ABSTRACT
This research aims to find out whether there is an influence of game models on the results of bottom passing in volleyball. This research method is quantitative with an experimental approach with a research design using a pre-test-post-test one-group design. Using a research sample of 30 people, it can be concluded that the meaning of Underpass is one of the basic techniques in the game of volleyball which is a player's attempt to pass the ball to a teammate using both wrists together, hitting the ball right in the middle of the calculation. In the Shapiro-Wilk column, the significance value obtained in the individual pretest was 0.332 > 0.05, while the group model posttest was 0.050 > 0.5. Based on these values, it can be concluded that the data distribution is normal. So Ha is accepted and Ho is rejected. So it can be said that the T-test has a significant influence, namely game models, on the results of bottom passing ability.

INTRODUCTION
Physical education is a way of the learning process that has deep meaning for the educational process in all aspects, in this case cognitive, affective, and psychomotor, which places great emphasis on patterns of understanding, insight, and benefits in carrying out lifelong sports activities (Devi Catur Winata, 2020). This means that physical education is education that is based on getting used to moving activities in terms of education itself. In literature (Isman et al., 2020). Physical education learning is learning that moves away from sedentary activities or sedentary activities. The meaning is to provide experience and benefits in carrying out moving activities and making movement activities part of the lifestyle itself. In this way, the meaning of physical education is conveyed through various learning activities, the main of which is providing deep meaning to always moving and making it a habit to live an active lifestyle.
In literature (Kamsurya, 2021) stated that games are very good for children's development and are able to provide a good stimulus for the body's response which allows it to maximize the power of growth and development in a positive way. This indicates that some of the benefits contained in this game are necessities that will occur when this game is given and implemented in educational institutions. In this way, the perceived benefits will be commensurate with the cognitive, affective and psychomotor patterns that the child will obtain. Then other things come into play (Perdima & Kristiawan, 2021) such as increasing cognitive intelligence also increases as an individual carries out this volleyball game activity.

Basically, all forms of volleyball games involve moving activities in certain parts such as the feet and hands. In other words, volleyball is a game whose main source is physical activity in the form of athletic activity (Usman et al., 2019). Thus, this activity is very good for fulfilling the maturation aspects of children's development. However, in essence, children will easily get bored or easily get irritated by always doing repetitive activities. Playing is essentially a need for all humans, not only children of gods, but even small children, even those with physical disabilities, need to do this play activity. Playing cannot be separated from everyday life, this is because in the absence of enjoyable activities, people tend to be more gloomy if they do not play in an activity, but experts (Saepudin et al., 2018) said that the identity of play is embedded in children which is a pleasure for children. Because of this, children will not be separated from playing and will continue to play because playing for children is a necessity.

Humans are playing creatures (homo ludens) which in essence humans make playing an essential need. Lutan (1997) with a statement like that can be concluded that humans believe that each person has different opinions about playing and the same thing is believing that playing is a necessity in doing something. In this case, Cart (1991) states that playing can increase individual motivation to carry out activities, so that physical education learning takes the essence of playing because basically physical education is a movement learning activity in which there is a very strong playing activity. This was strengthened by (Paramitha et al., 2017) which states that physical education is a learning activity that is rich in fun games but does not eliminate the essence of the material being taught.

“3 On 3 Game” Learning Method to Improve Students' Volleyball Underpassing Ability. One way that can be done to improve the results of passing down in volleyball is to play 3 on 3 in a basketball game that is modified to follow the flow of volleyball (Saragih, 2022). Thus, the results of the research above are a big step for future researchers to provide a description of the goals and functions of this 3 on 3 game.

Then there are also efforts to improve learning outcomes for passing under volleyball games through balloon media. By using balloon media, it can improve the bottom passing results of students who feel they are lacking in performing bottom passing movements. With balloon media which is easy to find, of course it is cheap, but with this media, at least students can help refine the basic bottom passing movement, so the function of balloons is an adequate medium. The function can be taken, namely
that it involves the correct contact of the hand which will produce the right touch when the bottom pass is made.

Then other media such as plastic balls are an indication of teacher creativity in packaging lessons that can build good basic techniques (Erwan & Nur, 2023). With the plastic ball, it is hoped that students will be able to provide a general idea of the contact or touch given and provide the feeling or instinct that will be obtained when involving the basic pattern in the down pass. This indicates that an object or media that is simple but processed in such a way and has a good purpose for learning will be better than having to use a real ball or volleyball that meets standards.

Like an update or continuation which has the same characteristics, namely using a plastic ball but in a different way, namely a hanging ball. In one of these ways, it is possible for the child’s understanding to be maximized by understanding the initial position of the body and the regulation of the force exerted as well as the indication that the hanging ball is moving forward, which is a sign that the learning provided is in accordance with the aim, namely to improve down-passing. Then it was improved again with a throwing and catching ball game model in which there are intrinsic values that can increase the results of the bottom results that will be carried out at the time of the game. Learning takes place (Muhyi & Utamayasa, 2023). By taking the catch and throw game model approach, it gives the impression that volleyball has a simplicity that is easy to learn, but someone can forget the basic movements which are very important in this volleyball game.

This research will also highlight game models as an approach to the game of volleyball. It is possible to find out whether there is a correlation between the game models and the game of volleyball which tends to be a passing movement which will determine whether there is an influence that occurs in this aspect of the game activity. This makes this research closer to the perception of modifying other games that will be given in physical education learning. To fulfill the provision of volleyball learning materials using a game model approach that has been designed by researchers. (Saepudin et al., 2018)

Based on the circumstances and conditions of direct observation and observation. And students’ knowledge and skill improvement are not yet effective, especially in basic passing techniques in volleyball games (Mubarok, 2016). So this research wants to improve the results of basic volleyball passing techniques using game models. This is to attract the child’s attention to enjoy playing this game and as a result the child will experience the love of a change cognitively and psychomotorically and indirectly will get the results of passing the volleyball well and correctly. (Sinaba et al., 2020). This will result in a change in thinking about the approach to games that children often play to take advantage of this cat and mouse game movement and manifest it in passing movements in volleyball games.

**METHODS**

This method is the method that will be used to achieve the research objectives. The purpose of research is to describe, express and summarize data, answer and solve
several practical problems, and conduct research in a certain way according to research procedures. This research uses experimental research methods as stated by Borg & Gall (1983) in Jaedun, (2011). Experimental research is research that can be used in research between variables, between independent variables and dependent variables. Experimental research is used to find cause and effect by imposing one or more treatment conditions on one or more experimental groups and comparing the results between one group and another group. Based on these characteristics, this research is included in experimental research which focuses on cause and effect. As Arifin (2011) said, "experimentation is a practical way to study something by changing the conditions and influence on other things".

This experimental research is to test the use of which learning method is more effective in order to improve basic passing techniques in the game of volleyball (Soegiyono, 2011). This method is used based on the consideration that the nature of experimental research is trying something to find out the influence or consequences of a treatment. (Ardyanto, 2018). This research has several method steps in conducting research, namely as follows:

**Research design**

Regarding the experimental research method, it is a series of experimental activities with the aim of finding out something or a problem so that results can be obtained. In this case the researcher used a research design, namely one group pre-test post-test design. In other words, the researcher wants to know first the results of volleyball passing and then use a treatment or training session using a model game approach. The researcher wants to know the effect of the independent variable on the dependent variable being investigated or observed, namely: the use of a model game approach to improving passing results in volleyball. (Ardyanto, 2018:4)

**Population and Sample**

The population of this study were all students at SDN 3 Karangtawang, namely 30 students. A sample is a part of a population that has the characteristics or conditions to be studied. By only using one group, this makes research that requires only one group as the provider of research data.

**Instruments**

Based on the research method taken, namely experimentation. The research uses an instrument in the form of a test. In connection with the research problem to be studied, this research is used as a measuring tool to measure volleyball passing technique skills. The instrument in question is a measurement tool used to find the data results you want to research (Waruwu, 2023). In other words, an instrument is a measuring tool that is capable of measuring tests with measuring specifications determined by the research objectives.

**Research procedure**

a. Test participants stand in the middle of an area measuring 4.5 x 4.5 m.
b. To start the test, the ball is thrown by the test participant himself, after hearing
the signal “Yes”.
c. After the ball is bounced, participants make a downward pass with a minimum
height of 2.30 m for men and 2.15 m for women.
d. If the test taker fails to pass down and the ball leaves the area, then the test taker
immediately takes the ball and continues passing down again.
e. If both feet of the test taker are outside the area, the test officer I orders the test
taker to immediately return to the area, and balls that are bounced while both
feet are outside the area are not counted.
f. Data collection
At this stage, the data collected is quantitative data from the initial test and final
test, then the data is processed, and then conclusions are drawn from the processed
data, and are based on research. There are two main factors that influence the quality of
research data, namely the quality of research instruments and the quality of data
collection. As previously mentioned Sugiyono, (2011) Research on the effectiveness and
reliability of instruments. Quality of instruments, and quality of data collection regarding
the accuracy of data collection methods.

Data analysis
Analysis begins when the data has been collected, and analyzing the data according
to the results of the data. Sugiyono (2015) It is recommended that data analysis be used
to answer research questions. If the data collected is quantitative data, then analyze and
use statistical data, if the data is qualitative then use qualitative analysis. Data analysis
is a step used to accurately summarize data that has been collected. The data obtained
from the research results is quantitative data (in the form of numbers). Quantitative data
obtained from the pre-test and post-test results obtained were identified first and then
analyzed.

After obtaining the pre-test and post-test data, the average of the pre-test and
post-test was calculated. Calculations were carried out to determine the results of
accuracy passing for members of the experimental group. Then, the data obtained was
tested using the normality test, homogeneity test and hypothesis test.

Normality test
In this normality test, a test will be carried out to determine whether the distribution
of initial passing ability value data (pretest) and final passing ability value data (posttest)
of players in the experimental group is normal or not. (Purba, 2021) In this research, the
normality test used was the Shapiro Wilk test with the help of SPSS version 20.0 for
Windows software. Below is the testing hypothesis.

H0 = Data comes from a normally distributed sample
H1 = Data comes from a sample with a non-normal distribution.

After the calculation has been carried out, the p-value has been obtained which
then uses testing criteria with a significance level (α = 0.05). If p-value < α, then H0 is
rejected, whereas if the p-value > α then H0 is accepted. For retrieval, the criteria are the
same as the testing criteria, with a significant nerve of 5% ($\alpha = 0.05$). The following are the results of the normality test calculation using the Sapiro Wilk test on the initial passing ability value and the final passing ability value of the experimental group players.

**Hypothesis testing**

After the normality test and homogeneity test were carried out on the initial passing ability value and final passing ability value for the experimental group players, it could be seen that both were normally distributed and homogeneous. Thus, the hypothesis test that will be used is the Paired Samples T-Test with the help of SPSS software version 20.0 for Windows. The testing hypothesis is as follows:

$H_0 =$ There is no influence of the cat and mouse game approach on volleyball passing results

$H_1 =$ Providing changes through a cat and mouse game approach to volleyball passing results. The testing criteria for the mean difference test are, if the p-value $<(0.05)$, then $H_0$ is rejected and $H_1$ is accepted, whereas if the p-value $>(0.05)$ then $H_0$ is accepted and $H_1$ is rejected (Putra, 2019)

**RESULTS AND DISCUSSION**

This research is experimental research carried out in elementary school physical education learning. This research was conducted with one group of Sumedang school children with a population of 11 people. By using a total sampling of 11 using a sample equal to the population in the study. Meanwhile, the variables that are the focus of the research are training using game models (x) and bottom passing ability (Y). The research instrument used was a direct practical test with a predetermined assessment format.

**Data Description**

Data description is a general description to make it easier to present the input data and easy to read with its own character taking into account the data to be obtained. The following is a data presentation of descriptive data for free variables or independent variables for the application of game models to down-passing ability in volleyball games using a game models approach.

**Research Implementation Procedures**

This research procedure has three stages, preparation stage, implementation stage, data processing stage and data analysis, the explanation is as follows: Preparation Stage At this stage there are several activities carried out, namely arranging research permits, then grouping players and preparing objects to be used. Implementation Stage: In the implementation stage, this stage is carried out using a game model with implementation techniques that have been planned and approved with this training mechanism using a three-trial mechanism with a calculation of one minute of passing down individually and in groups. The goal is to improve the ability to pass under the volleyball when learning the game of volleyball. This training program was carried out in
10 meetings. The frequency of exercise refers to the opinion of Slaving (2011) "it should be done twice a week".

**Evaluation**

By using a pre-test without treatment, the same thing is done when processing the test. This is how the treatment or treasury is carried out, namely the lateral passing exercise, which is carried out 10 times in meetings with a target that does not have a number or value and only gives the perception of on pass on the target. Then tested again in the post test. Using a measuring instrument in the form of time per minute with 3 trials per minute in the pre-test and post-test. Then the three results are added up. However, in management, the highest score was taken in 3 trials.

**Analysis of Pre-Test Results**

The pre-test was carried out to determine the part practice learning model in learning to shoot basketball. Pretest data is used to carry out analysis before conducting research. This analysis aims to determine the average accuracy. The following is data from the results of the pre-test that the researchers carried out.

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The number of students</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Average Score</td>
<td>12.4</td>
</tr>
<tr>
<td>3</td>
<td>Median</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Minimum Score</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Maximum Score</td>
<td>15</td>
</tr>
</tbody>
</table>

After processing the data, the number of students was 11 with an average score of 12.4, then the median of the pre-test results was 13, the minimum score was 10, the maximum score was 15.

**Analysis of Post-Test Results**

Post Test (final test) is carried out to find out. Pretest data is used to carry out analysis before conducting research. This analysis aims to determine the average accuracy. The following is data from the results of the pre-test that the researchers carried out.

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The number of students</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>Average Score</td>
<td>16.7</td>
</tr>
<tr>
<td>3</td>
<td>Median</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>Minimum Score</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Maximum Score</td>
<td>18</td>
</tr>
</tbody>
</table>

After processing the data, the number of students was 11 with an average score of 16.7, then the median of the post-test results was 17, with a minimum score of 15, a maximum score of 18.
From the data above, it can be seen from the two results from the Pre-test and Post-test. It can be seen from the diagram below:

![Average score diagram](image)

*Figure 1.*
Average score value

From the results of the bar chart above, it is stated that the average score obtained from the volleyball underpassing ability, namely Pre-Test, was 12.4. Meanwhile, after treatment, the Post-Test results were found to be 16.7.

**Normality test**

Accuracy passing ability data in this study was obtained from the results of the pre-test and post-test. Test the normality of the data using game models using the Shapiro-Wilk Test with the help of SPSS 20. If the p value is > 0.05 then the data is normal, but on the other hand if the analysis results show a p value < 0.05 then the data is not normal. The results of the free throw shooting data normality test can be seen as follows:

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>.164</td>
<td>.200*</td>
</tr>
<tr>
<td>Posttest</td>
<td>.221</td>
<td>.139</td>
</tr>
</tbody>
</table>

Based on the calculation results in the Shapiro-Wilk column, the significance value for the individual pre-test was 0.332 > 0.05, while the group model post-test was 0.050 > 0.5. Based on these values, it can be concluded that the data distribution is normal.

**Hypothesis testing**

Hypothesis testing is carried out after the prerequisite tests are met. Hypothesis testing is carried out to find out whether the hypothesis is accepted or rejected. Hypothesis testing of down passing ability data was carried out using the Paired Samples
Test, this is because the passing ability data is normally distributed. Hypothesis testing in this research was carried out to test the following hypothesis:

- \( H_a \): There is a significant influence using the game models approach on the results of volleyball bottom passing ability.
- \( H_0 \): There is no significant effect of using a game models approach on the results of volleyball bottom passing ability.

The results of the analysis of passing accuracy hypothesis testing using the SPSS version 20 program can be seen in the following table.

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest - Posttest</th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-4,273</td>
<td>2,054</td>
<td>-5,653, -2,893</td>
<td>-6,900</td>
<td>10</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on the results in the table above, using the SPSS 20 for Windows T paired samples test application, it can be seen that: has a sig value (2-tailed) \( 0.000 < 0.05 \). So it can be concluded that \( H_a \) is accepted and \( H_0 \) is rejected. So it can be said that the T test has a significant influence, namely game models, on the results of bottom passing ability.

**CONCLUSION**

Based on the explanation above, it can be concluded that the meaning of Underpassing is one of the basic techniques in the game of volleyball which is a player's attempt to pass the ball to a teammate using both wrists together, hitting the ball right in the middle of the count in the column. Shapiro-Wilk obtained a significance value in the individual pretest of \( 0.332 > 0.05 \), while the group model posttest was \( 0.050 > 0.5 \). Based on these values, it can be concluded that the data distribution is normal. So \( H_a \) is accepted and \( H_0 \) is rejected. So it can be said that the T test has a significant influence, namely game models, on the results of bottom passing ability.

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