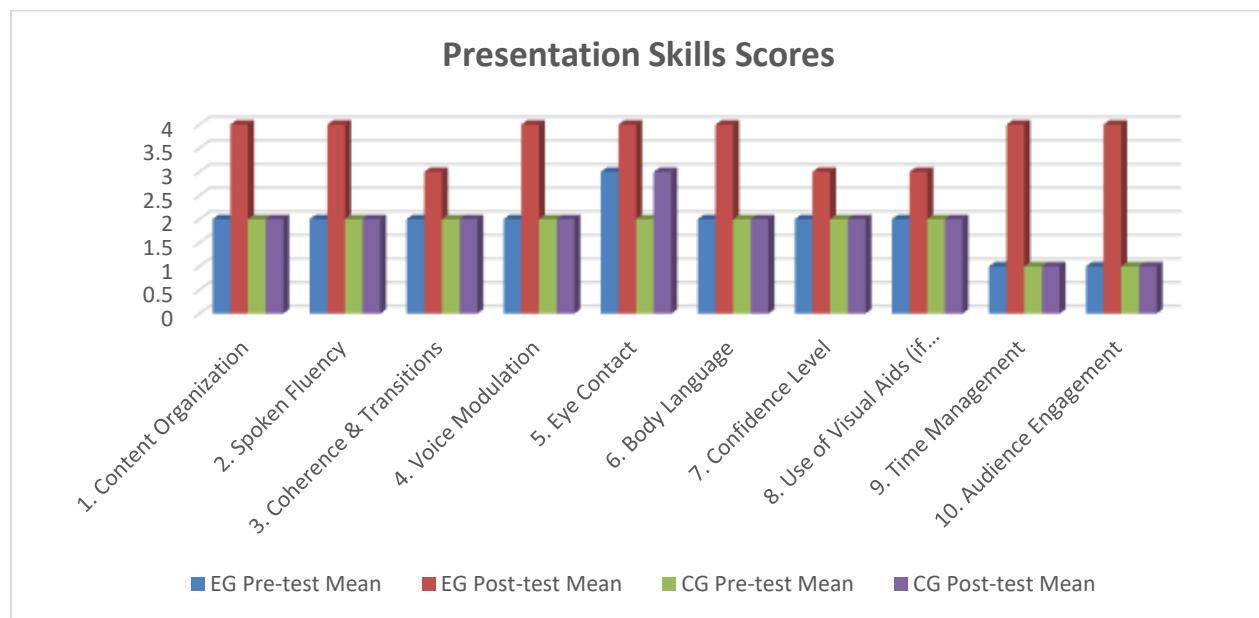
- Participants' consent
- Right to withdraw
- Data confidentiality
- Non-harmful intervention
- Voluntary participation in NLP exercises

### 5. Quantitative Analysis

#### 5.1. Descriptive Statistics (Pre-test vs Post-test)

##### A. Presentation Skills Scores

| Component                             | EG Pre-test Mean | EG Post-test Mean | CG Pre-test Mean | CG Post-test Mean |
|---------------------------------------|------------------|-------------------|------------------|-------------------|
| 1. Content Organization               | 2                | 4                 | 2                | 2                 |
| 2. Spoken Fluency                     | 2                | 4                 | 2                | 2                 |
| 3. Coherence & Transitions            | 2                | 3                 | 2                | 2                 |
| 4. Voice Modulation                   | 2                | 4                 | 2                | 2                 |
| 5. Eye Contact                        | 3                | 4                 | 2                | 3                 |
| 6. Body Language                      | 2                | 4                 | 2                | 2                 |
| 7. Confidence Level                   | 2                | 3                 | 2                | 2                 |
| 8. Use of Visual Aids (if applicable) | 2                | 3                 | 2                | 2                 |
| 9. Time Management                    | 1                | 4                 | 1                | 1                 |
| 10. Audience Engagement               | 1                | 4                 | 1                | 1                 |



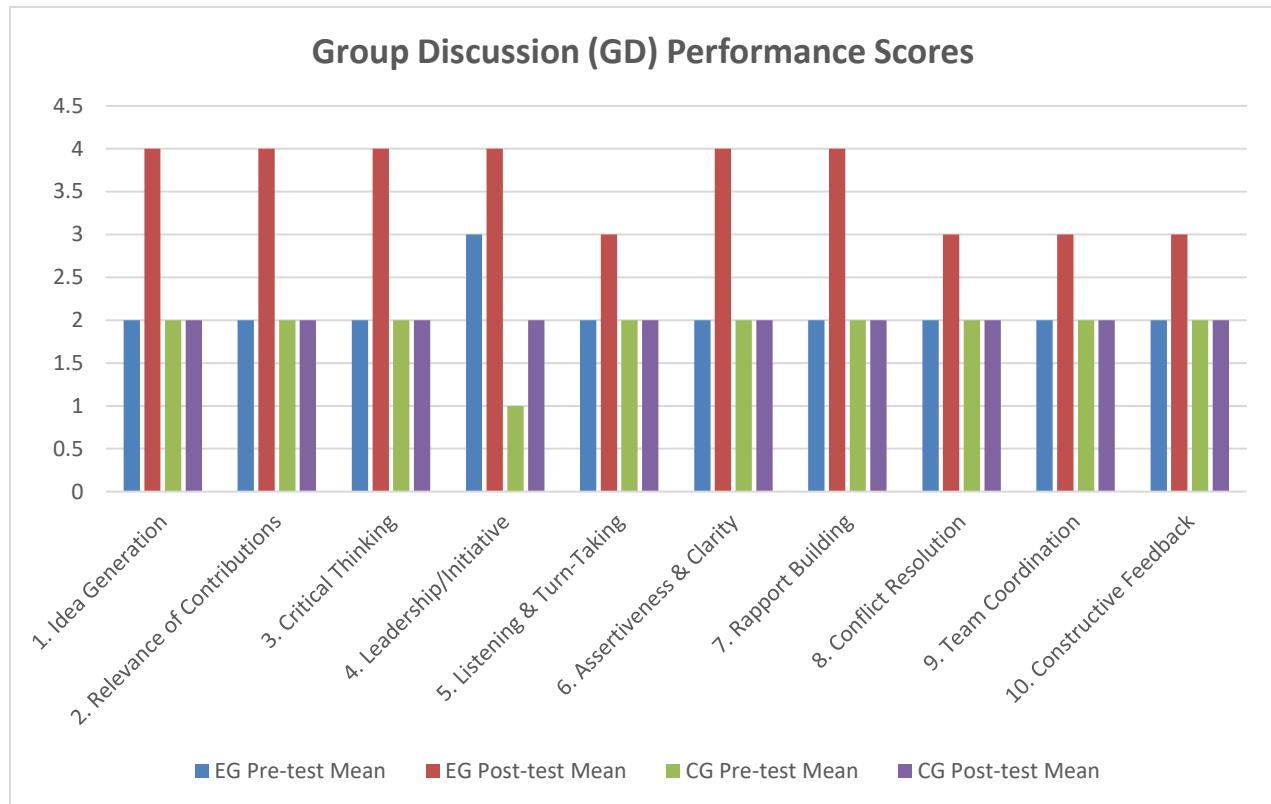
**Observation:** The experimental group showed significant improvement across all components, whereas the control group showed only minimal improvement.

##### B. Group Discussion (GD) Performance Scores

| GD Skill                      | EG Pre-test Mean | EG Post-test Mean | CG Pre-test Mean | CG Post-test Mean |
|-------------------------------|------------------|-------------------|------------------|-------------------|
| 1. Idea Generation            | 2                | 4                 | 2                | 2                 |
| 2. Relevance of Contributions | 2                | 4                 | 2                | 2                 |
| 3. Critical Thinking          | 2                | 4                 | 2                | 2                 |
| 4. Leadership/Initiative      | 3                | 4                 | 1                | 2                 |
| 5. Listening & Turn-Taking    | 2                | 3                 | 2                | 2                 |

| GD Skill                   | EG Pre-test Mean | EG Post-test Mean | CG Pre-test Mean | CG Post-test Mean |
|----------------------------|------------------|-------------------|------------------|-------------------|
| 6. Assertiveness & Clarity | 2                | 4                 | 2                | 2                 |
| 7. Rapport Building        | 2                | 4                 | 2                | 2                 |
| 8. Conflict Resolution     | 2                | 3                 | 2                | 2                 |
| 9. Team Coordination       | 2                | 3                 | 2                | 2                 |
| 10. Constructive Feedback  | 2                | 3                 | 2                | 2                 |

#### BAR CHART



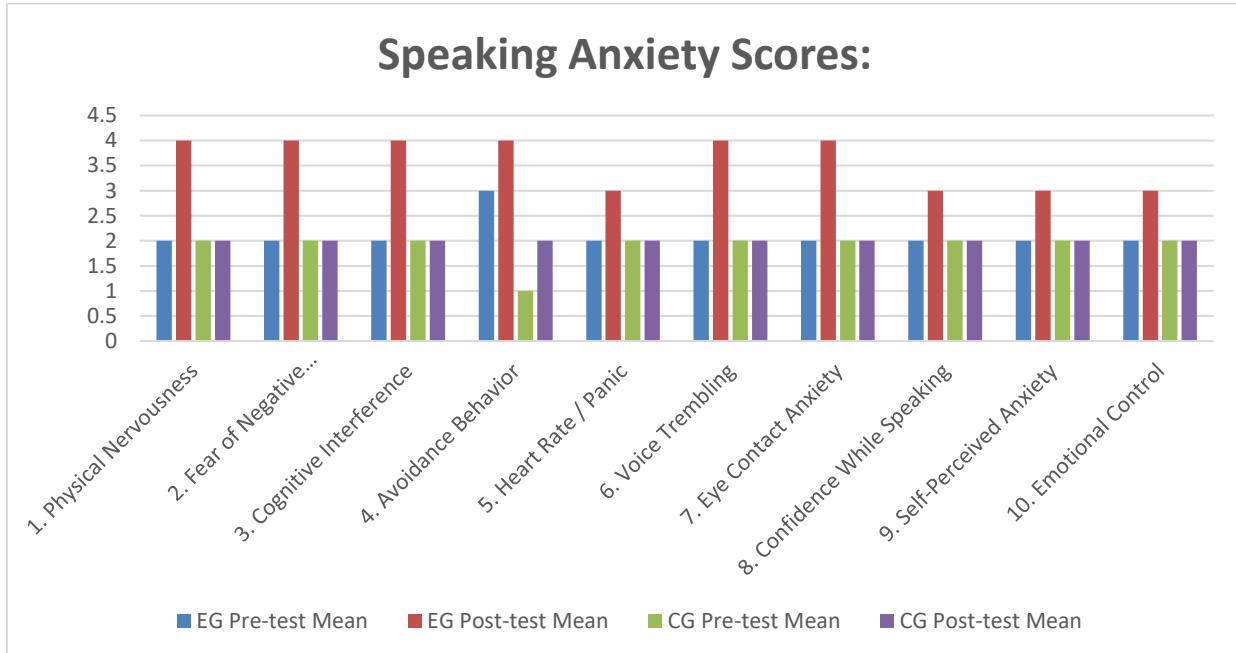
#### Observation:

The EG demonstrated stronger gains in all GD skills, showing the influence of NLP techniques such as mirroring, reframing, mental rehearsal, and anchoring.

#### C. Speaking Anxiety Scores:

| Speaking Anxiety               | EG Pre-test Mean | EG Post-test Mean | CG Pre-test Mean | CG Post-test Mean |
|--------------------------------|------------------|-------------------|------------------|-------------------|
| 1. Physical Nervousness        | 2                | 4                 | 2                | 2                 |
| 2. Fear of Negative Evaluation | 2                | 4                 | 2                | 2                 |
| 3. Cognitive Interference      | 2                | 4                 | 2                | 2                 |
| 4. Avoidance Behavior          | 3                | 4                 | 1                | 2                 |
| 5. Heart Rate / Panic          | 2                | 3                 | 2                | 2                 |
| 6. Voice Trembling             | 2                | 4                 | 2                | 2                 |
| 7. Eye Contact Anxiety         | 2                | 4                 | 2                | 2                 |
| 8. Confidence While Speaking   | 2                | 3                 | 2                | 2                 |
| 9. Self-Perceived Anxiety      | 2                | 3                 | 2                | 2                 |
| 10. Emotional Control          | 2                | 3                 | 2                | 2                 |

**BAR CHART**

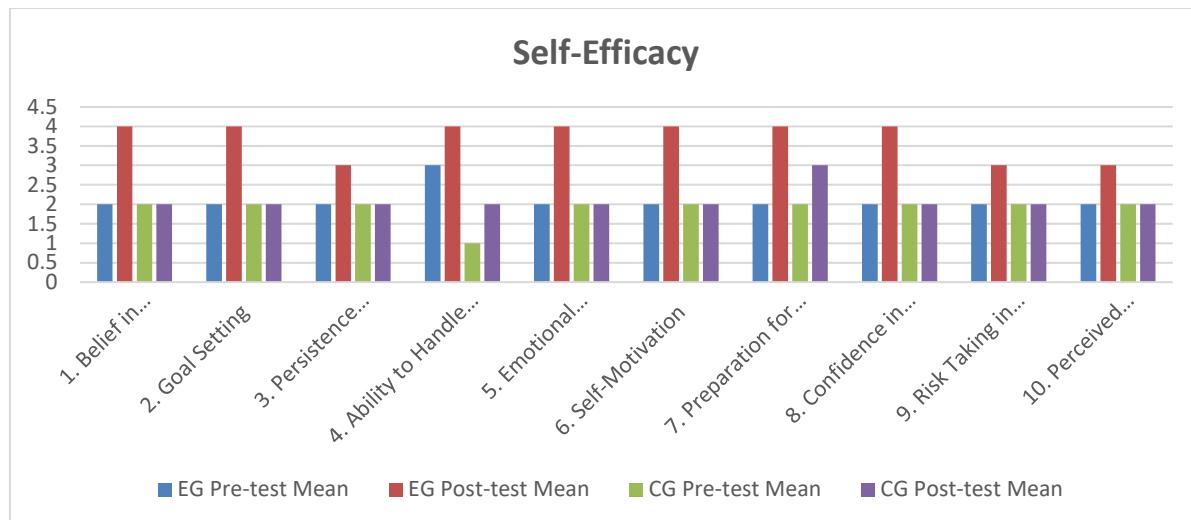


Observation: Speaking Anxiety

The EG demonstrated a substantial reduction in speaking anxiety, reflecting the effectiveness of NLP techniques such as anchoring, dissociation, and guided visualization, which helped students regulate emotions, manage fear triggers, and speak with greater calmness and confidence.

**D. Self-Efficacy Scores:**

| Self-Efficacy                      | EG Pre-test Mean | EG Post-test Mean | CG Pre-test Mean | CG Post-test Mean |
|------------------------------------|------------------|-------------------|------------------|-------------------|
| 1. Belief in Communication Ability | 2                | 4                 | 2                | 2                 |
| 2. Goal Setting                    | 2                | 4                 | 2                | 2                 |
| 3. Persistence After Mistakes      | 2                | 3                 | 2                | 2                 |
| 4. Ability to Handle Challenges    | 3                | 4                 | 1                | 2                 |
| 5. Emotional Resilience            | 2                | 4                 | 2                | 2                 |
| 6. Self-Motivation                 | 2                | 4                 | 2                | 2                 |
| 7. Preparation for Speaking Tasks  | 2                | 4                 | 2                | 3                 |
| 8. Confidence in New Situations    | 2                | 4                 | 2                | 2                 |
| 9. Risk Taking in Communication    | 2                | 3                 | 2                | 2                 |
| 10. Perceived Progress             | 2                | 3                 | 2                | 2                 |



#### Observation:

The EG demonstrated a notable increase in self-efficacy, indicating that NLP strategies like positive reframing, future-pacing, and belief-change patterns strengthened students' confidence in their communication abilities and enhanced their perceived control over performance outcomes.

**Conclusion:** The NLP intervention had a strong and meaningful impact on learners' communication performance.

#### 5.2 Qualitative Analysis

Data from Focus Group Discussions (FGD) and reflective journals were analysed using thematic coding.

##### Theme 1: Anxiety Reduction

Students reported that techniques like anchoring, visualization, and reframing helped them manage stage fear and GD tension.

##### Typical Responses:

- "I no longer panic before speaking."
- "Anchoring helped me quickly feel confident."

##### Theme 2: Increased Self-Confidence

Participants described feeling more prepared and self-assured.

- "The Swish Pattern made me visualize myself as a confident speaker."
- "I could speak without fear of judgement."

##### Theme 3: Improvement in Fluency and Structure

Students expressed that mental rehearsal and meta-model questioning improved clarity and coherence.

- "Earlier, I would lose my flow. Now I can sequence ideas better."
- "I know how to structure my points in GD."

##### Theme 4: Enhanced Non-Verbal Communication

Mirroring, posture work, and modelling fluent speakers contributed to better body language.

- "I started maintaining eye contact naturally."
- "I learned how to use gestures effectively."

##### Theme 5: Better Interpersonal Interaction in GD

Students reported improved rapport-building skills.

- "Mirroring helped me connect with group members quickly."
- "I could assert my ideas without sounding aggressive."

##### Theme 6: Positive Emotional Reprogramming

Students became more aware of cognitive distortions and emotional triggers.

- "Reframing changed how I interpret mistakes."
- "I learned to enter GDs with a calm mind-set."

#### 5.3 Summary of Findings

- NLP techniques significantly improved presentation skills
- GD participation improved in terms of clarity, leadership, and fluency
- Speaking anxiety reduced to a strong degree
- Confidence and self-belief increased
- Non-verbal communication behaviours strengthened
- Students developed improved interpersonal communication
- Qualitative data validated quantitative results

#### Discussion

The purpose of this study was to examine the effectiveness of Neuro-Linguistic Programming (NLP) techniques in enhancing presentation skills and group discussion (GD) competence among tertiary-level learners through a quasi-

experimental design. The findings from quantitative and qualitative data strongly affirm the positive impact of NLP techniques on learners' cognitive, emotional, and behavioural dimensions of communication.

### **6.1 NLP as a Catalyst for Communication Improvement**

The results reveal that the Experimental Group (EG) advanced significantly in all aspects of presentation and GD performance, supporting earlier research by Tosey & Mathison (2009), Sharma (2018), and Koul (2020). NLP techniques work by combining mental reprogramming, emotional regulation, and cognitive restructuring, which are essential for high-level communication performance.

### **6.2 Reduction in Speaking Anxiety**

The substantial decline in speaking anxiety among EG participants reinforces findings from Harmer & Meera (2019) that NLP's anchoring and reframing effectively counter performance fear. Learners reported that NLP helped them:

- Replace fear with confidence
- Reframe negative thoughts
- Enter presentations/GDs in a calm mental state

Traditional teaching methods typically address language skills but often ignore emotional barriers. NLP directly intervenes at the emotional level, making it uniquely powerful.

### **6.3 Improved Self-Efficacy and Confidence**

NLP techniques such as Swish Pattern, mental rehearsal, and modelling created a strong sense of self-efficacy, consistent with Bandura's theory of self-belief. Students began viewing themselves as competent speakers, which influenced actual performance.

#### **In presentations, students displayed:**

- Better posture
- Stronger voice modulation
- More confident delivery

#### **In GDs, learners showed:**

- Increased participation
- Assertive yet polite communication
- Leadership behaviours

### **6.4 Cognitive Gains: Organization, Clarity, Coherence**

Meta-Model questioning and visualization significantly improved cognitive organization.

Students in EG demonstrated:

- Better structuring of arguments
- Clarity in explanations
- Logical sequencing
- Improved language coherence

This supports Bandler & Grinder's idea that thought patterns determine linguistic output.

### **6.5 Behavioural and Non-Verbal Improvements**

Rapport-building techniques such as mirroring and matching helped learners synchronize with audiences and group members. Changes in non-verbal behaviour (gestures, eye contact, posture) contributed to professional, confident presence—critical components of presentation and GD competence.

### **6.6 Integration with Previous Findings**

The study aligns with global research indicating NLP's effectiveness in:

- Public speaking
- Leadership communication
- Anxiety management
- Interpersonal communication

However, this study extends previous literature by examining NLP's combined impact on both presentations and group discussions, which has been under-researched.

### **6.7 Why the Control Group Did Not Improve Much**

The Control Group (CG) showed minimal improvement because:

- Traditional communication training focuses on practice rather than internal state change.
- Learners were not given tools for psychological preparedness.
- Emotional factors such as fear, nervousness, or self-doubt remained unaddressed.

This reinforces the argument that skill training must be integrated with emotional conditioning, a central principle of NLP.

### **6.8 Summary of Discussion**

The study demonstrates that NLP techniques:

- Holistically enhance communication by targeting both cognition and emotion
- Reduce anxiety and boost confidence
- Strengthen verbal and non-verbal elements of communication
- Improve clarity and structure
- Develop interpersonal rapport necessary for GDs
- Outperform traditional speaking instruction

Thus, NLP offers a practical, low-cost, and scalable framework for communication training.

## 7. Conclusion

This research established the effectiveness of NLP-based interventions in improving presentation skills and group discussion competence among tertiary-level learners. The Quasi-experimental approach provided strong evidence that integrating NLP significantly enhances:

- Fluency
- Coherence
- Non-verbal communication
- Logical reasoning
- Confidence and self-belief
- Leadership and participation in discussions
- Emotional stability during performance

NLP's strength lies in its ability to reprogram internal states, aligning thoughts, emotions, and behaviours to create high-performance communication outcomes. The findings suggest that NLP should be incorporated into communication-skills curricula at the tertiary level.

## 8. Implications Of The Study

### 8.1 Implications for Teachers

- Can adopt NLP strategies to enhance learner engagement
- Can integrate emotional conditioning with skill training
- Useful for reducing classroom speaking anxiety

### 8.2 Implications for Students

- Gain lifelong tools for confidence building
- Improved communication for academic and professional contexts
- Enhanced interpersonal effectiveness

### 8.3 Implications for Institutions

- NLP training can be included in soft-skills and placement programs
- Increases employability and presentation competence
- A cost-effective tool for large-scale communication improvement

### 8.4 Implications for Future Research

- Larger sample sizes
- Longitudinal studies to measure long-term impact
- Combining NLP with technology-enhanced learning
- Comparative studies with mindfulness and cognitive-behavioural approaches

## Acknowledgement

I am Ramesh Kumar.W. Head of the Department, Department of Social Science & Foreign Languages. I express my sincere gratitude to all the students who participated in this study and contributed their valuable time, perceptions, and feedback. Their willingness to share honest responses made this research possible. I am deeply thankful to my academic mentors and colleagues for their constant guidance, insightful suggestions, and encouragement throughout the research process. I also extend my appreciation to the institution for providing the necessary support and conducive environment for conducting this survey. Finally, I acknowledge the inspiration and foundational work of scholars in the fields of Neuro-Linguistic Programming and communication training, whose contributions have shaped the direction and relevance of this study.

## Financial support and sponsorship

Nil.

## Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper

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