

## Using Jigsaw in Teaching Reading Comprehension across Different Personality and Psychology Awareness

Muhaidi Mustaffa Al-Hafiz<sup>1</sup>, Nazeema Mohamed Yusof<sup>2</sup>, Siti Sarah Maidin<sup>3</sup>, Robe'ah Yusuf<sup>4</sup>, Siti Noor Aneeis Hashim<sup>5</sup>

Received: 02-January-2023

Revised: 11-February-2023

Accepted: 09-March-2023

<sup>1</sup>Universiti Teknologi Malaysia, Johor, Malaysia

<sup>2</sup>Universiti Sultan Azlan Shah, Perak, Malaysia

<sup>3</sup>INTI International University, Nilai, Negeri Sembilan, Malaysia

<sup>4</sup>Universiti Pendidikan Sultan Idris, Perak, Malaysia

<sup>5</sup>Universiti Utara Malaysia, Sintok, Kedah, Malaysia

### Abstract

In order to teach reading, one must teach all of the components of language (hearing, speaking and writing) as well as reading. As soon as they've mastered listening and speaking, reading is usually provided. We wanted to see whether or not there was a correlation between personality and the jigsaw's ability to improve reading comprehension, as well as whether or not it had an influence on an extrovert and an introvert's performance. before administering jigsaw or conventional therapy to the experimental group, the researcher administers a questionnaire on personality to the students. The study was conducted at a university with 55 eleventh-grade students, with 30 students in the experimental group being 20 percent extroverts and 10 percent introverts, and 25 students in the control group being 15 percent extroverts and 10 percent introverts. As a way of testing the strength of a hypothesis's association with several variables, the researcher used an experimental factorial design. The data was analyzed using a Two-Way ANOVA. There are considerable disparities between extroverts and extroverts in the effectiveness of the jigsaw approach. Personality and the jigsaw puzzle.

**Keyword:** Jigsaw puzzle, descriptive text, Psychology Awareness and personality.

### Introduction

Four language skills, hearing, speaking, reading and writing; and three more components (vocabulary, grammar and pronunciation) are discussed while discussing English. Since a method of learning the English language, reading plays a vital role in the teaching and learning process, as it immediately increases the vocabulary of pupils. Reading is defined by (Farashahi & Tajeddin, 2018) as the capacity to derive meaning from written text and to accurately interpret it. Identifying written or printed material and deciphering its meaning is what most people mean when they say they're reading. In the teaching and learning process, reading comprehension isn't an easy task, but rather a highly complicated one.

Due to the students' lack of active participation in teaching and learning activities, it is very difficult for students' motivation in reading comprehension to remain high. The monotony of the procedure and the inactivity of the pupils resulted in learners being bored. Because of this, instructors must employ a variety of methods and keep up their efforts to ensure that their pupils reach their full potential. As a result, students will look forward to class. Teaching reading comprehension may be accomplished in a variety of ways. Jigsaw is one of the methods. The (Fu & Hwang, 2018) The jigsaw approach is a cooperative learning strategy. It had the effect of making the lesson more student-focused. Most pupils are more engaged in class when they are doing something like this. Instructor and facilitator are two distinct roles for the teacher. As a result, a communicative technique is used. However, the jigsaw method has one essential difference that each student teaches something's about. To help pupils retain information, the jigsaw method uses a kind of puzzle where the content is split up and jumbled before being put back together again by the learner. Furthermore, the jigsaw technique's efficiency is shown by its use (Tseng et al., 2020). Jigsaw is the least successful of the well-known cooperative learning approaches, according to an analysis of more than a dozen research. Jigsaw, on the other hand, is typically more successful than traditional methods. (Dhillon et al., 2020) the jigsaw-reading approach has certain advantages and disadvantages: As one of the jigsaw technique's qualities, cross-role teams may "break the mold" in terms of finding creative solutions because of the synergy that results from bringing together people with diverse backgrounds and viewpoints. 5 Cooperative and trusting relationships become more important in the pursuit of academic success. All pupils in the class have a responsibility to learn and to share what they've learnt to their peers. One disadvantage is that returning to one's home group may put too much pressure on certain students to

do well. Second, students may be unable to contribute to their home group because they are incorrect about their second language communication skills, learning challenges, or social position.

Using the Jigsaw method to teach reading comprehension as outlined by (Hsu, & Wang, 2018): The term "home group" refers to the original method of arranging pupils into groups of five or six. Gender, ethnicity, ability, and skill levels should be diverse across the teams. One kid from each group will be designated as the "leader." Making a third division into five or six sections. assigning each student to study a portion of the topic in turn. As a final step, give students at least two chances to read through their part. Sixth, constructing a temporary "expert group" by having one student from each home group join other students allocated to the same section. Teachers must allow these "expert groups" time to discuss the key elements of their segment as well as to practice the presentations they will deliver to their home group at this point. In the seventh step, students are reunited with their respective groups. It's time for students to share their segments with each other. Observing the process from group to group was the ninth. Make an appropriate intervention if a group has a problem, such as a member who is domineering or disruptive. The tenth step is to provide a test to see how well the pupils understand the topic. (Chen et al., 2019) (Chen and colleagues) Text that describes a specific person, location, or object is known as descriptive text. The objective of descriptive writing is to convey information. Description of an object, animal, or person is the focus of this kind of prose." With reference to the quote, readers might guess what the speaker was referring to via this paragraph. Identification and description are the basic building blocks of descriptive writing. Identifying the topic or item to be described is the first step in the process, while providing a concise explanation of the subject is the second step. Personality is concerned with universal human characteristics and the uniqueness of each person. Because each person is unique, one's personality may help them stand out from the others. (Bhardwaj et al., 2021) divided people into extroverts and introverts (Bhardwaj et al., 2021). Although earlier research has been done on jigsaw puzzles, the variables in this study were different. Personality is linked to the teaching jigsaw by the researcher. No one in the prior research linked this variable with the technique. The researcher wants to discover whether there is a difference in the mean score between various kinds of personalities and techniques. A goal must be set for this investigation in order to give it a sense of direction. In light of the aforementioned issue, the following are the study's primary objectives: To see whether students who are taught using the jigsaw approach and those who are taught using the standard way are able to read descriptive text more well. Extrovert and introverted students will be tested to see whether their ability to understand descriptive text differs significantly after being taught via jigsaw and traditional methods. To find out whether the method and a person's personality interact.

### **Research method**

Experimentation is used in this investigation. It is possible to assess the strength of the association between two variables using an experimental design, which is a method of evaluating a hypothesis. The study's subject is a researcher who conducts an experiment including several therapies. The experimental group (y) was compared to the control group (XI A) using the jigsaw approach in this research. Additionally, the control group (x) is XI B, a group that does not make use of the approach under investigation.

Complexity levels range from simple to complicated in the development of factorial designs. The 2 by 2 simple factorial design is used in this investigation (2 x 2). There are two possible values for each of the two independent variables in this design (Bernacki et al., 2020). Four groups are required for the 2 x 2 configuration. Random assignment is used to divide the subjects into two groups, one for each of the two personalities. The sample was chosen at random from among the available classes by the researcher, who took into account that two classes had the same degree of equality while making the selections. An additional test was administered to make sure that the two groups were equal. Analyses were carried out using a multivariate statistical analysis of variance (SAS).

It is critical to have a thorough understanding of the topic at hand. Students in their second year of college are the focus of this investigation. The study's intended audience is known as the "subject," and it is this audience to whom the study's findings should be extrapolated. The collection of items from which a feature may be detected is referred to as the "subject." It's critical to the field's ability to conduct research more efficiently. The participants in this study include 55 university students in the eleventh grade, divided into 30 experimental groups, each with 20 extrovert students and 10 introverts, and 20 control groups, each with 15 extrovert students and 10 introverts as participants.

Tests and questioners are only two examples of research instruments that may be used to gather data. In this case, the test serves as the researcher's tool. The first step is to provide a questionnaire to determine whether pupils are more outgoing or more reserved. Next, the pre-test and post-test are used to determine a student's level of ability, while the post-test is used to determine how the therapy has affected the student's ability.

### Findings and Discussion

#### Independent Sample Test

Test for quality of variance									
Reading achievement	F	SIG	t	df	Sig. (2 tailed)	Mean difference	Error difference	Interval of the Difference	
								Lower	Upper
Equal variances assumed	1.115	.297	2.622	45	.017	6.768	2.663	1.323	12.052
Equal variances not assumed			2.486	41.709	.017	6.687	2.690	1.258	12.117

The P-value (sig) was 0.017, which means that the t columns were 2.622 and the mean was 6.768, meaning that the p-value was less than the alpha 0.05. The results of the analysis rejected the null hypothesis and accepted the alternative hypothesis (students taught using the jigsaw technique and students not taught using the jigsaw technique do not read descriptive text significantly differently) (there is significant difference in reading achievement of descriptive text between students who are taught using jigsaw technique and not taught using jigsaw technique). To put it another way, descriptive texts taught using the jigsaw approach vary significantly from those taught without it in terms of students' reading proficiency.

Tests of Between-Subjects Effects					
Dependent Variable: reading					
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	711.358	3	234.090	2.941	.051
Intercept	244431.426	1	244431.426	2866.527	.000
Personality	90.608	1	90.608	1.187	.312
Teaching method	592.708	1	592.708	7.277	.011
personality teaching method	94.277	1	94.277	1.151	.283
Error	3556.370	43	82.706		
Total	281691.000	47			
Corrected Total	4258.638	46			
a. R Squared = .166 (Adjusted R Squared = .108)					

A statistical analysis of the post-test F table found that it was 2.941 (p = 0.051) significant. In this research, the significance threshold was set at .05–.06, which is below this sig.. Certainly. Jigsaw, the students' personalities, and their interactions with the jigsaw approach were all significant influences on the dependent variable in this research (reading ability).

In addition, the importance of the intercept is.000. " With a 96% degree of confidence, the F is equal to 2866.52. Intercept's significance is less than 96 percent ( =.05) of the degree of confidence. The independent factors have an impact on the dependent variable's score difference. When there are no independent factors, the dependent variable's score might vary or remain the same The intercept, on the other hand, is important. With a significance threshold of.312, the F-value of Jigsaw's influence on post-test scores is 1.187 (F=1.187) As of this investigation, the significance threshold was set at sig.312 .06. This suggests that reading ability has no discernible impact on personality.

According to F-values, there is a 7.277 (p=.011) and.06 significant level for the influence of Jigsaw's personality on reading ability. It signifies that, since the p-value is less than the sig. (.06), the working hypothesis (H0) is rejected and the alternative hypothesis (H) is accepted, pupils who are more extroverted or more introverted are less likely to learn to read on a jigsaw puzzle.

It was also shown that students' personalities were a significant factor in the F-value of the interaction between think pair sharing and gap activity and the students' personalities. P-values greater than 0.06 indicate that the two teaching methods Jigsaw and students' personalities are not intertwined. The specifics of the statically computed results obtained via the use of Two Way ANOVA.

### Conclusion

More enjoyable for students who utilize the jigsaw method to answer questions regarding descriptive text is the jigsaw approach, rather than traditional methods. Because jigsaw is a novel learning method at their school, they may enjoy the process. It was the first time they had ever grasped it. Furthermore, the jigsaw technique's efficiency is shown by its use (Tseng et al., 2020) studied several cooperative learning research and determined that jigsaw is the least successful of the well-known cooperative learning approaches. Jigsaw, on the other hand, is typically more successful than traditional methods. According to earlier research, this study's findings were in line with the findings of a previous study (Sibarani & Pardede, 2020) In the end, it can be determined that students' reading comprehension skills have improved as a consequence of using the jigsaw method. The kids, on the other hand, grew more excited about reading. According to the findings of this study, the jigsaw strategy is more successful than the traditional method for improving reading comprehension skills in individuals with diverse personalities. When it comes to learning a second language, personality variables may have a direct or indirect impact on how well a student does in the process. Jigsaw method may not have directly influenced students' reading success, hence there was no significant difference between extrovert and introvert in either approach when personality and jigsaw were intertwined. According to the preceding assertion, jigsaw instruction and personality were shown to have a strong correlation. As a result of the students' heightened nervousness and apprehension in the later strategy, they may have fared better than in the earlier method. Students who employed the jigsaw method were more successful than those who remained quiet and secluded. Extrovert pupils are more likely to engage in risky behavior and seek out new experiences. Extrovert university students have something fresh to try with Jigsaw. According to the following finding, reading ability has no measurable influence on personality traits. Students who are more extroverted tend to have a better time learning to read on jigsaw than those who are more introverted. Jigsaw and students' personalities seem to have little effect on each other as a teaching approach. The specifics of the statically computed results obtained via the use of Two Way ANOVA.

### References

1. Bernacki, M. L., Greene, J. A., & Crompton, H. (2020). Mobile technology, learning, and achievement: Advances in understanding and measuring the role of mobile technology in education. *Contemporary Educational Psychology*, 60, 101827. <https://doi.org/10.1016/j.cedpsych.2019.101827>
2. Bhardwaj, H., Tomar, P., Sakalle, A., & Bhardwaj, A. (2021, March). Classification of extraversion and introversion personality trait using electroencephalogram signals. In *International Conference on Artificial Intelligence and Sustainable Computing* (pp. 31-39). Springer, Cham. [https://doi.org/10.1007/978-3-030-82322-1\\_3](https://doi.org/10.1007/978-3-030-82322-1_3)
3. Chen, Y., Mayall, H. J., York, C. S., & Smith, T. J. (2019). Parental perception and English learners' mobile-assisted language learning: An ethnographic case study from a technology-based funds of knowledge approach. *Learning, Culture and Social Interaction*, 22, 100325. <https://doi.org/10.1016/j.lcsi.2019.100325>

4. Desa, M.B.M., Nasir, N.B.C.M., Jasni, M.A.B., Yusof, Y.B., Nordin, M.N. (2022). ISIS Uses A Social Influence Techniques To Induce Individuals To Become Terrorist Sympathizers: A Review. *Journal of Pharmaceutical Negative Results*, 2022, 13, pp. 5622–5630.
5. Dhillon, B. P. S., Herman, H., & Syafryadin, S. (2020). The Effect of Skimming Method to Improve Students' Ability in Reading Comprehension on Narrative Text. *Linguists: Journal Of Linguistics and Language Teaching*, 6(1), 77-88. <http://dx.doi.org/10.29300/ling.v6i1.2991>
6. Farashahi, M., & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The international journal of Management Education*, 16(1), 131-142. <https://doi.org/10.1016/j.ijme.2018.01.003>
7. Fu, Q. K., & Hwang, G. J. (2018). Trends in mobile technology-supported collaborative learning: A systematic review of journal publications from 2007 to 2016. *Computers & Education*, 119, 129-143. <https://doi.org/10.1016/j.compedu.2018.01.004>
8. Hsu, C. C., & Wang, T. I. (2018). Applying game mechanics and student-generated questions to an online puzzle-based game learning system to promote algorithmic thinking skills. *Computers & Education*, 121, 73-88. <https://doi.org/10.1016/j.compedu.2018.02.002>
9. Kadir, M.A.B.A., Muhammad, A.B., Yusoff, M.Z.B.M., Hassan, M.H., Nordin, M.N. The Relationship Between Learning Style And Jawi Writing Skills Among Primary School Student. *Journal of Pharmaceutical Negative Results*, 2022, 13, pp. 5524–5534.
10. Magiman, Mohamad Maulana; Nordin, Mohd Norazmi (2021). A Study of Ritual Communication In Kadayan Community In Sarawak. *Journal for the Study of Religions and Ideologies*, Vol. 20, Iss. 60, (Winter 2021): 211-224.
11. Omar, S.A., Latif, M.S.A., Bujang, S., ...Musa, P.I.P., Nordin, M.N. (2022). Determination of Uruf Rate of Gold Jewelry In The State of Sarawak. *Journal of Pharmaceutical Negative Results*, 2022, 13, pp. 5607–5612.
12. Rani, M.A.M., Jasmi, Z.S., Abbas, M.S., Nordin, M.N., Musa, P.I.P. (2023). Empowering The Competitiveness Of Asnaf Rural Zakat Entrepreneurs Policy: National Development Aspirations 2030. *Journal of Pharmaceutical Negative Results*, 2022, 13, pp. 5613–5621.
13. Rani, M.A.M., Mohd Arif, M.I.A., Adenan, F., Nordin, M.N., Izham, S.S. (2022). Contemporary Research In Islamic Philanthropy: An Analysis of The Needs And Directions of The Field of Waqf. *Journal of Pharmaceutical Negative Results*, 2022, 13, pp. 5805–5813.
14. Sibarani, J. K., & Pardede, H. (2020). The Effect of Jigsaw Technique in Reading Comprehension on Recount Text. *Cetta: Jurnal Ilmu Pendidikan*, 3(1). <https://doi.org/10.37329/cetta.v3i1.413>
15. Tseng, W. T., Liou, H. J., & Chu, H. C. (2020). Vocabulary learning in virtual environments: Learner autonomy and collaboration. *System*, 88, 102190. <https://doi.org/10.1016/j.system.2019.102190>