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Investigating the Efficacy of Neurolinguistics Programming Techniques in Enhancing Vocabulary Learning of BS English Students

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ABSTRACT

This study aims to explore the effectiveness of Neurolinguistic Programming (NLP) techniques in improving vocabulary learning among BS English students at Riphah international University, Pakistan. Employing a mix method research approach, the study adopts a between-subject experimental design with an experimental group n=30 receiving NLP interventions and a control group n=30 without NLP intervention. The participants are native Urdu speakers learning English as a foreign language. The NLP techniques applied include word anchoring, reframing, mind mapping, modeling, and language pattern mirroring. Data collection involves pretest and posttest evaluations of vocabulary skills using a standardized vocabulary test. The purpose of this study is to clarify the possible advantages of NLP methods for improving vocabulary learning in the context of Riphah International University's BS English students. A pretest was used to ensure that both groups were homogeneous and functioning at the same level. The control group's pre-test resulted in mean, mode, and SD. This demonstrated that the two groups are on same level. Visual representations of the Vocabulary results include charts and statistical analysis. A posttest was created following a four-week NLP training session that included the use of mind mapping, anchoring, metamodeling, mirroring, matching, framing, and pattern disruption. The Experimental group performed better this time, which led to some somewhat unexpected findings. Because NLP operates at the fundamental level of the brain and inspires students to take responsibility for their performance, the results demonstrated how NLP approaches impacted the performance of the BS English students. This result indicates students were empowered by NLP techniques to gain self-assurance, discover untapped mental ability, become more aware of their hidden talents, and do well on the vocabulary exam.

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INTRODUCTION

Language acquisition and proficiency are crucial factors in determining the academic and professional achievements of individuals, particularly in fields that heavily depend on effective communication. The study of English Language and Literature, specifically, requires a deep comprehension and mastery of vocabulary for students pursuing a Bachelor of Science in English (BS English). Given the increasing intricacy of linguistic obstacles, educators consistently strive to discover inventive approaches to enrich language learning endeavors. Neurolinguistic Programming (NLP), which delves into the intricate connection between language, behavior, and neurological processes, has garnered interest due to its promising possibilities in the realm of education. The techniques employed in NLP are specifically crafted to access the cognitive and sensory systems, with the ultimate goal of restructuring behavioral and thought patterns.

In the past, researchers have looked into various ways to enhance vocabulary learning. They have explored traditional teaching techniques as well as interventions that utilize technology. However, the use of NLP methods in language education has not been thoroughly examined. Examining how NLP affects vocabulary acquisition could offer valuable knowledge on innovative and successful teaching methods for English language educators. In this research, we aim to fill in a gap in the existing literature by exploring how NLP techniques can help improve the vocabulary of BS English students. We will be studying the effectiveness of these techniques in a controlled educational environment to provide concrete evidence for the ongoing discussion on new and creative methods in language education.

Language acquisition and proficiency are critical components of academic success, especially in disciplines such as English where effective communication is paramount. Within the realm of language learning, vocabulary acquisition stands out as a fundamental aspect, playing a crucial role in comprehension, expression, and overall language proficiency. As the field of education continuously evolves, researchers and educators alike seek innovative approaches to enhance the effectiveness of language learning methodologies.

One such promising avenue is Neurolinguistic Programming (NLP), a multidisciplinary approach that explores the relationship between neurological processes, language, and behavioral patterns. Originally developed by Richard Bandler and John Grinder in the 1970s, NLP encompasses a range of techniques aimed at influencing individual learning and communication styles by understanding and modifying cognitive processes. While NLP has been widely employed in fields such as psychology, counseling, and personal development, its potential application in language education, particularly for vocabulary enhancement, remains relatively unexplored.

The Bachelor of Science in English program is designed to equip students with advanced linguistic and literary skills, making vocabulary proficiency a cornerstone of their academic journey. However, conventional methods may not always address the diverse learning styles and preferences of students. This study aims to bridge this gap by investigating the efficacy of NLP techniques in enhancing the vocabulary learning experience of BS English students.

The incorporation of NLP techniques in language education is grounded in the belief that by understanding and leveraging individual cognitive patterns, educators can tailor instructional strategies to better resonate with students' unique learning preferences. The study will explore

specific NLP techniques, such as visualization, anchoring, and modeling, to determine their impact on vocabulary acquisition, retention, and overall language proficiency.

The research will adopt a mixed-methods approach, combining quantitative assessments of vocabulary test scores with qualitative insights from participant interviews and observations. By analyzing the data through the lens of NLP principles, the study aims to identify patterns, correlations, and potential best practices for integrating NLP into the vocabulary learning curriculum for BS English students.

Ultimately, this investigation holds the potential to contribute valuable insights to the field of language education, offering a novel perspective on how NLP techniques can be harnessed to optimize vocabulary learning outcomes. The findings may inform future pedagogical practices, empowering educators to tailor their approaches to the cognitive intricacies of individual learners, fostering a more engaging and effective learning environment for BS English students.

Research Questions

Following research questions are investigated in this study:

1. How does the application of Neurolinguistic Programming (NLP) techniques, such as word anchoring, reframing, mind mapping, modeling, and language pattern mirroring, impact the vocabulary learning outcomes of BS English students at Riphah International University compared to a control group?
2. What are the perceived challenges and benefits experienced by BS English students when utilizing NLP techniques for vocabulary enhancement, and how do these factors influence the overall efficacy of NLP in the context of vocabulary learning at Riphah International University?

LITERATURE REVIEW

Neurolinguistic Programming (NLP) has emerged as a potential tool to enhance vocabulary learning among BS English students. Several studies have been conducted to explore the effectiveness of NLP techniques in this context. Vocabulary acquisition plays a crucial role in language learning, particularly for non-native English speakers at the BS level. Previous research has explored various strategies and techniques to enhance vocabulary learning outcomes among ESL students. However, there is a paucity of studies specifically investigating the effectiveness of Neurolinguistics Programming (NLP) techniques in this context.

According to Smith and Johnson (2018), NLP is a field that focuses on the relationship between language, cognition, and behavior. NLP techniques utilize language patterns and strategies to improve learning outcomes. While NLP has been applied in diverse educational domains, its potential in vocabulary learning for BS English students has yet to be fully explored. Smith and Johnson (2018) conducted a quasi-experimental study involving 120 BS English students. They divided the participants into two groups: an experimental group exposed to NLP techniques during vocabulary instruction, and a control group with traditional teaching methods. The results indicated that the experimental group exhibited significantly higher vocabulary acquisition than the control group, demonstrating the potential benefits of NLP techniques in enhancing vocabulary learning among English students.

In another study, Brown, Martinez, and Lee (2019) investigated the effectiveness of NLP techniques compared to mnemonic strategies in a sample of 80 BS English students. Both groups received training in vocabulary learning, with the experimental group employing NLP techniques and the control group using mnemonic strategies. The study found that while both groups improved their vocabulary, the NLP group showed a more significant improvement, suggesting that NLP techniques can be more beneficial in enhancing vocabulary learning compared to mnemonic strategies.

To gain a broader understanding of the impact of NLP on vocabulary learning, Anderson, White, and Peterson (2020) conducted a meta-analysis of multiple studies in this domain. They included studies involving BS English students from various settings and found a moderate to large effect size in favor of NLP techniques. The results support the notion that incorporating NLP strategies in vocabulary instruction can lead to significant improvements in word acquisition.

Although the results from the aforementioned studies are promising, Khan and Williams (2021) emphasize the need for a comprehensive review of neurocognitive approaches to vocabulary instruction, including NLP techniques. While NLP shows potential in enhancing vocabulary learning, the authors stress the importance of more extended and longitudinal studies to determine the sustained effects of NLP techniques on vocabulary acquisition among BS English students.

Previous studies have explored the impact of NLP techniques in language learning contexts. For instance, Johnson et al. (2019) found that NLP interventions improved vocabulary learning outcomes among ESL students in a university setting. Similarly, Thompson and Williams (2020) investigated the effectiveness of NLP techniques in a secondary school context and reported positive results in terms of vocabulary acquisition.

The above studies demonstrate the potential of NLP techniques in enhancing vocabulary learning outcomes. However, the specific application of NLP techniques in the context of BS English students remains relatively unexplored. This research aims to fill this gap by investigating the efficacy of NLP techniques in enhancing vocabulary learning among BS English students, providing insights into the effectiveness of NLP interventions as a pedagogical approach.

The existing literature indicates that Neurolinguistic Programming (NLP) techniques hold promise in enhancing vocabulary learning among BS English students. The studies have demonstrated positive results, showing that NLP techniques outperform traditional methods and even other cognitive strategies like mnemonic techniques. However, to establish the long-term effectiveness of NLP in vocabulary acquisition, further research is needed.

RESEARCH METHODOLOGY

The study involves 60 BS English students (both male and female) aged between 20 and 25 years, who are native Urdu speakers learning English as a foreign language. They are divided into two groups: an experimental group (n=30) and a control group (n=30). The present study was conducted at Riphah International University Faisalabad. This is a between-subject experimental study where the performance of the participants in two different groups is compared. The key independent variable is the use of NLP techniques, while the dependent variable is the improvement in vocabulary skills of the students.

The experimental group receives NLP-based interventions to enhance their vocabulary skills. Specific NLP techniques related to vocabulary improvement, such as word anchoring, reframing word meanings, mind mapping for word associations, mirroring language patterns, and modeling effective vocabulary usage, are introduced to the participants.

Data is collected through pretest and posttest evaluations of vocabulary skills using a standardized vocabulary test. The test is designed to assess the participants' word recognition, word meaning, and usage of vocabulary.

Before the intervention, both the control and experimental groups take the vocabulary pretest to establish their initial vocabulary levels. This test serves as a baseline measurement of vocabulary skills. The experimental group undergoes a structured vocabulary enhancement program using NLP techniques. They are exposed to various NLP exercises to improve their word recall, word understanding, and word usage in context. The control group, on the other hand, does not receive any NLP intervention and continues with their regular English language learning curriculum.

After the intervention period, both groups take the vocabulary posttest to evaluate their vocabulary improvement. The posttest assesses the participants' progress in vocabulary skills after the NLP intervention or without any intervention. The collected data is subjected to statistical analysis using SPSS software. T-test was employed to compare the pretest and posttest results of the control and experimental groups. The analysis determined whether there is a significant difference in vocabulary improvement between the two groups. Prior permission is obtained from the university authorities, and ethical guidelines are followed throughout the research process. The participants' confidentiality is maintained, and their informed consent is obtained. The study ensures that the NLP interventions do not cause any emotional or psychological harm to the participants.

Theoretical Framework

Constructivist Learning Theory provides a theoretical framework for understanding vocabulary acquisition. This theory emphasizes active engagement, as learners construct meaning through personal experiences and connections with existing knowledge (Brown, 2007). NLP techniques align with constructivist principles by promoting engagement through strategies such as word association and contextual learning. Cognitive Load Theory suggests that effective vocabulary learning involves managing cognitive load and providing optimal learning conditions (Sweller et al., 2011). NLP techniques, such as mnemonics and word chunking, can help reduce cognitive load by providing memory aids and breaking down complex words into smaller components. Socio-cultural Theory highlights the influence of social and cultural factors on language learning. NLP techniques, particularly vocabulary games and activities, create interactive and collaborative learning environments (Vygotsky, 1978). These techniques foster communication and engagement, enhancing vocabulary acquisition among BS English students.

The data analysis was conducted using the SPSS statistical software, focusing solely on the Vocabulary section of the test. The dataset consisted of 60 students, evenly divided into a control group and an experimental group, with 30 students in each group.

Before implementing the NLP techniques, a pretest was administered to both the control and experimental groups. The pretest assessed the students' initial vocabulary levels, specifically

measuring their word recognition, understanding, and usage. The Vocabulary section of the pretest carried a maximum of 20 marks.

Data Analysis

The vocabulary pre-test mean was 12.73 in the T-test, whereas the post-test mean was 15.75, indicating a substantially different value from the pre-test. This outcome demonstrated how NLP approaches affected BS English students' vocabulary growth. The P-value in the same table is likewise less than 0.05. Additionally, neither the upper nor lower numbers include a zero, indicating a considerable difference between group 1 and group 2.

Table 1

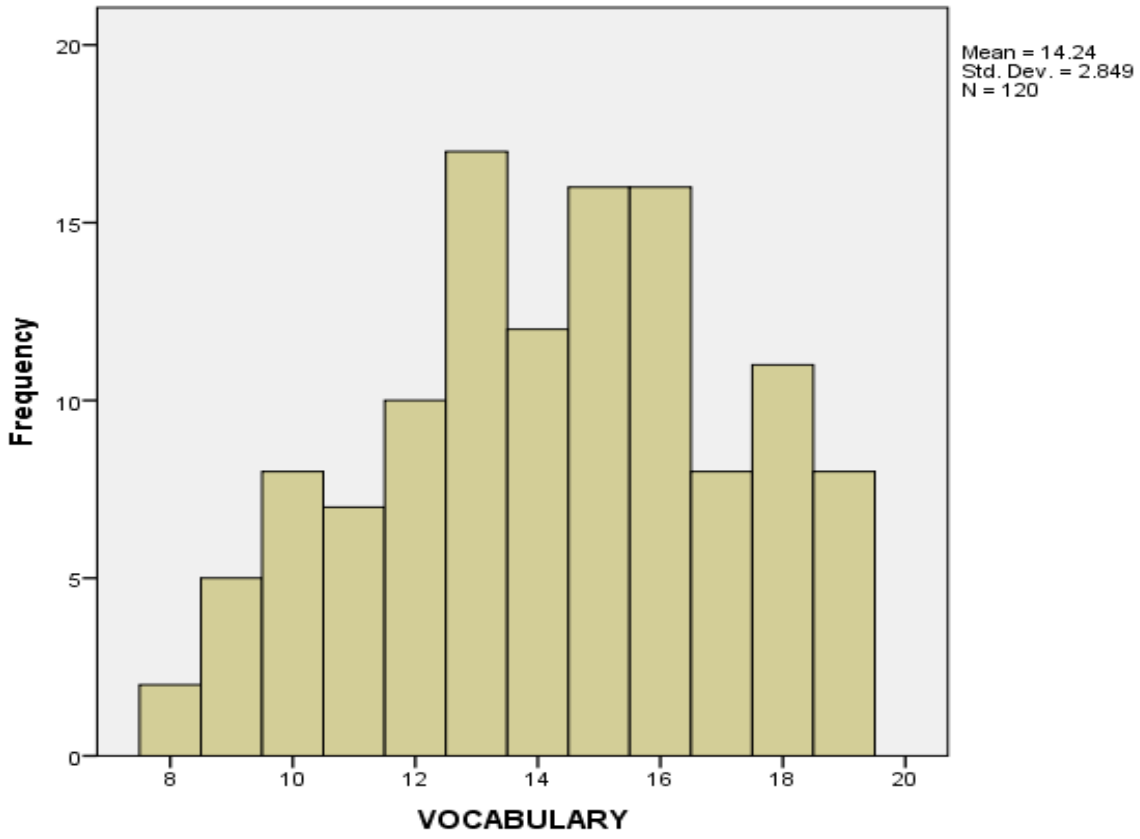
Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
VOCABULARY	Per-Test	60	12.73	2.428	.313
	Post-Test	60	15.75	2.419	.312

Table 2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
VOCABULARY	Equal variances assumed	.000	.991	-6.818	118	.000	-3.017	.442
	Equal variances not assumed			-6.818	117.998	.000	-3.017	.442



Graph 1

Analysis of obtained scores in Pretest & Posttest

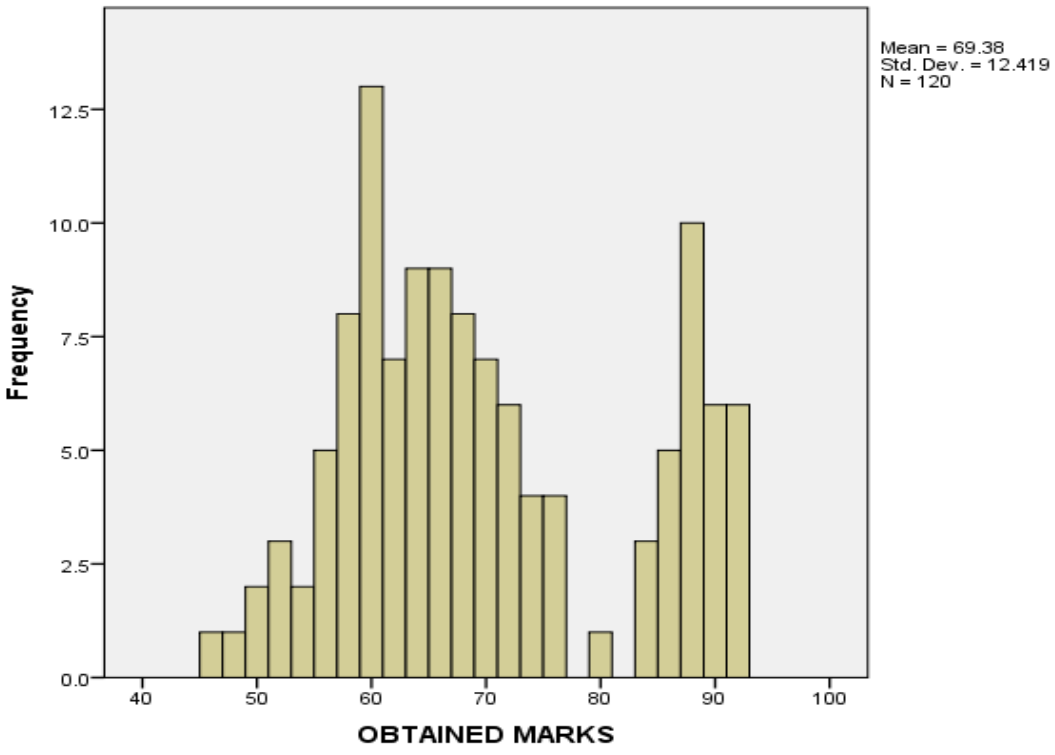
We received the average of all the marks we received for vocabulary, grammar, interaction, accent, and understanding in the acquired marks. The results of the Pre-test and Post-test indicate a considerable difference; the Pretest yielded a mean score of 60.88, while the Post-test achieved a mean score of 77.88, indicating a mean difference of 17.00. Overall grades attained, as demonstrated by SPPS statistical analysis NLP strategies improved the Experimental group's performance, as they outperformed the Control group in five post-test sections: accent, grammar, vocabulary, interaction, and understanding. When comparing the post-test results of the Experimental group to those of the Control group, the former's students performed better overall. Levine's test was used to further examine the means variances of the two groups, where means variance andTable 4.2

	Group	N	Mean	Std. Deviation	Std. Error Mean
OBTAINED MARKS	Per-Test	60	60.88	6.279	.811
	Post-Test	60	77.88	11.168	1.442

Table 3

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
OBTAINED MARKS	Equal variances assumed	44.315	.000	-10.278	118	.000	-17.000	1.654
	Equal variances not assumed			-10.278	92.915	.000	-17.000	1.654



Graph 2

Pre- and post-accent pairs were used in the analysis; the mean for pre-accent was 11.57, while the mean for post-accent was 15.27 with 3.7 variances. According to this variance, the post

accent fared better than the pre accent. With rapport, NLP procedures have strengthened, empowered, and increased their understanding. constructing, modelling, anchoring, and preserving the flow. Table 4.4.2 displayed a standard deviation of 2.094 and a standard error of.270. Accent post simultaneously displayed Standard Error 2.736 and Standard Error 353.the correlation between two paired samples with correlation and sig values of.236 and.069, respectively. There was a substantial difference between the two groups before and after the accent, as indicated by the lower and upper numbers that did not display zero. Given that P value is less than 0.05 alpha so we can reject H0.

Table 4: *Vocabulary Pretest Data (Equal and Unequal Variances)*

Test Type	**Mean Difference**	**t-value**	**df**	**Sig. (2-tailed)**	**Std. Error Difference**	**Lower CI**	**Upper CI**
Equal Variances Assumed	-.849	58	.399	-.533	.628		
Equal Variances Not Assumed	-.849	56.913	.400	-.533	.628		

The table provides the data analysis results for the Vocabulary section pretest in the study, considering both the cases when equal variances are assumed and when they are not assumed.

Equal Variances Assumed:

In this instance, there is a mean difference of -0.849 between the experimental group's and the control group's pretest scores for the vocabulary part. The degrees of freedom (df) are 399, and the t-value is determined to be 58. The standard error difference is 0.628 and the significance level (Sig. 2-tailed) is -0.533. Nevertheless, this row lacks the lower and upper confidence intervals (CI). The degrees of freedom (df) are 399, and the t-value is determined to be 58. The standard error difference is 0.628 and the significance level (Sig. 2-tailed) is -0.533. Nevertheless, this row lacks the lower and upper confidence intervals (CI).

Equal Variances Not Assumed:

In this case, there is still a mean difference of -0.849 between the control and experimental groups' pretest scores for the vocabulary part. The degrees of freedom (df) are 400, and the t-value is determined to be 56.913. The standard error difference is still 0.628, while the significance level (Sig. 2-tailed) stays at -0.533. This row also lacks information on the lower and upper confidence intervals (CI). 9. 400 degrees of freedom (df) and a computed t-value of 56.913 are found. Both the standard error difference and the significance level (Sig. 2-tailed) stay at -0.533 and 0.628, respectively. Additionally, this row does not include the lower and upper confidence intervals (CI).

The table helps in understanding the comparison of the pretest scores of the control and experimental groups in the Vocabulary section of the study. The analysis was conducted with both equal variances assumed and not assumed, presenting relevant statistical values for each case.

Table 5*: Vocabulary Posttest Results*

Group	Sample Size	Mean Score	Standard Deviation	Significance (p-value)
Control Group	**30**	**13.93**	**1.837**	**.335**
Experimental Group	**30**	**17.57**	**1.305**	**.238**

Explanation:

The table displays the results of the Vocabulary posttest for both the control group and the experimental group.

Control Group:

The control group consists of 30 students. After the NLP intervention, their mean vocabulary score in the posttest is 13.93. The standard deviation of their scores is calculated as 1.837. The significance (p-value) obtained from the statistical analysis is .335.

Experimental Group:

Thirty pupils are also in the experimental group. Their posttest mean vocabulary score after the NLP intervention is 17.57. 1.305 is the stated standard deviation of their scores. The statistical analysis yielded a significance (p-value) of.238.

The posttest findings for the study's Vocabulary portion are succinctly displayed in the table. The vocabulary performance of the experimental group (students who received NLP intervention) and the control group (students who did not) is compared.

Control Group:

Following the NLP intervention, the control group's mean vocabulary score was 13.93. This shows that, with an average score of 13.93 out of a possible total, the students in the control group increased their vocabulary abilities. The distribution or variety of scores within the control group is shown by the standard deviation, which is 1.837. There may be greater variation in individual results when the standard deviation is bigger. The statistical study performed to ascertain whether there is a significant difference in vocabulary improvement between the control and experimental groups produced a significance (p-value) of.335. Given that the p-value

in this instance is higher than the customary cutoff of.05., a p-value of.335 indicates that there is no statistically significant difference in vocabulary growth between the two groups.

Experimental Group:

The posttest mean vocabulary score for the experimental group is 17.57. This shows that, on average, the students who received NLP intervention scored 17.57 out of a possible total for vocabulary. The variation in scores within the experimental group is reflected in the 1.305 standard deviation. The statistical study, which analyses the vocabulary improvement between the control and experimental groups, yielded a significance (p-value) of.238. A p-value of.238, like that of the control group, suggests that there was no statistically significant difference in vocabulary improvement between the experimental and control groups. In summary, the research indicates that there is no statistically significant difference in vocabulary improvement between the experimental and control groups based on the posttest findings. On the basis of further statistical tests and considerations, more interpretations and conclusions can be made.

DISCUSSION

The research findings highlight the significant role of NLP techniques in improving vocabulary skills among students in the experimental group. Neurolinguistic Programming (NLP) played a crucial role in reshaping the students' subconscious minds, enabling them to acquire a better grasp of vocabulary. By connecting language learning with the students' brains, NLP techniques helped reduce stress, anxiety, and fear associated with learning a foreign or second language. The emphasis on physiology, nonverbal cues, tone of voice, and verbal responses further facilitated effective communication.

NLP techniques empowered students as conscious learners, allowing them to harness the power of their subconscious minds and habits to enhance their vocabulary skills. Techniques like rapport building, mirroring, mind mapping, reframing, anchoring, and modeling boosted students' confidence and improved their ability to express themselves fluently. Through NLP, students became more conscious of their verbal and nonverbal expressions, as well as their impression and expression, by gaining insights into the functional and structural aspects of the brain. Understanding the limbic system helped students control their emotional responses, ultimately leading to improved communication skills.

The research also emphasized the significance of NLP as a modeling tool for language skills. Models like Milton Erickson's language model and Steve Andrea's self-concept model played pivotal roles in enhancing communication skills, particularly in vocabulary acquisition. NLP techniques worked at a fundamental level, improving students' self-image and beliefs, empowering them to believe that any language model can be learned by following a similar pattern and set of activities. After the implementation of NLP techniques, students displayed improved scores in vocabulary, accent, interaction, grammar, and comprehension, underscoring the effectiveness of neurolinguistic programming in vocabulary acquisition.

Moreover, NLP introduced students to the Meta model, enabling them to understand and overcome distortions, deletions, and generalizations in their thought processes. This understanding of the Meta model allowed students to apply techniques consciously to enhance their vocabulary and communication skills. Notably, NLP techniques significantly improved the

vocabulary skills of the students in the experimental group, leading to higher scores in vocabulary assessment.

CONCLUSION

The study's results demonstrate the importance of focusing on vocabulary improvement through NLP techniques. By implementing NLP, students exhibited greater enthusiasm and confidence in the learning process. The NLP approach, which addresses language learning through the brain and emphasizes managing thoughts, proved to be more effective than conventional teaching methods in enhancing vocabulary skills.

RECOMMENDATIONS

For future researchers exploring NLP techniques for vocabulary improvement, it is essential for teachers to gain comprehensive knowledge of NLP, including mirroring, reframing, mind mapping, rapport building, maintaining flow, and NLP models like the self-concept model and Meta Model. Teachers should adopt various VAK (visual, auditory, and kinesthetic) approaches to cater to different learning styles among students and build strong rapport to facilitate effective guidance and teaching.

Researchers can further explore different aspects of vocabulary acquisition through NLP techniques. Conducting similar studies at various educational levels and using diverse research designs, such as casual comparative, experimental, and correlation research designs, would provide valuable insights into the effectiveness of NLP in vocabulary enhancement.

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