



Available online at:

<https://ejournal.upi.edu/index.php/penjas/article/view/69658>

DOI: <https://doi.org/10.17509/jpjo.v9i2.69658>

Effects of Cooperative Learning Models and Gender on Basketball Skills

Widya Sastri*, Damrah Burhan, Syahrial Bakhtiar, A Alnedral

Department of Sports Education Master, Faculty of Sports Science, Padang State University, Padang, Indonesia

Article Info

Article History :

Received Mei 2024

Revised August 2024

Accepted September 2024

Available online September 2024

Keywords :

basketball skills, cooperative learning, gender, student teams-achievement division, team games tournament

Abstract

This research aimed to analyze the effect of two types of cooperative learning models, namely Student Teams-Achievement Division (STAD) and Team Games Tournament (TGT), and gender on basketball skills. This research used a 2x2 factorial design and involved 36 students divided by gender and learning model. Basic basketball skill tests included passing, dribbling, and shooting tests. The treatment was conducted for 8 weeks. The pre-test and post-test were administered to measure changes in basketball skills. Data were analyzed using two-way Analysis of Variance (Two-Way ANOVA) to examine the effect of the learning models, gender, and their interaction on basketball skills. The results showed that the TGT learning model was more effective in improving the student basketball skills compared to the STAD model. In addition, there was a significant difference in basketball skills between male and female students, with male students showing better results. However, there was no significant interaction between the learning models and gender with the student basketball skills.

INTRODUCTION

Sport education plays a crucial role in shaping a student character, physical health, and motor skills (Yilmaz, 2020). However, despite its benefits, the issue of gender disparity in sport education remains relevant and requires a greater attention (Tanni & Khan, 2024). In practice, gender-based differences in treatments often affect the quality of student learning experiences, particularly in sports. Stereotypes associating physical abilities with specific genders frequently lead to disparities in motor skill development, including in basketball (Chalabaev et al., 2013). Male students are often perceived as being more skilled in sports, while female students tend to face lower expectations. This not only hampers skill development but also limits opportunities for female students to fully engage in sport activities (Solmon, 2014).

This phenomenon is evident in the research setting, where, despite basketball being highly popular among both male and female students, there are significant issues in mastering basic skills. Empirical observations show that many students, especially females, have not yet mastered fundamental techniques such as shooting, dribbling, and passing. This indicates a gap in skill development between genders, with female students generally showing lower proficiency compared to their male counterparts. External and internal factors, such as the learning model, also contribute to the student low skill levels (Putra & Snyanawati, 2020; Sumiyarsono, 2022). Therefore, an intervention was carried out using cooperative learning models, specifically the Student Teams-Achievement Divisions (STAD) and Team Games Tournament (TGT) types, to provide an effective solution for improving the student basketball skills. These models offer opportunities for students to learn in a collaborative and competitive environment, motivating them to participate actively and enhance their basketball skills (Rachman, Angger, Wahyu, Nuswantara, 2021; Wildani & Gazali, 2020; Yeung, 2015). Thus, this research focused on the effect of cooperative learning models, namely the STAD and TGT, and gender on basketball skills.

Previous research on cooperative learning models, specifically the STAD and TGT, has predominantly focused on improving academic outcomes. Although these models have been proven effective in enhancing the student engagement and general learning outcomes

(Kamaruddin & Yusoff, 2019; Permatasari et al., 2018; Suhendra et al., 2023), few studies have explored their impact on specific sport skills, such as shooting, dribbling, and passing in basketball (Hudah & Fitriawan, 2020; Rahman et al., 2024; Rizki, 2022; Rubiyatno et al., 2023). Additionally, studies on gender differences in sport education often focus solely on physical ability differences between male and female students without considering how specific learning models can address these disparities (Channabasappa & Kumar, 2021; Medrano & Mateos, 2018; Mocanu et al., 2022). Furthermore, research integrating gender factors along with the implementation of STAD and TGT models in the sport education context, particularly basketball, is still limited (Isnaini et al., 2017; Putra & Sudarso, 2017).

Therefore, there is a significant research gap in examining how cooperative learning models, namely the STAD and TGT, affect the student basketball skills by considering the gender factor. This research contributes to several key areas. First, the provision of empirical evidence on the effect of cooperative learning model type STAD and TGT in sport contexts, particularly basketball, would expand the understanding of these models beyond academic applications. Second, by considering gender differences, this research would provide insights into how demographic factors can influence sport learning outcomes. The main objective of this research was to analyze the effect of cooperative learning models, namely the STAD and TGT models, and gender on basketball skills.

METHODS

This research used a 2x2 factorial design involving two main factors, namely the learning models (STAD and TGT) and gender (male and female).

Participants

The population of this research consisted of all 11th Grade students at SMAN 1 Bintan Timur in the second semester of the 2022/2023 academic year, totaling 340 students. The selected samples for the research included 36 students from class XI MIPA 2, comprising 18 males and 18 females. The sample was determined using the purposive sampling technique, justified by the fact that the students in class XI MIPA 2 met specific research criteria, such as having a high interest in basketball but lacking in basic skills. Whereas, the purpos-

ive sampling is used when the researcher has specific considerations for selecting participants seemed representative for the population under research (Sugiyono, 2017).

Sampling Procedures

Purposive sampling was chosen because this research required samples with specific characteristics aligned with the research focus. Sample selection criteria included students who had taken physical education classes, had a basic knowledge of basketball, and showed a high interest in sports but lacked of fundamental skill mastery, as revealed in the initial observation. Additionally, students willing and committed to participate in all research sessions became the key criteria. This technique was considered the most appropriate technique for obtaining relevant samples since it allowed the researcher to select participants suitable for the research objectives, because purposive sampling is well-suited for research requiring specific participant selection to address particular research problems (Creswell, 2012).

Materials and Apparatus

This research used three types of basic basketball skill tests, including passing, dribbling, and shooting tests. In the passing test, students stood three meters from the wall and bounced the ball as many times as possible in 30 seconds. The dribbling test required students to dribble the ball through a predetermined course, with the speed measured from the “go” signal to crossing the finish line. The shooting test challenged students to make as many legal shots as possible into the basketball hoop within 30 seconds, with the score determined by the number of successful baskets. In the shooting test, the ball had to touch the backboard before going into the hoop for the score to count.

Procedures

The research lasted for 16 sessions for 8 weeks at the basketball court of SMAN 1 Bintan Timur. The number of sessions and the 8-week duration were chosen based on the suggestion of Campbell and Stanley (2015) on the optimal time frame for observing changes in motor skills in sports, including basketball. Before the treatment began, a pre-test was conducted to measure each student initial basketball skills. During the treatment period, two learning models were applied, for instance the STAD (Student Teams-Achievement Divi-

sions) and TGT (Team Games Tournament) models. The STAD model involved team collaboration, while the TGT model used a tournament format to encourage competitions among students. After completing the treatment sessions, a post-test was conducted to evaluate changes in the student basketball skills, because comparing the pre-test and post-test results is the basis for analysis (Creswell, 2012).

Data Analysis

Data were analyzed using Two-Way Analysis of Variance (ANOVA) to assess the effects of the learning models, gender, and their interaction on basketball skills. Normality and homogeneity of variance tests were conducted as prerequisites for the ANOVA test, with a significance level of $\alpha=0.05$ (Sugiyono, 2017).

RESULT

The high interest of students in sports, especially basketball, highlights the importance of effective teaching methods to develop their skills. In this context, this research aimed to investigate the effects of cooperative learning models, specifically the Student Teams-Achievement Division (STAD) and Team Games Tournament (TGT), and gender on the basketball skills of 11th Grade students at SMAN 1 Bintan Timur.

Before presenting the detailed research findings, it is essential to ensure that the data used for analysis meet the required statistical assumptions. Thus, the results of normality and homogeneity tests are presented first to confirm that the data meet the necessary conditions for further analysis. By addressing these two aspects, it guarantees that the results of the research are based on the accurate and reliable analysis.

The results of the normality test obtained Sig. value (0.102), which is greater than 0.05, suggesting that the data were normally distributed and met the first requirement for conducting the two-way ANOVA. Furthermore, the homogeneity test results showed a Sig. value of (0.991), greater than 0.05, concluding that the variance of student basketball skills was homogeneous, fulfilling the homogeneity assumption for the two-way ANOVA test. Based on the outcomes of both the normality and homogeneity tests, the two-way ANOVA test could be conducted.

The research results showed a comparison of stu-

dent basketball skills after the implementation of the STAD and TGT learning models. The research involved 36 respondents aged 17-18, consisting of 18 males and 18 females. The complete results of this research can be seen in Table 1.

Table 1. Test of Descriptive Statistics

Descriptive Statistics				
Dependent Variable: Basketball skills				
Learning Models	Gender	Mean	Std. Dev.	N
STAD	Male	39.22	4.450	9
	Female	30.74	4.564	9
	Total	34.98	6.178	18
TGT	Male	38.56	5.574	9
	Female	31.78	4.508	9
	Total	35.17	6.028	18
Total	Male	38.89	4.905	18
	Female	31.26	4.434	18
	Total	35.08	6.016	36

Table 1 shows that the TGT learning model had a more significant impact (35.1772) on the student basketball skills compared to the STAD learning model (34.9861). Overall, both the STAD and TGT learning models had an influence (35.0817) on the student basketball skills. It also indicates that male students receiving the STAD learning model (39.2267) gained better basketball skills compared to the male students receiving the TGT learning model (38.5656). In addition, basketball skills of female students receiving the TGT learning model (31.7889) were better compared to the basketball skills of female students receiving STAD learning model (30.7456).

Further research results indicated an interaction between the STAD and TGT learning models and gender with the student basketball skills. The complete results of this research can be seen in Table 2.

Table 2. Test of Two-Way ANOVA

Tests of Between-Subject Effects					
Dependent Variable: Basketball skills					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	530.665 ^a	3	176.8	7.687	.001
Intercept	44306	1	44306	1925.37	.000
Learning Models	.329	1	.329	.014	.906
Gender	523.8	1	523.8	22.76	.000
Learning Models *Gender	6.537	1	6.53	.284	.598
Error	736.3	32	23		
Total	45573	36			
Corrected Total	1267	35			

a. R Squared = .419 (Adjusted R Squared = .364)

Table 2 shows a Sig. score (0.906 > 0.05) for the learning model on the student basketball skills. This

result indicated that there was no significant difference in the student basketball skills based on the STAD and TGT learning models. Moreover, Table 2 also shows a Sig. score (0.000 < 0.05) for gender on the student basketball skills. This finding implied that there was a significant difference in the student basketball skills based on gender. In addition, the finding also revealed a Sig. score (0.598 > 0.05) for the interaction between the learning model and gender with the student basketball skills. This result concluded that there was no significant interaction between the learning model and gender with the student basketball skills.

DISCUSSION

The research results provide intriguing insights into the effectiveness of the TGT (Team Games Tournament) and STAD (Student Teams-Achievement Divisions) learning models in enhancing student basketball skills. The more significant impact of the TGT learning model on the student basketball skills (35.1772) was apparent compared to the STAD learning model (34.9861), suggesting that the TGT approach might be more effective in this context.

One relevant theory to explain this phenomenon is cooperative learning theory (Karmina et al., 2021). This theory emphasizes the importance of collaboration among individuals to achieve learning goals. The TGT model, with its strong team collaboration structure, might have provided a more supportive context for students to develop their basketball skills. Previous studies had investigated the effectiveness of various learning models in improving student basketball skills. For instance, a research found that students who learned through the TGT model showed significant improvements in social skills, problem-solving skills, and academic achievement compared to those using the STAD approach (Sung et al., 2017).

Another research findings provided intriguing insights into the differences in male student basketball skills after implementing two different learning models, namely the STAD and TGT models. A relevant concept to discuss it in this context is the theory of differences in learning styles and individual student needs. This theory highlights that each student has unique learning preferences and needs, which can influence their response to a particular learning model (Nasution et al.,

2023). Additionally, the concepts of intrinsic and extrinsic motivation are also relevant for understanding these results. This theory highlights the difference between motivation originating from within the individual (intrinsic) and motivation from external factors (extrinsic) (Hidayat & Hambali, 2019).

Previous research had also explored the impact of motivation on sport learning. Earlier studies had shown that a strong intrinsic motivation could enhance student participation and achievement in sports (Chang & Chang, 2012). On the other hand, previous research had also highlighted the importance of social interaction and environmental supports in sport learning. These findings suggest that a supportive and collaborative social environment can enhance a student motivation and achievement in sports (Lasfeto, 2020). Therefore, the differences in male student basketball skills after the implementation of the STAD and TGT learning models might also reflect differences in the level of social interaction and supports provided by the learning environment.

Further research findings highlighted differences in basketball skills between the two learning models, the TGT and STAD models, particularly in the female student context. To understand these results more deeply, several relevant concepts or theories can be considered. One of them is the cooperative learning theory introduced by Isjoni (2013). This theory emphasizes the importance of cooperation among individuals in the learning process, which is implemented in learning models like TGT. By working together in teams, students have the opportunity to support and teach each other, which can strengthen their understanding and skills in sports, including basketball.

Some previous studies highlighted that female student learning skills and preferences often differed from those of male students, hence different learning approaches might be more effective for meeting their needs (Turhusna & Solatun, 2020). These findings underscore the importance of considering gender when designing effective sport learning strategies that align with female student characteristics and preferences. Furthermore, previous research had also highlighted the importance of motivation in sport learning, including in the basketball skill context. Studies indicated that high motivation could enhance student commitment and learning outcomes in sports (Chang & Chang, 2012). In

this context, the differences in female student basketball skills after receiving the TGT and STAD learning models might reflect differences in the level of motivation generated by each learning model.

Further research findings provided intriguing insights into the influence of learning models and gender on student basketball skills. The analysis using the Sig. values showed that there was no significant difference in the student basketball skills based on the applied learning models, whether the STAD or TGT model. A relevant concept to discuss this is the theory of individual differences in learning. This theory highlights that each student has a unique learning style, thus the same learning model may not yield the same results (Turhusna & Solatun, 2020).

Therefore, even though there was no significant overall difference in outcomes between the STAD and TGT models, it is important to consider individual differences among students when interpreting these results. Some previous studies highlighted the effectiveness of cooperative learning models. For instance, cooperative learning models, like TGT, could yield better results than individualistic learning approaches in terms of the student motivation and academic achievement (Nur'aeni and Hasanudin, 2023). It is relevant to the current research results showing the positive effect of the TGT learning model on the student basketball skills.

However, interesting findings emerged when considering the influence of gender on the student basketball skills. The finding showing a significant difference in skills based on gender highlights the importance of the consideration of demographic factors in learning design. The concept of social theory regarding gender roles in learning may be relevant here. This theory emphasizes that gender stereotypes and social norms can influence the student learning experiences and outcomes (Hardi & Mudjiran, 2022). In this context, there may be differences in supports, motivation, or access to training and practice between male and female students that can affect their basketball skills.

Additionally, there is research highlighting differences in sport skills based on gender. A research found that there were differences in sport skills and achievements between male and female students (Murod and Jannah, 2021). The finding is consistent with the current research results showing significant differences in the student basketball skills based on gender. Thus, the

results of this research can be seen as an additional contribution to understanding gender-based differences in sport skills.

Furthermore, the analysis of the interaction between the learning model and gender with the student basketball skills showed that there was no significant interaction between these two factors. The theory of interaction between variables may be relevant to consider. This concept refers to the possibility that the influence of one variable depends on the level or presence of another variable (Sugiono, 2004). In this context, although gender independently affected the student basketball skills, there was no significant interaction between gender and the learning model. This suggested that the effect of the learning model on basketball skills did not differ significantly in male and female students.

Moreover, the absence of significant interaction between the learning model and gender with the student basketball skills highlights the importance of understanding how these factors interact. Some previous studies showed that the effects of a learning model could be influenced by individual student characteristics, including gender and initial skill levels (Roberts et al., 2018). Therefore, it is necessary to consider whether these factors moderate the relationship among the learning model, gender, and student basketball skills.

CONCLUSION

The research results concluded that cooperative learning models, specifically the Student Teams-Achievement Division (STAD) and Team Games Tournament (TGT), had a significant impact on the student basketball skills. The TGT learning model had proven to be more effective in enhancing basketball skills than the STAD learning model. Additionally, differences in basketball skills between male and female students were revealed, with male students generally demonstrating higher skills than female students. However, no significant interaction was found in the learning models, gender, and the student basketball skills. Future researchers are encouraged to explore other relevant learning models that can improve student skills, while considering environmental factors such as family supports and school facilities. Additionally, incorporating other demographic variables, such as socio-economic background, psychological aspects, and student motiva-

tion, would provide a more comprehensive understanding. Schools are recommended to develop a more inclusive curriculum that addresses individual differences among students, as well as to offer skill enhancement programs, teacher trainings, and improved supportive facilities. Relevant stakeholders, such as the government and educational authorities, are expected to support the development of innovative learning models through inclusive educational policies and the adequate allocation of resources for facility improvements, educator trainings, and student motivation programs.

CONFLICT OF INTEREST

The authors declared no conflict of interest.

REFERENCES

- Al Hadist, G., & Prasetyo, A. (2022). The Influence of Instructional Models on Badminton Skills Performance base on Motor Educability Levels. *Jurnal Pendidikan Jasmani dan Olahraga*, 7(2), 268-275.
- Campbell, D. T., & Stanley, J. C. (2015). *Experimental and Quasi-Experimental Designs for Research*. Ravenuo Books.
- Chalabaev, A., Sarrazin, P., Fontayne, P., Boiché, J., & Clément-Guillot, C. (2013). The influence of sex stereotypes and gender roles on participation and performance in sport and exercise: Review and future directions. *Psychology of sport and exercise*, 14(2), 136-144.
- Chang, I. Y., & Chang, W. Y. (2012). The effect of student learning motivation on learning satisfaction. *International Journal of Organizational Innovation*, 4(3).
- Channabasappa, N., & Kumar, C. K. (2021). Sports Facilities and Sport Performance in the Soccer Sports Between Male and Female College Players: A Comparative Study. *Research Journey*, 144.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). Pearson.
- Ginanjari, A., Ramadhan, R., Adib, W., & Effendy, F. (2021). Differences between STAD Learning Model and DI Learning Model on Pencak Silat Learning Outcomes. *Jurnal Pendidikan Jasmani dan Olahraga*, 6(2), 217-223.
- Hardi, E., & Mudjiran, M. (2022). Diversitas sosiokultural dalam wujud pendidikan multikultural, gender dan pembelajaran berdiferensiasi. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 8931-8942.
- Hidayat, Y., & Hambali, S. (2019). Peranan ekstrakurikuler olahraga terhadap motivasi belajar siswa da-

- lam pembelajaran pendidikan jasmani. *Jurnal Olahraga*, 5(1), 59-65.
- Hudah, M., & Fitriawan, C. F. (2020). Pengaruh model pembelajaran kooperatif student team achievemen division (STAD) dan Jigsaw terhadap minat dan hasil belajar bola basket pada siswa kelas XI SMA Negeri 1 Pecangaan. *Jurnal Kualita Pendidikan*, 1(3), 52-56.
- Isjoni. (2013). *Cooperative Learning Efektifitas Pembelajaran Kelompok*. Alfabeta.
- Isnaini, A. F. ., Wahjoedi, & Wijaya, M. A. (2017). Pengaruh Model Pembelajaran Kooperatif Tipe Stad Terhadap Hasil Belajar Teknik Dasar Passing Bola Basket Pada Siswa Kelas Vii Smp Negeri 3 Sawan Tahun Pelajaran 2017 / 2018. *E-Journal PJKR Universitas Pendidikan Ganesha*, 8(2), 1-9.
- Kamaruddin, S., & Yusoff, N. M. R. N. (2019). The Effectiveness of Cooperative Learning Model Jigsaw and Team Games Tournament (TGT) towards Social Skills. *Creative Education*, 10(12), 2529-2539.
- Karmina, S., Dyson, B., Watson, P. W. S. J., & Philpot, R. (2021). Teacher implementation of cooperative learning in Indonesia: A multiple case study. *Education Sciences*, 11(05), 218.
- Lasfeto, D. (2020). The relationship between self-directed learning and students' social interaction in online learning environment. *Journal of e-learning and knowledge society*, 16(2), 34-41.
- Medrano, E. F., & Mateos, M. E. (2018). How do Psychological Characteristics Influence the Sports Performance of Men and Women? A Study in School Sports. *Journal of Human Sport & Exercise*, 13(4), 858-872.
- Mocanu, G. D., Murariu, G., Onu, I., & Badicu, G. (2022). The influence of gender and the specificity of sports activities on the performance of body balance for students of the faculty of physical education and sports. *International Journal of Environmental Research and Public Health*, 19(13), 7672.
- Murod, A. M. M., & Jannah, M. (2021). Perbedaan ketangguhan mental atlet ditinjau dari jenis kelamin pada siswa SMA "X". *Character Jurnal Penelitian Psikologi*, 8(9), 74-84.
- Nasution, F., Wulandari, R., Anum, L., & Ridwan, A. (2023). Variasi Individual dalam Pendidikan. *Jurnal Edukasi Nonformal*, 4(1), 146-156.
- Nur'aeni, N., & Hasanudin, E. H. I. (2023). Model Pembelajaran Kooperatif Team Game Tournament Berbasis Media Digital Blooket untuk Mengembangkan Motivasi dan Hasil Belajar Pendidikan Pancasila. *Asatiza: Jurnal Pendidikan*, 4(3), 259-273.
- Permatasari, M., Kurnia, D., & Rostikawati, R. T. (2018). The Effect of Teams Games Tournament (TGT) and Student Teams Achievement Divisions (STAD) Teaching Techniques on The Learning Outcome of Natural Science Subject. *JHSS (JOURNAL OF HUMANITIES AND SOCIAL STUDIES)*, 2(1), 7-11.
- Putra, D. W. A., & Sudarso. (2017). Pengaruh Model Pembelajaran Kooperatif Tipe TGT (Teams Games Tournament) Terhadap Ketuntasan Belajar Shooting Bola Basket (Studi Pada Siswa Kelas VIII SMP Negeri 1 Tulangan Sidoarjo). *Jurnal Pendidikan Olahraga Dan Kesehatan*, 5(1), 21-26.
- Permatasari, M., Kurnia, D., & Rostikawati, R. T. (2018). The Effect of Teams Games Tournament (TGT) and Student Teams Achievement Divisions (STAD) Teaching Techniques on The Learning Outcome of Natural Science Subject. *JHSS (JOURNAL OF HUMANITIES AND SOCIAL STUDIES)*, 2(1), 7-11.
- Rachman, Angger, Wahyu, Nuswantara, A. (2021). Pengaruh Model Pembelajaran Kooperatif TGT (Teams Games Tournament) Terhadap Ketuntasan Belajar Shooting Bola Basket. *Jurnal Pendidikan Jasmani Olahraga Dan Kesehatan.*, 9(1), 193-203.
- Rahman, A., Juniarisca, D. L., Kartiko, D. C., & Prakoso, B. B. (2024). Penerapan Model Pembelajaran Kooperatif Tipe Team Games Tournament (TGT) terhadap Hasil Belajar Dribble Bola Basket. *Journal of Education Research*, 5(3), 3800-3808.
- Rizki, B. S. (2022). STAD-Type Cooperative Learning To Improve Learning Outcomes Under Ring Shoot. *International Journal of Basketball Studies*, 1(1), 25-31.
- Roberts, C., Khanna, P., Rigby, L., Bartle, E., Llewellyn, A., Gustavs, J., ... & Lynam, J. (2018). Utility of selection methods for specialist medical training: a BEME (best evidence medical education) systematic review: BEME guide no. 45. *Medical teacher*, 40(1), 3-19.
- Rubiyatno, Perdana, R. P., Supriatna, E., Yanti, N., & Suryadi, D. (2023). Team Game Tournament (TGT)-Type Cooperative Learning Model: How does it Affect the Learning Outcomes of Football Shooting? *Edu Sportivo: Indonesian Journal of Physical Education*, 4(1), 86-96.
- Solmon, M. A. (2014). Physical education, sports, and gender in schools. *Advances in child development and behavior*, 47, 117-150.
- Sugiono. (2004). Konsep, Identifikasi, Alat Analisis dan Masalah Penggunaan Variabel Moderator. *Jurnal Studi Manajemen Organisasi*, 1(2), 61-70.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.
- Suhendra, D., Ginanjar, A., Mubarak, M., & Novaldi, R. (2023). The Effect of STAD Learning Model on Learning Motivation of Elementary School Students. *Jurnal Pendidikan Jasmani dan Olahraga*, 8(1), 67-72.
- Sumiyarsono, D. (2022). *Skill in Basketball (Keterampilan Bola Basket)*. FIK UNY.

- Sung, Y.-T., Yang, J.-M., & Lee, H.-Y. (2017). The Effects of Mobile-Computer-Supported Collaborative Learning: Meta-Analysis and Critical Synthesis. *Review of Educational Research*, 87(4), 768–805.
- Tanni, A. A., & Khan, M. M. I. (2024). Exploring the Gender Disparity in Sports Participation: A Qualitative Analysis of Women's Limited Engagement in Sports in Bangladesh. *Innovation Journal of Social Sciences and Economic Review*, 6(1), 43-51.
- Turhusna, D., & Solatun, S. (2020). Perbedaan individu dalam proses pembelajaran. *As-Sabiqun*, 2(1), 18-42.
- Wildani, L., & Gazali, N. (2020). Model Kooperatif Teams Games Tournaments: Apakah dapat meningkatkan keterampilan belajar dribbling sepakbola?. *Edu Sportivo: Indonesian Journal of Physical Education*, 1(2), 103-111.
- Yeung, H. C. H. (2015). Literature review of the cooperative learning strategy-student team achievement division (STAD). *International Journal of Education*, 7(1), 29-43.
- Yılmaz, A. (2020). The effect of sport on life skills of athlete-students in different education levels: Mixed research approach. *Kastamonu Education Journal*, 28(3), 1233-1243.