

Analysis of the Lavani Volleyball Team's Offense in the 2026 Proliga Tournament

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Keywords

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Abstract

This study aims to analyze the effectiveness of the Lavani volleyball team's offensive variations during the Final Four through the Grand Final of the 2026 Proliga. The study employs a quantitative descriptive method with an ex post facto approach. The research sample was determined using purposive sampling, data were collected through indirect observation by analyzing video recordings and official match statistics using an observation sheet. The variables analyzed included the serve, open spike, back attack, and quick attack. The results of the study show that the total number of attack attempts by the Lavani team reached 1,135. The serve was the most dominant technique with 530 successful attempts, 113 errors, and 39 aces, achieving an effectiveness rate of 82.43%. The open spike recorded an effectiveness rate of 79.92% with 215 successful attempts and 54 errors. The back attack had the highest effectiveness rate of 86.32% with 101 successful attacks and 16 errors, while the quick attack showed an effectiveness rate of 84.91% with 90 successful attacks and 16 errors. Based on these results, it can be concluded that the Lavani team possesses excellent attacking quality with a variety of effective, organized, and difficult-to-anticipate attack patterns.

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INTRODUCTION

One of the most popular sports in the modern era is volleyball, a sport played by two teams on a court divided by a net. The game is played on a court measuring 18 x 9 meters. (Irwanto, 2021). In volleyball, there are several basic techniques that every player must master: the serve, the pass, the spike, and the block (Fikri et al., 2021). Basic techniques are essential for creating an effective game, and one of them is the basic serve. According to (Sopiyan et al., 2025) the serve is not merely a technique used to start the game, but also one of the first forms of attack that can set the pace of the match. According to (Maulana et al., 2025) strategic and tactical planning in volleyball can be defined as a systematic effort to manage and implement structured playing patterns in order to achieve optimal performance and desired results.

In volleyball, offensive skills are essential, particularly a strong and effective spike or smash, as it serves as the primary individual attack in the game. According to (Setiyawan et al., 2023) variations in spike or smash techniques include not only attacking from the front known as an open spike but also spiking from behind the attack line, known as a back-row spike. A spike that scores a point is one that is hit with power and accuracy, directed at an open spot in the opponent's defense. In addition, a common type of attack in modern volleyball is the quick attack. The quick attack relies on the speed of the hit to execute the attack. (Hidayatullah & Wahyudi, 2023). The effectiveness of the quick attack depends heavily on the timing between the setter and the spiker. This study was conducted through a systematic process focused on analyzing attacks, including types such as the open spike, back attack, quick attack, and serve, to determine their success rates in scoring points. The effectiveness of attacks is an important aspect in volleyball, because effective attacks determine the success of the team in winning the match (Tectona, 2023).

Advances in technique and strategy in modern volleyball require every team to employ creative and efficient offensive patterns. In Indonesia, the top professional volleyball competition organized annually by the Indonesian Volleyball Association is the Proliga, which features the best clubs from various regions and allows each team to recruit a maximum of two foreign players. One of the participating teams is Jakarta Lavani Livin' Transmedia, founded in 2021 by Susilo Bambang Yudhoyono as a tribute to the late Ani Yudhoyono. Although considered a new club, Lavani has shown remarkable growth by winning the 2022 Proliga and finishing as runner-up again in the 2023 season. This success is supported by the team's consistent performance and the implementation of an effective attacking system through variations of quick attacks, open spikes, and back attacks, making Lavani's play aggressive, organized, and difficult for opponents to predict.

Research on volleyball in Indonesia in recent years has largely focused on individual skills and basic techniques, without conducting an in-depth analysis of the effectiveness of each type of attack in a match context. Furthermore, previous studies have tended to evaluate only a single type of attack or have been conducted at the developmental level rather than in professional competitions. Based on the research conducted (Aljamazi et al., 2025) The study still focuses on improving basic underhand passing techniques at the student level and has not examined the relationship between these techniques and attacking patterns in matches. Furthermore, the research has not addressed the analysis of attacking variations at the competitive level. Therefore, further research is needed to analyze the effectiveness of attacks such as the open spike, quick attack, and back attack in professional matches. Furthermore, (Pramudya et al., 2022) t merely describes players' skill levels without analyzing how those skills are applied in match situations, particularly in building and executing attacks. Additionally, research remains limited to the developmental (academy) level and has not yet addressed game analysis at the competitive level. Therefore, there remains a research gap regarding a more in-depth examination of the effectiveness of attack variations in volleyball matches, particularly among professional teams.

Based on the above discussion, there remains a research gap because most previous studies have focused only on measuring basic techniques at the developmental level and have not analyzed the effectiveness of attack variations in match situations at the professional competition level. As research has been conducted (Aguss et al., 2021) the focus of the research

is still limited to the relationship between vertical jump ability and smash ability in extracurricular volleyball students at school level. Therefore, this study aims to analyze the success rate of attack variations by the Jakarta Lavani Livin' Transmedia team in the 2026 Proliga. The results of this study are expected to provide insights into the effectiveness of attacks in volleyball, serve as evaluation material for coaches in designing training programs, assist the Lavani team in identifying the strengths and weaknesses of their play, and enhance researchers' knowledge of attack techniques and strategies in professional volleyball.

METHODS

The type of research used in this study is quantitative descriptive. Quantitative descriptive research is a method used in research to describe, explain, or summarize various conditions, situations, phenomena, or research variables based on actual occurrences that can be photographed, interviewed, observed, and revealed through documentary materials. The type of research used in this study is quantitative descriptive research. Quantitative descriptive research is a method used in research to describe, explain, or summarize various conditions, situations, phenomena, or research variables based on actual occurrences that can be photographed, interviewed, observed, and revealed through documentary materials (Adiningrat et al., 2025). In this study, a quantitative descriptive method was used to analyze the frequency and effectiveness of volleyball team offensive actions during the match, which included open smashes, quick attacks, back attacks, and serves. The technique or method used in this study is *ex post facto*. In other words, the *ex post facto* method, according to (Rasyidi et al., 2020) research that does not involve any intervention, but simply presents facts that occur naturally, can be conducted through collected video footage.

The sampling method used in this study was purposive sampling, which involves the deliberate selection of a sample based on specific criteria relevant to the research objectives (Mushofa et al., 2024). The sample selected in this study is the Lavani volleyball team's matches from the Final Four to the Grand Final in the 2026 Proliga event, which totaled 8 matches. The data collection method used in this study is observation, employing a non-participant (indirect) approach through the analysis of video recordings of the matches. Data were collected by observing all of the Lavani team's matches from the Final Four through the Grand Final of the 2026 Proliga, and then recording every event related to the research variables. According to (Novianti, 2012) observation involves focusing one's attention intensively on either specific aspects or the overall phenomenon at hand, with the aim of obtaining accurate and objective data.

The data analysis technique used in this study is quantitative descriptive analysis with percentages, a method used to describe observational data in the form of percentages. The data obtained through observation sheets were then tabulated by frequency based on specific categories. The attack types analyzed in this study were open spike, quick attack, back attack, and serve. Next, the data was analyzed using percentage formulas to determine the success rate of each type of attack.

RESULTS AND DISCUSSION

Based on an analysis of data regarding the offensive strategies employed by the Lavani volleyball team from the Final Four through the Grand Final of the 2026 Proliga, several research findings regarding the effectiveness of their attacks during the matches were identified. The data for this study was sourced from the Lavani team's match statistics from the Final Four through the Grand Final of the 2026 Proliga, covering matches against Garudajaya, Samator, and Bhayangkara Presisi. The analysis focused on several types of attacks used by the Lavani team, namely the serve, open spike, back attack, and quick attack.

The research findings include the number of successful plays (good), errors, and aces recorded for each attacking technique throughout the matches. The data was then analyzed to identify the most frequently used attacking patterns, the effectiveness of each attacking technique, and the contribution of each attack to the Lavani team's performance from the Final Four through the Grand Final of the 2026 Proliga.

The following is a description of the research data presented based on the cumulative totals for each type of attack including serves, open spikes, back attacks, and quick attacks executed by the Lavani team from the Final Four through the Grand Final of the 2026 Proliga.

Table 1. Summary of Lavani Team's Performance from the Final Four to the Grand Final of the 2026 Proliga

Attack Technique	Good	Error	Ace	Total Activity
Serve	530	113	39	682
Open Spike	215	54	-	269
Back Attack	101	16	-	117
Quick Attack	90	16	-	106
Total	936	199	39	1.135

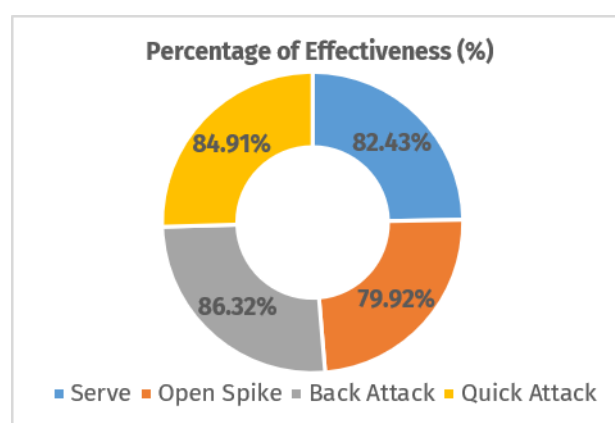


Figure 1. Diagram of the Lavani Team's Offensive Effectiveness from the Final Four to the Grand Final of the 2026 Proliga

Table 1 and **Figure 1** show that the Lavani team recorded a total of 1,135 attack attempts from the Final Four through the Grand Final of the 2026 Proliga. The serve was the most frequently used form of attack, with 530 successful attempts resulting in 39 aces and an effectiveness rate of 82.43%. The high effectiveness of the serve indicates that the Lavani team was able to utilize the serve as a form of initial pressure against the opponent from the start of the rally to put pressure on the opponent through the quality of their serves. In addition to being used as a game opener, the serve was also utilized as an initial attack to disrupt the opponent's receiving patterns and attack setups.

The open spike achieved an effectiveness rate of 79.92% with 215 successful attempts. The high frequency of open spikes indicates that the open attack pattern remains the primary choice for finishing attacks because it is more flexible in various game situations. However, the open spike also has a higher error rate compared to other attack techniques. This suggests that the open spike carries a significant risk of error due to the strength of the opponent's blocks and defense during the match..

The back attack achieved the highest success rate of 86.32%, with 101 successful attacks. This high success rate indicates that Lavani's players were able to make the most of their varied back-row attacks to score points. Additionally, the success of the back attack was influenced by the setter's ability to distribute the ball effectively and the spikers' ability to read the opponent's defensive positioning.

The quick attack achieved an effectiveness rate of 84.91%, with 90 successful attempts. These results indicate that the quick attack is one of the most effective fast-attack variations used by the Lavani team. The quick attack technique relies on rapid ball movement between the setter and the middle blocker, making it difficult for the opponent to anticipate the block.

Overall, the variety of attacks employed by the Lavani team demonstrated a high level of offensive quality throughout the Final Four and Grand Final of the 2026 Proliga. The diverse

attacking patterns they utilized made their play more dynamic, making it difficult for opponents to anticipate the direction and type of attacks they would launch.

Table 2. Lavani Team's Offensive Performance from the Final Four to the Grand Final of the 2026 Proliga

Match	Date	Serve	Open Spike	Back Attack	Quick Attack	Description
vs Garudajaya	03 April 2026	47	23	11	9	The initial performance was quite good
vs Samator	05 April 2026	64	26	14	13	Increased Variety of Attacks
vs Bhayangkara Presisi	09 April 2026	72	32	13	17	The most effective quick attack
vs Garudajaya	11 April 2026	60	25	7	13	Back attacks are on the decline
vs Samator	16 April 2026	58	27	11	9	Open spike stable
vs Bhayangkara	19 April 2026	71	25	15	12	Attacks from behind are on the rise
vs Bhayangkara Presisi	24 April 2026	82	23	17	8	Best serve and back attack
vs Bhayangkara	25 April 2026	76	34	13	9	Highest open spike

Table 2 shows that the effectiveness of Lavani's offensive performance varied across different attack techniques in each match. These variations were influenced by the opponents' playing styles, game situations, and the variety of attacks employed by Lavani from the Final Four through the Grand Final. In general, the Lavani team demonstrated fairly stable offensive performance from the Final Four through the Grand Final of the 2026 Proliga. This is evident from the high number of successful attacks in each match, particularly in the serve and open spike techniques, which served as the team's primary attacking patterns. The variety of attacks employed also indicates that the Lavani team maintained good on-court coordination among the setter, spikers, and middle blockers throughout the matches..

Lavani's best offensive performance was on display in the Grand Final against Bhayangkara Presisi on April 24, 2026. In that match, Lavani recorded the highest number of good serves at 82 and scored 7 aces. The high serve success rate demonstrates that Lavani was able to put pressure on their opponents from the start of each rally through aggressive and consistent serving. Additionally, their back attacks in that match also performed at their best, with 17 successful attempts. This indicates that the team maximized the use of varied back-row attacks to score points and outmaneuver the opponent's defense. The high effectiveness of serves and back attacks in that match was a key factor supporting Lavani's performance in the Grand Final.

In the match against Bhayangkara on April 25, 2026, the Lavani team demonstrated their best open spike performance from the Final Four through the Grand Final of the 2026 Proliga, with 34 successful attempts. The high frequency of open spikes indicates that the open attack pattern remains the primary choice for finishing plays. In addition to being more flexible in

various game situations, the open spike also offers a greater chance of scoring points when the setter's reception and ball distribution are executed well. The success of the open spike in that match demonstrates that the collaboration between the setter and spiker was quite effective throughout the game. However, the high frequency of open spikes also increases the risk of errors due to the opponent's strong blocks and defense.

The best quick attack performance occurred in the match against Bhayangkara Presisi on April 9, 2026, with 17 successful attempts. The high effectiveness of the quick attack demonstrates that the Lavani team was able to maintain a fast pace of play through good coordination between the setter and the middle blocker. The quick attack was executed at a rapid pace, making it difficult for the opponent to anticipate the block. Additionally, the variety of quick attacks made the Lavani team's offensive patterns harder for opponents to read during the match. The success of the quick attacks in that match demonstrated that ball distribution and timing among players were executed quite effectively throughout the game.

In the matches against Samator on April 5, 2026, and April 16, 2026, the Lavani team demonstrated a fairly consistent offensive performance across all attacking techniques. This consistency was evident in the high success rates of serves, open spikes, back attacks, and quick attacks in both matches. This indicates that the Lavani team was able to maintain a consistent level of offensive quality despite facing varying levels of match pressure. Additionally, the variety of attack patterns employed made the team's play more dynamic and harder for opponents to anticipate. The consistency of offensive performance in these matches indicates that coordination among players and the game strategy implemented by the Lavani team functioned effectively throughout the competition. Attacks in volleyball represent one of the most critical offensive aspects for scoring points and determining match outcomes (Jahir et al., 2021).

A good variety of attacks can put pressure on the opponent's defense and increase the team's chances of scoring points (Allan et al., 2020). In modern volleyball, the effectiveness of an attack is influenced by the quality of the reception, the setter's distribution of the ball, the spiker's ability to finish the attack, and coordination among players during the match (González-Silva et al., 2020). The more varied a team's attacking patterns are, the harder it is for the opponent to anticipate the direction and type of attack. Therefore, the quality of the offense is one of the key factors influencing a team's performance in a volleyball match (Lima et al., 2023). Based on the results of the research covering the Final Four through the Grand Final of the 2026 Proliga, the Lavani team demonstrated strong offensive capabilities through the variety of attacks employed in each match. The high effectiveness of their attacks—particularly in serving, back attacks, and quick attacks—indicates that the Lavani team was able to develop a diverse offensive strategy, making it difficult for opponents to anticipate the direction of their attacks.

In volleyball, the serve is a fundamental technique used to start the game and also serves as the first offensive play in the game (Maneiro et al., 2026). In modern volleyball, the serve is not only used to start a rally, but also to put pressure on the opponent through aggressive, well-placed serves (Hussein et al., 2026). According to the research findings, the serve was the most frequently used attacking tactic by the Lavani team during the Final Four and Grand Final stages of the 2026 Proliga, with 530 successful serves and 39 aces. The high effectiveness of the serve indicates that the Lavani team was able to use the serve as the starting point of their attack to disrupt the opponent's receiving patterns and offensive setups (Krajcigr et al., 2026). This was particularly evident in the Grand Final match against Bhayangkara Presisi on April 24, 2026, where the Lavani team recorded the highest number of good serves at 82 and scored 7 aces. This indicates that the quality of the serve is a key factor in building pressure throughout the match (Alagappa, 2026). These findings are consistent with the view of Maneiro et al., (2026) who state that the serve can be used as an opening attack to put pressure on the opponent and influence the course of the game.

The open spike is the most commonly used attack technique in volleyball (Labit & Spencer, 2026). This technique is executed through an open set that the setter delivers to the spiker to generate a powerful spike into the opponent's defensive zone (Surakarta et al., 2026). According to the research findings, the open spike was the most frequently used attack by the

Lavani team in finishing their attacks, with 215 successful attempts and an effectiveness rate of 79.92%. The high frequency of open spikes indicates that this attack pattern remains the team's primary choice during matches because it offers greater flexibility in various game situations (Tilp et al., 2026). The best open spike performance occurred in the match against Bhayangkara on April 25, 2026, with 34 successful spikes. The high success rate of open spikes in that match indicates that coordination between the setter and the spiker was strong enough to maximize the effectiveness of the attack. However, the open spike also resulted in a higher number of errors compared to other attacking techniques due to the opponent's strong blocking and defense throughout the match.

A back attack—a type of attack carried out by a player from the back row—is a technique used to outwit the opponent's defense (Naser, 2025). This technique requires good coordination between the setter and the spiker so that the attack pattern can be executed effectively (Muhammad Rizky Al Mufarid et al., 2026). Berdasarkan hasil penelitian, back attack menjadi teknik dengan tingkat efektivitas tertinggi compared to other attacking techniques, at 86.32% with 101 successful attempts. This high level of effectiveness indicates that the Lavani team was able to maximize the use of back-row attack variations to score points. The best back-row attack performance was seen in the Grand Final match against Bhayangkara Presisi on April 24, 2026, with 17 successful attempts. This indicates that back-row attack variations can be used to divert the opponent's blocking focus away from front-row attacks. Additionally, the success of back attacks is influenced by the setter's ability to distribute the ball effectively and the spiker's ability to read the opponent's defensive positioning during the match (Slovák et al., 2026).

The quick attack is a technique executed through cooperation between the setter and the middle blocker (Gumelar et al., 2026). This technique is executed at a fast pace, making it difficult for the opponent to anticipate the block (Yue, 2026). Research findings indicate that the quick attack has a fairly high success rate of 84.91%, with 90 successful attempts. The best performance of the quick attack occurred in the match against Bhayangkara Presisi on April 9, 2026, with 17 successful attempts. The high effectiveness of the quick attack demonstrates that the Lavani team is capable of maintaining a fast pace of play through good coordination between the setter and middle blocker. This variety of quick attacks makes the team's playing style harder for opponents to read during the match. A study by Drikos et al., (2021) states that the quick attack is a type of attack that is difficult to anticipate because it is executed very quickly and requires good coordination among players. Thus, the high effectiveness of the quick attack on the Lavani team indicates that coordination among players was strong throughout the match.

Overall, the research findings indicate that the Lavani team demonstrated strong offensive capabilities from the Final Four through the Grand Final of the 2026 Proliga. The variety of attacks employed made the team's playing style more dynamic and difficult for opponents to anticipate. The high effectiveness of their serve, back attack, and quick attack techniques demonstrates that the Lavani team does not rely on a single offensive pattern to score points. Additionally, coordination among players, the setter's ball distribution quality, and the spikers' ability to capitalize on attacking opportunities were key factors influencing the team's offensive success throughout the matches. Thus, the variety of attacking patterns possessed by the Lavani team became one of their primary strengths in facing matches from the Final Four through the Grand Final of the 2026 Proliga.

CONCLUSION

Based on the research findings, it can be concluded that the Lavani volleyball team demonstrated excellent attacking quality from the Final Four through the Grand Final of the 2026 Proliga. Of the total 1,135 attack activities analyzed, the serve was the most dominant technique used with 682 occurrences, consisting of 530 good serves, 113 errors, and 39 aces, with an effectiveness rate of 82.43%. The open spike technique recorded 269 instances, with 215 successful spikes and 54 errors, resulting in an effectiveness rate of 79.92%. The back attack was the most effective type of attack, with a success rate of 86.32% from 117 instances, comprising 101 successful attacks and 16 errors. Meanwhile, the quick attack showed an

effectiveness rate of 84.91% from 106 attempts, with 90 successful attacks and 16 errors. These results indicate that LavAni does not rely solely on a single attack pattern but is capable of executing effective, organized, and unpredictable attack variations that are difficult for opponents to anticipate. The high effectiveness of serves, back attacks, and quick attacks reflects good coordination between the setter, spikers, and middle blockers, as well as the team's ability to capitalize on opportunities to score points. Thus, the effectiveness of attack variations is one of the key factors supporting LavAni's performance and success in the 2026 Proliga.

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