Cooperative Learning on the Subject Proficiency of Psychology Students in the Philippines: A Comparative Study

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Abstract-

Index Terms- About four key words or phrases in alphabetical order, separated by commas. Keywords are used to retrieve documents in an information system such as an online journal or a search engine. (Mention 4-5 keywords)

I. INTRODUCTION

Ooperative learning is a method of education that is based on working in small groups with the intention of accomplishing a common objective (Lewis, 2019). Understanding the potential advantages of cooperative learning in education holds significance for the academic community. Cooperative learning effectively fosters knowledge acquisition, communication, critical thinking skills, self-regulated learning, and academic motivation (Keramati & Gillies, 2021). Studies were conducted to assess the effectiveness of the cooperative learning method (CLM) in the context of English language learning and resulted in a noteworthy improvement in the academic performance of students who were exposed to CLM (Al-Mubireek, 2021; Al-Tamimi & Attamimi, 2014). These studies proved to be efficient in improving students' academic achievement in learning the English language. Although further exploration must be conducted to determine if CLM is effective in other courses.

Traditional learning methods are generally teacher-directed and where students are taught in a manner that is conducive to sitting and listening (Tularam, 2018). This approach has been long standing and effective in keeping the learning process (Bencheva, 2010). However, one major problem with traditional learning is its "one-size-fits-all" approach. This made students subjected to the same teaching approaches and evaluation systems regardless of ability or interest (Mead, 2023). This resulted in students feeling bored, frustrated, and unable to learn (O'Shaughnessy, 2020).

According to Willis (2021), there are common student challenges—such as embarrassing mistakes, unpreparedness,

concerns about language proficiency, and peer-related fears—that can be eased by cooperative learning. This fosters collaboration, peer interaction, and the development of important social and communication skills (Kibirige & Lehong, 2015). Cooperative learning promotes the development of interpersonal skills and encourages students to be more active participants (Mendo-Lázaro et al., 2022). This aligns naturally with the goals and objectives of psychology education as it demands insightful approaches that not only impart foundational knowledge but also cultivate critical thinking, problem-solving skills, and a deep understanding of human behavior (Severson, 2022). Many studies have shown the positive effects of Cooperative learning. However, challenges like group dynamics, time limitations, standardized curricula, and other classroom issues can hinder its effectiveness (Celik et al., 2013).

In the pursuit of educational excellence, cooperative learning emerges as an academic strategy with the potential to revolutionize the way students engage with their coursework (Kelly, 2020). This study aims to explore and analyze the ongoing discourse and research surrounding the selection between traditional learning and cooperative learning approaches in modern education. This study aims to explore and compare traditional learning, which is characterized by a teacher-centered model of knowledge dissemination (Todorovic, 2020), and cooperative learning, a student-centered model that emphasizes collaboration and active participation (Jacobs & Renandya, 2019; Willis, 2021). Both styles in education will be examined in terms characteristics and approaches of both traditional and cooperative learning, this research seeks to provide a comprehensive understanding of these educational models and their effect on the subject proficiency of psychology students.

II. METHODOLOGY

This study is a quantitative research that determined the effectiveness of cooperative learning on the subject proficiency of first-year Psychology students by comparing the scores in their assessment test. According to Frierson-Campbell & Froehlich (2022), quantitative research uses statistical methods to explore variations and similarities among extensive sets of individuals or groups. The essential qualities of quantitative research include a well-defined target population, the use of

Table 2. Measure of Central Tendency for Control and Experimental groups.

III. DATA ANALYSIS

The initial overview of the data will come from the descriptive statistics that will be calculated for both the control and experimental groups. This includes the mean, median, mode, standard deviation, and range of assessment test scores. The researchers will perform a t-test, with a P-value of 0.5, to determine whether there is a significant difference between the control and experimental group. A t-test is a statistical method used for inferential purposes to assess whether there is a noteworthy distinction between the averages of two groups and to understand their relationship (Hayes, 2023). This study makes use of taking the scores from the assessment test and finding their correlation with the effectiveness of cooperative learning. A critical value will also be used to determine whether to accept or reject the null hypothesis. If the critical value is higher than the value (t), the null hypothesis is rejected.

IV. RESULTS

Age	Frequency	Percentage			
18	12	20			
19	14	23.33			
20	18	30			
21	9	15			
22	5	8.33			
23	2	3.33			
TOTAL:	60	100%			

Table 1. Demographic profile of Psychology students according to age.

Table 1 presents the demographic profile of the participants according to their age. There were 60 participants gathered from 1st and 2nd year Psychology students. Most of the participants are 20 years old with a percentage of (30%). There were 14 participants (23.33%) aged 19, 12 participants (20%) aged 18, 9 participants (15%) aged 21, and 5 participants (8.33%) aged 22.

Table 1. Demographic profile of Psychology students according to age.

Table 2 presents the measure of central tendency for control and experimental groups. Based on the results above, the control group had a higher average (M=32.67, SD=10.00) than the experimental group (M=24.9, SD=7.84).

	Standard Deviation		df	CV		P-		Value
Group	Cont	Expean	Medi	an	Mo	dValue	\mathbf{S}	D(t)
cochitrol	10.0	32.67	32		33	- /-	1(0.6014
Lellanagin	negntal	124 .9	2 4 9	0.6	/8 <u>/</u> 4	0/5	7.	8 4 3

Table 3. Summary statistics of the effectiveness of cooperative learning on students' subject proficiency.

Table 3 presents the summary statistics of the effectiveness of cooperative learning on students' subject proficiency. It used a t-test with a P-value of 0.5 to determine the differences between the two groups. If the sample's t-value is higher than the critical value, then the null hypothesis will be rejected. According to the table above, the critical value (CV = 0.6787) is higher than the T-value (t-value = 0.001433), meaning that the null hypothesis is accepted.

V. DISCUSSION

The purpose of this study is to determine the effectiveness of cooperative learning on the subject proficiency of 1st- and 2nd-year psychology students. The experimental group utilized cooperative learning in their discussion, while the control group utilized traditional learning method. After the discussion, the participants were given an assessment test to determine the effectiveness of cooperative learning.

The hypothesis was that cooperative learning has a significant effect on the subject proficiency of psychology students. Table 2 shows the difference of the results for both control and experimental groups. It indicates that the control group has a higher average (M=32.67) than the experimental group (M=24.9). This implies that the participants who utilized traditional learning received a higher score than the participants who utilized cooperative learning.

Table 3 shows the results of the assessment test for both the control and experimental groups. The (t) value of the data is (t-value= 0.001433) with a critical value of (CV= 0.6787). Therefore, there is no significant effect of cooperative learning on the subject proficiency of the psychology students. Traditional learning significantly affects student performance, with research indicating higher likelihood of failure in classes utilizing traditional lecturing compared to employing active learning (Ting et. al., 2023). However, it's important to highlight that students generally assign a higher rating to the benefits of traditional learning. However, it's important to highlight that students generally assign a higher rating to the benefits of

traditional learning. An advantage is having an instructor present for face-to-face interactions, which are preferred by students for immediate feedback and a personalized learning experience (Lawlor, 2019). Traditional learning also facilitates better communication, creating a sense of community and support between students and teachers (Daymont et al., 2011; Sadeghi, 2019; Radović-Marković, 2010).

VI. CONCLUSION

The researchers were able to conclude that traditional learning remains vital. This method has stood the test of time, providing a foundation for lifelong learning habits by instilling curiosity, critical thinking, and a passion for knowledge acquisition. This research paper proves that in-person interactions between educators and students foster a deeper comprehension of the material and enable customized instruction. With a long history of success, traditional techniques convey research-based content and can easily benefit students, fostering an active learning environment. Despite the increasing interest in cooperative learning, traditional methods remain crucial in education, offering a strong foundation that can be enhanced by integrating innovative techniques for an improved educational experience..

REFERENCES

- [1] Al-Mubireek, S. (2021). The Effects of Cooperative Learning versus Traditional Teaching on Students' Achievement: A Case Study. TESOL International Journal, 16(2), 31-55.
- [2] Al-Tamimi, N. O. M., & Attamimi, R. A. (2014). Effectiveness of cooperative learning in enhancing speaking skills and attitudes towards learning English. International Journal of Linguistics, 6(4), 27.
- [3] Bencheva, N. (2010). Learning styles and e-learning face-to-face to the traditional learning. Научни Трудове На Русенския Университеt, 49(3.2), 63-67. vBirt, J. (2023). Cooperative Learning Strategies: Definition, Benefits and Tips https://www.indeed.com/career-advice/career-development/cooperative-learning-strategies
- [4] Çelik, S., Aytın, K., & Bayram, E. (2013). Implementing cooperative learning in the language classroom: Opinions of Turkish Teachers of English. Procedia - Social and Behavioral Sciences, 70, 1852–1859. https://doi.org/10.1016/j.sbspro.2013.01.263
- [5] Daymont, T., Blau, G., & Campbell, D. (2011). Deciding between traditional and online formats: Exploring the role of learning advantages, flexibility, and compensatory adaptation. Journal of Behavioral and Applied Management, 12(2), 156.
- [6] Frierson-Campbell, C., & Froehlich, H. C. (2022). Quantitative Research in Music Education: Letting Numbers Speak. In Inquiry in Music Education (pp. 183-191). Routledge.
- [7] Hayes, A. (2023). T-Test: What It Is With Multiple Formulas and When To Use Them. Investopedia. https://www.investopedia.com/terms/t/t-test.as
- [8] Heba, Bakr, Khoshaim., Saima, Rashid. (2016). Assessment of the Assessment Tool: Analysis of Items in a Non-MCQ Mathematics Exam.. International Journal of Instruction, doi: 10.12973/IJI.2016.9110A
- [9] Jacobs, G. M., & Renandya, W. A. (2019). Student centered cooperative learning. In Springer briefs in education. https://doi.org/10.1007/978-981-13-7213-1
- [10] Jamalludin, Ab, Rahman. (2020). Quantitative methods in global health research.
- [11] Kelly, M. (2020, August 28). Cooperative Learning Versus Traditional Learning for Group Activities. Retrieved from https://www.thoughtco.com/cooperative-learning-for-group-activities-7749
- [12] Keramati, M. R., & Gillies, R. M. (2021). Advantages and challenges of cooperative learning in two different cultures. Education Sciences, 12(1), 3.

- [13] Kibirige, I., & Lehong, M. J. (2016). The Effect of Cooperative Learning on Grade 12 Learners' Performance in Projectile Motions, South Africa. Eurasia Journal of Mathematics, Science and Technology Education, 12(9), 2543-2556. https://doi.org/10.12973/eurasia.2016.1250a
- [14] Lawlor, D., & Lawlor, D. (2019). The Advantages of Learning Traditional Microscopy. Introduction to Light Microscopy: Tips and Tricks for Beginners, 11-16.
- [15] Lewis, B. (2019). What is cooperative learning? ThoughtCo. https://www.thoughtco.com/what-is-cooperative-learning-2081641
- [16] Mead, S. (n.d.). Differentiated Learning: Why "One Size Fits All" Doesn't Work In Education. https://www.whitbyschool.org/passionforlearning/differentiated-learningwhy-one-size-fits-all-doesnt-work-in-education
- [17] Mendo-Lázaro, S., Del Barco, B. L., Del Río, M. I. P., & Ramos, V. M. L. (2022). The impact of cooperative learning on university students' academic goals. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.787210
- [18] O'Shaughnessy, M. (2020, July 20). One size doesn't fit all in education Education evolution. Education Evolution. https://educationevolution.org/one-size-doesnt-fit-all/
- [19] Radović-Marković, M. (2010). Advantages and disadvantages of e-learning in comparison to traditional forms of learning. Annals of the University of Petroşani, Economics, 10(2), 289-298.
- [20] Sadeghi, M. (2019). A shift from classroom to distance learning: Advantages and limitations. International Journal of Research in English Education, 4(1), 80-88.
- [21] Severson, H. (2022). Top skills for Psychology Students: Find what you need to succeed. Public Service Degrees https://www.publicservicedegrees.org/online-degrees/psychologyprograms/student-skills
- [22] Ting, F. S., Shroff, R. H., Lam, W. H., Garcia, R. C., Chan, C. L., Tsang, W. K., & Ezeamuzie, N. O. (2023). A Meta-analysis of Studies on the Effects of Active Learning on Asian Students' Performance in Science, Technology, Engineering and Mathematics (STEM) Subjects. The Asia-Pacific Education Researcher, 32(3), 379-400.
- [23] Todorovic, I. (2020). Importance of New Class Teaching Methods in Curricula Development in Developing Countries. IGI Global. https://www.igi-global.com/dictionary/importance-of-new-class-teaching-methods-in-curricula-development-in-developing-countries/85643#:~:text=Traditional% 20teaching% 20methods% 20focused % 20on,the% 20teacher% 20to% 20the% 20student.
- [24] Tularam, G. (2018). Traditional vs Non-traditional Teaching and Learning Strategies - The case of E-learning. Traditional vs Non-traditional Teaching and Learning Strategies - the case of E-learning! | International Journal for Mathematics Teaching and Learning
- [25] Willis, J. (2021). How cooperative learning can benefit students this year. Edutopia.https://www.edutopia.org/article/how-cooperative-learning-can-benefit-students-year/

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