



## Improving students' responsibility in tennis courses: "The Silent Movement" model for physical education programme

<sup>1abcde</sup>Selvi Atesya Kesumawati\* , <sup>2abc</sup>M. Fransazeli Makorohim , <sup>1abd</sup>Aprizal Fikri , & <sup>3bde</sup>Husni Fahritsani

Department of Physical Education, Postgraduate, Universitas Bina Darma, Palembang, Indonesia<sup>1</sup>

Department of Physical Education, Faculty of Teacher Training and Education, Universitas Islam Riau, Pekanbaru, Indonesia<sup>2</sup>

Department of Physical Education, Faculty of Teacher Training, Science and Education, Universitas PGRI Palembang, Palembang, Indonesia<sup>3</sup>

Received 09 June 2024; Accepted 30 September 2024; Published 24 October 2024



### ABSTRACT

**Background:** Tennis courses are a mandatory component prepared for prospective physical education teachers in universities. However, many students do not achieve optimal learning outcomes due to the irresponsible attitude of students, which can hinder the learning process. **Research Objective:** The purpose of this study is to develop and produce a tennis learning model (Silent Movement Tennis) for increasing the sense of personal and social responsibility in students. Silent Movement Tennis is the latest model in tennis learning, and there has been no previous research. **Method:** This research used the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) method in producing a learning model called "Silent Movement Tennis," which consists of 4 movement skill activity posts that must be carried out by every student with a sense of responsibility. The respondents of this study are all 4th semester students (academic year 2023-2024), totalling 30 people, consisting of 9 females and 21 males at a university in the city of Palembang. The Silent Movement Tennis model was also validated by 3 experts consisting of 1 learning planning expert, 1 tennis practitioner, and 1 developmental psychologist and analysed using the Content Validity Index (CVI) and Content Validity Ratio (CVR). **Finding/Result:** The results of validation by experts who have been analysed show the value of the Content Validity Index (CVI) shows an average score of 3.63, and the Content Validity Ratio (CVR) analysis shows an average score of 0.27, which means the model developed is appropriate, relevant, or good, and also high content validity to increase the sense of social and personal responsibility for students. **Conclusion:** Silent Movement Tennis model as an alternative model to improve basic tennis skills and student responsibility. Future research efforts must focus on the design and implementation of sports values programs, namely by developing learning games and other sports based on the TPSR model to foster and develop a sense of personal and social responsibility that is important for students to become an adaptive and resilient generation, which ultimately contributes to their future success.

**Keywords:** Student responsibility; skill development; higher education

\*Corresponding Author

[kesumawati@binadarma.ac.id](mailto:kesumawati@binadarma.ac.id)

[10.25299/es:ijope.2024.vol5\(3\).17491](https://doi.org/10.25299/es:ijope.2024.vol5(3).17491)

Copyright © 2024 Selvi Atesya Kesumawati, M. Fransazeli Makorohim, Aprizal Fikri, Husni Fahritsani.

**How to Cite:** Kesumawati, S. A., Makorohim, M. F., Fikri, A., & Fahritsani, H. (2024). Improving students' responsibility in tennis courses: "The Silent Movement" model for physical education programme. *Edu Sportivo: Indonesian Journal of Physical Education*, 5(3), 207-217. [https://doi.org/10.25299/es:ijope.2024.vol5\(3\).17491](https://doi.org/10.25299/es:ijope.2024.vol5(3).17491)

**Authors' Contribution:** a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection



## INTRODUCTION

Physical education at various levels of education, ranging from primary education to higher education, has an important role in developing individuals holistically, both in terms of physical, social, and mental (Erfayliana, 2015). In its development, physical

education not only focusses on the physical component but also pays attention to the affective (Latifah et al., 2024), and cognitive aspects of students (Qasash et al., 2023). Physical education plays an integral role in shaping physical fitness, motor skills, emotional stability, morality, and a healthy lifestyle among students (Qasash et al., 2023).

The Quality of Physical Education (QPE) classes are essential in helping students develop the skills, knowledge, and dispositions necessary to actively participate in enjoyable physical activities. At the tertiary level, physical education (PE) is often the last opportunity for students to engage in structured classroom-based learning, with the goal of encouraging their involvement in sustained physical activity (Garn et al., 2017). Student participation is often used as a measure of success in physical education (Friesth & Dzara, 2020). In this context, tennis courses are a mandatory component prepared for prospective physical education teachers (Maulidin et al., 2021).

Nevertheless, although tennis courses have an important role, many students do not achieve optimal learning outcomes. One of the factors contributing to this is the lack of ability of physical education teachers to choose effective learning models, approaches, or teaching techniques (Winarni, 2020). In addition, the main problems in tennis courses often arise from the irresponsible attitude of students, which can hinder the learning process (Kahveci, 2023). The lack of a robust evaluation mechanism in tennis courses can contribute to students' irresponsible attitudes (Fikri et al., 2022).

One of the learning models that can be implemented in tennis courses is Teaching Personal and Social Responsibility (TPSR). This model is designed to increase students' personal and social responsibility through the physical learning process (Juliantine & Ramadhan, 2018). The TPSR model is designed to address this challenge, emphasizing two core values: personal responsibility (effort and self-control) and social responsibility (respect for the rights and feelings of others and concern for others) (Hidayat et al., 2020). Students who have personal responsibility will more easily develop their potential through independent learning driven by intrinsic motivation (Dewi & Ansori, 2018).

The TPSR model has been shown to significantly improve social skills and affective learning outcomes (Kusumaning et al., 2024). In addition, a literature review also confirms the success of TPSR in improving character and basic motor skills in the context of PE (Faisal et al., 2023). In the past decade, Hellison's TPSR (1985, 2003) has come to the fore when working on values through physical activity and sports through five levels of responsibility (Prat et al., 2019). The benefits of TPSR not only increase responsibility but also affect student satisfaction with the overall learning process (Manzano-Sánchez, 2023). Further research shows that students involved in TPSR-based PE programs experience significant improvements in personal and social responsibility (Pan & Wei, 2024). A systematic review and meta-analysis also confirmed the positive effects of TPSR on emotional and social outcomes in PE (Aygün et al., 2024).

However, although the TPSR model is widely applied in PE, research that specifically develops the model for improving students' personal and social responsibility in physical education courses in colleges, especially court tennis, is still very limited. This shows that there is a gap in literature that needs to be filled with further research. Therefore, this study aims to develop and evaluate the TPSR model in the context of tennis courses in universities. The results of this research are expected to contribute to increasing students' personal and social responsibilities and improving learning outcomes in tennis courses. In addition, this model is expected to be a relevant solution to overcome obstacles in the physical education learning process in higher education.

## METHOD

This research uses the research and development method ADDIE model. The ADDIE Model has divided instructional strategies into five steps, such as analysis, design, development, implementation, and evaluation (Handrianto et al., 2021). The stages in this study are as follows: (i) Analysis: at this stage, the researcher identifies the learning needs of the tennis court course, learning objectives, and analysis of available resources. The steps in this stage include identifying learning needs, setting learning objectives, and analysing available resources (infrastructure and learning media that are suitable for use). (ii) Design; this stage includes learning planning, selection of learning methods, and creation of learning scenarios. The steps in this stage include: the researcher designs by choosing the learning method and model that will be implemented in learning. (iii) Development; this stage includes the creation of learning materials and learning tools needed. The steps in this stage include compiling learning materials (motion tasks and model instructions developed), learning tools and media to be used, and evaluating the quality of learning materials through expert validator tests. The model developed is Silent Movement Tennis to increase student active participation (students centre learning) and improve basic tennis playing technique skills for students of the sports education undergraduate program. Silent Movement Tennis is the latest model in tennis learning, and there has been no previous research. (iv) Implementation: this stage includes the implementation of learning that has been planned and tested by experts. The steps in this stage include conducting a trial of a silent movement model that has been tested and declared feasible by experts. (v) Evaluation; this stage includes the evaluation of the learning outcomes that have been implemented. The steps in this stage include measuring learning outcomes, evaluating the learning outcomes of the silent movement model, and making improvements to the model if necessary.

### The Silent Movement Model

Silent Movement Tennis model is a tennis learning model developed to increase student active participation (student centre learning) and improve basic tennis playing technique skills for students of sports education undergraduate programs. The basic techniques of playing tennis developed in this model are forehand and backhand drives, passing the ball without a racket/throwing the ball towards the player (as a coach/teacher), and footwork. Besides, this model aims to increase the sense of personal and social responsibility in the team. This model consists of 4 posts; each post has its own movement task, so each student is required to carry out movement tasks in each post alternately with his friends. If there are students who are not responsible for doing their duties, it will interfere with the movement process of other friends. The necessary equipment for this model is as follows: (1) 3 tennis rackets; (2) 80 tennis balls; and (3) 1 basket for storage.



Figure. 1 Silent Movement Model Tennis

Instructional Silent Movement Model

- Post 1: Doing the basic technique of hitting a 10-ball forehand and a 10-ball backhand. When you're done, leave the racket in post 1 and run towards post 2.
- Post 2: Take 20 balls that have been hit and place them in the basket in post 3. After finishing queuing in the back row of post 3.
- Post 3: doing the basic technique of throwing (feeding) the ball from the top direction (overhead throwing). After finishing, heading to post 4.
- Post 4: Do footwork side-stepping movements along the sideline, double back and forth.

Table 1. Rubric Personal and Social Responsibility for Students

No.	Aspects of Attitudes Assessed	Checklist	
		Yes	No
	<b>Opening</b>		
1.	Students arrive on time.		
2.	Students are consequent if they arrive late.		
3.	Students help lecturers prepare learning equipment.		
4.	Students take the initiative to become group leaders without being appointed.		
5.	Students stretch and warm up without being instructed by the lecturer.		
	<b>Post 1</b>		
6.	Students line up in order.		
7.	Students do 10 forehand and 10 backhand strokes (no more and no less).		
8.	Students put the racket in the place provided immediately after hitting.		
9.	Students do not disturb other friends, and do not speak as long as they are not asked to speak.		
10.	Students do not mock friends who cannot yet.		
11.	Students have the initiative to help friends who have difficulty moving.		
12.	Students are active and enthusiastic even though they are not being noticed by lecturers or friends.		
13.	Students listen to the teacher's directions (listening without interrupting the direction).		
	<b>Post 2</b>		
14.	Students take and collect 20 balls and place them in the prepared place.		
15.	Students collect the balls excitedly.		
16.	Students collect the ball quickly.		
	<b>Post 3</b>		
17.	Students throw 20 balls in the right direction and fit for the batter.		
18.	Students have the initiative to encourage their friends who are hitting.		
19.	Students do not laugh at friends who have not been able to hit well.		
20.	Students are active and eager to make the right throw.		
	<b>Post 4</b>		
21.	Students do sidestep movements according to instructions (2 times back and forth).		
22.	Students move with enthusiasm.		
23.	Students have the initiative to help friends in need.		
	<b>Closing</b>		
24.	Students stretch and cool down when the lecturer closes the learning.		
25.	Students help lecturers in storing learning equipment and media.		
<b>Total Score</b>			

$Value = \frac{\text{Number of points obtained}}{25} \times 100$
--

## The Data Collection

Researchers evaluated the Silent Movement Tennis model by involving 3 experts, consisting of 1 learning planning expert, 1 tennis practitioner, and 1 developmental psychologist. At this stage, the expert will conduct a silent movement model assessment using the expert rating rubric (rating scale), and the expert will provide suggestions and comments on the developed model. Experts provide ratings on a scale of 1 to 4. For more details, they can be seen on the Table. 2.

**Table 2. Instructional Rating Scale Assessment for Experts**

No.	Scale	Assessment Description
1.	4	Very appropriate/very precise/very easy/very safe/very practical/very useful.
2.	3	Appropriate/precise/easy/safe/practical/useful.
3.	2	Not suitable/inappropriate/not easy/unsafe/impractical/not useful.
4.	1	Very inappropriate/very inappropriate/very not easy/very unsafe/very impractical/very unhelpful.

(Kesumawati et al., 2024)

After receiving assessments from experts, the next step includes analysing the acquired data to determine the validity of the “Silent Movement Tennis” model using the Content Validity Ratio (CVR) in Table 3.

**Table 3. Instrument of Assessment Expert Validation**

No.	Aspect	Score			
		1	2	3	4
1.	The model is developed in accordance with the learning outcomes of the course (CPMK).				
2.	The model is developed in accordance with the learning outcomes of graduates (CPL).				
3.	Facilities and media equipment used can overcome learning problems.				
4.	The developed model provides opportunities for students to improve basic technical skills in playing tennis.				
5.	The model developed provides opportunities for students to be proactive in learning.				
6.	The developed model fosters a sense of personal and social responsibility.				
7.	The developed model is easy for students to understand and actualize.				
8.	The model developed stimulates students' critical thinking skills in cognitive aspects.				
9.	Increase students' confidence in analyzing motion tasks on the model.				
10.	Fostering students' enthusiasm to learn things that can correct the mistakes of the movements made.				

(Kesumawati et al., 2024)

## RESULTS AND DISCUSSION

The development of a tennis learning model product through the “Silent Movement Tennis” model requires several important stages, starting from needs analysis, product design planning and development, validation by experts, product revision, implementation, and product evaluation.

The development of the “Silent Movement Tennis” product aims to help improve forehand and backhand drive skills, the ability to throw or pass the ball in the right direction, the knowledge to analyse basic tennis techniques, and foster personal and

social responsibility for students who take tennis courses. The product is designed by considering the needs of students in improving basic tennis technical skills to achieve course learning outcomes (CPMK).

### Expert Validation

The development of this model involves 3 experts to provide an assessment of the silent movement tennis model before implementation or empirical validation tests (field trials). The results of the validation test analysis by experts using the Content Validation Index (CVI) and Content Validation Ratio (CVR) can be seen in the Table 3 below:

Table 4. CVI and CVR

No.	E1	E2	E3	ne	N	N/2	ne-(N/2)	CVR	Criteria
1.	3	4	4	2	3	1.5	0.5	0.3	Valid
2.	3	4	4	2	3	1.5	0.5	0.3	Valid
3.	3	3	4	1	3	1	0	0	Valid
4.	4	4	3	2	3	1.5	0.5	0.3	Valid
5.	4	3	4	2	3	1.5	0.5	0.3	Valid
6.	4	4	3	2	3	1.5	0.5	0.3	Valid
7.	4	4	3	2	3	1.5	0.5	0.3	Valid
8.	4	4	3	2	3	1.5	0.5	0.3	Valid
9.	4	3	4	2	3	1.5	0.5	0.3	Valid
10.	4	3	4	2	3	1.5	0.5	0.3	Valid
Total	37	36	36		Total			2.7	
Average	3.7	3.6	3.6		Average			0.27	Valid
Average		3.63							

CVR scores on each item ranged 1 to -1 Information.

ne : Total Essential Subject Matter Expert (SME)

N : Total of Subject Matter Expert

v : Valid

The data on the results of the validation test by experts can be seen in Table 3 above. The results of the CVI and CVR analyses obtained a score of 0.27 (data is valid if the CVR score on each item ranged from 1 to -1). This means that the silent movement tennis model has an item affinity with a domain that is measured based on the experts' considerations, that the silent movement tennis model has high validity/according to the aspects developed, namely, to improve the skills of groundstroke (forehand and backhand) and social skills aspect; to increase the sense of social and personal responsibility for students.

### Empirical Validation

The silent movement model was piloted (implementation) on students in the 4th semester of sports education at Bina Darma University, which consisted of 9 female students and 21 male students. The results of the silent movement model trial that focusses on aspects of personal and social responsibility (used Rubric personal and social responsibility for students at table 1), and the result can be seen in Table 4.

Table 5. Learning Outcomes of the Silent Movement Model

Score	Frequency	Category
90 - 100	12	Very good
80 - 89	15	Good
Less 70 - 79	3	Poor
60 - 69	0	Less
< 60	0	Very Less
Amount	30	

Based on the results of the trial of the silent movement learning model in the field tennis course, scores were obtained with a very good category of 40% (14 students), a good category of 50% (15 students), and a poor category of 10% (3 students). From the data obtained, it can be concluded that the silent movement learning model in the tennis course that adapts the TPSR learning model of the Hellison Model 2011. It can help improve students' attitudes of personal and social responsibility when carrying out learning activities or carrying out instructions given by lecturers. This is important so that the learning process can take place effectively.

The results of this study show that the Silent Movement Tennis model can increase students' sense of personal and social responsibility, where in the implementation of the rules in each movement in this model is a very important part for students to obey. The rules of this model are not only to maintain order but also play an important role in shaping and fostering personal and social responsibility. The rules teach discipline, fairness, cooperation, and ethics. All of which are essential components of a mature sense of responsibility. By understanding the importance of following the rules, students can develop an attitude of responsibility that will have a positive impact on their social and professional lives outside of lectures.

The results of previous studies are relevant and relate to the results of this study, where the application of the TPSR learning model can increase the active participation of students in increasing responsibility. Various studies on the TPSR (Teaching Personal and Social Responsibility) model and its impact on students. In conclusion, for many physical educators who implemented the TPSR model in their sessions, this model is considered a viable and effective pedagogical approach in after-school contexts ([Baptista et al., 2020](#)). [Manzano-Sánchez \(2023\)](#) reported that students improved in social and personal responsibility after TPSR interventions, according to teachers' observations. [Garn et al. \(2017\)](#) found that the TPSR model reduced irresponsible behavior in students. Overall, these studies suggest that the TPSR model positively influences the development of responsibility in students.

The research by Sanchez Al-Caraz, after applying the TPSR model, the students in the experimental groups demonstrated improvements in social and personal responsibility, according to the data pertaining to teachers' perceptions ([Sanchez-Alcaraz et al., 2019](#)). It shows that students' responsibility can grow through the TPSR model. So from that the application of the Hellison model shows a positive effect in the growth of the attitude of child responsibility.

Through the silent movement model, student interest becomes better and makes students more active and planned and easy to implement. It is supported by [Suryono \(2016\)](#) which states "interest is a person's tendency towards something or activity they like, accompanied by a feeling of pleasure, attention and activeness in doing, which has a significant impact on student learning outcomes."

Consider weaknesses and limitations: this model is adjusted to the circumstances and abilities of students at Bina Darma University, which has been explained in the introduction. For the next researcher, it is highly recommended to analyze the needs and abilities of the respondent first whether this model is also suitable for implementation or not.

Internal and external factors are some of the components that can affect the process and success of learning motion, internal factors come from within, such as IQ, motivation, and self-confidence ([Friskawati & Sobarna, 2018](#)). In addition to the training factor and the process of growth, development, and maturity, a person's abilities will develop naturally ([Tarju & Wahidi, 2017](#)). This model can be a reference for students to read and perform in one activity. Effective teaching materials can support and improve learning outcomes appropriately ([Riusman, 2021](#)). This variation is one of the interactive learning

models and participatory learning is proven to improve service-learning outcomes in tennis courses (Masrun et al., 2022). This model can also be one of the exercises if done repeatedly and systematic for tennis. One method used to improve the ability of tennis is to drill (Sidik et al., 2023; Arifianto & Raibowo, 2020). Lessons in tennis should be repeated (Kusuma et al., 2019). Instructional behaviour of tennis coaches style primarily promotes development of motor skills and techniques which are representative of the psychomotor domain. The learning aims and objectives in relation to learning tennis, however, also includes development in the cognitive domain (Hewitt, 2020).

## CONCLUSION

Based on the results of data analysis by three experts involved in this study, the 'Silent Movement Tennis' model developed has proven to be effective as an alternative learning method that helps lecturers achieve the courses learning objectives. This model significantly improves basic technical skills in playing tennis, such as forehand and backhand strokes, as well as the ability to pass the ball. Furthermore, this model succeeded in increasing the sense of personal and social responsibility in teamwork during tennis learning activities.

However, this study has several limitations. First, the limited sample size of 30 students may affect the generalisation of these findings to a wider population. We conducted this study over a semester, thus not determining the long-term effects of implementing this model. Nevertheless, this study makes a significant contribution to the theory and practice of sports learning by introducing the 'Silent Movement Tennis' model that can improve students' technical skills and social responsibility. Lecturers can use this model as an alternative learning method that not only focusses on physical skills but also fosters the development of personal and social attitudes. Learning is influenced by various factors that interact with each other, both from within the individual (internal factors) and from the surrounding environment (external factors). To achieve optimal learning outcomes, it is important for individuals and related parties, such as families and educators, to understand and manage these factors so that they can create conditions that support an effective learning process.

Silent Movement Tennis model for physical education programmes are effective in increasing personal and social responsibility, as can be seen from several activities that are carried out well by students when carrying out tennis lectures, such as, consequently, if they arrive late, helping lecturers prepare learning equipment, stretching and warming up without being instructed by the lecturer. Students have the initiative to help friends who have difficulty moving. Students have the initiative to help friends who have difficulty moving.

## ACKNOWLEDGEMENTS

Thanks to everyone who supported this research and publication.

## CONFLICT OF INTEREST

The author declares no conflict.

## REFERENCES

- Arifianto, I., & Raibowo, S. (2020). Model Latihan Koordinasi Dalam Bentuk Video Menggunakan Variasi Tekanan Bola Untuk Atlet Tenis Lapangan Tingkat Yuniior. *STAND: Journal Sports Teaching and Development*, 1(2), 78-88. <https://doi.org/10.36456/j-stand.v1i2.2671>
- Aygun, Y., Boke, H., Yagin, F. H., Tufekci, S., Murathan, T., Gencay, E., Prieto-González, P., & Ardigò, L. P. (2024). Emotional and Social Outcomes of the Teaching Personal and Social Responsibility Model in Physical Education: A Systematic Review and Meta-Analysis. *Multidisciplinary Digital Publishing Institute (MDPI)*, 11(4), 1-15 <https://doi.org/10.3390/children11040459>
- Baptista, C., Corte-Real, N. , Regueiras, L. , Seo, G. , Hemphill, M. , Pereira, A. , ... Fonseca, A. . (2020). Teaching Personal and Social Responsibility after School: A Systematic Review. *Cuadernos de Psicología del Deporte*, 20(2), 1–25. <https://doi.org/10.6018/cpd.346851>
- Dewi, R.A., & Ansori, I. (2018). Hubungan Kedisiplinan dan Tanggung Jawab Terhadap Hasil Belajar PKN Kelas IV. *Joyful Learning Journal*, 8(2), 64-71. <https://doi.org/10.15294/jlj.v7i2.25063>
- Erfayliana, Y. (2015). Pendidikan Jasmani dalam Membentuk Etika, Moral, dan Karakter. *Jurnal Pendidikan dan Pembelajaran Dasar Volume 2 Nomor 2 Desember 2015*, 2(2), 302–315. <https://doi.org/10.24042/terampil.v2i2.1299>
- Faisal, M., Maesaroh, S., Vai, A., & Aspa, A. P. (2023). Strengthen Students' Sense of Responsibility in Learning PJOK Through the TPSR Model. *Journal of Physi-Cal Education, Health and Sport*, 10(2), 105-111. <https://doi.org/10.15294/jpehs.v10i2.47523>
- Fikri, A., Pratama, R. R., Widiastuti, Samsudin, Muslimin, Haqiyah, A., Ramadhan, A., Hardiyono, B., & Hidayat, A. (2022). Tennis Ball Exersice: Variation to Increase Arm Muscle Strength in Martial Athletes at Sriwijaya State Sports School. *International Journal of Human Movement and Sports Sciences*, 10(5), 964-972. <https://doi.org/10.13189/saj.2022.100513>
- Friesth, M., & Dzara, K. (2020). An Educational Evaluation of a Journal Club Approach to Teaching Undergraduate Health Care Research. *Journal of Medical Education and Curricular Development*, 7, 238212052094066. <https://doi.org/10.1177/2382120520940662>
- Friskawati, G. F., & Sobarna, A. (2018). Faktor Internal Pencapaian Hasil Belajar Pendidikan Jasmani pada Siswa SMK. *Jurnal Penelitian Pendidikan*, 18(3), 327-335. <https://doi.org/10.17509/jpp.v18i3.15004>
- Garn, A. C., Simonton, K., Dasingert, T., & Simonton, A. (2017). Predicting Changes in Student Engagement in University Physical Education: Application of Control-Value Theory of Achievement Emotions. *Psychology of Sport and Exercise*, 29, 93-102. <https://doi.org/10.1016/j.psychsport.2016.12.005>
- Hewitt, M. (2020). Considering the Application of a Range of Teaching Styles from the Spectrum that Promotes the Holistic Development of Tennis Players in a Variety of Learning Domains. In *The Spectrum of Teaching Styles in Physical Education*. <https://doi.org/10.4324/9780429341342-6>

- Hidayat, A., Pratama, R., & Hardiyono, B. (2020). Effectiveness of Skipping Exercises and Bench Step-Up Against Explosive Power Leg Muscles. *Jurnal Penelitian Pembelajaran*, 6(4), 1-14. [https://doi.org/10.29407/js\\_unpgri.v6i3.15316](https://doi.org/10.29407/js_unpgri.v6i3.15316)
- Handrianto, C., Jusoh, A. J., Goh, P. S. C., & Rashid, N. A. (2021). Using ADDIE Model for Designing Instructional Strategies to Improve Teaching Competency of Secondary Schools Teachers. *Proceeding Webinar Konvensyen Kaunseling Kebangsaan Kali Ke*, 22, 361-371.
- Juliantine, T., & Ramadhan, U. (2018). Pengembangan Tanggung Jawab dan Perilaku Sosial Siswa melalui Model TPSR dalam Pendidikan Jasmani. *Jurnal Sositoteknologi*, 17(3), 350-354. <https://doi.org/10.5614/sostek.itbj.2018.17.3.2>
- Kahveci, H. (2023). The Positive and Negative Effects of Teacher Attitudes and Behaviors on Student Progress. *Journal of Pedagogical Research*, 7(1), 290-306. <https://doi.org/10.33902/JPR.202319128>
- Kesumawati, S. A., Fikri, A., Ardianto, H., Sukmawati, N., Hardiyono, B., Fahritsani, H., & Muslimin, M. (2024). Fun Game Based Learning Model to Enhance Fundamental Movement Skills (FMS) Children with Mild Intellectual Disability. *International Journal of Disabilities Sports and Health Sciences*, 7(2), 396-407. <https://doi.org/10.33438/ijdshs.1407873>
- Kusuma, I. A., Yulianto, R., & Ardianzah, A. (2019). Perbedaan Pengaruh Metode Pembelajaran Direct Dan Indirect Terhadap Peningkatan Kemampuan Servis Tenis Lapangan Tahun 2019. *Jurnal Ilmiah Spirit*, 19(2), 13-25. <https://doi.org/10.36728/jis.v19i2.949>
- Kusumaning, N., Wibowo, N., Kurniawan, R., & Darmawan, A. (2024). Pengaruh Model Teaching Personal and Social Responsibility Terhadap Keterampilan Sosial dan Hasil Belajar Afektif. *GPJI*, 8(1), 81-90. <https://doi.org/10.17977/um040v8i1p81-90>
- Latifah, A. U., Nufus, A. M., Latifah, N., Rizkita, N. P., Khairunnisa, P., & Mulyana, A. (2024). Pendidikan Jasmani dan Olahraga di Sekolah Dasar Menuju Gaya Hidup Bersih dan Sehat. *Jurnal Bintang Pendidikan Indonesia*, 2(3), 89-102. <https://doi.org/10.55606/jubpi.v2i3.3023>
- Manzano-Sánchez, D. (2023). Comparing Traditional Teaching and the Personal and Social Responsibility Model: Development of Values in Secondary Education Students. *Sustainability (Switzerland)*, 15(8). <https://doi.org/10.3390/su15086964>
- Masrun, M., Umar, U., Yendrizal, Y., & Khairuddin, K. (2022). Efektivitas Case Method Terhadap Hasil Belajar Service Tenis. *Jurnal Patriot*, 4(4), 353-363. <https://doi.org/10.24036/patriot.v4i4.896>
- Maulidin, M., Syah, H., & Wibawa, E. (2021). Evaluasi Pembinaan Prestasi Tenis Lapangan. *Gelanggan Olahraga: Jurnal Pendidikan Jasmani dan Olahraga (JPJO)*, 5(1), 146-154. <https://doi.org/10.31539/jpjo.v5i1.3252>
- Prat, Q., Camerino, O., Castañer, M., Andueza, J., & Puigarnau, S. (2019). The Personal and Social Responsibility Model to Enhance Innovation in Physical Education. *Apunts. Educacion Fisica y Deportes*, 136, 83-99. [https://doi.org/10.5672/apunts.2014-0983.es.\(2019/2\).136.06](https://doi.org/10.5672/apunts.2014-0983.es.(2019/2).136.06)

- Pan, M., & Wei, T. H. (2024). Examining Students' Tripartite Efficacy Beliefs in Physical Education Through a Teaching Personal and Social Responsibility Intervention. *The Journal of Educational Research*, 117(2), 87-97. <https://doi.org/10.1080/00220671.2024.2329585>
- Qasash, M., Syafruddin, M. A., Hamzah, A., Aksir, M. I., & Bachtiar, I. (2023). Pembelajaran Pendidikan Jasmani melalui Teori Koginitf. *Jurnal Ilmiah STOK Bina Guna Medan*, 11(1), 22-28. <https://doi.org/10.55081/jsbg.v11i1.803>
- Riusman, A. (2021). Student Teams Achievement Division (STAD): Model Pembelajaran Cooperative Learning dalam Meningkatkan Hasil Passing Bawah Bolavoli. *Edu Sportivo: Indonesian Journal of Physical Education*, 2(1), 11-20. [https://doi.org/10.25299/es:ijope.2021.vol2\(1\).5236](https://doi.org/10.25299/es:ijope.2021.vol2(1).5236)
- Sanchez-Alcaraz, B. J., Gomez-Marmol, A., Valero-Valenzuela, A., de La Cruz Sanchez, E., Moreno-Murcia, J. A., & Lochbaum, M. R. (2019). Teachers' Perceptions of Personal and Social Responsibility Improvement Through a Physical Education Based Intervention. *Journal of Physical Education and Sport*, 19, 156-161. <https://doi.org/10.7752/jpes.2019.s1023>
- Sidik, F. Z., Nurhidayat, N., & Indarto, P. (2023). Meningkatkan Pukulan Backhand Tenis Lapangan Menggunakan Metode Drill. *Indonesian Journal of Sport Science and Technology (IJST)*, 2(2), 132-139. <https://doi.org/10.31316/ijst.v2i2.5602>
- Suryono, S. (2016). Pengaruh Metode Latihan dan Persepsi Kinestetik Terhadap Keterampilan Groundstrokes Tenis Lapangan pada Siswa SD. *Jurnal Keolahragaan*, 4(2), 220-231. <https://doi.org/10.21831/jk.v4i2.10901>
- Tarju, T., & Wahidi, R. (2017). Pengaruh Metode Latihan Terhadap Peningkatan Passing dalam Permainan Sepak Bola. *JUARA: Jurnal Olahraga*, 2(2), 66-72. <https://doi.org/10.33222/juara.v2i2.35>
- Winarni, S. (2020). Kompetensi Guru Pendidikan Jasmani Olahraga dan Kesehatan Ditinjau dari Usia dan Jenis Sekolah. *Jurnal Pendidikan Jasmani Indonesia*, 16(1), 101-114. <https://doi.org/10.21831/jpji.v16i1.29639>