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Enhancing lower passing, confidence, and motivation through cooperative learning: the impact of team game tournaments in volleyball learning

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ABSTRACT

Background: Physical Education (PE) teachers often face challenges such as lack of mastery of underarm passing techniques, low self-confidence, and students' motivation in volleyball games. By using Cooperative Learning (CL) type Team Games Tournament (TGT), we can overcome existing challenges. This study complements existing research by looking at the effect of TGT on passing and motivation, as well as self-confidence that has never been discussed at all in junior high school students and presents a CL fidelity model of TGT type that has never been discussed at all. **Research Objectives**: The study aims to examine the effect of the Team Games Tournament (TGT) type cooperative learning model on junior high school students' lower passing ability, confidence, and motivation in volleyball. **Methods**: This study used a one-group pretest-posttest experimental design to evaluate changes in 20 students selected by purposive sampling. The research instrument used a volleyball underhand passing skill test, a self-confidence questionnaire for junior high school students in PE learning on volleyball underhand passing material, and a motivation questionnaire for junior high school students in PE learning. The data analysis technique used statistical descriptions, paired sample t-tests, and one-way ANOVA. **Finding/Results**: The findings and results of this study state that the fidelity model of TGT is at a very good level in implementation and planning. TGT has an influence on underhand passing, self-confidence, and learning motivation of junior high school students with results on underhand passing being better than self-confidence, and motivation. **Conclusion**: This study concludes that there is an influence of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students. Further research to update the research instruments used and pay attention to the fidelity model for the use of TGT, updating research instruments, and comparison classes to make them more generalisable.

Keywords: Cooperative learning; team games tournament; volleyball; self-confidence; motivation

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INTRODUCTION

Physical education (PE) as a forum for students to keep their bodies fit or healthy through physical activity and sports (Ginanjar, 2022). This is in line with the curriculum which states that PE is not provided to educate prospective athletes, but rather for all students to be physically and mentally healthy (Wahyudin et al., 2024). One of the

materials in PE in junior high school is volleyball. Volleyball is a game played by two teams with each team consisting of six players. As stated that volleyball is a large ball game played by two teams, each team has six players with the aim of dropping the ball to the opponent using their hands, so that the team gets points (Kharisma, 2019).

There are several techniques in volleyball, namely: serving, passing, attacking, and blocking (Schmidt, 2016). Passing is their first chance to set up an attack and put them in position to score points with good passing allowing the setter to distribute the ball to multiple hitters and prevent blockers from ganging up on one hitter (Schmidt, 2016). The problems faced by teachers in PE learning in class VII at one of the junior high schools in Indramayu Regency in PE learning volleyball material are that they still have not mastered the basic movements in volleyball, especially in the basic movement of underhand passing. Not only that, students also still do not have self-confidence and motivation in PE learning, especially in volleyball material.

In mastering volleyball underhand passing, it requires self-confidence in students, thus in carrying out underhand passing well which is also pumped up with motivation in the students. In line with this, sometimes students do not dare to do an underhand pass because of a lack of self-confidence (Simanungkalit, 2016). Self-confidence is a person's mental attitude in themselves and objects around them which ultimately makes someone believe in their ability to be able to do something according to their ability (Supriyanto, 2014). While motivation is a tendency to behave selectively in a certain direction that is controlled by certain consequences, and this behaviour will persist until the behavioural target can be achieved (Supriyanto, 2014). Furthermore, self-confidence as a person will not be able to achieve high achievement, because it is related to motivation and self-confidence (Supriyanto, 2014).

From the existing problems, actions are needed to help learning to be more effective. One way to help the learning process is by using the Cooperative Learning (CL) learning model. In CL, students learn in small groups that have different levels of ability in completing group assignments to work together and help each other to understand a lesson (Florida, 2019). Furthermore, CL can be applied to all types of heterogeneous classes with varying levels of ability (Slavin, 2015), in line with this in-depth CL learning as a result of developing students' abilities (perhaps willingness) to resolve their own conflicts and work with their peers in heterogeneous teams (Casey et al., 2015). Furthermore, successful CL is the team performance of each team member who is responsible for their contribution (Siedentop et al., 2011).

Related to research using CL in junior high schools. Several studies also state that CL is often used for research at the junior high school level. CL that is being integrated into PE in high school students can achieve students' motor learning and development as well as social learning and the development of basic human values in students (Bofill-Herrero et al., 2022), in line with this CL learning does not only focus on skills but can be used to facilitate the value of individual and collective interactions or transactions of students in different educational situations in PE (Casey & Quennerstedt, 2020). In addition, CL interventions can significantly increase the motivation of PE students (Liu & Lipowski, 2021), and if implemented sustainably can increase the types of motivation in secondary education students (Fernandez-Rio et al., 2017). CL provides interpersonal skills, group processing, positive interdependence, promotive interactions, individual accountability, and global cooperation significantly (Fernandez-Rio & Casey, 2021).

One of the CLs used in this study is the Team Games Tournament (TGT) type. In TGT, learning is more competitive (there is competition) with competitions or tournaments within groups to obtain rankings (teams are competitive) to be included in competitions

between groups to participate in tournaments between groups (Ginanjar, 2022). In Indonesia, previous research results stated that TGT has been successful in PE learning for junior high school students on passing material in volleyball. TGT is able to improve learning outcomes for volleyball underhand passing (Priyanti, 2014), and is better than conventional learning in junior high school students (Hudah, 2016). Furthermore, there is an increase in the attitude of responsibility before and after being given TGT (Agustryani et al., 2020) and can improve motivation and learning outcomes in junior high school students (Arisetiyana et al., 2020).

From several previous research results, the problems of passing and motivation have been resolved, as well as responsibility. This study aims to complement existing research by looking at the influence of TGT on passing and motivation, as well as self-confidence, which has not been discussed at all in junior high school students. In addition, this study also presents a model fidelity of CL type TGT, which has not been discussed at all in research using TGT in Indonesia, in line with the opinion that there needs to be significant expansion in each model according to the characteristics or special elements in PE related to the model fidelity (Casey et al., 2015). Based on the problems and explanations that have been presented, the purpose of this study is to test the influence of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students and test the differences in the influence of TGT between volleyball underhand passing, self-confidence, and motivation in junior high school students.

METHOD

Research Design

The research method used an experimental method with a one-group pretest-posttest design. In a one-group pretest-posttest design, one group is measured or observed not only after being given treatment but also before (Fraenkel et al., 2023).

Research Participants

The participants involved were 20 students of class VII at one of the junior high schools in Indramayu Regency who were taken using purposive sampling techniques. This was in accordance with the advice of the PE teacher and permission from the principal concerned by using one of the class VII classes at the school.

Model Fidelity

The model fidelity is viewed from two points, namely: planning by looking at the lesson plan made by the teacher and implementation by looking at the teacher's implementation using TGT in PE learning. To assess the model fidelity, the researcher used the CL operational model (Metzler, 2000; 2005; 2017), which has been verified in the CL model research (Ginanjar et al., 2021), with only a slight difference in the operational model in the test assessment criteria with sub-criteria on students and their groups working together to get the best test results (on the first test and the second test) replaced with students and their groups working together to get the best test results (on tests in groups and between groups). In conducting the assessment, the researcher used three expert judgements who work as lecturers. Two people come from one of the universities in Indramayu Regency, West Java, and one person comes from one of the universities in Denpasar Regency, Bali. One expert judgment with a doctorate who has expertise models of teaching in PE who has experience teaching models of teaching in PE for 11 years, one expert judgment with a master's degree who has expertise in volleyball learning with 11 years of volleyball teaching experience, and one expert judgment with a master's degree who has expertise in learning evaluation with three years of teaching experience in

learning evaluation. The calculation of inter-rater reliability was carried out for eight lessons in PE learning of volleyball material according to the treatment given in this study outside of the pretest and posttest which can be seen in Table 1, with a time of one week in one lesson for 90 minutes in each lesson. The results of the calculation of inter-rater reliability were obtained as 0.961 in planning and 0.957 in implementation. Things that were not confirmed in planning were: 1) the teacher gives instructions so the skilled students can teach the unskilled students, 2) skilled students teach unskilled students, and 3) when there was a problem/lack of understanding, students and their groups worked together to solve the problem. While things that were not confirmed in implementation were: 1) the teacher asks the students' responses regarding the group division, and 2) the teacher gives instructions so the skilled students can teach the unskilled students. The results of inter-rater reliability can be seen in Table 2.

Table 1. TGT Treatment in PE Learning on Volleyball Underhand Passing Material

Lesson	Volleyball Underhand Pass Material using TGT
1	Underhand pass to the wall with a checkered target
2	Underhand pass in a place above the head
3	Underhand pass bounced to the floor forwards, backwards and sideways
4	Underhand pass with cones forming a triangle of 5 meters
5	Underhand pass back and forth as far as 5 meters
6	Underhand pass to the checkered target over the net
7	Volleyball game using 1vs1 underhand pass
8	Underhand pass in a place above the head over the net

Table 2. Results of Inter-Rater Reliability Calculations

Inter-rater Reliability	Value
Planning	0.961
Implementation	0.957

Research Instruments

A good instrument at least has validity and reliability (Anggraeni, 2024). The research instrument for volleyball underhand passing using a 60-second volleyball underhand passing skills test for ages 13-15 years with a validity of 0.733 and a reliability of 0.758 (Depdiknas, 1999). For self-confidence, a self-confidence questionnaire was used for junior high school students in PE on volleyball underhand passing material using the Guttman scale which follows the self-confidence grid consisting of: self-concept, self-esteem, experience, and education (Supriyanto, 2014). The results of the instrument trial conducted on 42 junior high school students outside the participants used in this study, there were 16 test items declared valid, which originally amounted to 24 test items with a reliability of 0.846 which was analysed using Cronbach's Alpha with the help of SPSS. For the motivational instrument, using a junior high school student learning motivation questionnaire in PE learning as many as 25 valid test items with a reliability of 0.865 (Ginanjar, 2015).

Data Analysis

The data analysis technique used statistical descriptions to find the mean (M) and standard deviation (SD). Hypothesis testing used a paired sample t-test to test the effect of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students. Meanwhile, to test the difference in the effect of TGT between volleyball underhand passing, self-confidence, and motivation in junior high school students using one-way ANOVA with the data used being the results of the gain scores from the posttest

and pretest. All analyses were carried out using SPSS assistance in accordance with the analysis procedures according to (Field, 2024).

RESULTS AND DISCUSSION

Statistical description for volleyball underhand passing obtained M of 9.9 and SD of 9.95 in the pretest, M of 15.3 and SD of 11.92 in the pretest, and M of 5.4 and SD of 4.63 in the gain score. For self-confidence obtained M of 10.2 and SD of 3.56 in the pretest, M of 11.65 and SD of 2.89 in the pretest, and M of 1.45 and SD of 2.82 in the gain score. For motivation obtained M of 17.15 and SD of 4.38 in the pretest, M of 20.35 and SD of 3.17 in the pretest, and M of 3.2 and SD of 4.34 in the gain score. For more details, see Table 5.

Table 5. Statistical Descriptions

Variable	M	SD
Pretest underhand passing	9.9	9.95
Posttest underhand passing	15.3	11.92
Gain underhand passing	5.4	4.63
Pretest self-confidence	10.2	3.56
Posttest self-confidence	11.65	2.89
Gain self-confidence	1.45	2.82
Pretest motivation	17.15	4.38
Posttest motivation	20.35	3.17
Gain motivation	3.2	4.34

For the purpose of the study to test the effect of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students. In underhand passing, the t count was 5.21 with Sig. 0.00 < 0.05. In self-confidence, the t count was 2.3 with Sig. 0.03 < 0.05. In motivation, the t count was 3.3 with Sig. 0.00 < 0.05. From the results obtained, it means that there is an effect of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students. For more details, see Table 6.

Table 6. Paired Sample t-test

Variable	t count	Sig.
Underhand passing	5.21	0.00 < 0.05
Self-confidence	2.3	0.03 < 0.05
Motivation	3.3	0.00 < 0.05

For the purpose of the study, we wanted to test the difference in the influence of TGT between volleyball underhand passing, self-confidence, and motivation in junior high school students. The F count was 4.87 with Sig. 0.01 <0.05, which means that there is a difference in the influence of TGT between volleyball underhand passing, self-confidence, and motivation in junior high school students. For more details, see Table 7.

Table 7. One-way ANOVA

Variable	F count	Sig.
Underhand passing – Self-confidence - Motivation	4.87	0.01 < 0.04

Thus, the results in Table 7 were tested post hoc using the Tukey test. The results of the Tukey test obtained a mean difference between under-passing and self-confidence of 3.95 with Sig. 0.01 < 0.05, which means there is a difference in the influence of TGT. While the mean difference between under-passing and motivation is 2.2 with Sig. 0.20 > 0.05 and the mean difference between motivation and self-confidence is 1.75 with Sig. 0.36 > 0.05, which means there is no difference in the influence of TGT. For more details, see Table 8.

Table 8. Tukey Test

Variable	Mean Difference	Sig.
Underhand passing - Self-confidence	3.95	0.01 < 0.05
Underhand passing - Motivation	2.2	0.20 > 0.05
Motivation - Self-confidence	1.75	0.36 > 0.05

Before discussing the results obtained in this study, firstly we discussed the model fidelity of TGT. This needs to be done because many studies in Indonesia related to the use of Model-Based Practice (MBP) rarely validate the model fidelity. This is in line with the statement that we need to ask to what extent students' responses to learning are associated with the model fidelity by the teacher (Casey et al., 2015), and need to be careful in empirical studies of MBP (Hastie & Casey, 2014). From the results of the search, validation of the model fidelity in the use of MBP was carried out by Ginanjar et al. (2021) in Student Teams-Achievement Divisions (STAD). In this study, the results showed that the fidelity model of TGT was 0.961 in planning and 0.957 in implementation, which is in the very good category. Thus, for further research, the appropriate TGT treatment should be used in this study by using the guidebook used, namely the book "Instructional Models for Physical Education" by Metzler (2000; 2005; 2017) and also confirmed in the Indonesian language book, the work of Ginanjar (2022) and Suherman (2009).

From the results stating that there is an influence of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students. The results on underhand passing in this study support and complement the results of research stating that TGT can improve volleyball underhand passing learning outcomes (Priyanti, 2014). Then on the results of self-confidence, these results provide new findings that TGT can increase students' self-confidence, thus this study supports TGT in improving affective aspects related to self-confidence according to the results obtained, responsibility (Hudah, 2016), and motivation (Arisetiyana et al., 2020; Suhendra et al., 2023) which is also confirmed in the results of this study. In addition, CL with one of its treatments using the TGT type can increase motivation (Yang et al., 2021), and at the College level (Luo et al., 2020).

In addition, the most surprising thing is that the effect of TGT on underhand passing which is included in the psychomotor aspect is better than self-confidence, which is included in the affective and motivational aspects, although it does not provide significant results on motivation. This proves that if the CL model is more inclined to use the psychomotor aspect, the affective aspect will accompany it as an aspect of achievement which then leads to the cognitive aspect (Ginanjar, 2022; Metzler, 2017). However, the cognitive aspect cannot be discussed in this study. Therefore, for further research, it is recommended to use cognitive aspects that have not been confirmed in the results of this study and have also not been confirmed in previous studies.

Related to the specificity of the influence of TGT on the affective aspect between motivation and self-confidence, although it does not provide significant results. It turns out that motivation is better than self-confidence. This proves that the CL model is indeed based on the theory of motivation which is a factor in achieving the goals of all members to contribute and achieve to meet common goals (Ginanjar, 2022; Metzler, 2017), and is also confirmed in the results of previous studies (Arisetiyana et al., 2020; Fernandez-Rio et al., 2017; Liu & Lipowski, 2021; Suhendra et al., 2023).

When looking at the interaction between groups in this study, it turns out that there is indeed interaction between each group. Like when learning occurs, students in their groups help each other, including students who have better skills helping their friends who have fewer good skills. Although this was not confirmed in the planning, it was

confirmed in the implementation as obtained in the results of the inter-rater reliability test in the validation of the TGT model fidelity in the method section. Thus, this study supports and strengthens that TGT, which is a type of CL, states that CL can show social interaction in a group (Bofill-Herrero et al., 2022; Casey & Quennerstedt, 2020; Fernandez-Rio & Casey, 2021).

The weaknesses of the study include the self-confidence questionnaire which is only intended for volleyball underhand passing material and also the validation which is only limited to simple validity and reliability testing. Thus, for further research, a self-confidence questionnaire should be used which can be more generalised for all research for junior high school level in PE learning. As stated by the opinion that most studies in Indonesia directly adapt existing instruments without paying attention to the rules that must be followed first, which results in the lack of robustness of a research instrument, coupled with the use of applications for analysis such as using Mplus (Muthén & Muthén, 2017), or it can also use AMOS (Ghozali, 2017), and SPSS using factor analysis. In addition, the motivation questionnaire should be re-validated or updated because it still uses simple validity and reliability testing calculations, the same as the confidence questionnaire. Likewise, the volleyball underhand passing skills test, which is the same as the motivation questionnaire, has not been updated for too long, even though both instruments have often been used in research that continues to develop in Indonesia.

In addition, from the three instruments, it is not yet clear what level of validation was carried out, such as the suitability of the language specifically for the questionnaire, expert judgment assessment, small-scale trials, and large-scale trials. As stated, there are several stages of instrument validation carried out, such as: item writing rules, expert assessment, pilot study, and second expert assessment (Azwar, 2015; 2016). Another weakness of this study is the absence of a control class as a comparison, thus further research should use a comparison class so that the results can be generalised.

CONCLUSION

The findings in this study are that the fidelity model of the CL type TGT has very good reliability in planning and implementation and can improve volleyball underhand passing, self-confidence, and motivation. This study concludes that there is an influence of TGT on volleyball underhand passing, self-confidence, and motivation in junior high school students, with the influence of TGT on volleyball underhand passing being better than self-confidence. Further research is needed to update the three research instruments used in this study and pay attention to the model fidelity of TGT with the suggestion of using the TGT usage guidebook that has been stated in the discussion. In addition, with the existence of a comparison class, the results can be more generalised.

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CONFLICT OF INTEREST

All researchers do not have conflict of interest.

REFERENCES

Agustryani, R., Herliana, M. N., & Soraya, N. (2020). Pengaruh Model Team Game Tournament (TGT) Terhadap Peningkatan Responsibility siswa dalam Pembelajaran Penjas Kelas VIII SMP Negeri 4 Kota Tasikmalaya. *Jendela Olahraga*, *5*(1), 30–34. https://doi.org/10.26877/jo.v5i1.5225

Anggraeni, R. (2024). *Evaluasi Pembelajaran Pendidikan Seni*. Deepublish.

Arisetiyana, F. F., Kartiko, D. C., Indahwati, N., & Prakoso, B. B. (2020). Motivation and Student Learning Outcomes in Problem Based Learning. *JP.JOK (Jurnal Pendidikan Jasmani, Olahraga dan Kesehatan)*, *4*(1), 1–10. https://doi.org/10.33503/jp.jok.v4i1.829

Azwar, S. (2015). *Reliabilitas dan Validitas* (4th ed.). Pustaka Pelajar.

Azwar, S. (2016). *Penyusunan Skala Psikologi*. Pustaka Pelajar.

Bofill-Herrero, A., Baena-Morales, S., García-Taibo, O., & Ferriz-Valero, A. (2022). Cooperative Learning and Sdg 5. an Intervention for Physical Education in Secondary Schools. *Journal of Physical Education and Sport*, *22*(7), 1570–1580. https://doi.org/10.7752/jpes.2022.07198

Casey, A., Goodyear, V. A., & Dyson, B. P. (2015). Model Fidelity and Students' Responses to an Authenticated Unit of Cooperative Learning. *Journal of Teaching in Physical Education*, *34*(4), 642–660. https://doi.org/10.1123/jtpe.2013-0227

Casey, A., & Quennerstedt, M. (2020). Cooperative Learning in Physical Education Encountering Dewey's Educational Theory. *European Physical Education Review*, *26*(4), 1023–1037. https://doi.org/10.1177/1356336X20904075

Depdiknas. (1999). *Petunjuk Tes Keterampilan Bolavoli Usia 13 – 15 Tahun*. Pusat Kesegaran Jasmani dan Rekreasi Departemen Pendidikan Nasional.

Fernandez-Rio, J., & Casey, A. (2021). Sport Education as a Cooperative Learning Endeavour. *Physical Education and Sport Pedagogy*, *26*(4), 375–387. https://doi.org/10.1080/17408989.2020.1810220

Fernandez-Rio, J., Sanz, N., Fernandez-Cando, J., & Santos, L. (2017). Impact of a Sustained Cooperative Learning Intervention on Student Motivation. *Physical Education and Sport Pedagogy*, *22*(1), 89–105. https://doi.org/10.1080/17408989.2015.1123238

Field, A. (2024). *Discovering Statistics using IBM SPSS Statistics* (6th ed.). SAGE Publications Ltd.

Florida, M. (2019). Upaya Meningkatkan Motivasi dan Hasil Belajar Penjaskes Peserta Didik Kelas IV Semester Dua Tahun Pelajaran 2018/2019 melalui Penerapan Pendekatan Cooperative Learning (CL) Tipe STAD di SD Negeri 19 Cakranegara. *Jurnal Ilmu Sosail Dan Pendidikan*, *3*(2), 257–265. https://doi.org/10.36312/jisip.v3i2.742

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2023). *How to Design and Evaluate Research in Education*. McGraw Hill-Inc.

Ghozali, I. (2017). *Model Persamaan Struktural Konsep Dan Aplikasi Dengan Program AMOS 24 Update Bayesian*. Badan Penerbit Undip.

Ginanjar, A. (2015). The Influence of Inquiry Method in Motivating the SMP' Student. *Jurnal Kependidikan*, *45*(2), 123–129. https://doi.org/10.21831/jk.v45i2.7489

Ginanjar, A. (2022). *Implementasi Model-Model Pembelajaran Pendidikan Jasmani: Perkembangan Penelitian Di Indonesia* (1st ed.). Program Studi Pendidikan Jasmani dan Olahraga STKIP Nahdlatul Ulama Indramayu.

Ginanjar, A., Ramadhan, R., Adib, W., & Effendy, F. (2021). Differences between STAD Learning Model and DI Learning Model on Pencak Silat Learning Outcomes. *JPJO: Jurnal Pendidikan Jasmani dan Olahraga, 6*(2), 217–223. https://doi.org/10.17509/jpjo.v6i2.35500

Hastie, P. A., & Casey, A. (2014). Fidelity in Models-Based Practice Research in Sport Pedagogy: A Guide for Future Investigations. *Journal of Teaching in Physical Education*, *33*(3), 422–431. https://doi.org/10.1123/jtpe.2013-0141

Hudah, M. (2016). Pengaruh Model Pembelajaran Team Game Tournament dan Motivasi Belajar Siswa Kelas VIII Materi Bola Voli di SMP N 1 Karimunjawa 2016. *Jendela Olahraga*, *1*(1). 1-11. https://doi.org/10.26877/jo.v1i1%20Juli.1095

Kharisma, Y. (2019). *Belajar, Bermain, dan Melatih Bolavoli*. Program Studi Pendidikan Jasmani Kesehatan dan Rekreasi STKIP Nahdlatul Ulama Indramayu.

Liu, T., & Lipowski, M. (2021). Influence of Cooperative Learning Intervention on the Intrinsic Motivation of Physical Education Students—A Meta-Analysis within a Limited Range. *International Journal of Environmental Research and Public Health*, *18*(6), 1–11. https://doi.org/10.3390/ijerph18062989

Luo, Y. J., Lin, M. L., Hsu, C. H., Liao, C. C., & Kao, C. C. (2020). The Effects of Team-Game-Tournaments Application Towards Learning Motivation and Motor Skills in College Physical Education. *Sustainability (Switzerland)*, *12*(15), 1–12. https://doi.org/10.3390/su12156147

Metzler, M. W. (2000). *Intructional Models for Physical Education*. Allyn and Bacon.

Metzler, M. W. (2005). *Instructional Models for Physical Education* (2nd ed.). Holcomb Hathaway.

Metzler, M. W. (2017). *Instructional Models for Physical Education* (3rd ed.). Routledge.

Muthén, L. K., & Muthén, B. O. (2017). *Mplus User's Guide* (8th ed.). Muthén & Muthén.

Priyanti, E. D. (2014). Upaya Meningkatkan Keterampilan Passing Bawah Bolavoli Dengan Menerapkan Metode Team Game Tournament (TGT). *Bravo's Jurnal*, *2*(3), 135–142. https://doi.org/10.32682/bravos.v2i3.275.g216

Schmidt, B. (2016). *Volleyball: Steps to Success*. Human Kinetics.

Siedentop, D., Hastie, P. A., & Mars, H. van der. (2011). *Complete Guide to Sport Education* (2nd ed.). Human Kinetics.

Simanungkalit, E. (2016). Peningkatan Hasil Belajar Passing Bawah Bola Voli Tipe Student Tim Achievenment Division V SD Negeri 18 Pontianak Barat. *Jurnal Locomotor Ilmu Keolahragaan*, *2*(2), 1–9.

Slavin, R. E. (2015). *Cooperative Learning: Teori, Riset dan Praktik*. Nusa Media.

Suhendra, D. I., Ginanjar, A., Mubarok, M. Z., & Novaldi, R. (2023). The Effect of STAD Learning Model on Learning Motivation of Elementary School Students. *JPJO: Jurnal Pendidikan Jasmani dan Olahraga*, *8*(1), 67–72. https://doi.org/10.17509/jpjo.v8i1.50671

Suherman, A. (2009). *Model Pembelajaran Pendidikan Jasmani: Alternatif Pengembangan dan Implementasi Model Pembelajaran dalam Pengajaran Pendidikan Jasmani*. FPOK UPI Bandung.

Supriyanto, A. (2014). *Psikologi Olahraga*. UNY Press.

Wahyudin, D., Subkhan, E., Malik, A., Hakim, M. A., Sudiapermana, E., Alhapip, L., Anggraena, Y., Maisura, R., Amalia, N. R. A. S., Solihin, L., Ali, N. B. V., & Krisna, F. N. (2024). *Kajian Akademik Kurikulum Merdeka*. Pusat Kurikulum dan Pembelajaran Badan Standar, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.

Yang, C., Chen, R., Chen, X., & Lu, K.-H. (2021). The Efficiency of Cooperative Learning in Physical Education on the Learning of Action Skills and Learning Motivation. *Frontiers in Psychology*, *12*(October), 1–17. https://doi.org/10.3389/fpsyg.2021.717528