

## Android-Based Athlete Talent Identification: Preliminary Study



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**ABSTRACT:** This study aims to find out how much the coach's knowledge is related to talent identification in the community environment. This research is descriptive research with a survey method. The data collection technique used a closed questionnaire which totaled 12 valid statements with a reliability value of 0.897. The sample in this study was 40 sports trainers in Yogyakarta, who were taken using a purposive sampling technique, with the criteria of coaches being elite coaches and having coached athletes. The results of the research on how high the trainer's knowledge is to identify android-based talent are: "very low" at 5.00%, "low" at 22.50%, "enough" at 32.50%, "high" at 32.50%, and "very high" of 7.50%.

**KEYWORDS:** Talent identification, athlete, android

### I. INTRODUCTION

In this era, the lack of national sports achievements with other Asian countries became one of the main obstacles for the country to improve its sports achievements (Anggorowati et al., 2023). The support and participation of the community for the development of sport itself is still at a low level so there has been a surge in the development of sports in sports in Indonesia which has not significantly fluctuated in a positive direction for its improvement (Islam & Deegan, 2010). The development of sports is also influenced by the introduction of the public to the types of sports they like. Talent in the new generation will be the determining factor for sporting achievements. Sports achievements have been monitored systematically in accordance with laws and regulations, especially in Indonesia because sport is a means of national dignity (Li et al., 2023). In fact, (Furukawa, 2023) defines sport as a miniature of life, penetrating the level or order of society, and "D.Mac. Arthur" as the guardian of the state. Sports are referred to as the miniature of life because all human components which include cognitive, affective, and psychomotor components work when doing sports.

The community recognizes sport as a national dignity because it involves many factors, especially achievement as a measure of success (Hardman, 2023). Until now, in achieving achievements, especially in the field of sports, there are still many sports that have not achieved optimal results and always face obstacles, one of these obstacles is the difficulty of finding talented athletes (Debois et al., 2015). These factors affect the performance of athletes because at the age of coaching the best performance is not achieved according to the talent they have. The coaching process is a continuation of the Athlete's nursery process, this is in accordance with the statement of Simply (Darroch & Hillsburg, 2017), sports nursery is an important stage in fostering sports achievement. Sports nurseries are the foundation of a sports coaching system building, especially sports achievements. Without a well-systemized nursery, the achievement stage will not be reached. The nursery system is the best way to form a strong foundation, leading to the next stage of development in a sustainable manner.

Talent scouting or talent identification process is a process of giving characteristics (characterization) to the basic ability of a person who is born from birth to be able to base sports skills (Ginés et al., 2023). Furthermore, (Turner, 2023) states that in Western countries, talent scouting or talent identification for prospective athletes is not a new concept in the field of sports, even though its implementation has not been done formally. The process of talent scouting or talent identification provides positive results for sports achievements (Romlah, 2023).

In a more modern era, if sports activists can identify a person's talent through child biometrics, then they can identify a person's athletic ability from an early age (Sweeney et al., 2023). The presence of tools/applications can provide an overview of prospective athletes to understand their talents, which will make it easier for Practitioners to find seeds and develop prospective athletes by looking at the biometric abilities of prospective athletes. Talent scouting has several impacts and benefits. Furthermore, " (Crossen et al., 2023); (Sarmiento et al., 2018) suggests that the use of scientific criteria in the talent identification process has several advantages, namely: (a) reducing the time needed to achieve high achievements by selecting

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talented athlete candidates in certain sports; (b) eliminating the high volume of work, energy, and talent for the Practitioner. Training effectiveness can be achieved, especially for prospective athletes who have high abilities; (c) increasing the competitiveness and number of athletes in achieving high levels of achievement; (d) increasing the confidence of prospective athletes, because the dynamics of achievement appear to be more dramatic compared to other athletes of the same age who have not undergone selection; and (e) indirectly facilitating the application of scientific training, because it is sports scientists who assist in identifying talent that can be motivated to continue and monitoring athlete training. because the dynamics of achievement appear to be more dramatic compared to other athletes of the same age who have not undergone selection; and (e) indirectly facilitating the application of scientific training, because it is sports scientists who assist in identifying talent that can be motivated to continue and monitoring athlete training. because the dynamics of achievement appear to be more dramatic compared to other athletes of the same age who have not undergone selection; and (e) indirectly facilitating the application of scientific training, because it is sports scientists who assist in identifying talent that can be motivated to continue and monitoring athlete training.

## II. METHODS

This type of research is quantitative descriptive research. The method used in this study is a survey and data collection techniques using a questionnaire (Likert scale). This means the coach fills out the questionnaire with 12 questions and contains components of knowledge in athlete identification, which was conducted in Yogyakarta. The research presented in the form of a graded scale has the following questionnaire grid.

**Table 1. Instrument grid**

Variable	Component	Indicator
Android-Based Athlete Talent Identification	visible	The application uses a good selection of color combinations The application presents the clarity and layout of the buttons well There has never been an application before.
	accurate	This application presents a practical display of steps The appearance of this application already presents material that is in accordance with talent identification material View the material provided in this application can be held accountable right.
	structured	The appearance of the material presented in the application is neatly arranged based on talent identification material The appearance of the material presented in the application is sorted based on talent identification material
<b>Amount</b>		<b>12</b>

This self-confidence questionnaire adopts (Nasution, 2019) and then tested for validity with the product moment correlation formula and reliability test Cronbach's alpha with a value of 0.896, which means the questionnaire is valid and reliable. The research location is in Yogyakarta, which will be held in April-June 2020. The population in this study is trainers who are determined by purposive sampling, with the criteria of trainers in Yogyakarta and are willing to be the sample. The sample in this study was 40 trainers, namely 40 trainers from Yogyakarta and Sleman. By distributing a closed questionnaire via Google form as many as 12 items were distributed to the archery trainers, then after the data was collected it was analyzed using SPSS 2021.

## III. RESEARCH RESULTS

The basis and foundation of this preliminary study aim to find out how high the level of coaches' knowledge is about identifying talented athletes based on Android in order to create an athlete talent identification tool:

**Table 2. Knowledge of Athlete Talent Identification Based on Android Visible Components**

No	intervals	Category	Frequency	%
1	51.45 < X	Very high	3	7.50%
2	47.88 < X ≤ 51.45	Tall	13	32.50%
3	44.32 < X ≤ 47.88	Enough	13	32.50%

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4	$40.75 < X \leq 44.32$	Low	9	22.50%
5	$X \leq 40.75$	Very low	2	5.00%
<b>Amount</b>			<b>40</b>	<b>100%</b>

Based on the table shows that the trainer's knowledge in Yogyakarta based on visible factors is in the category of "very low" at 5.00% (2 people), "low" at 22.50% (9 people), "adequate" at 32.50% (13 people), "high" by 32.50% (13 people), and "very high" by 7.50% (3 people). Based on the average value, which is 46.10, the trainer's knowledge of the identification of visible athlete talent is in the "sufficient" category.

**Table 3. Knowledge of Athlete Talent Identification Based on Accurate Android Components**

No	intervals	Category	Frequency	%
1	$13.82 < X$	Very high	4	10%
2	$12.11 < X \leq 13.82$	Tall	3	7.5%
3	$10.40 < X \leq 12.11$	Enough	23	57.5%
4	$8.69 < X \leq 10.40$	Low	8	20%
5	$X \leq 8.69$	Very low	2	5%
<b>Amount</b>			<b>40</b>	<b>100%</b>

Based on the table shows that the knowledge of trainers in Yogyakarta based on the accurate identification factor of athlete talent is in the "very low" category of 5.00% (2 people), "low" of 20.00% (8 people), "enough" of 57, 50% (23 people), "high" 7.50% (3 people), and "very high" 10.00% (4 people).

**Table 4. Knowledge of Structured Component Athlete Talent Identification Based on Android**

No	intervals	Category	Frequency	%
1	$13.73 < X$	Very high	3	7.5%
2	$12.53 < X \leq 13.73$	Tall	8	20%
3	$11.32 < X \leq 12.53$	Enough	17	42.5%
4	$10.12 < X \leq 11.32$	Low	7	17.5%
5	$X \leq 10.12$	Very low	5	12.5%
<b>Amount</b>			<b>40</b>	<b>100%</b>

Based on the table shows that the knowledge of coaches in Yogyakarta based on the structured factor identifying athlete talent is in the category of "very low" at 12.50% (5 people), "low" at 17.50% (7 people), "enough" at 42, 50% (17 people), "high" 20.00% (8 people), and "very high" 7.50% (3 people).

## IV. DISCUSSION

This study uses the Google form because researchers want to take advantage of existing media to more easily and quickly retrieve data. In detail, the sufficient and high categories are 13 people or 32.50%, then in the low category there are 9 people or 22.50%. In the high category accurate factor of 20.00%, in terms of knowledge trainers who have a level of knowledge are quite inclined to be improved to be good because most trainers who have sufficient knowledge already have licenses and graduate degrees, and 10% is not good enough so it must be improved to be able to improve knowledge about identifying the right athlete's talent so that it has an impact on athletes to be better at training or competition.

Trainers who have poor knowledge are mostly young and do not have licenses and experience (Patricios et al., 2023). Knowledge of new things is a component that every coach must have because the provision of methods and updates from increasingly modern tools can improve athlete performance (Schneider et al., 2023). Achievement will increase if it is supported by an optimal coach and achievement will increase if it is supported by updated tools to perfect the natural talent you have, but based on an analysis of the trainer's knowledge regarding the identification of talent there are still trainers who don't know how to identify athletes with the help of this android, there are even some This is the first time hearing the name of this tool (Mansir, 2023).

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"Talent Identification" refers to the process of recognizing current participants with the potential to excel in a particular sport. Talent identification programs are applied worldwide to better identify athletes at an early stage. Best practices in talent detection and talent identification over the past few decades can yield insights new in this field (El Bairi et al., 2023). Talent detection and identification systems cannot be applied "just like that." accurate data on morphological, physical, coordinative, and maturity characteristics (Rohmat Nurjaya et al., 2023). Talent identification is a dynamic process and must take into account maturity status and potential for development, not to exclude children at an early age.

The potential is the ability and quality that a person has but has not been used optimally (Indonesian General Dictionary) (Susanto et al., 2023). From this understanding, we have an understanding that potential is a power possessed by humans, but this power has not been used optimally (Morganti et al., 2023). Therefore, the next task for potential human beings is how to utilize this potential to achieve achievement. In the sports context, potential can be analogous to talent. Talent is a latent ability that someone has from birth (Höner et al., 2023). Talent is the innate potential of family offspring (especially from parents) and forms the basis of real ability (Ribeiro et al., 2023). The role of identifying early talent is very important in the talent scouting and coaching program of an athlete to achieve peak performance (Čular et al., 2023). This is reinforced by the main objective of scouting sports talent is to estimate how much a person's talent has the opportunity to undergo a training program so as to be able to achieve high achievements (Uceng et al., 2019). So that the success of an athlete to achieve the highest achievement can be realized if the sport that is followed is in accordance with the talent that the athlete has. Identifying talent at an early age can also shorten the time needed for an athlete to reach peak performance and be able to increase competitiveness between athletes in undergoing training programs to reach peak performance.

## V. CONCLUSIONS

Talent is a latent ability that someone has from birth. Talent is the innate potential of family descent and forms the basis of real ability. The role of identifying early talent is very important in the talent scouting and coaching program of an athlete to achieve peak performance.

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