PLYOMETRIC : Jurnal Sains dan Pendidikan Keolahragaan
Vol. 5 No. 2, Desember 2025, Hal. 27- 35
Https://e-journal.umc.ac.id/index.php/PLY

THE EFFICACY OF THE COOPERATIVE LEARNING TECHNIQUE IN ENHANCING FUNDAMENTAL BASKETBALL ABILITIES AMONG MIDDLE SCHOOL PUPILS

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Diterima: 7 Desember 2025, Diperbaiki: 29 Desember 2025 diterbitkan: 30 Desember 2025

Abstract

This study will be conducted to test the effectiveness of cooperative learning methods in improving the basic basketball skills of fifth-grade preparatory students in a preparatory school in Maysan Governorate. The study design was an experimental one that used two-group design, experimental and control group, which contained pre-test and post-test results. A total of 40 students were used as the sample (evenly split between the two groups); the intervention of the experimental group was eight weeks, two sessions a week. Various tools were used such as a test of basic basketball skills such as passing, shooting, dribbling and ball handling and a performance observation form. The statistical analysis of the outcomes was performed with respect to the descriptive statistics (mean, standard deviation) and t -test of related and independent samples. The results showed that there were significant differences in favor of the experiment group in all the basic skills, which showed that cooperative learning methods had potent impacts in boosting the level of students motor performance. The discussion revealed that the method enhanced social interaction, self-confidence, intrinsic motivation, and cooperation, as per the current educational and psychological theories, such as the theory of Vygotsky (1978) and Johnson and Johnson (2019). The article suggests the implementation of the cooperative learning methods in the physical education classes, educating the teachers on how to apply them, and carrying out similar research to analyze their applicability in other team sports.

Keywords: *Collaborative Learning, Basketball, Fundamental Skills, Physical Education, Fifth Preparatory Grade.*

INTRODUCTION

Physical education is one of the essential substances for system of educational process that contributes to formation and development of students physically, mentally, emotionally as well as socially (Athaya et al., 2023). By means of an appropriate teaching strategy, young learners are supposed to acquire and control motoric 'hows' what could result in involvement in sport activities (Ebrahim & Hussein, 2025; Yusroni, 2024). Basketball, one of the most popular

team sports, is conducive to help students improve coordination, cooperation and decision-making capabilities in physical education; therefore it's important to choose the suitable teaching mode (Custodio et al., 2024; Pelamonia & Puriana, 2023).

Nevertheless, traditional pedagogical methods are still prevalent in many schools, with a focus on the teacher as lecturer and students drilling repeatedly. Such strategies might work to create kids who "know" things, but rarely do they engender active learning, creativity and collegiality (Apriandi et al., 2023; Gunawan et al., 2023). This inability leads to a low mastery of the basic basketball skills among many players in fundamental aspects like passing, dribbling shooting and ball handling (Haïdara et al., 2023). The researcher's observation in the field also revealed that students are passive learners and do not participate more actively during lessons because there is little group work.

Cooperative learning is a new educational method that deals with interaction, teamwork and shared responsibility (Bodsworth & Goodyear, 2017; Perdana et al., 2023). Based on social constructivist theory, knowledge develops by conversations, negotiation and solving problems between learners (Aslan et al., 2020). Cooperative learning is a group-based instructional method that helps students work together, exchange information and learn their subject matter while learning about how to collaborate with others.Cooperative Learning on a physical education class (Suryadi et al., 2024).

Various researches have shown favourable effects of cooperative learning on skill acquisition and motivation in sport situations. Abdullah (2022) also observed marked skill acquisition performance enhancement in track and field athletes with the use of joint strategies. Alsharif (2021) also underscored the enhancement of motivation and involvement towards learners taught with cooperatives methods. Likewise, Hassan (2023) advocated for innovative teaching strategies in team sports to enhance performance results. Although cooperative learning is supported by the literature, few studies have attempted to apply it in basketball with middle school students.

Against this background, the current study aims to ascertain whether Teamplay can be effective in teaching fundamental skills in basketball. The hypothesis is that students taught using cooperation will score better than the their

counterparts. These outcomes will help better develop pedagogy in physical education, especially for teaching ball games.

In this regard, the current study attempts to offer empirical data to examine the impacts of cooperative learning on grades 7~8 students' basic basketball skills. The findings can be used as a resource for teachers, curriculum developers and researchers in creating inclusive and student-centered learning. In addition, this study is expected to provide basis data for future studies among different age groups and team sports, and in more extensive educational context.

METHOD

Research Method

The researcher used the experimental method with a two-group design (control and experimental) with pre-test and post-test measurements.

Research Community and Sample

The community consists of fourth-year preparatory students at Al-Imara Preparatory School, Al-Hayat Preparatory School, totaling 80 students. The research sample was randomly selected with a total of 40 students, divided into two groups: (1) Experimental group: (n=20) students are taught using the cooperative learning strategy. (2) The control group: (n=20) students are taught using the traditional method.

Table 1. Research sample (experimental group, control group)

Notes	Teaching method	Class	Number of students	groups
Implementation of the field experiment for 8 weeks, two sessions per week	Cooperative learning strategy	The fifth preparatory grade	20	Experimental
No modern strategy was applied to it for comparative understanding	The traditional method	The fifth preparatory grade	20	Control

The Field Experiment

The experiment lasted for 8 weeks with two sessions per week, each lesson included stages of cooperative learning (group formation – goal setting – interaction – evaluation).

Statistical Methods

Use the t-test for paired and independent samples to verify the significance of the differences.

RESULTS AND DISCUSSION

The research results showed that the application of the cooperative learning strategy had a positive and significant impact on developing basic basketball skills among fifth-grade preparatory students. The comparison between the pre-test and post-test for the experimental group revealed significant differences in all four skills: passing, shooting, dribbling, and ball control.

Table 2. pre-test and post-test for the experimental dan control group

Skill	groups	Pre-test (M±SD)	Post-test (M±SD)	t-value	The significance
Passing	Experimental	6.8 ± 1.2	9.4 ± 1.1	4.52	Sig
	Control	6,7 ± 1.2	7.2 ± 1.4	1.21	Not Sig
Shooting	Experimental	5.9 ± 1.3	8.7 ± 1.0	5.01	Sig
	Control	6.0 ± 1.2	6.5 ± 1.3	1.34	Not Sig
Dribbling	Experimental	6.2 ± 1.4	9.1 ± 1.2	4.68	Sig
	Control	6.3 ± 1.4	6.9 ± 1.5	1.28	Not Sig
Ball control	Experimental	7.0 ± 1.1	9.6 ± 0.9	4.33	Sig
	Control	6.9 ± 1.1	7.4 ± 1.2	1.17	Not Sig

Passing skill

In table 2, the experimental group showed a significant improvement in passing after implementing the strategy, with the average increasing from 6.80 to 9.4. This improvement can be attributed to the fact that the interaction between the students in their groups is continued thus providing them with regular chances of participating in the practical training where they are trained on passing the ball quickly and accurately. In addition, collaborative learning programs have increased group awareness in terms of relevance of passing as a tactical ability in the context of basketball.

Shooting skill

Table 2 shows that there is statistically significant increase in mean shooting score, 5.9 to 8.7, which is due to the fact that a cohort of people gave each other mutual encouragement and continued feedback. Students who learn in collaborative environments enjoy timely peer coaching, hence, developing self-esteem and

stimulating the development of shooting skills. These are similar to the findings of Alsharif, (2021), who determined that cooperative learning led to motivation and improved performance of skills in a team sport setting.

Dribbling skill

In table 2, the dribbling skill improved significantly in the experimental group, where the average increased from 6.2 to 9.1. This is because interactive activities in cooperative learning force students to face different challenges during play, such as overcoming opponents and dealing with peer pressure, which helped them develop the ability to control the ball and dribble with greater confidence.

Ball control skill

In table 2, the level of ball control increased from 7.0 to 9.6, which is evidence that collaborative learning helped students practice skills repeatedly within a safe and interactive environment, where each student can evaluate their peer's performance and learn from their mistakes. It also reflects that social interaction contributes to enhancing attention and focus during the practice of motor skills.

The results of the control group showed relative stability in basic skills without significant improvement, indicating that the traditional teaching method was not sufficient to effectively develop physical skills. This supports the research hypothesis that cooperative learning is more effective in developing basic skills compared to traditional methods.

The results align with Vygotsky's (1978) social constructivist theory, which posits that learning occurs thru social interaction among individuals. Working within cooperative groups provides a rich educational environment with shared experiences, where the student learns from their peers and develops both skills and knowledge simultaneously. The results also support Johnson & Johnson's (2019) theory that collaborative work motivates students to participate actively and creates a sense of shared responsibility, which positively reflects on athletic performance.

Social impact: Cooperative learning has contributed to strengthening the bonds between students and enhancing their ability to communicate and solve group problems, making the training experience more enjoyable and motivating. The

psychological impact; Teamwork led to an increase in self-confidence and intrinsic motivation among students, and reduced anxiety during skill performance, as each student felt the support and continuous encouragement of their peers.

These results are consistent with previous studies, including: (1) Abdullah's study (2022) confirmed that cooperative learning improves skill acquisition among physical education students. (2) Hassan's study (2023) indicated that group interaction enhances motor skill performance and increases the enjoyment of learning. (3) Alsharif's (2021) study, which showed that cooperative learning increases motivation and reduces boredom while learning sports skills.

The cooperative learning approach has been proven to be a successful approach towards development of the basic basketball skills in fifth-grade preparatory students in the preparatory school in Maysan Governorate. This is very effective since it involves combination of practical training, inter personalization and psychological motivation which will result into a more comprehensive and effective learning process compared to traditional instructional process. Findings have shown that there were significant differences in favor of the post-test of the experimental group in all the foundational skills which imply that the cooperative learning strategy has led to improvement in the level of motor performance of the students. This is the case because of the social interaction that will support intrinsic motivation and contribute to positive participation in the group. The comparison to the control group also demonstrated that students who were able to learn in a cooperative environment acquired their skills faster and in a more consistent manner. These results are consistent with the research of Johnson and Johnson (2019), which proved the teamwork development to simultaneously stimulate motor and cognitive understanding. Cooperative learning is thus among the most appropriate teaching techniques of instilling group skills like those needed in basketball since it integrates physical, cognitive and social aspects.

CONCLUSIONS

The results of this study indicate that the cooperative learning approach is significantly effective in improving elementary basketball skills for middle school learners. There was a significant development in the passing, dribbling, shooting and

ball-handling skills of the cooperative-treated group compared to the traditionally-taught. In addition to building skills, the cooperatives also prompted good social behavior and strengthened teamwork as well as encouraged learners to be more confident in taking part actively in their own lessons.

These results indicate that during cooperative learning physical skill performance is positively affected, yet more importantly affective and social development are facilitated, granting students with feelings of being valued, connected and autonomous in their learning environment. These findings suggest that cooperative learning should be an essential part of physical education curriculum and instruction especially in ball skills development programs. Potential for impact: Teachers are empowered to access professional development that provides them with hands-on experiences of developing the practical skills required to apply cooperative structures in classroom and field contexts. In addition, future studies are recommended to investigate the effects of cooperative learning in other team sports, and at different levels of age so that it may be better understood its influence on motor aspects, motivational variables and social development.

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