Abstract: Traditional teacher-centered approaches are being replaced by collaborative learning methods like cooperative learning. This research explores the benefits of cooperative learning for both introverted and extroverted students. A pre-experimental, one-group pretest-posttest design was employed. The participants were first-semester students at a health science institute (n=18). Purposive sampling was used to select a group of students. The researcher administered a personality assessment to classify students as introverts or extroverts. The findings showed that cooperative learning improved reading comprehension for both extroverted and introverted students. Extroverts benefited from the interactive and collaborative aspects of cooperative learning. Introverts, on the other hand, thrived in an environment that allowed for thoughtful participation and reflection. The results also suggest that personality traits moderate the effects of cooperative learning on reading comprehension. This study highlights the effectiveness of cooperative learning in enhancing reading comprehension for students with diverse personalities. It emphasizes the need for educators to consider individual characteristics when designing instructional strategies. By incorporating cooperative learning and acknowledging the influence of personality traits, educators can create more personalized and effective teaching practices that cater to the diverse needs of students in language classrooms.

Keywords: cooperative learning, reading comprehension, extroverted and introverted students

INTRODUCTION

This Reading has been regarded as one of the most significant abilities that students should learn. They can use reading as a stepping stone to achieve in their studies and in life. A student will miss out on many opportunities in both his schooling and his future real-world circumstances if he or she cannot read properly. Reading can help pupils learn new things, appreciate literature's beauty, and carry out daily tasks including reading news articles, periodicals, novels, maps, manuals, and other everyday materials. Also, reading helps people understand the language used in the writings as well as learn new information from the books. Reading may help children learn new vocabulary, phrases, idioms, and many other things about language when they read different kinds of books.

The issues with the students’ reading included a lack of enthusiasm in reading, poor reading strategies, inadequate vocabulary knowledge, sentence structures that were longer than what they were used to reading or creating, and confusion over the grammatical structures utilized in the text (Ekorini, 2020). For many years, several instructional strategies have been employed to enhance the teaching of English as a foreign language. New approaches and strategies are gradually replacing teacher-centered traditional approaches to improve student success. English language classes have also seen a rise in the use of the cooperative learning approach, which enables students to work together to achieve shared learning objectives rather than learning on their own.

Several research has demonstrated the value of using cooperative learning to promote reading comprehension. This approach enables students to collaborate in small groups, optimizing the usage of reading comprehension exercises and strengthening their reading skills. The improvement of English reading comprehension, the growth of reading proficiency, the improvement of motivation and attitudes toward reading, and ultimately the improvement of students’ general reading comprehension have all been seen as benefits of cooperative learning. Cooperative learning is a successful method for teaching reading comprehension, and as a result, it should be regarded as a useful tool in the classroom.
Several studies have investigated the effectiveness of cooperative learning in teaching reading comprehension. The studies suggest that cooperative learning can enhance English reading comprehension and learning. (Haydan, 2013; Pan, C. Y., & Wu, 2013; Yu, 2019; Tankersley, A., & Cuevas, J. A, 2019). The present research is distinct from earlier studies because it introduces moderator variables, specifically personality traits such as extroversion and introversion, among the student participants. This inclusion of personality as a variable sets this research apart from previous studies.

There is more to true cooperative learning than simply having students sit in groups. Cooperative learning is most effective when it is planned with precise instructions, student work responsibilities, and outputs and measures for learning goals. This approach's teachers place a high importance on cooperation, teamwork, and collaboration in their lessons. Through cooperative learning, students can develop the skills necessary to work effectively with others as adults in the workplace (Foster, 2020). Students complete a learning assignment in small groups during cooperative learning lessons in the classroom. The teacher gives specific instructions along with the work. Students then collaborate on the project while playing specific roles (i.e. reporter, spokesperson, researcher, recorder). teachers who are good at assessing the class. Dörnyei, Z. (2005).

The approaches and learning techniques chosen should be in line with the peculiarities of the students. The differences in student characteristics are what led to the difficulties in history learning. Learning styles are the only way that student characteristics differ from one another. Understanding learning styles has helped educators understand the needs and characteristics of their students indirectly. Identification of learning styles is anticipated to give educators reference materials for deciding which techniques, strategies, and approaches are suitable for students to apply historical learning.

The identification of learning styles can be done using a variety of instrument models. Determine the study's learning styles using the Myers-Briggs Type Indicator (MBTI) model. Extrovert, Introvert, Sensing, Intuition, Thinking, Feeling, Judging, and Perceiving are the eight components of this model's learning style. Determine the traits of these learning styles based on Carl Gustav Jung's psychological theories. Regarding the educational element, it is crucial to comprehend psychological students. This is essential to help instructors comprehend the mental processes involved in kids' cognitive functions. (Sternberg, R. J., & Sternberg, K, 2012).

In the field of teaching research, a number of personality types have been identified. According to Dörnyei, Z. (2005), extroversion/introversion is the personality type that has captured the attention of professionals in the L2 research area. Both introverted and extroverted pupils benefit from cooperative learning when reading comprehension is being taught. Cooperative learning has been found in studies to improve students' attitudes toward learning and boost their willingness to achieve. Also, studies show that cooperative learning can enhance both personality types' reading comprehension abilities. Teachers can create a positive and engaging learning environment that is beneficial to all students by integrating cooperative learning into reading comprehension instruction. (Tankersley, A., & Cuevas, J. A, 2019; Ahour, T., & Haradasht, P. N, 2014; Nejad, S. G., & Keshavarzi, A, 2015).

**METHOD**

This study utilizes a pre-experimental research design, specifically a one-group pretest-posttest design, as defined by Cohen. This design involves measuring the same group of participants twice, both before and after a treatment or intervention is administered. (Cohen, L., Manion, L., & Morrison, K, 2017) The purpose of this experimental research is to examine the efficacy of cooperative learning in teaching reading comprehension to students with introverted and extroverted personalities. The experimental group consists of students who were taught using cooperative learning, with introversion and extroversion acting as moderator variables. The population under study is comprised of first-semester students at the Institute of Health Science in the academic year 2023/2024. The research employed purposive sampling, wherein the entire population was divided into groups or clusters and a purposive sample was selected from each cluster. After collecting the data, the researcher analyzed the students' result of pre-test and post-test by using t-test was used to test the effect of teaching reading by using cooperative learning to students with extrovert and introvert personalities.
FINDINGS AND DISCUSSION

In order to analyze the effects of the cooperative learning method on reading comprehension skills and achievements of introvert and extrovert students, first Reading Comprehension Achievement Test was carried out both in experimental groups and then the differences were compared.

The approach to classifying research samples according to their personalities will be presented. Before administering the pre-test and treatments, the researcher administered a personality assessment to the experimental group. By completing this questionnaire, the researcher may determine whether the learners have an introverted or extroverted personality. According to the findings, 12 students were extroverts and 6 students with introverts.

After giving personality determination questionnaires, the researcher gave pre-tests to both extrovert and introvert groups. Then the following results are obtained.

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<td>Pre-test</td>
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<td>Extrovert Students</td>
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<td>Introvert Students</td>
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In this table, we have organized the data into columns representing the characteristics of two student groups: extroverts and introverts. Upon analyzing the provided data, some intriguing patterns emerge regarding their minimum, maximum, and mean scores. Among the extrovert students, the minimum score recorded was 50, while introvert students scored slightly higher at 52. This observation suggests that introverts may have a slightly better performance at the lower end of the score range.

Shifting our focus to the maximum scores, we find that extroverted students achieved a maximum score of 83, while their introverted counterparts outperformed them with a higher maximum score of 90. This indicates that introverted students have the potential to achieve higher scores compared to extroverts, even at the upper end of the score spectrum.

However, the most notable difference lies in the mean scores, which represent the average performance. Extrovert students obtained an average score of 62.83, whereas introvert students achieved a significantly higher mean score of 71.17. This substantial discrepancy suggests that, on average, introverted students tend to perform better academically compared to extrovert students.

Nevertheless, it is crucial to acknowledge the limitation of our conclusions due to the relatively small sample size of 12 extrovert students and 6 introvert students. As such, these findings should be interpreted with caution and cannot be fully generalized to all extroverted and introverted students. To establish more robust and reliable conclusions about the academic performance of these two groups, further research and statistical analysis with larger sample sizes would be necessary.

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<th>Table2: Post-test score</th>
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In the given data, we conducted an analysis of extrovert and introvert students' academic performance, considering their minimum, maximum, and mean scores. Looking at the minimum scores, we observed that extrovert students scored 60, while introvert students achieved a slightly higher score of 65. This finding suggests that introverted students might have a slight edge in performance at the lower end of the score range.

Examining the maximum scores, both extrovert and introvert students attained the same highest score of 90, indicating no substantial difference in their top-level performance.
However, the most noteworthy distinction emerged in the mean scores, representing the average academic performance. Extrovert students obtained a mean score of 72.83, whereas introvert students displayed a notably higher mean score of 80.00. This significant difference suggests that, on average, introverted students tend to outperform extroverted students academically.

It is essential to consider the limitations of these conclusions due to the relatively small sample size of 12 extrovert students and 6 introvert students. As such, we should exercise caution when generalizing these findings to all extroverted and introverted students. To establish more robust and reliable conclusions about the academic performance of these two groups, further research with larger sample sizes would be necessary.

Despite these limitations, the data provides valuable insights into the potential influence of personality traits on academic achievement. The findings imply that introverted students might have a slight advantage over extroverted students in terms of both average and minimum scores, while both groups seem to perform equally well at the highest level.

After introducing cooperative learning for the students, the researcher conducted a post-test to assess any changes in their reading skills. Before and after the intervention, the data collection underwent a normality test to determine if the research sample followed a normal distribution. Additionally, the hypotheses were tested using statistical data. The results showed that for the pre-test data, with values of 0.032 and 0.480, the normality assumption was met (p > 0.05), indicating a normal distribution. Similarly, the post-test data were subjected to a normality test, and the significant score values of 0.217 and 0.147 were also greater than 0.05, confirming that both extrovert and introvert students' pre-and post-test data had a normal distribution.

**Teaching Reading Comprehension Through Cooperative Learning to Extrovert Students**

Cooperative learning is able to be applied in teaching reading and evolving the students' achievement of reading. This technique could change the students' reading comprehension better than before. Students with extroverted personalities tend to be easier to participate in cooperative learning. Extroverted students are more comfortable and eager to take the lead in initiating conversations or expressing their thoughts and ideas. Their outgoing nature and desire for external stimulation make them more likely to take the initiative in initiating conversations and driving the flow of communication. Olsen and Kagan, 1992:8, as cited in Richards and Rodgers, 2001) stated that cooperative learning is a group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others.

Based on the results, cooperative learning was practical for teaching reading to students with extroverted personalities. The t-test for paired samples produced a significant result of 0.000. It demonstrates that 0.000 < 0.05. It indicates a substantial difference between the pre-test and post-test scores of extrovert students’ personalities. It could be inferred statistically based on the t-test value that cooperative learning is more effective in developing students’ comprehension of literal, inferential, and critical reading skills, in other words, it could increase the students’ learning reading comprehension and more effectively than the conventional method.

**Teaching Reading Comprehension Through Cooperative Learning to Introvert Students**

Introverted students often prefer to process information internally before expressing their thoughts. This introspective nature can make introverts more comfortable in the role of responders, as they take their time to carefully consider their responses and provide well-thought-out insights.

In learning English, several studies have shown that introverts are good at some skills. Introvert personality type with reading comprehension has a significant correlation. The more introverted students, the better their reading comprehension.

Based on the results, cooperative learning was practical for teaching reading to students with introverted personalities. The t-test for paired samples produced a significant result of 0.000. It demonstrates that 0.000 < 0.05. It indicates a substantial difference between the pre-test and post-test scores of extrovert students’ personalities. It could
be inferred statistically based on the t-test value that cooperative learning is more effective in developing students’ comprehension of literal, inferential, and critical reading skills, in other words, it could increase the students’ learning reading comprehension and more effectively than the conventional method.

CONCLUSION

In conclusion, this study aimed to investigate the effectiveness of implementing cooperative learning for teaching reading comprehension to both introverted and extroverted students. Through a comprehensive analysis of the data, several key findings have emerged that address the research objectives and contribute to the current understanding of the role of cooperative learning in enhancing reading skills.

The primary objective of this research was to assess the impact of cooperative learning on the reading comprehension skills of both introverted and extroverted students. The findings reveal that cooperative learning positively influences reading comprehension for both personality types. Extroverted students exhibited enhanced engagement and active participation in cooperative learning environments, benefiting from the immediate feedback and collaborative dynamics. On the other hand, introverted students leveraged their introspective nature to contribute thoughtfully within discussions, gradually building confidence and strengthening their comprehension skills. These results underscore that cooperative learning is a versatile approach capable of accommodating the learning preferences of both personality types.

Furthermore, this study aimed to determine whether personality traits, specifically introversion and extroversion, moderate the effects of cooperative learning on reading comprehension. The results indicate that while both personality types experienced improvement in reading comprehension through cooperative learning, the strategies and mechanisms through which they benefited differed. Introverted students gravitated towards reflective and measured participation, while extroverted students thrived in interactive and feedback-rich group discussions. Therefore, the study demonstrates that personality traits do indeed play a role in shaping the nuances of learning outcomes within the cooperative learning framework.

Additionally, this research sought to contribute to the existing knowledge by introducing moderator variables, and personality traits, into the study of the effects of cooperative learning on reading comprehension. Prior research primarily focused on the impact of cooperative learning without considering the potential influence of individual characteristics. This study breaks new ground by shedding light on how introversion and extroversion interact with cooperative learning strategies to impact reading comprehension.

In summary, this study advances the field by providing insights into the nuanced effects of cooperative learning on reading comprehension for both introverted and extroverted students. The research demonstrates that cooperative learning is an effective approach for enhancing reading skills regardless of personality type, while also revealing how these two distinct personality traits interact with the teaching method. By considering the diversity of students’ personalities, educators can tailor instructional strategies to optimize learning outcomes. Ultimately, this research contributes to the development of more personalized and effective teaching practices that cater to the diverse needs of students in language classrooms.

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