

**DOMINANT COMPONENTS OF TECHNICAL ASPECTS IN
IDENTIFICATION OF FOOTBALL ATHLETE TALENT
USING AHP**

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Abstract

The aim of this research is to assess which technical aspects are dominant in identifying football athletes using the Analytic Hierarchy Process (AHP). This research uses a combination method. Mixed Methods Research (MMR) is a research approach that combines elements of qualitative and quantitative approaches in one study. The sample used in this research consisted of 10 coaches in the sport of soccer, who had a national coaching license with more than 5 years of coaching experience in the sport of soccer. Data collection was carried out using a questionnaire distributed online via Google Form. From the results of this analysis, it is proven that passing has a very important role compared to other criteria. The order of priority scores obtained from this analysis is as follows: Passing = 0.420; Control = 0.253; Dribbling = 0.144; Shooting = 0.126; and Post = 0.057. The conclusion in this study is that passing has a higher percentage in the assessment. This shows that passing is the main factor in detecting the talent of soccer athletes.

Keywords: Talent Identification, Football, Basic techniques, AHP

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INTRODUCTION

Football has become one of the most popular sports throughout the world. The exciting game dynamics, which include a combination of technical skills, tactical strategies and physical strength, have succeeded in attracting interest from various groups (Yao et al., 2020). Football is one of the most popular, and attracts interest from various ages and genders, from children to adults, both men and women. In many countries, football is often a favorite sport, including in Indonesia which is experiencing development. in this case (Allsabah, 2020). For high achievement, it is important for athletes to master various supporting elements in football, including to become a quality football player, good basic technical skills are required (Utomo & Indarto, 2021). because players who have solid basic

technical skills tend to be more confident in facing challenges when playing and have more options in making the right decisions (Mardhika & Dimiyati, 2015).

Mastery of basic techniques has a very important role in the world of football. It is important to remember that to become a good soccer player, you need strong basic skills in playing soccer (Irfan et al., 2020). Mastery of the components of basic football technical skills, which include the ability to pass, shoot, control, head and dribble well, is the main foundation in forming the basis of a high-quality game, which in turn will make a significant contribution to the team's overall performance. overall in the match (Sinan Bozkurt et al., 2020; Naldi & Irawan, n.d.). The quality of a football team lies in the ability of each player to master the technique of kicking the ball well, this is because this fundamental aspect not only influences individual performance, but also leads to strong synergy between all team members (Soniawan, 2018). Proficiency in mastering and applying these skills provides effective responsibilities on the field, whether as an attacker who scores goals, a midfielder who coordinates the game, or a defender who maintains the defense (Anam, 2013). Coaching and training for football players emphasizes the development of basic skills as the main priority by acquiring good technique, it is hoped that the players will be able to carry out the coach's instructions well during the match, so that they can play an effective and quality game (S Bozkurt & Kucuk, 2018). To select talented athletes requires a thorough talent identification process.

Talent identification is an important step in efforts to improve performance in sports, and generally refers to the process of identifying individuals who have potential in a particular sport, including football (Woods et al., 2016). The process of identifying and selecting prospective athletes often relies on subjective assessments carried out by coaches or talent scouts, which can be influenced by various factors such as their experience, personal preferences, and individual assessments of criteria that are considered important in an athlete (Williams, 2020). The sports talent identification process is to detect, capture, select and support athletes who have the skills and abilities that enable them to achieve optimal competitive success (Mustafovic et al., 2020). Talent identification must be carried

out continuously and integrated as an initial stage in a talent development model that is continuously developing (Burgess & Naughton, 2010). The challenge that arises in the talent search process is that those involved in athlete selection often face difficulties in identifying certain potential without objective or valid standards. As a result, coaches often must assess athletes based on current performance, which can result in uncertainty and the risk of inaccurate assessments (Mendes et al., 2022). To identify this, technology is needed to support the ease of identifying the talent of football athletes in the technical aspect.

To become a superior team, the ability to optimize knowledge and technology is needed to utilize potential and develop football athletes to achieve optimal performance (Rizal et al., 2018). The method used is Analytic Hierarchy Process (AHP) to solve complex problems in unstructured situations by dividing them into components in a hierarchical structure. Thus, this method produces a numerical value for each variable assessed, based on a subjective assessment of relative importance. Next, through a synthesis process, a decision is made regarding which factors have the most significant influence on resolving the situation (Priyono, 2018). Through AHP, we can break down the complexity of technical aspects in football into measurable elements, such as kicking ability, ball control, heading and dribbling skills (Ali, 2011b). Thus, AHP helps coaches and talent scouts to make more informed and objective decisions in the talent identification process.

The use of AHP in the world of sports has been widely used, including in comprehensive talent identification in taekwondo athletes which analyzes various aspects such as anthropometry, biomotorics, somatotype (Andriani & Rusdiana, 2023), then talent identification in badminton (Saripah, 2023). And in identifying the talents of futsal athletes (Aldoris & Rusdiana, 2023). The aim of this research is to assess which technical aspects are dominant in identifying soccer athletes using AHP.

METHOD

This research uses a combination method. Mixed Methods Research (MMR) is a research approach that combines elements of qualitative and quantitative approaches in one research. In MMR, researchers use a combination of data collection and analysis methods to gain a more comprehensive understanding of the phenomenon under study (Sparkes, 2015). With an analytical research design, Sequential Design is a research approach that begins by prioritizing data collection and qualitative as the first step, followed by subsequent stages involving the use of quantitative methods (Abeza et al., 2015). In this research, qualitative data was collected and analyzed through observations of the Google Scholar, Publish and Pasrish 8 libraries, systematic international journals as well as exploring the views of experts regarding technical aspects in identifying talent in football athletes. Quantitative data was collected through an online survey using Google Form with respondents from 10 nationally licensed soccer coaches who had coached soccer clubs for 5 years or more. Respondents were asked to fill in a priority scale based on criteria covering five technical aspects. These criteria were selected microscopically by considering various perspectives to identify technical aspects of football players in talent identification.

Table 1. Criteria and Sub-criteria selected to identify technical aspects in talent identification

Criteria	Sub criteria	code	Reference
Aspects Technic	Passing	AT1	(Bozkurt et al., 2020; Coutinho et al., 2023; Forsman et al., 2016; Gonçalves et al., 2017; Kismono & Dewi, 2021; Robert M. Malina et al., 2007; McLean et al., 2018; Naldi & Irawan, n.d.)
	Shooting	AT2	(Bozkurt et al., 2020; Forsman et al., 2016; Hutabarat et al., 2017; R M Malina et al., 2007; Najib & Priambodo, 2019; Naldi & Irawan, n.d.; Vaeyens et al., 2006)
	Dribbling	AT3	(Bozkurt et al., 2020; Forsman et al., 2016; Hasanuddin, 2018; R M Malina et al., 2007; Mubarok & Mudzakir, 2020; Naldi & Irawan, n.d.; Vaeyens et al., 2006)
	Control	AT4	(Bozkurt et al., 2020; Coutinho et al., 2023; Dahlan et al., 2019; Kismono & Dewi, 2021; Naldi & Irawan, n.d.; Ramdani & Asriansyah, 2018)
	Heading	AT5	(Bozkurt et al., 2020; Hidayat et al., 2024; Naldi & Irawan, n.d.; Putra & S, 2020)

The approach using the Analytic Hierarchy Process (AHP) is to evaluate and make a decision based on various criteria. The AHP method uses various criteria to assess various options and produces relative values for several alternatives (saaty, 2002). In this study, researchers chose the AHP method because first, it allows solving complex problems by dividing them into hierarchies that are more easily managed. Second, AHP performs pairwise comparisons at each level to ensure in-depth investigation, and third, reaches a clear final decision.

The first step in determining element priority is to compare the sub-criteria with each other in a hierarchy. Next, the comparison is converted into a matrix for numerical analysis. Comparison between criteria in the hierarchy uses a scale of one to nine as shown in Table 2.

Table 2. AHP comparison scale

Level	Definition	Information
1	Equally Important	Both Elements are equally important
3	Slightly More Important	One element is slightly more important than the others
5	More Important	One element is essential or very important than other elements
7	Very Important	One element is clearly more important than the other elements
9	Absolutely More Important	One element is absolutely more important than other elements
2,4,6,8	Middle Values	Values between two adjacent considerations

In this research, the top level consists of the research objectives and then the second level, namely the three main criteria (aspects). Then the criteria are further divided into sub-criteria at the third level. Then at the last level there are alternatives. This alternative describes potential soccer athletes who will be identified as shown in Figure 1.

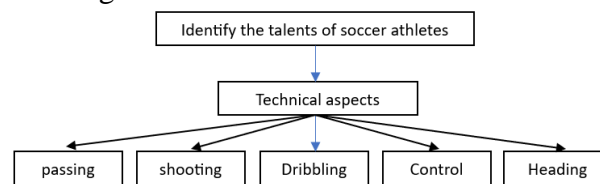


Figure 1 Evaluation of technical aspects of prospective soccer athletes in the AHP form

RESULT AND DISCUSSION

Table 3 displays an example of the Analytic Hierarchy Process (AHP) questionnaire. As shown in Table 1, passing has a value of 3 when compared with shooting, indicating that passing is considered slightly more important than shooting. On the other hand, if passing has an acute value (0.33) than shooting.

Table 3. Criterion importance questionnaire scores

	Passing	Shooting	Dribbling	Control	Heading
Passing	1	3	3	1	6
Shooting	0,33	1	1	2	2
Dribbling	0,33	1	1	1	2
Control	1	0,5	1	1	3
Heading	0,14	0,5	0,5	0,33	1

Below, in Figure 2, shows the results of the analysis obtained from data collected through a questionnaire containing the opinions of football coaches. using Expert Choice 11 software.



Figure 2. Results of data analysis originating from a questionnaire containing expert opinions using Expert Choice 11 software

To get a more detailed explanation in the image above regarding the priorities shown, a pairwise comparison was carried out for each criterion based on expert assessments. In Figure 2, the Technical Aspect has five main criteria, namely passing, shooting, dribbling, control and heading. From the results of this analysis, it is proven that passing has a very important role compared to other criteria. The order of priority scores obtained from this analysis is as follows: Passing = 0.420; Control = 0.253; Dribbling = 0.144; Shooting = 0.126; and Heading = 0.057. From the results of this comparison, it can be said that passing has a more significant or more important role. Even though passing has a higher priority, it should also be noted that other technical aspects are no less important to pay attention to. This

analysis provides valuable insight into how each engineering criterion has different values and concerns for each sub-criterion.

Discussion

The results of data analysis regarding technical aspects in identifying football talent show that there are five main sub-criteria consisting of passing, shooting, dribbling, control and heading. Of the five criteria, passing is proven to be the most important criterion in obtaining talented athletes. Passing is a key element in football because it really supports tactics and strategy in matches, allows teams to organize the flow of play and create goal-scoring opportunities and without good passing skills, teams will have difficulty maintaining possession of the ball and building effective attacks (Roel Vaeyens et al ., 2008).

Apart from that, in this technical aspect, other technical abilities such as shooting, dribbling, control and heading also need to be improved. Every soccer player must master these basic techniques to become a quality and competitive player (Coutinho et al., 2023; Saputra, 2019). Good shooting mastery will increase your chances of scoring goals from various positions and situations on the field. Effective dribbling is very important to get past opponents and create opportunities for yourself and your teammates (Amaruloh et al., 2018). Stable control ensures good possession of the ball under pressure, which is very important for maintaining possession of the ball and organizing attacks (Ali, 2011). Accurate and strong heading is useful in aerial ball situations, both in defense and attack (Irfan et al., 2020). So comprehensive training and a focus on developing all aspects of technique is very important to form soccer players who have high potential and are able to contribute effectively to the team. Through structured and ongoing training, players can improve all aspects of their technique, which in turn will improve overall team performance.

CONCLUSION

Basic techniques in soccer are very important for soccer athletes, as well as for talent scouts or coaches who are looking for soccer talent. They need to pay attention to basic technical aspects because these basic techniques are the most

important foundation, apart from other aspects such as physical, mental and game strategy (Mendes et al., 2022). After conducting in-depth and comprehensive research, it was discovered that technical aspects, especially passing, had a higher percentage in the assessment. This shows that passing is the main factor in detecting the talent of soccer athletes. This assessment is followed by other technical aspects such as control, dribbling, shooting and heading. Each of these aspects plays an important role in developing a football player's abilities, but passing stands out as the most significant key indicator in bringing out a player's potential and talent (Mustafovic et al., 2020). Therefore, coaches and talent scouts must pay special attention to players' passing abilities, in addition to paying attention to developing other basic techniques to form high-quality and high-potential football players.

Based on the research that has been conducted, there are several limitations. Firstly, the sample used is still small so that in future research more samples can be obtained so that the results obtained are more optimal. Second, we hope that further research can further deepen other aspects.

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