

Conference Paper

The Effect of Scoring Skill and Opponent Errors on the Team Wins of the Final Four Proliga Volleyball Team Participants 2019

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Abstract

This study aims to determine and prove the direct effect of scoring skills (service, spike, block) and opponent error on the team wins of the four Proliga volleyball teams participating in the 2019 finals. The research method used is a survey method with analysis techniques using the path analysis approach. A total sampling technique was used and data collection was carried out based on the indicators contained in the Volleyball Information System (VIS). The results of the study concluded that: (1) service has a direct but not significant effect on opponent error by 2.34%; (2) spike has a direct effect on opponent error by 5.76%; (3) the block has a direct but not significant effect on opponent error by 0.27%; (4) opponent error directly affects the team wins by 16.4%; (5) service has a direct effect by 8.61%; (6) spike has a direct effect by 33.8%; (7) block has a direct effect on the team wins of by 21.68%.

Keywords: scoring skills, opponent error, team wins.

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1. Introduction

Volleyball Proliga is the highest professional volleyball league event in Indonesia, which is participated by big teams supported by companies who are sponsoring. The year 2019 is the 19th volleyball Proliga since it was held since 2001. Participation in volleyball Proliga participants also requires professional qualifications and requirements including participating teams required to involve a minimum of 1 (one) and a maximum of 2 (two) foreign players in each round that is followed, paying a registration fee that is quite large for the contract within 2 years year of participation, excluding the operational costs of the team in participating in the competition in each round.

In every year the volleyball Proliga is held in 3 rounds; Round 1 (half competition), Round 2 (half competition) and Final Round (final four). Each round will be given a prize money for the team that wins the round. The results of the first round standings will be

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added to the standings in round 2 and the next 4 top ranking teams will then be taken in the final round (final four).

In this final round, each match uses the Volleyball Information System (VIS), because at the end of the league the best 7 qualifiers will be selected including the Most Valuable Player (MVP) players. VIS (Volleyball Information System) developed by FIVB (Federation International Volley Ball) in 2005, the instrument is a program to complete a match which includes statistics of each individual player to the team. The main objective of VIS is to inform national and international media on the results of team and individual player's statistical results [8]. Therefore this instrument is considered to be used to assess the athlete's performance when playing volleyball in accordance with the techniques or skills carried out by each individual.

The pattern of developing volleyball games and the prevailing scoring system, then the division of groups in volleyball technique is divided into 2 categories, namely; 1) Scoring skills (techniques that produce scores) and 2) Non-Scoring skills (techniques that do not produce scores).

Scoring skill group, according to its name, will produce a score if done correctly and immediately stop the game. The techniques included in this group are; service, spike and block. While the Non- Scoring Skill technique group, does not produce scores, even if done correctly, because it still takes place with another touch. But if it's technically wrong, there will be game stops and scores for your opponent. The techniques included in this group are; receive, dig and set.

From various events in the match, scores were obtained which were not derived from the techniques performed by the team itself. Some scores are obtained as a result of opponents' mistakes in performing techniques or completing rallies, for example; service that fails or exits the field, spikes that fail to cross the net or fall off the field, double-touch by setters and others. This condition in the calculation of match statistics is called an opponent error. Obtaining a score from the opponent's error is a distinct advantage for the team, because the score is obtained free of charge and the team does not spend too much energy to obtain a wins score.

From this description, the researcher intends to find out how the influence of the whole technique of scoring skills (service, spike, block) and opponent error is generated with the wins of the team participating in the final four Proliga volleyball 2019.

Volleyball is a very popular sport all over the world, with millions of people participating and playing the game at least once a week. [14] Volleyball is a sport in the form of volleyball in the air back and forth on a net or net, with the intention of dropping the ball in the opponent's field to search for wins. According to [19] Volleyball and bouncing

the ball into the air can use any part of the body as long as the touch/ reflection must be perfect.

The characteristic of volleyball is that each team can have a maximum of three touches before sending the ball to the opponent's field. Two types of actions can be distinguished in these three touches: trying to get points and/or making it difficult for the opposing team; and follow-up action, which is trying to neutralize the opposing team's action then send the ball to teammates [28].

Volleyball is a game whose activities try to drop each other on the floor of the opponent quickly with the aim of forcing the opposing team to not be able to return the ball so that it scores/points [10]. The above is in accordance with the opinion [20] which explains that a volleyball match consists of at least three and a maximum of five sets with the wins team reaching the first three sets obtained. Each set is played until one team reaches a score of 25 points with at least a difference of two points from their opponents. The number of points that a team scores is mainly based on the efficiency of the team's skills in the game.

In volleyball games, there are two patterns of play, namely attack patterns and defense patterns. Both patterns can be implemented perfectly, players must really be able to master the basic techniques of volleyball well. The basic techniques contained in the game of volleyball according to [21] states that "techniques in the game of volleyball consist of service, bottom passing and top passing, block, and smash." Basic techniques contained in the game of volleyball greatly affect one's skills in volleyball games.

According to [1] explained that;

1. Service has a function to start the game
2. Passing, has the function to receive/play the ball coming from the opponent's area or teammates,
3. Set-up, has a function to present the ball to teammates in accordance with their wishes,
4. Spike, has a function to carry out attacks to the opponent's area, so that the ball to be crossed to the opponent's area can be deadly at least make it difficult for the opponent to play the ball perfectly
5. Dam or block, has a function to block the opponent's attack from near the net as well as a counter- attack to the opponent,
6. Receive, has a function to keep the ball from touching the floor.

According to [6] states that in actual play requires systematic basic skills. That is, playing volleyball is a sequence of series of games consisting of a service, which is then passed by using the bottom passing or passing up towards the feeder, then feeding the attacker, hitting the ball on the opponent's field, at the same time where the opponent is also preparing defense by using blocks, and receivers in the back-yard, this sequence occurs continuously during the match until the ball dies and scores. One of the goals in volleyball is to get points or points. The acquisition of numbers and points in volleyball in addition to attacking techniques as well as defensive techniques. Attack techniques that can get points directly are serve and spike. While defensive techniques that can get points directly are blocks.

A team can score points in four different ways: by serve, block, attack or from the opponent's error. This is in accordance with the opinion according to [11] which states that Points in the volleyball game are printed with serve, block, attack, and from the opponent's error. [16] Attack, block, and service are techniques that have the possibility of scoring points directly, so they are referred to as scoring skills, while the means of defense, bait, and receive are called "non-scoring skills".

Getting points directly, through attacks, blocks and serves, in literature is called Scoring Skill. [16]. In turn, defense procedures, such as receive and bait are referred to as Non-Scoring Skills, [22]. Three skills that support in getting points are receive, bait and survive [14].

According to [14] Score-Point-Skills (SPS) and Non-Score-Point-Skills (NSPS) are key factors for wins or defeat in volleyball matches. On the one hand, baiting, defending, and receiving are N-SPS techniques that do not score points directly but are carried out to set the timing for attacking. On the other hand spike, block, and serve are SPS techniques that can score points directly to win a match. Conversely, the opponent's error is not a skill to score points but is also referred to as SPS. According to [3] in volleyball matches, attack, block, serve and opponent's errors are Score-Point-Skills (SPS). Among SPS, spikes are those that dominate the match to determine the win or lose.

The term opponent error is indeed known in the VIS operations and the results of the matches issued by FIVB. VIS Staff Guide [8], states; "Opponent errors (Op.-) To be used in all cases that the team scores a point but no player action of their team can be evaluated for this success. The point is the opponent (Op.), Used in all events in a game, the team gets a score but there is no player action from the team, they are evaluated for the success of this score. In essence, the score obtained is due to an error by the opponent.

In volleyball games, all players try to score the wins numbers through game techniques which are the main goal in completing the rally. Some numbers are obtained as a result of opponents' mistakes in performing techniques or completing rallies, for example; service that fails or exits the field, spikes that fail to cross the net or fall off the field, double-touch by setters and others. This condition in the calculation of match statistics is called an opponent error. Obtaining a number from the opponent's error is a distinct advantage for the team, because the number is obtained free of charge and the team does not spend too much energy to obtain a wins score.

Some research results indicate that opponent error directly influences in determining the wins and defeat of a team. According to [12]. Mention that 61% of points are gained by attacking, 24% of opponents' errors 9% with serve and 5% with blocks. According to [15] explained that for male and female teams, most of the points were obtained in attacks and opponent errors (opponent errors). The difference in how you get points when you win or lose a match is calculated based on the level of the team.

There are several scores obtained due to opponent error, including: (a). Failed/Wrong opponent's service. (b). Spike failed/wrong opponents. (c). Block failed/wrong opponents. (d). Dig the wrong opponent. (e). Receive the wrong opponent. (f). Technical violations are punished by the referee. (g). No opposing player accepts/continues the ball. (h). Violation of rotation/position of the opposing team. (i). Card penalty by the referee.

2. Method of Research

This study uses a survey method by looking at causality between variables. Data analysis techniques using path analysis (path analysis). Path analysis technique is used in testing the amount of contribution (contribution) directly and indirectly realized by the path coefficient on each path diagram of the causal relationship between variables X1, X2, and X3 to X4 and their impact on X5 (Riduwan, et al 2008). According to Sewell Wright, 1934 in [29], path analysis models that aim to explain the direct and indirect effects of a set of variables, as causal variables, on other variables that are dependent variables. The variables studied consisted of exogenous variables namely service (X1), spike (X2) and block (X3) and endogenous variables namely opponent error (X4) and team winss (Y).

In this study used as the target population (target population) of the study were all volleyball team matches registered as participants of Volleyball Proliga 2019. The sampling technique used in this study used a purposive sampling technique. Purposive

sampling technique to determine the research sample with certain considerations aimed at making the data obtained later more representative [33]. The research sample was 14 matches (98 wins data) 4 men's teams participating in the final four Proliga volleyball 2019.

In this study the instruments used were the indicators contained in the VIS software (Volleyball Information System) for scoring skills and team wins. This study involved four experts or rater as assessors. The results obtained from the expert assessment of skills in the game there are 4 kinds of service, spike (spike), block and opponent error collected from forms P-1, P-2, P-3 VIS instruments 3 were analyzed quantitatively with the help of SPSS software (Statistical Program for Social Science) version 18.0.

Data analysis conducted in this research includes: (1) data description, (2) test requirements analysis consisting of: data normality test, homogeneity test, linearity test and regression significance test, (3) path analysis which includes: model testing and hypothesis testing.

3. Results of Research

Based on the results of calculations from each of the exogenous variables, the endogenous variables obtained are two sub-structural equation models as follows:

3.1. Calculation of Path Coefficient in Sub-Structure 1

The causal relationship between the variables shown in the figure below, consists of one endogenous variable, X_4 and one exogenous variable, X_1 , X_2 , and X_3 structural equation for sub-structure 1 is as follows: $X_4 = r_{41}X_1 + r_{42}X_2 + r_{43}X_3 + e_1$. Based on the results of processing the entire test data or F test on sub-structure 1 with a calculated F value = 2.744 greater than the F table for $\alpha = 0.05$ of 2.70, it can be continued on an individual test or t test.

The following summarizes the results of calculation and testing of path coefficient sub-structure 1:

Based on the summary table above shows that the coefficient of two paths is significant at $\alpha = 0.05$, because t arithmetic is greater than t table. Based on the results of sub-structure 1 path analysis, it proves the coefficient of two paths is not significant and one path is significant. Then the sub-structure 1 relationship model is X_1 ; X_2 ; and X_3 ; X_4 needs to be improved by the trimming method. Based on the analysis results in the table above, the service path coefficient (X_1) to opponent error (X_4) is $\rho_{41} = 0.153$. Spike

TABLE 1: Summary of Test Results for Sub-Structure Path Coefficients 1

The effect of service to the opponent error (pathway ρ_{41})	
Path coefficient Count-T	0.153
Table-T ($\alpha = 0,05$) Results	1.538
	1.661
	Not Significant
The effect of spike to the opponent error (pathway ρ_{42})	
Path coefficient	0.240
Count-T	2.417
Table-T ($\alpha = 0,05$)	1.661
Results	Significant
The effect of block to the opponent error (pathway ρ_{43})	
Path coefficient	0.052
Count-T	2.519
Table-T ($\alpha = 0,05$)	1.661
Results	Not Significant

path coefficient (X2) to opponent error (X4) is $\rho_{42} = 0.240$, block path coefficient (X3) to opponent error (X4) is $\rho_{43} = 0.052$. While the determinant coefficient or contribution of X1 X2 and X3 to X4 is R square = R2 is 0.081 which means 8.1% opponent error (X4) can be explained by spike variations (X2). Large residual coefficient $\rho_{4\epsilon 1} = \sqrt{(1-0,081)} = 0.9586$ is the influence of other variables outside the spike (X2). The structural equation for sub- structure 1 is: $X_4 = 0.240X_2 + 0.9586\epsilon_1$.

Subsequently the process of calculating trimming sub-structure 1 through the process of removing service variables (X1) and block (X2), then the results obtained $X_4 = 0.230X_2 + 0.8775\epsilon_1$. Interpret Results of Path Analysis a Service contribution (X1) which directly affects opponent error (X4) = $0.1532 \times 100\% = 2.34\%$ b Spike contribution (X2) which directly affects opponent error (X4) = $0.2402 \times 100\% = 5.76\%$. c Contribution block (X3) which directly affects opponent error (X4) = $0.0522 \times 100\% = 0.27\%$.

3.2. Calculation of Path Coefficient in Sub-Structure 2

Based on the results of processing the whole test data or F test on sub-structure 2 with a value of $F_{count} = 9050.3$ greater than F_{table} for $\alpha = 0.05$ of 2.70 then proceed to the individual test or t test, summarized in the following table:

Based on the summary table above shows that all path coefficients are significant at $\alpha = 0.05$, because all t arithmetic is greater than t table. Based on the results of the analysis of sub-structure path 2, prove that all path coefficients are significant. Then the

TABLE 2: Summary of Calculation Results and Testing the Coefficient of the Path Sub-Structure 2

The effect of service to team wins (pathway ρ_{51})	
Path coefficient t-count	0.363
t-table ($\alpha = 0,05$) Results	67.553
	1.661
	Significant
The effect of spike to team wins (pathway ρ_{52})	
Path coefficient	0.753
t-count	136.259
t-table ($\alpha = 0,05$)	1.661
Results	Significant
The effect of block to team wins (pathway ρ_{53})	
Path coefficient	0.646
t-count	87.764
t-table ($\alpha = 0,05$)	1.661
Results	Significant
The effect of opponent error to team wins (pathway ρ_{54})	
Path coefficient	0.659
t-count	120.330
t-table ($\alpha = 0,05$)	1.661
Results	Significant

sub-structure 2 relationship model is X1; X2; X3; X4; X5 does not need to be improved by the trimming method. Based on the analysis results in the above table, the path coefficient value X1 to X5 is $\rho_{51} = 0.362$. The path coefficient X2 to X5 is $\rho_{52} = 0.753$. The path coefficient X3 to X5 is $\rho_{53} = 0.464$. The path coefficient X4 to X5 is $\rho_{54} = 0.659$. While the determinant coefficient or contribution of X1 X2 X3 and X4 to X5 is $R_{square} = R^2$ is 0.997 which means that 99.7% of the X5 team's wins can be explained by variations of X1, X2, X3 and X4. Large residual coefficient $\rho_{5\epsilon 1} = \sqrt{1-0.997} = 0.055$ is the influence of other variables outside of X1 X2 X3 and X4. Thus the structural equation for sub-structure 2 is: $X_5 = 0.753X_1 + 0.464X_2 + 0.362X_3 + 0.659X_4 + 0.055\epsilon_2$.

Interpret Results of Path Analysis

1. Service contribution (X1) which directly influences team win (X5) = $0.3622 \times 100\% = 36.22\%$
2. Spike contribution (X2) which directly influences team win (X5) = $0.7392 \times 100\% = 73.92\%$
3. Contribution of opponent error (X4) which directly affects the team's wins (X5) = $0.6592 \times 100\% = 65.92\%$

4. The contribution of the whole variable simultaneously which directly affects the team's wins $(X5) = 0.997 \times 100\% = 99.7\%$, and the remaining 0.3% is the influence of other factors beyond the four variables studied.

4. Discussion

As stated earlier, in sub-structure 1 there are three exogenous variables, namely: service (X1), spike (X2) and block (X3) and one endogenous variable namely opponent error (X4). Based on the results of calculations and testing of path coefficients, we can interpret the direct and indirect effects of each service variable (X1), spike (X2) and block (X3) and opponent error (X4). A summary of the major direct and indirect effects of exogenous variables on endogenous variables sub-structure 1 can be displayed in the following table:

TABLE 3: Percentage of Influence of Variables on Sub-Structure 1

Variable	Direct influence on (X4)
<i>Service (X1)</i>	2.3%
<i>Spike (X2)</i>	5.76%
<i>Block (X3)</i>	0.4%

4.1. The direct effect of service (X1) on opponent error (X4) of the teams participating in the final four Proliga volleyball 2019

Hypothesis testing results show that service has a direct but not significant effect on the opponent error of the 2019 volleyball final four Proliga team participants. Service has a direct effect on opponent error of $0.1532 \times 100\% = 2.3\%$. According to [26] the opportunity to get points directly using the service is very small. However, the benefits of service are not only based on the possibility of scoring points, but also on influencing the next opponent's attack game.

This above explains that the possibility of an opponent error caused by the service exists though it is not significant. Opponent errors that often occur, usually due to a player unable to receive properly. Research conducted by [32] explains that points in service, receive errors and block errors are variables that influence the final outcome of the match (wins/defeat). In addition, successful service is the main variable that is most influential with the success of the match (wins). Other research results according to [25] that, service points, receive errors, and blocked attacks appear as important factors that determine to win or lose a match.

4.2. The direct influence of the spike (X2) on opponent error (X4) The team participating in the final four Proliga volleyball 2019

The results of hypothesis testing, showed that the spike directly affected the opponent error of the team participating in the final four Proliga volleyball 2019. Spike (X2) directly affected the opponent error by $0.2402 \times 100\% = 5.76\%$. One way to get points is to attack through hard and accurate spikes. [27]. If this is done well, the opponent error committed by the opposing team in receiving the attack will be very large. This certainly benefits the team in wins points.

Based on the description above in accordance with the opinion [34] the main variables that affect performance in accordance with the situation of defeat or wins in the senior women's volleyball 2014 World Championship are acceptance of attacks, receive, opponents make service errors and fail; therefore, actions that affect team performance are service actions and receiving attacks. Whereas according to [32] point service, acceptance error, and block error are distinguishing variables that identify the final outcome of a match (wins/defeat). Service point is the main variable that is most likely related to the success of the match (wins).

4.3. The direct influence of block (X3) on opponent error (X4) The team participating in the final four Proliga volleyball 2019

The results of hypothesis testing, showed that the block had a direct but not significant effect on the opponent error of the team participating in the final four Proliga volleyball 2019. Block (X3) had a direct effect on the Opponent error of $0.0522 \times 100\% = 0.27\%$. Opponent errors that occur when blocking are so small that the resulting effect is not significant. Opponent errors occur due to the inability of a player to cover or dig when a team attacks.

A player must be able to read the blocks made by opponents, if the results of the blocks that enter the field area can be taken well will be an advantage for the team to counterattack. This is consistent with the opinion [9] that players must make fewer mistakes when spiking, and coaches should pay more attention to blocks and counterattacks.

As stated earlier, in sub-structure 2 there are four exogenous variables, namely: service (X1), spike (X2), block (X3) and opponent error (X4) and one endogenous variable, namely team win (X5) final four participant soccer Proliga participants volleyball 2019. Based on the results of calculations and testing of path coefficients can be

interpreted the amount of direct and indirect influence of each service variable (X1), spike (X2), block (X3) and opponent error (X4) and team wins (X5) final participants four Volleyball Proliga 2019. A summary of the large percentage of direct and indirect effects of exogenous variables on endogenous sub-structure 2 variables can be displayed in the following table:

TABLE 4: Percentage of Influence of Variables on Sub-Structure 2

Variable	Direct influence on (X5)	Indirect influence through (X4)	Total Influence
<i>Service (X1)</i>	7.4%	1.21%	8.61%
<i>Spike (X2)</i>	32.1%	1.7%	33.8%
<i>Block (X3)</i>	21.6%	0.08%	22.68%
<i>Opponent error (X4)</i>	16.4%	-	16.4%

4.4. The direct effect of opponent error (X4) on team win (X5) of the final four Proliga volleyball 2019 participants

The results of hypothesis testing, showed that Opponent error directly affected the wins of the team of final four Proliga volleyball 2019. Opponent error directly affected the wins of the team of participants of the final four Proliga volleyball 2019 of $0.164 \times 100\% = 16.4\%$.

Based on the results of testing the above hypothesis opponent error directly affects the team's wins. This is consistent with the opinion [13] When looking at the results of different skills on the screen in volleyball matches (serve, block, attack, receive, bait and defend), it is clear that the team that makes the fewest mistakes is the most might win the match.

Opponent errors are mistakes made by opponents and benefit the team. However, researchers see several factors that cause opponent error is caused by some good quality techniques. Like the opponent is not able to do a good receive because the quality of service that is launched is very sharp and difficult. Opponents are not able to return the attack, because the spike is done precisely and accurately placement.

Based on the above each team tries to reduce the mistakes made during the match. This is in accordance with the opinion [30] which explains that To be a champion, any team must develop good playing and technical skills. Trying to make as few mistakes as possible in playing techniques so as to give a big chance to win.

4.5. The direct effect of service (X1) on team wins (X5) of the final four Proliga volleyball 2019 participants

Hypothesis testing results show that service directly and indirectly affects the wins of the 2019 volleyball final four Proliga team winners. Service directly affects the wins of the 2019 volleyball final four Proliga participants by $0.074 \times 100\% = 7.4\%$. Service (X1) indirect effect through opponent error (X4) of $0.074 \times 0.164 \times 100\% = 1.21\%$. The total effect of service on the wins of the 2019 volleyball 2019 (X5) volleyball Proliga participants was 8.61%.

Based on the results of the study above, scoring skills for service have an influence on team wins. According to (Patsiaouras et al., 2011) A team that is able to maintain good and efficient service has the possibility of wins the match.

Proliga is a high level volleyball competition in Indonesia, this is certainly all components of scoring skills for service are of particular concern for coaches in applying strategies and tactics to each player's ability to perform services. Service is an initial attack carried out by a team in a match. So the service itself besides being able to generate points directly if the service is done aces, good service is able to damage the opponent's game. According to [26] in a high level volleyball game, the chance of getting points directly using the service is very small. However, the benefits of service are not only based on the possibility of scoring points, but also on influencing the next opponent's attack game.

In improving the quality of player's service, a coach must be able to prepare a good training program. Even in the development of modern volleyball service is a special priority in the training program. This is consistent with the opinion [32] which states that in training elite volleyball teams the effectiveness of service must be a top priority.

4.6. The direct and indirect influence of the spike (X1) on the team's win (X5) participants of the final four Proliga volleyball 2019

Hypothesis testing results show that the spike has a direct and indirect effect on the wins of the 2019 volleyball final four Proliga team winners. Spike has a direct influence on the wins of the 2019 volleyball final four Proliga participants by $0.321 \times 100\% = 32.1\%$. Spike has an indirect effect through opponent error (X4) of $0.321 \times 0.053 \times 100\% = 1.7\%$. Thus the total effect of the spike (X2) on the team wins (X5) of the final four Proliga volleyball 2019 participants was 33.8%.

The effect of the spike on wins has a very big effect compared to other scoring skill techniques. The results of this study are supported by research conducted by [30] which explains that Jakarta Electricity PLN won the top four of Proliga, because it has good spike, block, and receive skills. Statistical data shows that spiking, blocking, and receiving are the skills that determine wins. Spiking and blocking are effective for generating points.

One way to get points is to attack through hard and accurate spikes. [27] states attacks in volleyball games called spikes. One of the most popular techniques in volleyball. Most volleyball players work hard to master the spike technique to be able to contribute points in the team. Spike technique in general is a technique to hit the ball with a hard and directional aiming to get points.

The results of this study are consistent with the opinion [17] spike is the best indicator of success in high-level volleyball. According to [7] Players on the wins team will show a higher performance value (service, defense, bait and spike) than players on the losing team.

Based on the results of this study became input for coaches in improving the quality of the spike technique of the players. If the quality of the spikes increases, a player will be able to spike effectively. This is in accordance with the opinion [5], speakers can attack effectively when considering factors: (1) the quality of the ball, (2) block the opposition (opponent), (3) the defensive position of the opposing party, (4) the technical ability of the speakers, (5) the condition of the team and the opposing team.

4.7. Direct and indirect influence of block (X3) on the team's win (X5) of participants in the final four Proliga volleyball 2019

The results of hypothesis testing, showed that the block had direct and indirect effects on the wins of the 2019 volleyball final four Proliga teams. Block had a direct effect on the wins of the 2019 volleyball final four Proliga participants by $0.216 \times 100\% = 21.6\%$. Block indirect effect through opponent error (X4) of $0.216 \times 0.004 \times 100\% = 0.08\%$. Thus the total influence of block (X3) on the team wins (X5) of the final four Proliga volleyball 2019 participants amounted to 21.68%.

The results of the above study explain that the block is the second scoring skill technique after the spike which has a big contribution in wins. In a high level volleyball game, besides spikes and blocks become an important factor in determining team success. This is in accordance with the opinion [23] which explains that there are

significant differences between team levels for spiking and blocking skills. Block is a skill that distinguishes level 1 teams from level 2 teams.

A differentiator in the team to win the match. This is consistent with the opinion (Mladen Stankovic, Guillermo Ruiz-Llamas, Dušan Perić, 2019) which states that the type of attack being the same among the teams, the development of blocks and services may have a stronger influence in the future on the final set results and matches.

Spike attacks are still the main point in volleyball and the coach must continue to work with it focusing a little more on developing attacks through blocks and attacks with tip balls, given that the losing set shows a high likelihood of wins points with blocks and tip balls.

The results of the above study are in accordance with the opinion [31] which explains that in the volleyball game the most points are determined or obtained from: Service aces, attacks from receiving service, successes from blocks and transitions (surviving receiving attacks and producing points from a counterattack). Therefore the block technique must be improved so that a blocker is able to read the opponent's attack. Because the purpose of the block is to cover as much of the playing field from the attacker as possible. Therefore, the wider the block the smaller the remaining area the defender must protect. [2]

5. Research Limitedness

In this study various efforts have been made to avoid things that can reduce the weight and results of research, so the results can be in accordance with the objectives to be achieved. However, it is recognized that there are still some weaknesses in this study, including:

1. There are no other variables that affect the wins of the team in the final four Proliga volleyball 2019, so that it is small to allow for other variables that can influence. In the technical implementation of this research, it is very difficult to make data collection errors on the research sample. Because this study does not use experimental research methods where control is carried out more stringently.
2. This study is limited to four independent (exogenous) variables, namely service, spike, block and opponent error. While there were no other factors that contributed to the increase in the team wins for the final four Proliga volleyball 2019 as a bound variable (endogenous) that was not examined in this study. As has been discussed in a theoretical framework that to increase the wins of the 2019 volleyball final four

Proliga volleyball teams the 2019 volleyball final participant teams are only based on scoring skills and opponent errors.

3. The samples examined in this study were only conducted for the 2019 volleyball final four Proliga volleyball teams with a total of 98 sets, out of 28 2019 final four Proliga men's matches.

6. Conclusion

The conclusion was drawn based on the findings of the study with variables consisting of scoring skills (service, spike, block) and opponent error of the team wins for the final four Proliga volleyball 2019 participants, as follows:

1. Service has a direct but not significant effect on the opponent error of the team participating in the final four Proliga volleyball 2019 by 2.34%.
2. Spike directly affected the opponent error of the team participating in the final four Proliga volleyball 2019 by 5.76%.
3. Block has a direct but not significant effect on the opponent error of the team participating in the final four Proliga volleyball 2019 by 0.27%.
4. Opponent error directly affects the team wins in the final four Proliga volleyball 2019 by 16.4%.
5. Service has a direct effect on the wins of the 2019 volleyball Proliga final four participants by 8.61%.
6. Spike directly influenced the wins of the team participating in the final four Proliga volleyball 2019 by 33.8%.
7. Block has a direct influence on the wins team for the final four Proliga volleyball 2019 by 22.68%. Based on the conclusion above, the wins team of the participants of the final four Proliga volleyball 2019 was most dominantly influenced by the spike. While the opponent error of the team participating in the final four of the 2019 volleyball Proliga most dominant was also influenced by the spike.

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