

## **Learning Passing in Volleyball Through a Basic Movement Approach**

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**A.** Conception and design of the study; **B.** Acquisition of data;  
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### **ABSTRACT**

This research and development aim to produce a top-passing learning model using a basic movement approach for SMA Negeri 4 Barru class X students. Apart from that, this research and development was carried out to obtain in-depth information about the development and application of the upper passing learning model through a basic movement approach for students and to determine the effectiveness, efficiency, and attractiveness of children towards the model created. This research uses the Research & Development (R & D) research method from Borg and Gall. The subjects in this research and development were students at SMA Negeri 4 Barru, consisting of 30 students. The instruments used in this research and development were questionnaires, as well as volleyball passing test instruments which were used to collect volleyball passing data. The stages in this research and development were: (1) expert evaluation (initial product evaluation); (2) limited trials (small group trials); (3) large trials and (4) main trials (field testing). Test the effectiveness of the model using the top passing test to determine the level of volleyball top passing ability for students before giving treatment in the form of a top passing learning model through the basic movement approach that was developed and to determine the level of top passing ability after the treatment or treatment of the top passing model that was developed, from the initial test carried out obtained an average passing level for students of 19.20, then after being given treatment in the form of a learning model for upper passing through a basic movement approach, an average level of passing ability for students was obtained at 22.80. Furthermore, the most important result from the table above is the t value = 11,641, with df = 29 and significance figure or p-value = 0.000 < 0.05. Thus, it was concluded that there was a significant difference in students' volleyball passes before and after being given the upper passing learning model using a basic movement approach. So this model of learning upper passes using the basic volleyball movement approach is effective in improving learning of upper passing in volleyball for athletes. Based on the development results, it can be concluded that: (1) a volleyball passing pattern model for students, can be developed and applied in volleyball learning; (2) the upper passing learning model through a basic movement approach for students has been developed, evidence of this improvement is shown in the test results of the pre-test and post-test data, there is a significant difference between before and after the model treatment.

**Keywords** : Learning model; Top Passing; Volleyball; Basic Movement.



## INTRODUCTION

Education has a very important role in human life. Education can influence human development in all aspects of personality and life (I. N. Haris, 2018). This is by the contents of the National Education System Law Article 1 paragraph 1 which states that: "Education is a conscious effort to prepare students through guidance, teaching and/or training activities for their roles in the future." Education is not only a means to prepare individuals for their lives in the future (Sahabuddin, 2022), but also for the lives of today's children who are experiencing development towards maturity (Lengkana & Sofa, 2017). Education seeks to improve conditions that are conducive to children's development so that they can develop optimally (Sahabuddin et al., 2022). In the educational process, children actively develop themselves and teachers actively help create facilities for optimal development (Bangun & Yunis, 2016). Children's education is very important and needs to be taken seriously because children's education is a milestone or foundation for the future (Satyamardika & Prihanto, 2015). Education that is implemented correctly will develop children well, conversely, if education is implemented not by the child's development, then the child will experience difficulties in learning (Rohmansyah, 2017).

One of the factors that supports education and helps children in their growth and development is educators (Kusuma & Winarno, 2018). An educator needs to understand how students learn (Sahabuddin et al., 2020) and how to organize a learning process that can develop abilities and shape students' character (Arifin, 2017). How students learn is a condition that is expected to occur in children (Wijaya et al., 2022), in the form of changes in behaviour in the aspects of creativity, taste, initiative, and work (Bismar & Sahabuddin, 2019) which are based on and contain human values and the religion adhered to (Setiawan & Wisnu, 2019). This is through basic education which is part of the national education system and aims to develop students' basic abilities optimally in intellectual, social, and personal aspects that are integrated into their developmental characteristics (Utami et al., 2022).

The process of developing students' basic abilities is optimally pursued through physical education (Clarita et al., 2021). Regarding the objectives of physical education, Aip Syarifuddin (1993:4) said that Physical Education is a process through physical activity education, which is designed and arranged systematically, to stimulate growth and development (F. Haris et al., 2021), improve abilities and physical skills, intelligence and character formation (Herlina & Suherman, 2020), as well as positive values and attitudes for every citizen to achieve educational goals (Tumaloto, 2022).

One of the most important factors for realizing successful teaching is the formulation of objectives (Firmana, 2017), while the most important principle in physical education is the full and equal participation of students during the learning process (Saleh et al., 2023). Upper School level students are children aged 16-18 years and still need a quiet period or latent period (Tumaloto, 2022). What has happened and been fostered in previous periods will continue in future periods (Raibowo et al., 2019).

The aim of sports and health physical education which is very visible from the packaging of game modifications (Saitya, 2022) and modifications of sports facilities and infrastructure is to increase students' active movement which does not result in fatigue, sweating, and happiness (Muslim et al., 2023). Activities carried out with pleasure will produce sweat which can make the body fitter (Pratama, 2020). Learning carried out with fun games will make students more enthusiastic so they do not easily feel tired or bored (Sahabuddin et al., 2023). These are the successes of packaging learning modifications in all physical education materials such as; athletics, gymnastics, volleyball games, and various small ball games (Nailufar & Hartono, 2022).

This research will focus on volleyball game activities, especially overhead passing. In learning volleyball passing, the active role of students is very lacking because students feel bored quickly and complain that their hands hurt. As far as I have observed, SMA Negeri 4 Barru has not developed volleyball learning with games or modifications that can stimulate students to become more interested in learning. Learning is still carried out using a drill model, namely, students are given a ball and instructed to make a top pass. The techniques used are still monotonous, just the same, they have not been provided through games that can make students feel happier. In this way, after only a short time, students feel bored and tired.

In various lessons at SMA Negeri 4 Barru, researchers encountered problems in the teaching and learning activities of Physical Education, Sports and Health at SMA Negeri 4 Barru, there was material where the learning was still standard, namely in learning Volleyball. There are several problems that I encountered in teaching and learning activities for physical education, sports and health on volleyball material at SMA Negeri 4 Barru, the problem is that physical education teachers for sports and health in teaching and learning activities on volleyball material lack game modifications that make students more motivated because it uses real equipment and rules.

From the results of a preliminary study through direct observation, researchers found several problems in teaching and learning activities (KBM) for physical education, sports and health at SMA Negeri 4 Barru, including: (1) The rules and equipment used have not been modified (standard), and this is lacking. according to the student's growth stages, (2) Sports and Health Physical Education teachers do not dare to try to modify the volleyball game to be more varied, and (3) There is a lack of evaluation from Sports and Health Physical Education teachers.

Therefore, it can be concluded that teaching and learning activities (KBM) for physical education, sports and health on volleyball material at SMA Negeri 4 Barru, physical education teachers for sports and health have not been able to provide modifications that can foster students' interest in moving more actively. Based on the description above, it is hoped that physical education, sports, and health teachers will create various modifications to the volleyball game that are more varied and not monotonous. The aim is to attract students' interest in moving more actively and anticipating the feeling of boredom and boredom that students often experience in participating in the Physical Education, Sports, and Health learning process. From the background above, researchers can provide reasons why this problem needs to be researched, namely: (1) The learning paradigm for sports and health physical education used to focus more on mastering techniques to achieve achievement, but the sports and health physical education paradigm currently developing is more leads to active students to be more active in moving happily. This is the main aim of physical education for sports and good health, (2) So that students can first understand the importance of sports in general and the importance of physical education for sports and health in particular. So that the objectives of sports and health physical education can be achieved, and (3) Sports and health physical education in high school essentially has an important and strategic meaning, role and function in efforts to develop students' movement skills.

## METHODS

This research was carried out at SMA Negeri 4 Barru Regency. The research subjects were class X students at SMA Negeri 4 Barru. When this research was carried out in the fields of SMA Negeri 4 Barru Regency, what was needed for this research and development referred to research and development research from Borg and Gall which was planned for

one month, with the following details: (1) Needs Analysis, (2) Planning model development, (3) Basic motion model design development, (4) Expert validation and pattern model revision, (5) Small group trials and revisions, and (6) Field testing.

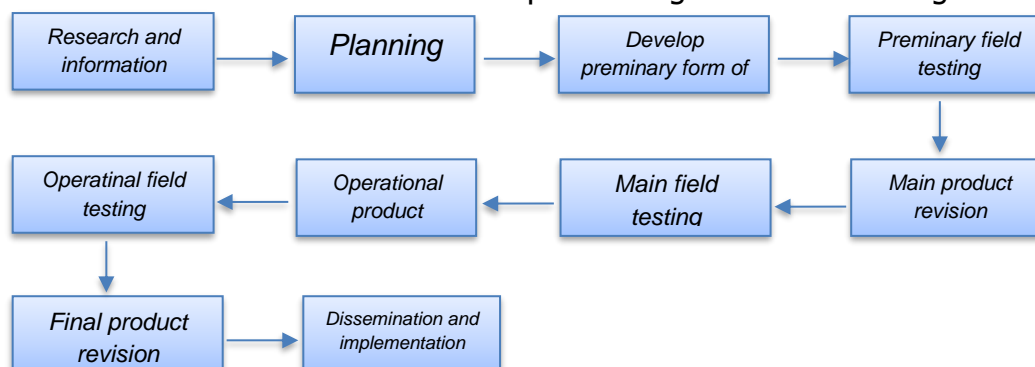
The subject sampling technique applied in this research was random sampling. The following are the criteria for research subjects, which will be explained in the following table:

**Table 1.**

Research subject

No	Research Stage	Number of Subjects	Criteria	Instrument
1	Expert Evaluation	2	• 2 Volleyball Experts	10 models
2	Product Trial			
	a. Small group try-out	12	• 12 Orang siswa	10 models
	b. Field try group	30	• Evaluation on a limited scale of 30 students of SMA Negeri 4 Barru	10 revised development models
3	Test product effectiveness	30	• 30 students from SMA Negeri 4 Barru	10 models

The research and development of the upper passing learning model through the basic movement approach uses a qualitative and quantitative approach and uses the Research & Development (R&D) development model from Borg and Gall which consists of ten steps or can also be described in the form of a development stage scheme as in Figure 2.



**Figure 2.**

Instructional Design R & D

It is hoped that the development of the basic motion model will become a product that can be developed systematically and logically so that this product has effectiveness and efficiency that is suitable for use. The planned upper passing pattern models are:

**Table 2.**

Basic movement model material carried out in research

No.	Pattern model material	Information
1.	Top passing in pairs	
2.	Passing up while skipping	
3.	Top passing steps to the right and the left	
4.	Passing over stepping diagonally	
5.	Top passing jumps	
6.	Pass over the half circle and clap your hands	
7.	Passing over circles and clapping	
8.	Passing over the triangle is a straight ball movement	
9.	Passing the ball to the side	
10.	Passing over the rectangle with a criss-cross ball movement	

**Table 3.**  
Passing assessment of major trials

Top Passing Technique	Indicator	Assessment		
		1	2	3
Early stage	1. Stand ready with your knees bent 2. Wait for the ball to arrive 3. Body position slightly tilted to the side 4. Balanced body weight			
Implementation Stage	1. Focus on the direction the ball is coming from 2. The position of the hands is above the head 3. Push the ball at the base of the fingers			
Final Stage	1. The body is ready and moves quickly towards the ball 2. The body must be ready and the knees bent when taking the ball with different foot positions 3. Body weight leans more forward 4. Push the ball up with open fingers and elbows and body straight forward			

At this stage, the instruments that will be given to students will also be tested, to find out whether the product that the researcher has created is suitable for helping students learn volleyball passing.

This trial aims to (1) find out whether the model design has been implemented properly and correctly by the physical education teacher, and (2) how effective the results of implementing the model are for the objectives of this research. Thus, a quantitative approach was used to find effectiveness with a pre-experimental research design in the form of a one-group pretest-posttest design. (Ali Maksum, 2012:29)

**Table 4.**  
Research Design in Testing Model Effectiveness

Subject	Pretest	Treatment	Post-Test
R	O <sub>1</sub>	P	O <sub>2</sub>

Researchers implement and distribute products that have undergone revisions from experts to volleyball players, both physical education teachers and students, which can be used as reference material for teaching basic volleyball passing skills. The development of a top-passing learning model using a basic movement approach can be analyzed and refined as development material.

The final evaluation stage was carried out at the large group field test stage. The results of athletes' responses to the upper passing pattern model in volleyball games are the same as the questions in the previous evaluation stage which will later be revised to refine the product results of the upper passing learning model through a basic movement approach in volleyball games and can be implemented in general.

**RESULTS AND DISCUSSION**  
**Result**

The evaluation results are in the form of scores for the criteria for learning objectives, learning facilities, learning implementation, and the upper passing learning model using a basic movement approach using the Guttman scale of 1–0. The scores and criteria used are as follows: (1) score 0 if the answer given is "Not Appropriate"; (2) score 1 if the answer given is "Appropriate". Below, the researcher presents the results of data from experts involved in this research.

**Table 5.**  
Expert test results on the top passing pattern model

No.	Model	Suitability	Information
1	Top passing in pairs	Appropriate	Worthy/Valid
2	Passing up while skipping	Appropriate	Worthy/Valid
3	Top passing steps to the right and the left	Appropriate	Worthy/Valid
4	Passing over stepping diagonally	Appropriate	Worthy/Valid
5	Top passing jumps	Appropriate	Worthy/Valid
6	Pass over the half circle and clap your hands	Appropriate	Worthy/Valid
7	Passing over circles and clapping	Appropriate	Worthy/Valid
8	Passing over the triangle is a straight ball movement	Appropriate	Worthy/Valid
9	Passing the ball to the side	Appropriate	Worthy/Valid
10	Passing over the rectangle with a criss-cross ball movement	Appropriate	Worthy/Valid

**Table 6.**  
Results of descriptive data from large-scale volleyball passing trials

Statistics	Pretest	Posttest
N	30	30
Mean	17.5000	26.0333
Std. Deviation	1.77628	1.75152
Variance	3.155	3.068
Range	6.00	6.00
Minimum	15.00	23.00
Maximum	21.00	29.00
Sum	525.00	781.00

**Table 7.**  
Pretest frequency distribution of large-scale volleyball passing trials data

No.	Class Interval	Frequency	Percent	Category
1.	28 – 33	0	0.00	Very Good
2.	21 – 27	2	6.67	Good
3.	14 – 20	28	93.33	Medium
4.	07 – 13	0	0.00	Less
5.	01 – 06	0	0.00	Very Less
<b>Amount</b>		<b>30</b>	<b>100</b>	<b>-</b>

**Table 8.**  
Frequency distribution of the final test (post-test) of large-scale volleyball passing trial data

No.	Class Interval	Frequency	Percent	Category
1.	28 – 33	7	23.33	Very Good
2.	21 – 27	23	76.67	Good
3.	14 – 20	0	0.0	Medium
4.	07 – 13	0	0.0	Less
5.	01 – 06	0	0.0	Very Less
<b>Amount</b>		<b>30</b>	<b>100</b>	<b>-</b>

**Table 9.**  
T-test results of large-scale volleyball passing trials

	Mean	Range	Stdv	r	p-value	t	df	p-value
Pretest	17.5000	8.5333	1.77628	0.794	0.000	16.473	29	0.000
Posttest	26.0333		1.75152					



**Table 10.**

Results of descriptive data on the effectiveness of the upper passing learning model through the basic movement approach

Statistics	Pretest	Posttest
N	30	30
Mean	19.2000	22.8000
Std. Deviation	2.26518	2.13993
Variance	5.131	4.579
Range	8.00	8.00
Minimum	15.00	19.00
Maximum	23.00	27.00
Sum	576.00	684.00

**Table 11.**

Data normality test results

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	0.205	30	0.002	0.909	30	0.014

**Table 12.**

Homogeneity Test

Levena (F)	df 1	df 2	p-value	F	p-value
2.379	6	21	0.065	5.161	0.001

**Table 13.**

Frequency distribution of the initial test (pretest) test data on the effectiveness of passing in volleyball

No.	Class Interval	Frequency	Percent	Category
1.	25 – 30	0	0.00	Very Good
2.	19 – 24	8	6.67	Good
3.	13 – 18	22	93.33	Medium
4.	07 – 12	0	0.00	Less
5.	01 – 06	0	0.00	Very Less
<b>Amount</b>		<b>30</b>	<b>100</b>	<b>-</b>

**Table 14.**

Frequency distribution of the final test (posttest) data on the effectiveness of volleyball passing

No.	Class Interval	Frequency	Percent	Category
1.	25 – 30	6	20.00%	Very Good
2.	19 – 24	24	80.00%	Good
3.	13 – 18	0	0.00%	Medium
4.	07 – 12	0	0.00%	Less
5.	01 – 06	0	0.00%	Very Less
<b>Amount</b>		<b>30</b>	<b>100%</b>	<b>-</b>

**Table 15.**

Results of testing the effectiveness of the upper passing learning model using a basic movement approach

	Mean	Range	Stdv	r	p-value	t	df	p-value
Pretest	19.20		2.26518					
Posttest	22.80	3.60	2.13993	0.706	0.000	11.641	29	0.000

## Discussion

The final results of developing a top passing learning model using a basic movement approach after research show that:

1. Physical education teachers have taught several techniques for playing volleyball, but the upper passing learning model through a basic movement approach has not been implemented.
2. Top passing technique material is given to students before playing games or games developed by each student or class.
3. The facilities used in learning volleyball currently are still in the form of nets and volleyball.
4. Physical education teachers still use a monotonous passing model for volleyball only by learning in groups or directly with games.
5. Students are enthusiastic about learning top passing techniques, but because the Less learning model is varied, students quickly get bored just playing in the field environment.
6. Physical education teachers have made maximum efforts to provide material on volleyball passing so that students are more interested in learning volleyball passing, however, due to the lack of existing learning model resources, physical education teachers have difficulty adding references for teaching volleyball passing movements that will be provided.
7. In general, physical education teachers need a variety of varied upper passing models, especially with the inclusion of models that are adapted from simple movements to complex movements.

Overall, the development of the upper passing learning model through a basic movement approach shows very good criteria and can be used in the learning process. Based on the results of large group trials as a whole, the model developed shows Good criteria and can be used in the learning and practice process.

The upper passing learning model through the basic movement approach developed by researchers has the following advantages:

1. The upper passing learning model using a basic movement approach is structured with simple to complex movement designs.
2. The frequency and intensity of movement in each learning model are adjusted to the characteristics of the students.
3. Presents a top passing learning model using a basic movement approach that is active, effective, and efficient and can be done by all students who have received basic volleyball technique material.
4. Students are more active in the learning process.
5. Students can become more proficient by repeating the basic movements of passing volleyball.

## CONCLUSION

Based on the data that has been collected from research results consisting of expert variables, small group trials, and large group trials as well as a discussion of research results, the researcher can conclude that:

1. The results of the needs analysis show that the upper passing learning model through a basic movement approach is needed by physical education teachers and students. Based on the 10 development models for learning top passing through a



basic movement approach compiled by researchers, the results from experts on the use of all these development models can be categorized as feasible and suitable for use in volleyball passing techniques.

2. The effectiveness of the model developed is declared effective for use. Based on the results of the comparison between the pretest and post-test scores given to students, the  $t_0$  result was 11,641, and the significance figure or  $p$ -value =  $0.000 < 0.05$ . So it can be concluded that there is a difference between the volleyball passing results of students at SMA Negeri 4 Barru after being given the upper passing learning model using a basic movement approach.

## REFERENCES

- Arifin, S. (2017). Peran Guru Pendidikan Jasmani Dalam Pembentukan Pendidikan Karakter Peserta Didik. *Multilateral Jurnal Pendidikan Jasmani dan Olahraga*, 16(1), 78–92. <https://doi.org/10.20527/multilateral.v16i1.3666>
- Bangun, & Yunis, S. (2016). Peran Pendidikan Jasmani Dan Olahraga Pada Lembaga Pendidikan di Indonesia. *Publikasi Pendidikan*, 6(3). <https://doi.org/10.26858/publikan.v6i3.2270>
- Bismar, A. R., & Sahabuddin, S. (2019). Studi pelaksanaan evaluasi pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan pada Siswa SMP di Makassar. *Seminar Nasional LP2M UNM*, 0(0). <https://www.ojs.unm.ac.id/semnaslemlit/article/view/8250>
- Clarita, N., Raibowo, S., Prabowo, A., & Nopiyanto, Y. E. (2021). Peran guru pendidikan jasmani dalam pelaksanaan sekolah siaga bencana pada kawasan pesisir pantai. *Altius: Jurnal Ilmu Olahraga dan Kesehatan*, 10(2), 143–154. <https://doi.org/10.36706/altius.v10i2.14718>
- Firmana, I. (2017). Pengaruh Modifikasi Media Pembelajaran Terhadap Hasil Pembelajaran Shooting Dalam Permainan Sepakbola. *JUARA: Jurnal Olahraga*, 2(2), 73. <https://doi.org/10.33222/juara.v2i2.36>
- Haris, F., Taufan, J., & Nelson, S. (2021). Peran Guru Olahraga bagi Perkembangan Pendidikan Jasmani Adaptif di Sekolah Luar Biasa. *Jurnal Basicedu*, 5(5), 524–532. <https://doi.org/https://doi.org/10.31004/basicedu.v5i5.1469>
- Haris, I. N. (2018). Model pembelajaran peer teaching dalam pembelajaran pendidikan jasmani. *Biomatika: Jurnal ilmiah fakultas keguruan dan ilmu pendidikan*, 4(1), 1–8. [www.ejournal.unsub.ac.id/index.php/FKIP/article/download/191/170](http://www.ejournal.unsub.ac.id/index.php/FKIP/article/download/191/170)
- Herlina, H., & Suherman, M. (2020). Potensi Pembelajaran Pendidikan Jasmani Olahraga Dan Kesehatan (PJOK) Di Tengah Pandemi Corona Virus Disease (Covid)-19 Di Sekolah Dasar. *Tadulako Journal Sport Sciences And Physical Education*, 8(1), 1–7. <http://jurnal.untad.ac.id/jurnal/index.php/PJKR/article/view/16186>
- Kusuma, R. A., & Winarno, M. . (2018). Efektifitas Waktu Pembelajaran Pendidikan Jasmani Olahraga dan Kesehatan di SMP. *Gelanggan Pendidikan Jasmani Indonesia*, 2(2), 135–141. <https://doi.org/http://dx.doi.org/10.17977/um040v2i2p135-141>
- Lengkana, A. S., & Sofa, N. S. N. (2017). Kebijakan Pendidikan Jasmani dalam Pendidikan. *Jurnal Olahraga*, 3(1), 1–12. <https://doi.org/https://doi.org/10.37742/jo.v3i1.67>
- Muslim, Mahyuddin, R., Bismar, A. R., & Sahabuddin. (2023). Analisis Kematangan Psikologi

- dan Tingkat VO2Max Atlet Kabaddi UNM dalam Menghadapi Pertandingan Kejurnas Kabaddi Indonesia. *Jurnal Penelitian Kesehatan, Suara Forikes*, 14(1), 97–100. <https://doi.org/http://dx.doi.org/10.33846/sf14120>
- Nailufar, N., & Hartono, M. (2022). Manajemen Pembinaan Prestasi Klub Bola Voli Mitra Kencana Semarang Tahun 2021. *Indonesian Journal for Physical Education and Sport*, 3(1), 311–317. <https://doi.org/10.15294/inapes.v3i1.48030>
- Pratama, B. A. (2020). Model Pembelajaran Kooperatif STAD Untuk Meningkatkan Hasil Belajar Servis Atas Permainan Bolavoli. *JCE SPORTS: Journal Coaching Education Sport*, 1(2), 127–132. <https://doi.org/https://doi.org/10.31599/jces.v1i2.368>
- Raibowo, S., Nopiyanto, Y. E., & Muna, M. K. (2019). Pemahaman Guru PJOK Tentang Standar Kompetensi Profesional. *Journal Of Sport Education (JOPE)*, 2(1). <https://doi.org/10.31258/jope.2.1.10-15>
- Rohmansyah, N. A. (2017). Pendidikan Jasmani dan Olahraga Sebagai Media Pengembangan Karakter Siswa. *Jurnal PENJAKORA*, 4(1), 38–50. <https://doi.org/https://doi.org/10.23887/penjakora.v4i1.11752>
- Sahabuddin. (2022). Idealisme Pendidikan Jasmani, Ilmu Keolahragaan an Kesehatan Masyarakat (Terapi Massage Untuk Menjaga Kondisi Kesehatan). In D. Adi Wijayanto (Ed.), *Akademia Pustaka* (Cetakan Pe). Akademia Pustaka. <https://edeposit.perpusnas.go.id/collection/idealisme-pendidikan-jasmani-ilmu-keolahragaan-dan-kesehatan-masyarakat-sumber-elektronis/116360>
- Sahabuddin, Hakim, H., & Bismar, A. R. (2020). Analisis Kinerja Guru Pendidikan Jasmani Olahraga dan Kesehatan Terhadap Motor Ability dan Hasil Belajar Pada Siswa SD Negeri di Kabupaten Pinrang. *JCESPORT, Ubharajaya*, 1(1), 35–48. <https://doi.org/https://doi.org/10.31599/jces.v1i1.84>
- Sahabuddin, Herman, & Windiana, N. (2023). Management of Volleyball Extracurricular Sports Coaching at High School. *Indonesian Journal of Sport Management*, 3(1), 121–127. <https://doi.org/https://doi.org/10.31949/ijsm.v3i1.4168>
- Sahabuddin, Sudirman, Latuheru, R. V., & Kamadi, L. (2022). Minat Murid Pada Kegiatan Ekstrakurikuler Olahraga Di SD Negeri Sudirman 1 Kota Makassar. *Phinisi Integration Review*, 5(3), 893–902. <https://doi.org/doi.org/10.26858/pir.v5i3.40392>
- Saitya, I. (2022). Pentingnya Perencanaan Pembelajaran Pada Pelajaran Pendidikan Jasmani Olahraga dan Kesehatan. *PIOR: Jurnal Pendidikan Olahraga*, 1(1), 9–13. <http://jurnal.habi.ac.id/index.php/Pior/article/view/53>
- Saleh, M. S., Syahrudin, Saleh, M. S., Azis, I., & Sahabuddin. (2023). *Media Pembelajaran* (M. S. Saleh, Syahrudin, M. S. Saleh, I. Azis, & Sahabuddin (ed.); Pertama). PENERBIT CV. EUREKA MEDIA AKSARA. <https://repository.penerbiteureka.com/publications/563021/media-pembelajaran>
- Satyamardika, B., & Prihanto, J. (2015). Peranan Guru Pendidikan Jasmani Terhadap Pembelajaran Pendidikan Kesehatan Di Sekolah Menengah Pertama Negeri se-Kecamatan Gresik. *Jurnal Pendidikan Olahraga dan Kesehatan*, 3(1), 46–49. <https://ejournal.unesa.ac.id/index.php/jurnal-pendidikan-jasmani/article/view/13483>
- Setiawan, W., & Wisnu, H. (2019). Survei Peran Guru Pendidikan Jasmani Kesehatan Dan Rekreasi Terhadap Terlaksananya Pendidikan Kesehatan Di SMP Se- Kecamatan

- Lakarsantri Kota Surabaya. *Jurnal Pendidikan Olahraga dan Kesehatan*, 7(2), 267–271.  
<https://jurnalmahasiswa.unesa.ac.id/index.php/9/article/view/27489>
- Tumaloto, E. H. (2022). Pembelajaran Pendidikan Jasmani, Olahraga Dan Kesehatan Selama Pandemi Covid 19. *Jambura Health and Sport Journal*, 4(1), 60–68.  
<https://doi.org/10.37311/jhsj.v4i1.13602>
- Utami, I., Burhanuddin, S., & Sahabuddin. (2022). Implementation of a Scientific Approach Using Problem-Based Learning (PBL) Models to Improve Learning Outcomes of Overhand Pass In Volleyball Game. *COMPETITOR: Jurnal Pendidikan Kepeleatihan Olahraga*, 14(1), 115–134. <https://doi.org/https://doi.org/10.26858/cjpko.v14i1.32521>
- Wijaya, M. A., Permana, W. G. G., & Adi, I. P. P. (2022). Kedisiplinan Atlet Bola Voli Dan Bola Basket Pada Masa Adaptasi Kebiasaan Baru Di Kabupaten Buleleng Bali. *JSES: Journal of Sport and Exercise Science*, 5(1), 35–43.  
<https://doi.org/10.26740/jses.v5n1.p35-43>