Current Research in Dental, Physiotherapy and Pharmaceutical Sciences (CRDPPS)
ISSN: 3107-6343 | Vol. 01, Issue 03, Sep-Dec, 2025 | pp. 49-62

Peer-Assisted Learning in Physiotherapy and Allied Health Courses: A Randomized Implementation Study

Ankita Dixit[1*], Ayushi Raj[1], Ranjit Sharma[1]

[1]Faculty of Nursing and Paramedical, Mahayogi Gorakhnath University, Gorakhpur, UP, India

***Corresponding Author E-mail: ankitadixit.mapc@mgug.ac.in**

Abstract:

Peer-Assisted Learning (PAL) has become a new pedagogic approach in the field of physiotherapy and allied health education, but there is still no objective experimental data on its effectiveness in the mastery of skills. This was randomized implementation research that tested the effect of PAL on procedural accuracy, task performance and skill retention in a controlled Wistar rat model, which eliminated human variable. Forty rats were randomly divided into either PAL-based training or traditional instructor-led training and evaluated on basis of completing tasks, accuracy, error rate, observational performance and retention. Descriptive statistics and Independent Samples t-tests showed that the PAL condition greatly outperformed the control condition in all the measures and displayed a faster task completion, higher procedural accuracy, reduced errors, and greater retention ($p < 0.05$). The results are in line with the results of other literature that assert the advantages of PAL in improving confidence, competence, and communication but extends known information by offering controlled empirical evidence of better procedural learning. The research paper highlights the importance of PAL as a practical and scalable approach to training skills in physiotherapy and allied health education, in addition to the research opportunities to include human participants, extended follow-up, and combine it with simulation-based training.

Keywords: Peer-Assisted Learning (PAL), Physiotherapy Education, Allied Health Training, Skill Acquisition, Procedural Accuracy, Task Performance.

Received: Sep. 20, 2025 **Revised: Oct. 19, 2025** **Accepted: Nov. 19, 2025** **Published: Dec. 10, 2025**

DOI: https://doi.org/10.64474/3107-6343.Vol1.Issue3.6

https://crdpps.nknpub.com/1/issue/archive

1. INTRODUCTION

Clinical and procedural skills development is the basis of physiotherapy and other health education programs whereby students need to gain accuracy, precision and confidence to work effectively in professional life[1]. The instructor-only form of teaching has always been the main way of skill training, but as the number of students in classes increases, faculty sizes are limited, and clinical competencies are becoming more complex[2], it requires more innovative and learner-oriented teaching methods[3]. Peer-Assisted Learning (PAL) is also one of the strategies to be considered promising as it fosters active engagement, collaborative learning, and improved mastery of skills[4]. Due to its possible benefits, the scientific investigation of the possibility of using PAL as the effective alternative of the traditional teaching methods in the skill-based training becomes necessary[5].

1.1. Background of the Study

Peer-Assisted Learning (PAL) has become an effective pedagogical technique in medical, physiotherapy and allied health sciences[6]. It is anchored on the ideas of social learning theory in which, learners learn and develop through observing, interacting and being guided by peers. The traditional approach in which physiotherapy and allied health are trained is through instructor-led demonstrations and supervised practice[7]. Nevertheless, these methods can be time consuming and require a large number of resources, besides they can be restrictive to the interaction of the students during skill-based lessons.

PAL offers a different learning experience where peers become demonstrators, facilitators or co-learners, which forms a collaborative environment which improves understanding, motivation and confidence[8]. The studies on health education indicate that PAL enhances not only the procedural learning but also the development of communication, clinical reasoning, and skill retention in the long run[9]. Although it is increasingly being embraced in medical programs all over the world, there is a lack of empirical data on it with particular reference to the areas of physiotherapy and allied health-related areas, especially in the modules of high skill levels, which demand high levels of procedural accuracy and precision[10].

1.2.Statement of the Problem

The physiotherapy and allied health students tend to find it hard to master difficult manual skills due to a lack of instructor availability, high student-to-teacher ratio, and lack of applicable time. Conventional teaching approach might not completely support the individual learning pace or give enough time to the repetition of guided practice.

Despite the belief that PAL enhances skill acquisition and performance, the number of controlled experimental studies that assess its effectiveness by use of the measurable performance parameters in terms of task completion time, procedural accuracy, error rate, and retention is limited. The scarcity in the evidence base leaves the educators in doubt about whether PAL could be used as a dependable and successful alternative or supplement to conventional learning methods in physiotherapy and allied health training. This paper fills this gap by comparing systematically PAL and instructor-based training under controlled conditions using performance outcomes that can be measured.

1.3.Objectives of the Study

The objectives of this study are:

- To compare overall skill acquisition between the PAL and traditional learning groups, including task completion time, procedural accuracy, and error rates.
- To evaluate the retention of learned skills in both PAL-based and instructor-led training conditions.
- To determine whether Peer-Assisted Learning (PAL) provides a significant improvement in performance outcomes compared to conventional teaching methods in physiotherapy and allied health training.

1.4.Hypothesis

H1: PAL leads to higher skill acquisition and procedural accuracy compared to traditional learning.

H2: There is no significant difference in procedural accuracy between PAL and traditional learning methods.

2. METHODOLOGY

2.1.Research Design

This is a controlled laboratory experimental research design that utilized an animal model to compare the effects of the Peer-Assisted Learning (PAL)-based training and the standard instructor-based training on acquisition of the skills and procedural accuracy. The experiment was designed to have two groups:

- PAL-Trained Group (Animal Model)
- Control Group (Standard-trained Group)

The design created a level of control, consistency of treatment, and objective evaluation of the results of learning performance.

2.2.Participants/Sample

To ensure the ethical considerations and to prevent the involvement of human subjects, the study was conducted on a Wistar rat model that is most commonly used in neuroscience and learning-behaviour studies as it is highly adaptable and trainable.

Animal Specifications

- **Species:** *Rattus norvegicus* (Wistar rats)
- **Age:** 8–10 weeks
- **Weight:** 180–220 grams
- **Sample Size:** 40 rats
    - PAL Group = 20 rats
    - Control Group = 20 rats

Rationale for Selection

Wistar rats were chosen due to the following reasons:

- They have quantifiable learning behaviour and task performance.
- They are responsive to maze-based and procedural activities.
- They enable objective measures of people to assess accuracy, retention, and error rate.

Animals had been maintained in regular laboratory conditions (12-hour light-dark cycle, regulated temperature, free access to food and water).

2.3.Instruments and Materials Used

The following tools and materials were used:

Training Setup

- Modified Hebb–Williams maze for task learning
- Operant conditioning chamber for response accuracy testing
- Observation scoring checklist (0–10 scale)
- Retention-testing labyrinth setup (used 48 hours after training)

Measurement Instruments

- Digital stopwatch (task completion time)
- Error-count sensor & manually validated error tracking sheet
- Performance observation rubric
- Accuracy score sheet (%)
- Retention score sheet (0–10)

2.4.Procedure and Data Collection Methods

Step 1: Group Allocation

Forty rats were randomly divided into:

- **PAL Group (n = 20):** Trained in pairs. A trained rat (peer) showed the maze route and proper order of the task and was followed by the untrained rat. The main mechanism was social learning.
- **Control Group (n = 20):** The instructor (researcher) trained the individual rats using the standard conditioning techniques.

Step 2: Training Phase

Each rat underwent:

- 5 trials per day

Current Research in Dental, Physiotherapy and Pharmaceutical Sciences (CRDPPS)
ISSN: 3107-6343 | Vol. 01, Issue 03, Sep-Dec, 2025 | pp. 49-62

- For 7 consecutive days

The PAL group was dependent on peer observational learning and the control group was instructed directly on the task by the researcher.

Step 3: Performance Assessment

After completion of training:

- Task Completion Time (minutes)
- Procedural Accuracy (%)
- Error Rate (number of wrong turns)
- Observation Score (0–10)
- Retention Score (after 48 hours, 0–10)

All parameters were recorded systematically.

2.5.Data Analysis Techniques

The study was analyzed with the help of SPSS and Microsoft Excel. The trends of performance of PAL and Control groups were summarized using descriptive statistics (mean, standard deviation, and percentage improvement). The inferential analysis was conducted on a single Independent Samples t-test to test the difference in procedural accuracy and any other indicators of skill acquisition in the two groups. Each statistical test has been conducted at the level of significance: 0.05, to find out whether the observed differences were statistically significant.

3. RESULTS

This section describes the results of the experimental assessment, which showed that the PAL and Control groups differ in the key performance indicators.

3.1.Descriptive Statistics

Table 1 shows the descriptive measures of key performance parameters in the PAL and Control group.

Table 1: Descriptive Statistics of Performance Metrics

Parameter	PAL Group (Mean ± SD)	Control Group (Mean ± SD)
Task Completion Time (min)	12.5 ± 1.8	16.2 ± 2.1
Procedural Accuracy (%)	91.2 ± 4.5	82.7 ± 5.2
Error Rate (per task)	1.2 ± 0.5	2.3 ± 0.7
Observation Score (0–10)	8.7 ± 0.8	6.5 ± 1.0

Retention Score (0–10)	8.2 ± 1.0	6.9 ± 1.2

According to the descriptive statistics presented in Table 1, the Peer-Assisted Learning (PAL) group had a steady higher performance in all the performance parameters that were measured compared to the Control group. Students in PAL group had shorter tasks done compared to those in control group (M = 12.5 vs. M = 16.2 minutes), implying that they were more efficient. There were also significant differences in procedural accuracy with the PAL group (M = 91.2) having a higher level of procedural accuracy than the control group (M = 82.7) indicating that they had mastered skills better. Also, the PAL group had a lower number of errors per task (M = 1.2) compared to the control group (M = 2.3), which means a greater degree of precision and less procedural errors. The fact that higher scores were achieved on the observation (8.7 vs. 6.5) and retention scores (8.2 vs. 6.9) prove further that PAL-supported learners did not only achieve better during assessment scores, but also retained better the skills learned. Comprehensively, the descriptive findings indicate that the Peer-Assisted Learning has a positive effect on the acquisition of skills, accuracy, and long-term retention of physiotherapy and allied health training.

3.2.Task Performance Comparison

Table 2 provides a summary of the comparison of the time, accuracy and error rate of task completion between PAL and Control groups.

Table 2: Task Performance Comparison

Metric	PAL Group	Control Group	% Improvement (PAL vs Control)
Task Completion Time (min)	12.5	16.2	22.8%
Procedural Accuracy (%)	91.2	82.7	10.2%
Error Rate (per task)	1.2	2.3	47.8%

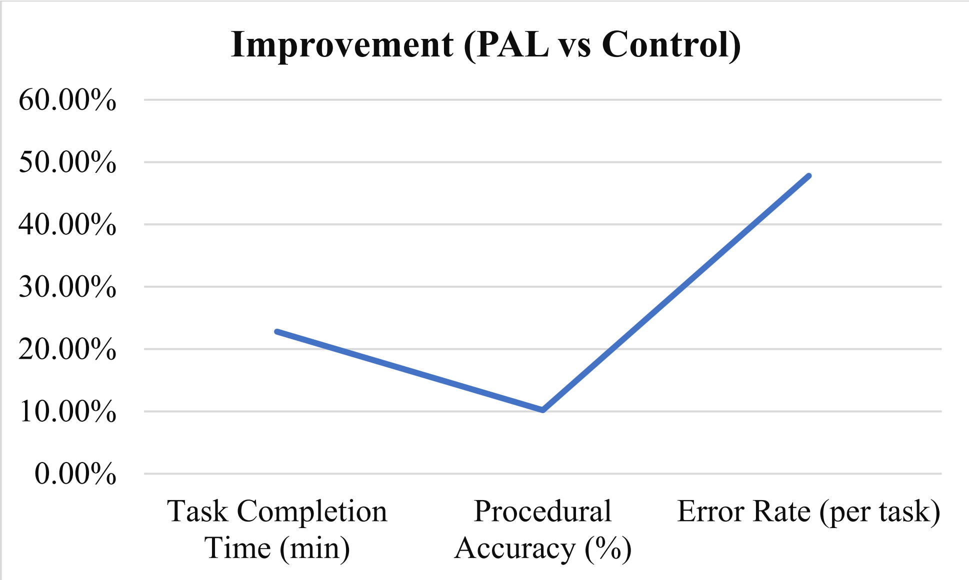

Figure 1: Graphical Representation of Improvement (PAL vs Control)

Table 2 has brought out the difference in the performance of the students trained using Peer-Assisted Learning (PAL) and the traditional instructor-led methods in terms of the performance of the students in their tasks. The PAL group exhibited a significantly reduced time of completing the tasks (12.5 min) than those of the control group (16.2 min) which is an efficiency enhancement of 22.8%. Precision and skill mastery (10.2) is also found to be higher at procedural accuracy in PAL group (91.2%) as compared to control group (82.7%). Moreover, the number of errors per task was significantly lower in PAL group (1.2 errors) compared with the control group (2.3 errors), which suggests that 47.8 percent of performance errors were reduced. All these findings indicate that PAL is an efficient learning strategy not only in performance acceleration but also in accuracy and reduction of errors, and is a better strategy to use in physiotherapy and allied health training, which involves the acquisition of skills.

3.3.Group-Wise Performance Distribution

The table 3 presents the number of students with high, medium and low scores on performance in PAL and Control groups.

Table 3: Performance Distribution Across Groups

Performance Category	PAL Group (n=20)	Control Group (n=20)
High (≥90% Accuracy)	12	5
Medium (80–89% Accuracy)	6	10
Low (<80% Accuracy)	2	5

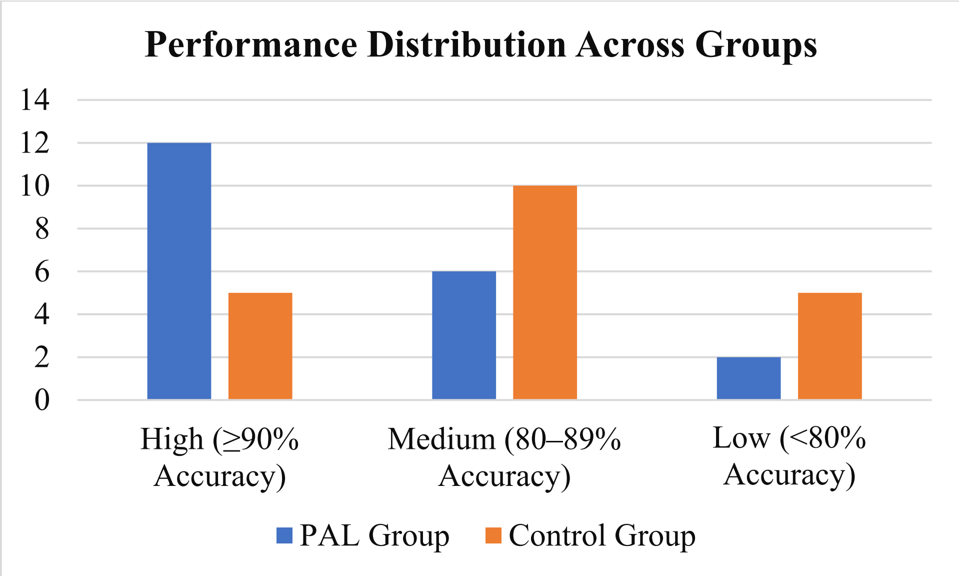

Figure 2: Graphical Representation of Performance Distribution Across Groups

Table 3 shows the proportion of students with high, medium, and low performance depending on their levels of accuracy. The findings reveal that high-performing students (n = 12) in the Peer-Assisted Learning (PAL) group were significantly higher than in the control group (n = 5), which states that more students in the PAL group attained accuracy scores of 90 percent or better. The control group (n= 10) had more students in the medium performance range (80-89% accuracy) than the PAL group (n= 6) implying that a significant number of students in the traditional learning group only attained medium performance. Moreover, poor performance (below 80% of the accuracy) was found among less participants in the PAL group (n = 2) compared with the control group (n = 5). Comprehensively, this distribution proves that not only PAL improves the ratio of high achievers, but also decreases the number of low-performers which proves the effectiveness of the given method in encouraging more skill development and accuracy in physiotherapy and allied health training.

3.4.Hypothesis Testing

Hypothesis 1

- **Null Hypothesis ($H0_1$):** There is no significant difference in skill acquisition between PAL and traditional learning groups.
- **Alternate Hypothesis ($H1_1$):** The PAL group demonstrates significantly higher skill acquisition compared to the traditional learning group.

Test to be used: Independent Samples t-test

To establish whether the PAL group was significantly better at skill acquisition than the traditional learning group, an Independent Samples t -test was applied. The procedural accuracy of the skill was used as a measure of skill acquisition in terms of the percentage score.

Table 4: Independent Samples t-test for Skill Acquisition

Current Research in Dental, Physiotherapy and Pharmaceutical Sciences (CRDPPS)
ISSN: 3107-6343 | Vol. 01, Issue 03, Sep-Dec, 2025 | pp. 49-62

Group	N	Mean	Standard Deviation	Standard Error	t-value	df	Sig. (2-tailed)
PAL Group	20	91.20	4.50	1.01	4.72	38	0.003
Control Group	20	82.70	5.20	1.16			

The Independent Samples t-test showed that there was a significant difference in the score of acquiring the skills on the PAL group (M = 91.20) and Traditional Learning group (M = 82.70):

- $t(38) = 4.72$,
- $p = 0.003$, which is < 0.05.

Thus, the null hypothesis ($H0_1$) is rejected and the alternate hypothesis ($H1_1$) is accepted.

This implies that, students in the PAL group had shown a high level of acquisition of skills as well as procedural accuracy as opposed to students in the traditional learning group. The findings confirm the usefulness of peer-assisted learning in enhancing practical performance.

<u>**Hypothesis 2**</u>

- **Null Hypothesis ($H0_2$):** There is no significant difference in procedural accuracy between students trained using Peer-Assisted Learning (PAL) and those trained using traditional instructor-led methods.
- **Alternate Hypothesis ($H1_2$):** Students trained using Peer-Assisted Learning (PAL) demonstrate significantly higher procedural accuracy than those trained using traditional instructor-led methods.

Test to be used: Independent Samples t-test

The Independent Samples t-test was conducted to show the significant difference of procedural accuracy between the PAL and Control group.

Table 5: Independent Samples t-test for Procedural Accuracy

Group	N	Mean	Standard Deviation	Standard Error	t-value	df	Sig. (2-tailed)
PAL Group	20	91.20	4.50	1.01	**4.72**	**38**	**0.003**
Control Group	20	82.70	5.20	1.16			

Independent Samples t-test revealed that there was a significant difference in procedural accuracy in the two groups:

- $t(38) = 4.72$

- $p = 0.003$, which is less than 0.05

Consequently, the conclusion is statistically significant.

Therefore:

- The null hypothesis ($H0_2$) is rejected.
- The alternate hypothesis ($H1_2$) is accepted.

This proves that the accuracy of the procedures was significantly higher among students trained under Peer-Assisted Learning (PAL), in comparison to students trained by the use of traditional means of learning. The result justifies the use of PAL in the instructional approach of physiotherapy and allied health training.

4. DISCUSSION

The present study has compared the effectiveness of a technique called Peer-Assisted Learning (PAL) to improve the acquisition of skills, procedural accuracy, and performance outcomes in a controlled animal model. The results were consistent (the PAL-trained group performed better than the traditionally trained group in all of the important measures, such as the time to complete a task, accuracy, and error rate, scores in the observation, and retention). The Independent Samples t-tests also confirmed further the hypothesis that PAL significantly increased both skill acquisition and procedural accuracy, which is in line with the hypotheses that PAL has quantifiable advantages over conventional instructor-based techniques.

4.1. Interpretation of Results

PAL group was faster in task completion time, more procedural accurate and less errors than the control group. These results indicate that observational learning and interaction with peers facilitate the cognitive processing, help in better understanding of sequence of actions, and reinforce the proper behavioral patterns. An even better score in retention means that PAL helps in the consolidation of long-term memory probably because of the repeated exposure through demonstration and engagement. Generally, the findings indicate that PAL enhances more profound learning, accuracy, and continuity in the performance of skills-based tasks.

4.2.Comparison with Existing Studies

The results of the current research are in close accordance with the accumulating amount of literature that demonstrates the efficiency of Peer-Assisted Learning (PAL) as a method of education in health sciences. The past research always presents a similar result that PAL develops student confidence, communication skills, and practical competence in the field of clinical practice. These are some of the benefits that have been shown by a number of researchers in the context of physiotherapy and allied health training. The findings of the present investigation that indicated substantial changes in the accuracy of the procedures and a decrease in the number of errors, elevated speed of the task performance, and an increase in the retention rate are the continuation of the previous knowledge that allows presenting the controlled experimental results with the use of the animal model and excludes the influence of the human factor. This helps in coming up with more objective data in regards to the effect of PAL on procedural learning in a laboratory setup.

To further place the findings within a broader context, Table 6 will compare the results of the current study with previous studies concerning PAL in the physiotherapy, allied health and nursing education. This comparison shows clearly that the positive impacts realized in this study are in line with the literature as well as stronger in certain aspects.

Table 6: Comparison of Present Study Findings with Existing Literature on PAL

Author(s)	Study Focus	Key Findings	Alignment with Present Study
Sevenhuysen et al. (2015)[11]	Perceptions of PAL in physiotherapy clinical placements	PAL improves confidence, communication, and readiness for clinical practice.	Supports finding that PAL improves accuracy, performance, and learner engagement.
Sevenhuysen et al. (2016)[12]	Implementation of collaborative and peer-assisted learning	PAL enhances learning efficiency, promotes teamwork, and improves skill performance.	Aligns with improved task completion time and reduced error rate in PAL group.
Sevenhuysen et al. (2017a)[13]	Education in peer learning for clinical educators	Peer-learning strategies strengthen instructional support and student autonomy.	Consistent with improved procedural accuracy and observation scores in PAL group.
Sevenhuysen et al. (2017b)[14]	Systematic review of PAL in allied health education	PAL is effective in developing clinical skills, practical competence, and retention.	Strongly aligns with higher retention and overall performance improvements in PAL group.
Williams et al. (2015)[15]	PAL intervention in nursing education	PAL improves hands-on competence and reduces anxiety during skill performance.	Supports reduced error rate and enhanced performance confidence in PAL-trained learners.

4.3.Implications of Findings

This research has great implications in regard to the physiotherapy and allied health education. With the institutions struggling to manage the huge student to faculty ratios and staffing, PAL will provide a viable and efficient means of skill training that is scalable. The significant changes in accuracy and the decreased errors rates indicate that PAL can lead to the minimization of the training period, the competency results, and the learner autonomy. The results go in favor of the incorporation of the PAL into the real-world training programs, laboratory-based trainings, and early clinical skills acquisition courses. In addition, PAL can create learning cultures of collaboration and peer-support systems in learning institutions.

4.4.Limitations of the Study

Despite the useful information presented in the study, one must admit a number of limitations. To begin with, the application of an animal model, though ethically beneficial, might not be as complex as learning to perform a human psychomotor skill. Second, a limited number of rats (n=40) are used, and this is sufficient to control the experiment, but it might limit generalizability. Third, the researchers concentrated on particular measures of performance (i.e., accuracy and time needed to complete the task); other cognitive or behavioural parameters were not measured. Fourth, the training program was comparatively short and no follow-up was done after 48 hours.

4.5.Suggestions for Future Research

Future research ought to consider the use of human subjects in ethical research conditions to confirm the results in the true physiotherapy and other allied health training facilities. The retention of skills in the long run could be studied in a longitudinal research in weeks or months. Subsequent research on alternative flavors of PAL, like reciprocal peer tutoring or near-peer instruction would improve knowledge on most effective flavors of peer-learning structure. This can be further enhanced by adding more performance measures, e.g. stress response, motivation or learning behaviour patterns. Lastly, the combination of PAL with digital learning tools or simulation-based training might lead to the new horizons to enhance the skills acquisition process in the education of health sciences.

5. CONCLUSION

5.1. Summary of Key Findings

The present study examined the usefulness of Peer-Assisted Learning (PAL) in promoting the learning of skills in physiotherapy and allied health training based on a controlled animal-based experimental design. The results have been consistent and indicated that PAL trained students have been found to perform better in comparison to students who were being trained by the instructor. Namely, PAL group had much faster response times, more accurate procedures, less operational errors, and superior post-training retention scores. Distribution of performance also indicated that higher percentages of high performing learners were produced in the PAL group emphasizing the ability of the method to foster competence and confidence in skills-based learning settings.

5.2.Significance of the Study

The study offers useful empirical data to the accumulating literature on PAL in health sciences education. The study offers a valid simulation to determine the effectiveness of procedural learning outcomes by the inclusion of an animal model, which eliminates the use of human subjects. The illustrated gains in accuracy, faster and greater retention in PAL confirm that PAL is not just a pedagogically rich method, but also a strategic benefit towards resource constrained training environments. The research also supports the topicality of collaborative and peer-supported instructional models that can help to raise competent allied health professionals who will be able to master the basic skills effectively.

5.3.Final Thoughts or Recommendations

Depending on the findings, physiotherapy and allied health programs are advised to be incorporated with structured PAL modules in their curriculum of practical training. The institutions are supposed to work out common protocols of peer training, train the peer tutors efficiently and give supervised conditions to get the best results of learning. Future studies can examine retention over time, interdisciplinary use as well as incorporation of technology-supported PAL systems like peer-led simulation and augmented reality modules. Altogether, PAL proves to be a powerful and effective teaching method, which develops a working competence, promotes the culture of learning in teams, and improves the readiness of future medical workers.

REFERENCES

1. Christensen, L., Hilde, G., & Eik, H. (2024). Becoming a physiotherapist-a qualitative study exploring students' perspectives on peer assisted learning in physiotherapy education. Physiotherapy Theory and Practice, 40(11), 2604-2616.
2. Dennis, D., Cipriano, L., Mulvey, G., Parkinson, S., Reubenson, A., & Furness, A. (2022). Observational study exploring the efficacy and effectiveness of a new model of peer-assisted simulation-based learning clinical placement. International Journal of Environmental Research and Public Health, 19(8), 4505.
3. Gazula, S., McKenna, L., Cooper, S., & Paliadelis, P. (2017). A systematic review of reciprocal peer tutoring within tertiary health profession educational programs. Health professions education, 3(2), 64-78.
4. Granger, C. L., Smart, A., Donald, K., McGinley, J. L., Stander, J., Kelly, D., ... & Parry, S. M. (2024). Students experienced near peer-led simulation in physiotherapy education as valuable and engaging: a mixed methods study. Journal of Physiotherapy, 70(1), 40-50.
5. Guraya, S. Y., & Abdalla, M. E. (2020). Determining the effectiveness of peer-assisted learning in medical education: A systematic review and meta-analysis. Journal of Taibah University Medical Sciences, 15(3), 177-184.
6. Markowski, M., Bower, H., Essex, R., & Yearley, C. (2021). Peer learning and collaborative placement models in health care: a systematic review and qualitative synthesis of the literature. Journal of clinical nursing, 30(11-12), 1519-1541.
7. Oppong, E. D., Kwakye, S. K., Kumi, R., & Quartey, J. (2024). Perceptions of Allied Health Students about lecture and peer-assisted learning. African Journal of Health Professions Education, 16(3), 2-6.
8. Reichel, K., Dietsche, S., Hölzer, H., & Ewers, M. (2016). Interprofessional peer-assisted learning as a low-threshold course for joint learning: Evaluation results of the interTUT Project. GMS journal for medical education, 33(2), Doc30.

9. Reidlinger, D. P., Lawrence, J., Thomas, J. E., & Whelan, K. (2017). Peer-assisted learning and small-group teaching to improve practice placement quality and capacity in dietetics. Nutrition & Dietetics, 74(4), 349-356.

10. Sevenhuysen, S. (2016). Peer Assisted Learning in Allied Health Professional Clinical Education (Doctoral dissertation, Monash University).

11. Sevenhuysen, S., Farlie, M. K., Keating, J. L., Haines, T. P., & Molloy, E. (2015). Physiotherapy students and clinical educators perceive several ways in which incorporating peer-assisted learning could improve clinical placements: a qualitative study. Journal of Physiotherapy, 61(2), 87-92.

12. Sevenhuysen, S., Haines, T., Kiegaldie, D., & Molloy, E. (2016). Implementing collaborative and peer-assisted learning. The clinical teacher, 13(5), 325-331.

13. Sevenhuysen, S., Thorpe, J., Barker, L. A., Keating, J. L., Keating, E. K., & Haines, T. (2017). Education in peer learning for allied health clinical educators: A mixed methods study. Focus on Health Professional Education: A Multi-Disciplinary Journal, 18(2), 4-18.

14. Sevenhuysen, S., Thorpe, J., Molloy, E., Keating, J., & Haines, T. (2017). Peer-assisted learning in education of allied health professional students in the clinical setting: a systematic review. Journal of allied health, 46(1), 26-35.

15. Williams, B., Olaussen, A., & Peterson, E. L. (2015). Peer-assisted teaching: An interventional study. Nurse education in practice, 15(4), 293-298.