Development of a Lower Passing Model for Volleyball Based Umbrella Learning Approach

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Article Info	Abstract
	The research aimed to develop a volleyball lower passing model based on an umbrella learning approach. The method used was research and development. This study was conducted in small-scale and large-scale trials. There were performance tests, written tests, and questionnaires to determine the effectiveness of models developed against students' cognitive, psychomotor, and affective abilities. The study subjects used were 20 respondents for small-scale trials and 40 respondents for large-scale trials at the Faculty of Sport Science. The results of the effectiveness test model in the small group test obtained psychomotor 0.75, cognitive results of 0.73 with a high category obtained with *n*-gain and affective analysis were assessed with a Guttman scale of 84.37% and belonged to the high category. The results of large-scale psychomotor trials of 0.74, cognitive results of 0.76 high categories obtained with *n*-gain and affective analysis were assessed with a Guttman scale of 87.57% and belonged to the high category. Based on expert assessments of learning, small-scale trials, and large-scale trials, this umbrella learning model is declared effective in improving students' cognitive, psychomotor, and affective abilities in the Faculty of Sport Science.

Introduction

Physical education is an essential component of the total educational system to improve health, physical fitness, critical thinking abilities, emotional stability, social skills, reasoning, and moral action through physical activity and exercise. Physical education is an educational process that aims to help students improve their motor, social, and emotional skills through physical activity, sports, and games (Fitriady, Sugiyanto, & Sugiarto, 2020). Physical education is a learning method through the physical exercise that aims to increase physical fitness, motor skills, knowledge, and behavior to live a healthy and active lifestyle and encourage sportsmanship and emotional intelligence (Samsudin, Setiawan, Taufik, & Solahuddin, 2021). Physical education aims to develop the comprehensive individual's affective, cognitive, and psychomotor aspects (Akhmad & Mesnan, 2019). Physical education is an essential component of general education since it may help people develop their personalities (Supriadi & The, 2022). Physical education involves physical exercise that helps a person develop physically, cognitively, and emotionally (Gultom, Baharuddin, Ampera, Fibriasari, & Sembiring, 2021).

Sujito (2020) stated that Physical education, exercise, and health are mediums to encourage physical growth, psychic development, motor skills, knowledge, and reasoning. As the intensification of education organizers as a process of human development that lasts a lifetime, physical education is vital because it can provide opportunities for students to be directly involved in various learning experiences through physical activities, play, and sports are carried out systematically.

Exercise is something that the body needs. Exercise may train togetherness, make individuals happy, and help a team establish unity and be good for the body (Verawati, Dewi, & Ritonga, 2021). Physical education is one of the intentional efforts to create an environment that can affect learners' potential and lead to positive behavior through physical activity (Akhmad & Mesnan, 2019; Atilgan & Tukel, 2021 ; Karagöz, Dinç, & Kaya, 2022; Ye et al., 2021). The implementation of physical education and sports is a long-term investment to improve the quality of human resources (Irwanto, 2016). The process of physical education is a pattern of achieving goals using physical activities, while the physical goals to be achieved include goals in terms of cognitive, affective, and psychomotor. Cognitive functions include intellectual functions such as comprehension, knowledge, and problem-solving abilities. Affective refers to qualities that deal with feelings, morality, and emotions (the ability to receive, respond, and believe). Aspects of motor skills, such as gestures and verbal behavior, are psychomotor. Physical education requires a more in-depth evaluation, both in terms of the pattern of goal accomplishment and the goals to be accomplished. Later, the goals of physical education truly meet the targets. Physical education is meant to teach a variety of fundamental movement abilities, game methods and strategies, internalization of values (sportsmanship, honesty, cooperation), and good living habits as part of the learning process (Mustaghfirin & Sukiyandari, 2020). The developed principles of physical education learning must stimulate the creation, development, and improvement of cognitive, emotional, and psychomotor aspects. According to the definition of physical education, which is "education through physical activity," mastery of motor skills is one of the most important goals to achieve during the process (Gustian, Supriatna, & Purnomo, 2019). The application of education in learning, particularly in sports education and physical education, in both academic units at the school level, is still seen to need work to promote the achievement of learning goals (Marsiyem, Destriana, & Pratama, 2018). Physical education, sports, and health are taught at the elementary, junior high, and high school levels of higher education (Dewi & Verawati, 2021). Physical education lessons on sports and health in schools are generally delivered in games and sports (Halik, 2016). One of the subjects taught in physical education is volleyball. If a teacher has less developed creativity in volleyball learning, students are less interested in following the learning. A teacher must carry out tasks and adopt learning models to help students solve their problems and achieve educational goals, especially at the bottom and top of the game section (Fitriani, Widiastuti, & Hernawan, 2021). In addition to developing the physical aspects of volleyball, learning is also expected to developmental aspects such as learning motivation, confidence, courage, discipline, tolerance, and cooperation, which is a social aspect that is also expected to change in a positive direction (Rudi & Arhesa, 2020).

The standard of competence of volleyball basic skills subject is that students can master and practice essential skills in volleyball game well and correctly, namely 1) students can master and practice basic movements in the volleyball game, 2) students can master and practice basic techniques in the volleyball game (including passing

techniques under receiving *float service*, *top passing* techniques, *smash* techniques, *block* techniques, *underhand service* techniques, and *tennis service* techniques). Students' success in following the learning can be seen from the level of understanding and increasing student learning outcomes through the standard of competence of the subjects that have been established through the learning process. It follows the theory by Dewi, Supriadi, Hardinoto, & Gustira (2020) that defined learning design theory as a detailed guide on how to develop and help learners learn. This learning design theory framework contains three variables, namely conditions, treatments (methods), and results.

The Urgency of the Learning Methods that have been used

The learning method that has been used in this course was a learning model that starts with *warming up*, *drilling* (exercise), and *closing*. This learning method focused on the process of delivering material verbally from a lecturer to a group of students to help students master the subject matter optimally. The obstacles faced were related to treatment (organizing strategies, delivery strategies, and management strategies). If a lecturer can apply the treatment, the learning method will encourage students to think creatively. The treatment here was the delivery of learning content. If a teacher can develop creativity in volleyball learning, students are less interested in learning because a teacher must carry out tasks and adopt learning models that can help student problems and achieve educational goals, especially at the lower and top of the passing sections of the game (Fitriani et al., 2021). Strategy management strategies for organizing lesson content are called "structural strategies," which refer to ways to sequence and synthesize pertinent facts, concepts, procedures, and principles. Organizing learning, in particular, is a significant phase in the learning plan. Volleyball is one of the sports that includes mandatory material in physical education subjects that must be taught in college. Student involvement in volleyball learning programs is expected to help optimize development and growth while improving physical fitness (Cahyani & Mustadi, 2021).

Many students are still less active in learning physical education, sports, and health in the actual learning process, especially the Volleyball material (Fitriady et al., 2020). Whereas in learning to teach the volleyball game, success is critical because, without the success of the learning process to teach the volleyball game, it is impossible to master the basic techniques of the game of volleyball well (Sd & Lebong, 2019). So far, the result of volleyball learning is *Teacher Central Learning* (centered on lecturers), so the role of students was not too active in it. It is a problem that must be solved. Moreover, the learning model is done by *warming up*, *drilling* (exercise), and *closing*. In addition, learning must also be effective, efficient, and attractive. Effective learning outcomes allow students to learn specific skills, science, and attitudes that make students happy. Effective learning fosters students' learning something useful, such as facts, skills, concept values, how to live in harmony with others, or something with the desired learning outcome. Student learning efficiency factors need to be comprehensively analyzed because learning activities are not in a "vacuum" atmosphere. Students are the main learning subjects, in line with the modern learning paradigm where learners become centers of learning (student-centered). While on the institutional side, they act as a provider of learning resources and a creator of conditions conducive to the occurrence of learning. Suganda and Suharjana (2013) explained that the lack of knowledge and limitations of references or reading sources about how teachers teach the suitable learning models and

methods to support the achievement of desired learning outcomes means that there must be breakthroughs that develop learning models. Veldman, Jones, Santos, Sousa-Sá, and Okely (2018) showed that the volleyball lower passing learning model based on scientific approaches showed significant cognitive, affective, and psychomotor outcomes. Researchers were trying to create a learning model designed to develop students' abilities in the learning process that is expected to improve PJOK learning abilities, especially in basic volleyball skills teaching materials. Researchers designed the learning model to develop students' potential from cognitive, affective, and motor skills (psychomotor) aspects and in learning processes where students are less encouraged to develop thinking skills.

The use of various learning models that vary and are adapted to the characteristics of students and teaching materials themselves needs to be applied and developed. The lack of PJOK learning models, especially for volleyball, is still the biggest problem that lecturers must solve. Therefore, researchers designed *umbrella learning models* with three stages: Grip, Rod, and Roof. The Grip consists of a structure (*Showing, Matter, Warming Up*), the Rod consists of a structure (*Exercise, Colling Down*), and the roof consists of a structure (*Analysis, Evaluation*). This learning model is designed to develop students' abilities in the volleyball learning process, which aims to develop students' potential from cognitive, affective, and skill aspects (psychomotor).

Method

This study used research development methods. Research and development methods were used to produce a particular product and test its effectiveness. A development model was a descriptive model showing the steps that must be followed to produce a product. In this study, using the development model according to Sugiyono (2014), the steps in R & D research, namely (1) Needs analysis, (2) Initial model, (3) Validation of the initial model, (4) Expert Validation Description, (5) Initial design revision, (6) Product trial, (7) Product revision, (8) Usage testing, (9) product revision, and (10) final product. The subjects in this development research were divided into two groups. Small-scale group trials were conducted on 20 students from the physical education, health, and recreation in sports science faculties. Large-scale group trials were conducted on 40 sports coaching education students from the Faculty of Sport Science. Research instruments in the form of five questions of description for the cognitive realm, ten questionnaires for the affective realms, and performance tests to test students' psychomotor. The data results were validated using *n*-gain for psychomotor and cognitive tests and Guttman scale analysis for the affective realms. The steps in the R & D research in the study that the researcher designed can be seen in Figure 1 as follows:
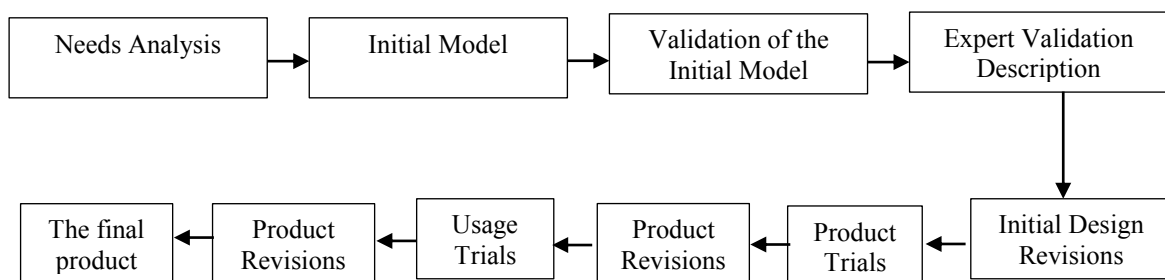
Needs Analysis → Initial Model → Validation of the Initial Model → Expert Validation Description

The final product ← Product Revisions ← Usage Trials ← Product Revisions ← Product Trials ← Initial Design Revisions

Figure 1. Development Steps

Results

The research findings obtained in the field are then described so that a formulation of the results can be made. The following will be explained the results of the analysis of needs obtained by researchers through questionnaires distributed to students that concerned students' ability in the cognitive, psychomotor, and affective aspects of lower passing is still minimal or more minor. Thus, the ability obtained by students to learn those skills is far from what is expected. Then, the researcher conducted a preliminary study using in-depth interviews with lecturers and students in the Faculty of Sport Science and surveyed to find solutions to the problem of lower passing. Researchers have also made observations of facilities and infrastructure in supporting the learning of lower passing skills in volleyball games. These observations found that the ball and net were suitable for use. Open fields also existed and were in good condition and had flat surfaces. Hence, from the results of these observations, researchers make an exciting learning process for students to ease an understanding of the material skills in lower passing volleyball. This study developed learning model products with an umbrella learning approach.

The learning activities on the model were:

1) Students observed learning videos.

2) Students tried to make lower passing.

3) Students did *Q & A* with lecturers about lower passing.

Validation is conducted by providing an initial product draft of the development of a lower-passing model of volleyball games based on an umbrella learning approach to students of the faculty of sports science, accompanied by an evaluation sheet and revision by one learning expert and one material expert. Based on the results of filling out questionnaires on the draft model developed by lecturers of the faculty of sports science, an average of 3.7 was obtained. In contrast, psychomotor experts obtained an average of 3.8, falling into the "VALID" assessment category. The needs analysis results through the questionnaire distributed can be seen in Table 1.

Table 1. Average Values and Expert Validation Questionnaire Value Categories

Average Value	Category	Rating Category
4.21-5.00	Very Practical	Very Valid
3.41-4.20	Practical	Valid
2.61-3.40	Quite Practical	Valid Enough
1.81-2.60	Impractical	Invalid
1.00-1.80	Very Impractical	Very Invalid

Based on Table 1, it can be concluded that the draft model of the lower passing volleyball game based on the umbrella learning approach in students of the faculty of sports science deserves to be used in lower passing volleyball learning.

The revised product continued by testing students divided into small and large groups. The small group field

trial was conducted using a research sample of 20 health and recreation physical education students. Field trial data collected using assessment evaluation covers the realm (cognitive, psychomotor, and affective) (see Table 2).

Table 2. Initial Product Revision

No	Revised Section	Improvement Suggestions	Description
1	Conformity with basic competencies in PJOK learning for Students	Adjusted to the student learning time used	Limited learning time needs to be addressed by a lecturer
2	Clarity of game instructions	The instructions should be more detailed	Detailed and clear game instructions make it easy for students to practice it
3	Accuracy in choosing the form or model of learning the game of volleyball lower passing for students	Written what learning model is used	The model's suitability greatly affects the success of learning
4	Conformity of lower passing volleyball learning model for students	Added according to the characteristics	Because the education delivered by teachers without having a theory in practice does not work

Based on the evaluation analysis of assessments in Table 3, results were obtained from the cognitive, psychomotor, and affective fields. Students of the faculty of sports science in small group trials obtained psychomotor scores of 0.75, cognitive scores of 0.73, and high categories were obtained with *n*-gain. Affective analysis was assessed with a Guttman scale of 84.37% and included a high category. Based on the criteria that have been determined, the model of volleyball learning based on the umbrella learning approach in students of the faculty of sports science has a significant effect on the psychomotor, cognitive, and affective abilities of students of the faculty of sports science. Field trials were conducted in large groups using a research sample of 40 students from the sports coaching education study program of the faculty of sports science. Field trial data collected using assessment evaluation covers the realms of cognitive, affective, and psychomotor.

Table 3. Data Recapitulation Percentage of Small Group Trial Success

Realms of Knowledge	Analysis Method	Analysis results	Category
Psychomotor	*n-gain*	0.75	High
Cognitive	*n-gain*	0.73	High
Affective	Guttman Scale	84.37%	High

Based on data obtained from large group trial questionnaires in Table 4, psychomotor results were obtained of 0.74, cognitive results of 0.76, belonged to high categories obtained with *n*-gain, and affective analysis was assessed on a Guttman scale of 87.57% and belonged to the high category. Based on the criteria that have been

determined, the model of volleyball learning based on the umbrella learning approach in students of the faculty of sports science has greatly influenced student achievement in cognitive, psychomotor, and effectiveness.

Table 4. Data Recapitulation Percentage of Large Group Trial Success

Realms of Knowledge	Analysis Method	Analysis results	Category
Psychomotor	*n-gain*	0.74	High
Cognitive	*n-gain*	0.76	High
Affective	Guttman Scale	87.57%	High

Discussion

The learning process is essentially a pedagogical interaction between teachers, students, materials, and their environment (Arni & Indrayana, 2021). Mursid, Saragih, and Hartono (2022) explain that learning is a thought process. Knowledge does not come from the outside but is formed by the individual in a cognitive structure. The learning process becomes grouped into three types, *i.e.*, teaching thinking, teaching to think, and teaching about thinking. According to Pratama, Hartati, and Waluyo (2020), the learning process that implements a scientific approach will touch three domains, *i.e.*, attitude (affective), knowledge (cognitive), and skills (psychomotor). The results of learning evaluations that include cognitive, psychomotor, and affective aspects of this study are described in Ariani's research (2017), which states that cognitive is a thought process, namely the ability of individuals to connect, assess, and consider an incident or event.

Students' cognitive abilities were measured from written test results by answering five questions about lower passing. In the small group test, cognitive results were tested with *N*-gain results obtained from the cognitive, psychomotor, and affective fields. Students of the faculty of sports science in small group trials obtained cognitive results of 0.73 that belonged to high categories obtained with *n-gain* and affective analysis assessed with a Guttman scale of 84.37%, which included having achieved the expected value. In the large group, the test obtained cognitive results of 0.76 that belonged to high categories from 40 students of the faculty of sports science. As a research subject, 83.33% of students had achieved their grades. The use of this scientific approach refers to the results of research conducted by Azizah and Wahyudi (2018), entitled "Application of Scientific-Based Think Talk Write Model to Improve Learning Outcomes of Togetherness." Themes from the results of data analysis obtained show the results of the improvement of student learning outcomes due to activities during learning. The percentage of learning outcomes in cycle I charged Indonesian by 78.95% and in cycle II by 100%. It obtained cycle I by 81.6% and cycle II by 92%. Affective aspects are related to attitudes and values (Pratama et al., 2020). This type of effective learning outcome appears in various behaviors such as attention to lessons, discipline, learning motivation, respect for teachers and classmates, learning habits, and social relationships.

The affective aspect of the study was assessed from the results of a student motivation questionnaire containing ten questions using Guttman with answers ranging from "yes" or "no." The results of a small group test obtained a student motivation level of 84.37% and included a high category, while the large group test obtained 87.57%

and included a high category. In the KBBI, "psychomotor" is defined as a physical activity related to mental and psychological processes. Psychomotor is concerned with actions and skills, such as running, jumping, and painting (Haryadi & Aripin, 2015). Muzaffar (2015) states that physical education will aid in the achievement of goals such as social development, cooperation, the impression of a pleasant personality, decision making, creativity, motoric skills, physical freshness, and understanding of the leading human movement toward sports achievement.

Based on these results, research with models can improve student learning outcomes. Relevant research conducted by Marsiyem *et al.* (2018) explained that the results of the study with the title "Development of the lower service-learning model through several stages," including the validation of expert stage 2, were assessed by 80% of PJOK experts and 81.67% of volleyball game experts and that the product was said to be "feasible." Large-scale trials were conducted in three classes with several respondents. As many as 72 students obtained results, *i.e.*, 90.74% of students were in a good category, so this product was declared "feasible." The findings in this study were the resulting model of learning services under the volleyball game used by junior high school students in class VII in the form of guidebooks. The implementation of this research is concerned with the product expected to be used by physical education, sports, and health teachers as a material to teach service in the volleyball game. Sujito (2020), with the title of *Lower Passing Volleyball Learning Model Development*, explained that the research results mentioned the results of the evaluation of the three experts. These consisted of two volleyball experts and one learning expert, 90.22%. Meanwhile, the evaluation results of the stage I test (small-group test) and stage II test (large-group test) were 83.33%, so this product can be used to develop a lower-passing volleyball learning model in State Junior High School 1, Rogojampi Banyuwangi. The research conclusion was based on data collected from volleyball experts, learning experts, and students of State Junior High School 1 Rogojampi Banyuwangi during phase I and II trials. If we pay attention to the results of the data analysis that has been done, then all learning models are feasible and can be used. Based on the research results conducted by Suganda and Suharjana (2013), it can be concluded that the volleyball learning model in upper-class elementary school students consists of four game models, namely (a) learning lower passing techniques; (b) learning upper-passing techniques; (c) learning lower service techniques, and (d) learning upper passing techniques. The volleyball learning model is adapted to the basic competency and standards in the curriculum, adapted to the growth and development of elementary school children, and adjusted to the security level of school activities' implementation. The volleyball learning model is also worth using for big ball learning, namely volleyball material.

The feasibility test is conducted based on the assessment of material experts. The expert assessment of the material shows that the compiled volleyball learning model deserves to be used as a large ball of learning, namely volleyball material for upper elementary students. Based on the research results conducted by Ahmad (Muzaffar, 2015) with the title "Learning Model (Passing) Over Volleyball With a Pattern of Playing Approach in Physical Education." Based on the research results presented, it can generally be concluded that there is an increase in student learning outcomes through the upper learning model (passing) with a pattern of playing approach in physical education for students of Class IV, Elementary School 150 in Jambi City. Ajayati's (2017) research with the title "The Learning Model of Forearm Passing in Volleyball for Junior High School" obtained

the results. In developing this research model, products were produced in lower volleyball passing learning models. Based on data collected from the study consisting of variable experts, small group trials, and large group testing and discussion of the research results, researchers can conclude that 1) the needs analysis results show that physical education teachers need the lower passing learning model in the volleyball game. Based on the 23 development of lower-passing learning models by volleyball researchers, the validation results of three experts obtained a score of 58, producing a maximum score of 69, or with an average percentage of model use of 84.06%. Therefore, overall, a model used in this development can be categorized as feasible and suitable for the development of derived model learning. The small group of criteria obtained in the ease of lower passing learning model in volleyball games obtained 77.01% and vice versa, good. The attractiveness aspect of the value obtained was 88.95%, and vice versa, good. In a large group of early tests and final graduation tests played under the volleyball game, there was an average difference of 21.06, the average of the initial test, to 26.26 in the final test. Budiarti, Hanif, and Samsudin (2019) state that the development of this volleyball smash learning model was in the form of 25 questions that have been recorded. Learning designs and objectives follow the core of basic competencies and skills in junior high school that can help teachers carry out the learning process effectively and efficiently. The learning model developed improved learning outcomes and was effectively applied to elementary school students with significance values of t-count= 15.611, DB 32, and p-value = 0.00 < 0.05. Then, Veldman et al. (2018) stated that the research results on the development of lower passing learning models of volleyball games based on scientific approaches in students of SMK Negeri 1 Tanjung Batu Ogan Ilir Regency could be concluded to be effective in improving cognitive, psychomotor, and affective skills in lower passing volleyball games for students of SMK Negeri 1 Tanjung Batu Ogan Ilir Regency. According to Mustaghfirin and Sukiyandari (2020), based on the results and discussion above, it can be concluded that the products of chain volleyball games are worth using in the study of physical education subjects, sports, and lower passing material health. Sd and Lebong's (2019) research aimed to improve the learning process for teaching volleyball games through learning methods, games, and competitions among the students of Class V at the State Elementary School 14, South Lebong. This research was conducted during the study hours of PJOK Class V at the State Elementary School 14, South Lebong.

The research method used was *Class Action Research* (PTK). This research is objective, as is with the research subjects of students in Class V at the State Elementary School 14, South Lebong, with 15 students. The study was conducted in two cycles, each consisting of four stages, namely (1) introduction, (2) core activities, (3) closing, and (4) reflection. The data type collected was qualitative data in observations of teacher and student activities during the learning process. Based on the observational results of the learning process to teach volleyball games through the learning methods of games and competition in Class V of the State Elementary School 14, South Lebong, it obtained that in pre-cycle, cycle I, and cycle II, there was an increase in the teaching and learning process in the learning of volleyball games to students. Specifically, in cycle I, the value of observation of the teaching and learning process to students was only 11 points, or if the percentage reached 55% of the overall assessment in the teaching and learning process. Then, in cycle II, the value of observation of the teaching and learning process to students increased to 17 points, or if the percentage increased to 85%. Thus, at the stage of cycle II, it achieves results close to perfection. According to Samsudin et al. (2021), with the title "volleyball fundamental movement learning model in primary school," it can be concluded that the product in

the form of a basic volleyball learning model is designed based on the basic movements of volleyball with the need for in-depth analysis, theoretical study, and planning.

The design validation results conducted in this research and development resulted in 63 game-based models. The basic movement model of volleyball combined with a complex approach game was perfect for elementary school students in volleyball learning. The basic movement model of volleyball was in a book to help teachers use or apply teaching materials and increase their variety and effectiveness in the ongoing teaching and learning process. Learning the model empirically proved to be effectively applied in elementary schools. Mustaghfirin and Sukiyandari (2020), concerning the development results of basic volleyball motion learning modules for SDN 16 Sungai Raya Kubu Raya Regency students. It can be concluded that the results of the development of the module can be used as a reference for learning materials to facilitate the mastery of basic motion materials in volleyball games properly and correctly. It is evidenced in large group tests getting an average of 90%, which is very valid for learning. For obtaining a figure of 90%, the module is also attractive for students. The effectiveness value also got a figure of 90%, which means this product has high effectiveness to help the volleyball learning process. The practicality value also got a figure of 90%, which means this module is efficient. From the study of Rudi and Arhesa (2020), concerned with the data obtained from field trials and discussion results, it could be concluded that elementary-age children could learn lower passing materials effectively and efficiently with the lower passing model. Researchers have developed lower passing materials, and elementary school-aged children can understand and quickly master lower-passing materials. Fitriani *et al.* (2021) stated that the Lower Volleyball Learning Model Passed For Upper-Class Students is developed results from problems discovered by researchers in the field via observations and interviews with elementary school students and educational teachers sports, and health physics.

Based on the literature, it can be concluded that the development of volleyball lower passing models based on umbrella learning approaches had a significant impact on learners' ability in PJOK learning. In line with this, Mursid (2018) explained that using learning models during the teaching process can arouse new desires and motivate and stimulate learning. Maya, Situmorang, and Mursid (2020) explain that the learning model integrated with learning strategies increases activity and even provides psychological effects on learners. The success of the volleyball lower passing model based on this umbrella learning approach makes the umbrella learning approach a solution to problems in the learning process.

Previous research has also been conducted to determine if the scientific approach can improve student learning outcomes. During this time, the program teacher conducted conventional learning, the traditional teaching and learning process with lecture methods, question and answer methods, and assignment methods. Conventional learning methods are teacher-centered, resulting in students' being less active and motivated in following learning (Ayu, 2009). In this lesson, teachers utilize learning media to increase student learning motivation. The results of this study also strengthen the opinion of Fadilah & Wibowo (2018) regarding the importance of student activeness, *i.e.*, the activeness of learners in the learning process can stimulate and develop their talents, learners can also practice thinking critically, and they can solve problems. Students' activeness in the low learning process, if left unchecked, will have a less positive impact and ultimately impact less satisfactory

learning outcomes. In other words, the success of this learning model increases student activity in learning activities. It also affects the results of the cognitive and psychomotor abilities of students who experienced an increase in high categories in this small group trial.

Conclusion

The results of the effectiveness test model in the small group test obtained psychomotor 0.75, cognitive results of 0.73, belonged to the high category obtained with *n*-gain and affective analysis were assessed with a Guttman scale of 84.37% and belonged to the high category. The results of large-scale psychomotor trials of 0.74, cognitive results of 0.76 high categories obtained with *n*-gain and affective analysis were assessed with a Guttman scale of 87.57% and belonged to the high category. Based on expert assessments of learning, small-scale trials, and large-scale trials, the umbrella learning model is declared effective in improving students' cognitive, psychomotor, and affective abilities in the Faculty of Sports Sciences. The research results are expected to be developed further to add scientific resources that have many innovations in choosing a lower passing model based on the umbrella learning approach to the learning outcomes of basic techniques mentioned above. Thus, lecturers and teachers can apply the umbrella learning model that becomes the way lecturers teach it and follow the purpose of physical education learning itself.

Acknowledgments

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