Analysis of Basic Forehand Table Tennis Skills at El-Jiilany Club, Tuban Regency

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Abstrak

The training process in developing high-performance athletes is still not optimal as only 3 out of 10 athletes have achieved success. The purpose of this research is to analyze 10 athletes' basic forehand strokes using selected instruments to identify the reasons behind their lack of success in performing the fundamental movements. The research design is descriptive, employing a theory-based approach to collect, analyze, and present the gathered data. This study is quantitative in nature, with a sample size of 10 athletes. A practical test instrument was used for the analysis. The results of the research show the analysis of basic forehand stroke skills, including the initial posture, execution, and final posture, among the athletes at El-Jilany Club in Tuban Regency in 2022. Overall, the analysis indicates that the athletes' basic forehand stroke skills are satisfactory. However, there are still some athletes who demonstrate low skill levels in execution and final posture. The novelty of this research lies in the use of a practical test instrument selected by the researcher to analyze the basic forehand stroke skills of high-performance athletes. Furthermore, the study provides insights into the analysis of basic forehand stroke skills among successful athletes in a specific club, serving as a reference for athlete development in the same or other clubs.

Keywords: Sports, Forehand Stroke, Table Tennis

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Author's Contribution: a) Research Design; b) Data Collection; c) Statistical Analysis; d) Manuscript Preparation; e) Fund
A. Introduction

Sports is a physical activity that aims to enrich and enhance body movements for various sports disciplines. It is also crucial for stress reduction. Additionally, sports can restore metabolic functions and impact the body's glandular systems (Faridah, 2015). Individuals engage in sports with different goals and benefits, such as achieving excellence, maintaining fitness, or simply for recreational purposes (Mustafa & Dwiyogo, 2020). Sports involve elements that carry meaning in the game and require individuals to challenge themselves, fostering a sporting spirit or fighting spirit (Setia & Winarno, 2021). In team sports, competition among individuals is encouraged through enjoyment and fair play (Supriyoko & Mahardika, 2018).

Sports are conscious physical activities that involve deliberate movements and improve functional abilities. They can be performed individually or in groups, with different goals and benefits based on individual objectives.

Table tennis is one of the popular sports disciplines, and it is well-known in Indonesia. It was previously referred to as ping-pong. In Indonesia, table tennis has gained significant popularity, as seen in the presence of numerous table tennis clubs and Indonesia's participation in regional, national, and international events (Rihtiana & Tomoliyus, 2014). Table tennis has been rapidly developing, with almost every segment of society familiar with and capable of playing the sport. To become a more talented athlete, mastery of techniques and tactics is essential for advancing in the game (Kurniawan et al., 2020).

Table tennis is a simple and easily learned sport, but it becomes complex when studied in depth. The game has unique characteristics, such as the small ball, the rubber-coated surfaces of the paddle with varying bounces, striking techniques, the playing field, and the rules (Kurniawan et al., 2020). The game begins with the first ball served to the opponent's side, and the ball must pass over the net and land on the opponent's table. Players must use their paddles to strike the ball after it bounces on the table (Kurniawan et al., 2020). Table tennis is a highly popular and creative game enjoyed by various segments of Indonesian society, including children, adolescents, and adults. The exact origins and pioneers of table tennis are unknown (Ridwan Ahmad Maftuhin & Danang Aji Setyawan, 2021). The forehand technique is crucial for scoring points in table tennis (Ridwan Ahmad Maftuhin & Danang Aji Setyawan, 2021). Athletes need to master the forehand technique, and at the El-Jiilany Club in Tuban Regency, efforts have been made by coaches to improve this skill through various training programs. The forehand
technique is the most dominant stroke among the six attacking strokes in table tennis, accounting for 34% of all strokes and 60% of all types of strokes. This indicates that the forehand stroke has a significant influence on achieving success in matches. Therefore, it is an essential technique for athletes to master in order to win matches. This research was conducted at the El-Jilany Club in Tuban Regency. During the observation and interviews with the coaches, it was noted that out of 10 high-performing athletes, only 3 were present. Hence, by analyzing the underperforming athletes using the provided instruments, the researchers aimed to identify the reasons behind their lack of performance.

A. Methods

This research aims to determine the basic movement skills in terms of the initial stance, execution, and final stance at the El-Jilany Club in Tuban Regency. The research design employed is quantitative descriptive, which is conducted to answer questions about the existing conditions or situations in the field and involves numerical calculations. The research design used is quantitative descriptive, where the practice of table tennis forehand stroke was performed using the forehand test instrument adopted from (Rihtiana & Tomoliyus, 2014). The data analysis was conducted using Excel, describing and presenting the collected data as they are without intending to draw general conclusions or generalizations. The descriptive design is a theory-based design method that involves collecting, analyzing, and presenting the collected data. After obtaining the data, simple analyses were performed using mean, median, standard deviation, minimum, and maximum values.

B. Result and Discussion

| Table 1 Forehand Technique Assessment Guidelines (Rihtiana & Tomoliyus, 2014) |
|---|---|---|
| No | Aspects of the Test | Criteria |
| 1. | Beginning Attitude/Initial Attitude | 1. Grip relaxed and in front of the body |
| | | 2. Stand with feet shoulder-width apart, and right foot slightly behind. |
| | | 3. Both knees slightly bent. |
| | | 4. Body leaning forward and slightly raised heels |
| 2. | Attitude of Implementation | 1. Turn to the right and followed by the right hand |
| | | 2. Weight on the hind legs |
| | | 3. Turn the kick to the left followed by the arm that carries the bat |
| | | 4. Hit the ball on the middle side at the bottom of the bet. |
| 3. | Final Attitude | 1. Bet moves towards the bottom of the ankle |
| | | 2. Shows the clock at 11 |
| | | 3. View towards the speed of the ball. |
1. Description of Basic Movement 
Skill Results in Stance Position for 
Forehand Stroke of Athletes in El-
Jilany Club, Tuban Regency, 2022.

Based on the data analysis conducted in the 
research, the description of the initial 
stance basic movement skill of athletes in 
El-Jilany Club, Tuban Regency, in 2022 
can be summarized as follows: the mean 
score is 9.8, the median score is 1, the 
minimum score is 7, and the maximum 
score is 11. Based on the test results, it can 
be categorized as good in terms of the basic 
movement skill for forehand stroke of 
athletes in El-Jilany Club, Tuban Regency, 
in 2022. The calculation is presented in the 
following table.

Table 2. Category of Movement Skills Basic Attitude in Forehand Shots for Club El – 
Jilany Athletes, Tuban Regency in 2022.

<table>
<thead>
<tr>
<th>No</th>
<th>Interval</th>
<th>Frekuen</th>
<th>Persentase</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 10</td>
<td>7</td>
<td>70 %</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>7 – 9</td>
<td>3</td>
<td>30 %</td>
<td>Currently</td>
</tr>
<tr>
<td>3</td>
<td>≤ 6</td>
<td>0</td>
<td>0</td>
<td>Low</td>
</tr>
<tr>
<td>Jumlah</td>
<td>10</td>
<td>100%</td>
<td></td>
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</tbody>
</table>

From the table above, it can be 
observed that the basic movement skill of 
the forehand stroke stance in El-Jilany 
Club, Tuban Regency, in 2022 is good, 
considering the highest frequency with 7 
individuals or 70% falling under the good 
category. The basic movement skill for 
forehand stroke in table tennis among 
athletes in El-Jilany Club, Tuban Regency, 
can be categorized as moderate for 3 
individuals or 30%, and none are 
categorized as low, accounting for 0%.

The following is the graph depicting 
the basic movement skill of the forehand 
stroke stance among athletes in El-Jilany 
Club, Tuban Regency, in 2022.
From the graph above, it can be observed that the basic movement skill of the forehand stroke stance in El-Jilany Club, Tuban Regency, in 2022 is good, considering the highest frequency falling under the good category with 7 individuals or 70% represented by the blue color. The basic movement skill for forehand stroke in table tennis among athletes in El-Jilany Club, Tuban Regency, can be categorized as moderate, represented by the dark brown color, with 3 individuals or 30%, and none are categorized as low, accounting for 0%.


From the analysis of the research data, it can be described that the basic movement skill in the initial stance in El-Jilany Club, Tuban Regency, in 2022 has an average score of 3.5 with a standard deviation of 1, while the minimum score is 3 and the maximum score is 4. Based on the test results, it can be categorized as good in the basic movement skill of the forehand stroke among athletes in El-Jilany Club, Tuban Regency, in 2022. The calculations are presented in the following table.


<table>
<thead>
<tr>
<th>No</th>
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<th>Percentage</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 4</td>
<td>5</td>
<td>50 %</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>2 – 3</td>
<td>5</td>
<td>50 %</td>
<td>Currently</td>
</tr>
<tr>
<td>3</td>
<td>≤ 1</td>
<td>0</td>
<td>0 %</td>
<td>Low</td>
</tr>
<tr>
<td>Jumlah</td>
<td>10</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the table above it can be seen that the initial attitude basic movement skills at the El – Jilany Club, Tuban Regency in 2022 are good with the most frequency considerations in the good category with 5 people or 50%. Basic forehand movement skills in table tennis athletes from Club El-Jilany, Tuban Regency, which are in the category of 5 people or 50%, less 0 or 0%.

The following is a graph of the initial attitude basic movement skills at the El – Jilany Club, Tuban Regency in 2022.

**Figure 2. Initial Attitude**

From the graph above it can be seen that the basic movement skills of the initial attitude at the El – Jilany Club, Tuban Regency in 2022 are good with the most consideration in the good category with blue 5 people or 50%. Basic forehand movement skills in table tennis athletes from the El-Jilany Club, Tuban Regency, in the Enough category with dark brown color 5 people or 50%, less 0 or 0%.

3. **Description of the Results of Basic Movement Skills Attitude Implementation for Club El – Jilany Athletes, Tuban Regency in 2022.**

From the results of the research data analysis carried out, it can be described the basic movement skills of the forehand stroke in contact with the ball at the El – Jilany Club, Tuban Regency in 2022 with an average of 3.1 standard deviation of 1, a minimum value of 2 and a maximum value of 4. From the results the test can be categorized as good, the basic movement skills of the athlete's forehand stroke at the El – Jilany Club, Tuban Regency in 2022. The calculation is presented in the following table.

<table>
<thead>
<tr>
<th>No</th>
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<td>20%</td>
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<tr>
<td>2</td>
<td>2 – 3</td>
<td>7</td>
<td>70%</td>
<td>Currently</td>
</tr>
<tr>
<td>3</td>
<td>≤ 1</td>
<td>1</td>
<td>10%</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

From the table above it can be seen that the basic movement skills for the attitude of the executor at the El – Jilany Club, Tuban Regency in 2022 are Moderate with the most frequency consideration being 7 people or 70%. Movement skills basic initial attitude at table tennis Club El-Jilany, Tuban Regency, in the Good category 2 people or 20% and Low 1 or 10%.

The following is a graph of the basic movement skills of hitting the ball in a forehand shot at the El – Jilany Club, Tuban Regency in 2022.

![Graph of Implementation Stages](image)

Figure 3. Implementation Stages

From the graph above it can be seen that the basic movement skills for the attitude of the executor at the El – Jilany Club, Tuban Regency in 2022 are Medium with a dark brown color with the most consideration being 7 people or 70%. The basic movement skills of the executor's attitude at table tennis Club El-Jilany, Tuban Regency, in the Good category with blue color 2 people or 20% and Low 1 with light green color or 10%.


From the results of the research data analysis conducted, it can be described the basic movement skills of the final attitude
in forehand strokes at the El – Jilany Club, Tuban Regency in 2022 with an average of 3.2 standard deviation of 1 while a minimum value of 2 and a maximum value of 4. From the results, the test can be categorized as good in terms of basic movement skills for forehand strokes in Club El – Jilany athletes, Tuban Regency in 2022. The calculations are presented in the following table.

Table 5. Category of Final Attitude Basic Movement Skills at the El – Jilany Club, Tuban Regency in 2022.

<table>
<thead>
<tr>
<th>No</th>
<th>Interval</th>
<th>Frekuency</th>
<th>Percentage</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥ 4</td>
<td>4</td>
<td>40 %</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>2 – 3</td>
<td>4</td>
<td>40 %</td>
<td>Currently</td>
</tr>
<tr>
<td>3</td>
<td>≤ 1</td>
<td>2</td>
<td>20%</td>
<td>Low</td>
</tr>
<tr>
<td>Jumlah</td>
<td>10</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

From the table above, it can be seen that the final attitude basic movement skills at the El – Jilany Club, Tuban Regency in 2022 are good with the highest frequency considerations in the good category with 4 people or 40%. The basic motion skills of the final attitude of table tennis in the athletes of the El-Jilany Club, Tuban Regency, which are in the Moderate category are 4 people or 40%, and Low are 2 people or 2%.

The following is a graph of the basic movement skills for the final attitude of athletes at the El – Jilany Club, Tuban Regency in 2022.

Figure 4. Final Attitude
From the graph above, it can be observed that the skill level of the final stance in El-Jilany Club, Tuban Regency, in 2022 is good, represented by the blue color with the highest frequency falling under the good category with 4 individuals or 40%. The skill level of the final stance in table tennis among athletes in El-Jilany Club, Tuban Regency, can be categorized as moderate, represented by the dark brown color, with 4 individuals or 40%, and low, represented by the light green color, with 2 individuals or 2%.

**Discussion**

From the description of the research results conducted on the analysis of basic movement skill in the initial stance, execution stance, and final stance in El-Jilany Club, Tuban Regency, in 2022, it can be concluded that the overall analysis of the basic movement skill in the forehand stroke in the initial stance, execution stance, and final stance in El-Jilany Club, Tuban Regency, in 2022 is good, considering the highest frequency falling under the good category with 10 individuals or 100%. The skill level in the initial stance is good with the highest frequency of 5 athletes or 50%, the skill level in the execution stance is good with the highest frequency of 10 individuals or 100%, and the skill level in the final stance is good with the highest frequency of 10 individuals or 100%. Based on the research results, it is shown that the analysis of the basic movement skill in the forehand stroke in the initial stance, execution stance, and final stance in El-Jilany Club, Tuban Regency, in 2022 is categorized as good. This indicates that the ability to perform the forehand stroke technique is already good, and it would be even better if it continues to be improved during practice. Based on the visual observations conducted by the researcher on the table tennis training, although the athletes performed the forehand skill practice with good criteria in the test, only a few athletes were able to play table tennis proficiently. It can be concluded that these athletes have talent and potential in playing table tennis.

**C. Conclusion**

Based on the research results and discussions presented, the following conclusions can be drawn: The analysis of the Forehand Stroke Skill in Table Tennis at El-Jilany Club, Tuban Regency, yielded the overall result that the analysis of the basic movement skill in the forehand stroke in the initial stance, execution stance, and final stance in El-Jilany Club, Tuban Regency, is good, considering the highest frequency falling under the good category with 7 athletes or 70%, moderate category with 3 athletes or 30%, and low category with 0 athletes or 0%. The skill level in the initial stance is good, with the highest frequency of 5 athletes or 50%, moderate
category with 5 athletes or 50%, and low category with 0 athletes or 0%. The skill level in the execution stance is moderate, with the highest frequency of 7 athletes or 70%, good category with 2 athletes or 20%, and low category with 1 athlete or 10%. The skill level in the final stance in table tennis is good, with the highest frequency of 4 athletes or 40%, moderate category with 4 athletes or 40%, and low category with 2 athletes or 20%.

D. Acknowledgments

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E. Konflik Kepentingan

No Conflict of Interest

Reference


