The Level of Tennis Skills Among FIK Students as Determined by Their Height

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Abstract

A This study aims to describe the level of tennis playing skills among students of the Department of Physical Education, Health, and Recreation (PJKR) at the Faculty of Sports and Health Sciences, Makassar State University (FIK UNM), specifically focusing on the basic techniques of the forehand drive and backhand drive. It also seeks to analyze the relationship between these skills and students' height. The research adopts a quantitative approach with a descriptive method. The subjects of the study were 30 male PJKR students from FIK UNM who had completed the Tennis course, selected through purposive sampling. To assess the students' forehand and backhand skills, the Hewitt Tennis Test was used. Data were analyzed using descriptive and inferential statistics. The results showed that students' forehand drive skills (mean score: 20.60) were better than their backhand drive skills (mean score: 14.57). The majority of students demonstrated a "good" level of forehand skill (30%), while for the backhand, most were categorized at "moderate" and "good" levels (33.3% each). Correlation analysis revealed a strong relationship ($r = 0.640$) between overall tennis skills (forehand and backhand combined) and students' height, with a contribution of 41%. This study highlights the importance of structured and varied training programs, incorporating both physical and mental components, to enhance students' tennis skills.

Keywords: Tennis; Forehand Skill; Backhand Skill; Height

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A. Introduction

Field Tennis is a sport that is one of the game category sports and is played by everyone, both men and women of all ages. This sport is one type of game sport that is popular and much favored by the middle and upper classes (Arifin et al., 2012). In the book (Arifin et al., 2012) . In the book (Saleh & Syahruddin, 2023) explains that Tennis is a racket sport played either individually one-on-one (singles) or between two teams of two players each (doubles). Each player uses a tennis racket tied with a string to hit a felt-covered hollow rubber ball over or around a net into the opponent's court. An excerpt from the online media article (Avantika, 2025) about the International Tennis Lagi-Lagi Tournament that took place on February 9, 2025 recorded a meeting between the Indonesian team, which consisted of figures such as Raffi Ahmad, Nagita Slavina, Desta Mahendra, Dikta Wicaksono, and Nia Ramadhani, and representatives from South Korea featuring Park Eun Seok, Hong Soo Ah, Jung Ha Young, Choi Woong, and Tae Eun. Therefore, field tennis is a sport that is an interesting challenge in playing it so that not only athletes, currently top artists also play field tennis and even make matches between national artists and between foreign artists, so that the enthusiasm of the community to play and even join the club in order to practice and compete in field tennis is currently very large. As well as the results of community service from (Putro & Haryani, 2022) explains The presence of this collaborative social media platform triggered a wave of new member registrations, both those who immediately joined and those who were still in the exploratory stage. In addition, public interest in finding out basic information about the sport of court tennis has also increased. There is no doubt that online media platforms are very helpful for the introduction and popularization of this sport. It can also help clubs to promote or find new athletes.

In the game of field tennis, it is the same as every other game sport where field tennis has basic techniques in playing. Similar to other game sports, in the game of field tennis it is necessary that someone in playing must be able and also skilled in performing these basic techniques. Therefore, basic techniques are the main thing that must be mastered for beginners or those who are new to field tennis. And if you have mastered the basic techniques in the game of field tennis, it will make it easier for someone to train more complex and varied hitting techniques.

Field tennis is a type of game sport that has a variety of basic techniques that must be taught to students or novice athletes (D. R. Budi et al., 2020) . One of the important basic techniques in the game of field tennis is to hit a shot over the net and the ball lands in the opponent's field area. The game of field tennis will demand a lot of skills and physical abilities when playing, technique and physicality are mutually supportive units in the game.

Techniques when teaching and training are needed to make it easier for students and novice athletes to achieve goals in mastering basic techniques in court tennis (D. Budi & Listiandi, 2021) . Therefore, a coach is required to carry out good programmed coaching in fostering athletes / players to make athletes who excel. The hitting techniques in the game of field tennis are serve, forehand, backhand, volley, and smash.

When the ball has touched and bounced off the court, the resulting stroke in tennis is known as a groundstroke (Prasetiono & Gandasari, 2018) . The groundstroke technique allows players to launch shots from all zones of play, with a tendency to

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be carried out from the back line of the court (baseline) after ball contact with the court surface (Siahaan, 2019) . Basic strokes in tennis are categorized into two variants, namely forehand and backhand. In general, the forehand stroke is considered a fundamental element in the strategy of a tennis game. Due to its status as the most frequently used stroke in tennis and its great influence on the outcome of a match, the forehand groundstroke is fundamental to achieving success. It is a widely understood concept among competitive tennis players that the proficiency and stability of the forehand groundstroke often determines individual point winners (Kwon et al., 2017) . Backhand, on the other hand, refers to a tennis stroke technique that involves swinging the racket from the opposite lateral side of the body towards the front side, utilizing the back side of the racket head for impact with the ball, and the characteristic palm position facing towards the ball at contact (Agus, 2015) .

The Department of Physical Education Health and Recreation (PJKR) is one of the departments owned by the Faculty of Sport and Health Sciences, Makassar State University (FIK UNM). Field tennis is a practical theory course programmed to be learned and mastered by PJKR FIKK UNM students. Therefore, every PJKR FIK UNM student must be able to know the theory and practice of playing field tennis skills not only to complete the TP course. Field Tennis but so that the output after graduating students can devote their knowledge to students or athletes in training techniques to play field tennis in a good and correct way. The majority of PJKR FIK UNM students know or understand the sport of field tennis when they are in college, but there are also students who already know or recognize this field tennis sport and even become field tennis athletes, so it can be said that PJKR FIK UNM students are in the beginner level category in learning the game of field tennis.

From that, the author wants to look at aspects of the potential and expertise of students in launching forehand drives and backhand drives effectively in order to signify the level of skill. The level of ability and skill to play field tennis for PJKR FIK UNM students is thought to be influenced by a number of factors. Inadequate physical condition is one of the inhibiting aspects, in addition, the limited allocation of lecture time also limits the intensity of repetition of the required skill movements.

By paying attention to the complexity of the problems described above, the researchers consider it relevant to study the "Level of Field Tennis Game Skills of PJKR FIK UNM Students in terms of their height".

B. Methods

This research uses a quantitative approach with descriptive methods. The choice of this approach aims to obtain an objective picture of the level of field tennis skills of PJKR FIK UNM students, Specifically, this research focuses on the basic technical aspects of forehand drive and backhand drive shots. Descriptive research itself is an approach that aims to represent a phenomenon as it is, systematically, factually, and accurately, including characteristics and correlations between observed variables (Rukajat, 2018) . As explained by (Arikunto, 1983) , the descriptive method is used to describe the condition of the research subject according to the data obtained empirically or as it is, the research variables are measured and analyzed without any treatment or manipulation from the researcher.

The subjects in this study were students of the Department of Physical Education, Health and Recreation (PJKR), Faculty of Sport and Health Sciences, Makassar State University who had attended and programmed MK Field Tennis lectures. The selection of subjects was carried out by purposive sampling, which is a sample selection technique based on special considerations or objectives in accordance

with the characteristics of the study. In this case, the researcher sets the criteria that the subject is a male student who takes Field Tennis courses. The number of subjects involved in this study were 30 students.

According to (Sugiyono, 2017) , Sampling through purposive sampling involves consideration of certain criteria and is generally applied when the researcher has clear research objectives and seeks to obtain data relevant to the focus of the investigation. This technique allows researchers to select individuals who are considered the most capable of presenting the information needed in depth and in accordance with the context of the study (Moelong, 2018) .

Field tennis forehand and backhand skills in this study were measured with forehand and backhand drive test instruments (Nurhasan, 2000) . Students are asked to direct the ball to a predetermined target. To measure their forehand and backhand skills, the Hewitt Test was used, a standardized instrument that has been proven valid and reliable for assessing accuracy and consistency of tennis skills (Hewitt, 2013) .

This research will analyze the data that has been collected in descriptive statistics with the aim of visualizing in general the level of skills of the PJKR FIK UN student field tennis game.

C. Results and Discussion
Research Results

Data collection of field tennis skills in this study was carried out through direct observation and observation, using forehand drive and backhand drive measurement tests applied to students majoring in PJKR FIK UNM, and to determine body height, a height measurement test was carried out with a height measuring meter instrument according to the number of samples available as many as 30 samples. From the explanation that has been stated above, explaining this research focuses on describing the actual conditions related to the mastery of field tennis playing skills by students majoring in PJKR FIK UNM in terms of student height.

Data analysis in this study is with descriptive and inferential statistical analysis techniques. From the results of descriptive statistics, then to determine the norms for categorizing the scale of data on the results of forehand skills and backhand skills based on normal distribution using the following formula.

Table.1 Category Scale

Category	Formula
Less than Once	X≤M-2SD
Less	M-2SD<X≤M-1SD
Medium	*M*-1*SD*<*X*≤*M*
Good	M<X≤M+1SD
Excellent	X>M+1SD

Source: (Suharsimi, 2013)

The following are the results of the statistical analysis of this study.

Descriptive data.

Table 3. Percentage of Forehand and Backhand Skills

	PF	PB	TT
$\bar{x}$	20,60	14,57	162,57
SD	5,001	3,360	6,436

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	PF	PB	TT
S^2	25,007	11,289	41,426
R	22	15	25
X_{min}	9	6	151
X_{max}	31	21	176
$\sum X$	618	437	4877

	PF	PB
Less than Once	1 :3,33%	2 :6,67%
Less	4 :13,33%	3 :10%
Medium	8 :26,67%	10 :33,3%
Good	9 :30%	10 :33,3%
Excellent	6 :20%	5 :16,67%
Total	30 :100%	30 :100%

Table 4. Correlation between variables

	PF	PB
TT	0,548	0,532

Table 5. Influence between variables

|	R	R^2	Sig
PF: PB-TT	0,640	0,410	0,001

Discussion

Based on the results of the research statistics above, it can be seen the results of data analysis in table 1 which shows the results of descriptive analysis showing the average value of PF (Forehand Skills) and PB (Backhand Skills) there is a significant difference. The average data analysis results of the PF variable show a value of 20.60 points, while PB obtained an average value of 14.57 points. So that from the results of the descriptive data analysis that has been described, it shows that forehand skills are better than the backhand skills of PJKR FIK UNM students with an average difference of 6.30 points.

Based on table 2 which describes the percentage of forehand and backhand skills, it explains that PF (Forehand Skills) and PB (Backhand Skills) tend towards a more positive direction (Good), PF has a high percentage proportion in the good category of 30% or 9 students showing good forehand skills, while PB has a high percentage proportion in the medium and good categories of 33.3% or 10 students showing moderate backhand skills and 10 students showing good backhand skills. The percentage graph is as follows:

Distribusi Persentase Pukulan Forehand (PF)

Distribusi Persentase Pukulan Backhand (PB)
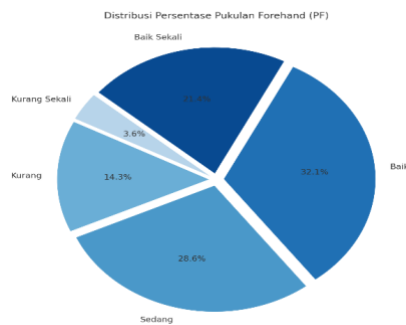
Seen in table 3 regarding the correlation between variables and table 4 regarding the influence between variables. then the results of the analysis data above can be described to find out about court tennis skills (forehand and backhand) when viewed from student height. So the relationship between court tennis skills (forehand and backhand) and student height is 0.640, which explains that the relationship between these variables is on a strong scale. The effect of field tennis skills (forehand and backhand) on student height is 0.410, which explains that the effect of field tennis skills is 41% and the remaining 59% is influenced by other variables not discussed by the researcher.

From the results of the interpretation of the research data above, it is important for students to practice better so that field tennis skills (forehand and backhand skills) can be even better. The way to improve field tennis skills besides doing technical exercises, namely by doing physical and mental. According to research (Naibaho et al., 2024) , explaining the results of consistent physical and mental training will improve all aspects of themselves in the game of field tennis. *"The quality of an individual's physical infrastructure serves as a critical determinant in the progression of their technical, tactical, and psychological domains"* (Bompa & Haff, 2009) . Where the meaning is that the development of significant technical, tactical, and
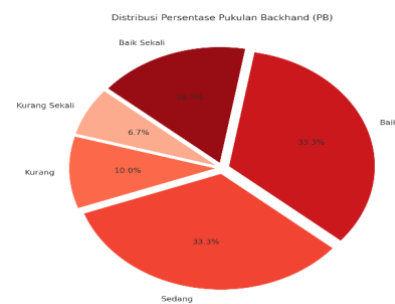
psychological capacities is highly dependent on the quality and strength of the physical foundation.

So it is recommended that in the MK TP Field Tennis lecture, it is better before giving the core material or practicing the technique of playing field tennis, so that it is carried out as well as possible to warm up involving more dominant muscle groups in the sport of playing field tennis and providing motivation to students so that students' concentration and mentality are awakened in the process of learning field tennis skills.

The results of the service (Saleh et al., 2024) explain the evaluation process that focuses on the basic techniques of forehand and backhand drives in tennis court through practical implementation that involves reviewing foot position, how to hold the racket, swing mechanism, and final position when hitting, using a multiball training approach. The results of this evaluation showed improvements in the PKM participants' knowledge and skills. In the book (Firdaus, 2023) it is written that to master the technique of hitting the ball well, several things must be considered such as foot movement techniques (preparation phase of hitting, racket holding techniques, racket movement techniques (hitting phase). Therefore, in improving the skills of the field tennis game many things need to be considered, one of which is by applying a variety of training methods in order to increase the stimulation of the accuracy of

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the direction of the forehand and backhand shots.

D. Conclusion

Based on the results of the research conducted, it can be concluded that there are differences in the level of skills in field tennis games in students of the Physical Education, Health and Recreation (PJKR) Study Program, Faculty of Sports Science, Makassar State University (FIK UNM), especially in the skills of performing forehand and backhand shots. In general, students show better ability to hit forehand shots compared to backhand shots.

In addition, the results of the analysis show that height has a significant and influential relationship with the skills of field tennis. Students with taller posture tend to have an advantage in reaching the ball and producing more effective shots, both in forehand and backhand techniques. Therefore, height can be one of the factors that support the achievement of better field tennis playing skills.

E. Acknowledgments

F. Conflict of Interest

The authors declare no conflict of interest.

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