

# Sport Talent Identification of Elementary and Junior High School in Situbondo Regency

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### ABSTRACT

One of the critical things in producing high-achieving athletes is identifying the talents and interests of the athletes. Sportkompas is an application to find out someone's skills and interests in the sport. This study aimed to determine the sports talents and interests of elementary and junior high school students in the Situbondo Regency. This research is descriptive quantitative research with a survey method. The sample in this study was elementary and junior high school students scattered in the Situbondo district, with 925 students selected randomly. Students are spread out from 52 schools in 17 sub-districts in the Situbondo district. The test instrument used the sportskompas application. The results showed that the recommended sports in the Situbondo district are rugby (21.11%), football (18.59%), fencing (4.97%), golf (4.86%), triathlon (4.65%), volleyball (4.65%), basketball (4.43%), korfball (3.68%). Sports recommendation for the western region in the Situbondo is football, rugby, volleyball, baseball/softball, Tennis, Surfing, swimming, handball, archery. Sports recommendation for the central region is rugby, football, baseball/softball, tennis, table tennis, volleyball, swimming. And sport recommendation for the eastern part is rugby, football, badminton, bike racing, table tennis, volleyball.

Keywords: Situbondo, Talent identification, Sport, Sportkompas.

### **1. INTRODUCTION**

Talent scouting program needs to be carried out because considering that athletes are the main determining factor in achieving achievement, choosing early age athletes is necessary; the process of attaining achievement can be optimally effective if the athletes being trained are selected athletes who have potential under the demands of specifications [1]. In the sport concerned, time and resources are used to process the training of talented athletes more efficiently. The goal of talent scouting is to predict a high degree of likelihood that a prospective athlete will be able and successful to complete a junior training program in the selected sport to measure with certainty in performing the next stage of training [2][3].

Sport talent identification is vital in determining appropriate sports for a person from an early age, and a more critical variable is motivation [4] [5]. Sports talent identification is finding potential participants in sports to become elite athletes later [6]. Talent identification will support the talent development process so that athletes with suitable talent identification can be well developed and realize talent potential [7].

Until now, sports talent identification was based only on expert coach observation, without test and measurement [4]. Sportkompas is a research-based orientation tool for determining talent. One of the modules in sportkompas is I-Like. I-Like is an interactive web application where children can find out which sports they like [8]. I-Like test In the SportKompas, the Sports figure asks questions about the movement preferences of the athlete/child. That way, the children can discover their favorite sports [9] [10].

Situbondo Regency is an area that needs to develop its sports potential. It was proven in a regional routine event

called Porprov in 2019, Situbondo district only won 33rd rank out of 38 city and district participants in East Java [11]. The obtained medals are minimal, consisting of 4 gold medals, one silver medal, and nine bronze medals with 27 points [11]. Situbondo Regency is located on the eastern tip of the northern part of Java Island with an area of 1,638.50 km<sup>2</sup> or 163,850 hectares. Situbondo Regency is divided into 17 subdistricts that extend from west to east with a total length of 150 km [12].

From the description above, the researcher wants to provide recommendations for sports development based on sports talent as measured using the sportkompas application for areas in the Stubondo district. To make it easier for researchers to determine recommendations for sports in the Situbondo district, the researchers divided the Situbondo district into three parts: the western, central, and eastern parts of Situbondo.

### 2. METHODS

This research is descriptive quantitative research with a survey method. The sample in this study was elementary and junior high school students scattered in the Situbondo district, with 925 students selected randomly. Students are spread out from 52 schools in 17 sub-districts in the Situbondo district.

Collecting research data through questionnaires sent via google form and answering several questions on the sportkompas application [13]. With the sportkompas application, each student will know the recommendations of the sports. After the data is collected, the school area data for students will be synchronized with sports recommendation data.

The data analysis used descriptive analysis consisting of the average value and the percentage of sports



recommendations in the Situbondo district (western region, central region, eastern region).

## **3. RESULTS AND DISCUSSION**

The results of this study are presented in a descriptive form to find out recommendations for sports in each region in the Situbondo district.

#### Table 1. The division of sub-districts in the Situbondo

### 3.1. Description of The Research Area

In this study, the Situbondo district where the research data was collected was all districts with 17 communities within the Situbondo district. To make it easier for researchers, the 17 sub-districts are divided into three regions, namely the western, central, and eastern regions. For more details, see table 1.

	Sub-district section			
	Western Region	Central Region	Eastern Region	
Sub- distric t	Banyuglugur	Panarukan	Jangkar	
	Besuki	Panji	Arjasa	
	Bungatan	Mangaran	Asembagus	
	Jatibanteng	Situbondo	Banyuputih	
	Kendit	Kapongan		
	Mlandingan			
	Suboh			
	Sumbermalang			

From table 1, it can be seen that there are eight subdistricts in the western region of Situbondo district, five subdistricts in the central area of Situbondo district, and four subdistricts in the eastern province of Situbondo district. In this study, there were 52 schools from 17 sub-districts in the Situbondo district. The 52 schools consist of 8 elementary schools and 44 junior high schools. For more details, it can be seen in Table 2.

### 3.2. Description of Total of Schools

Table 2. Total of school in this research

Western Region	Total of school	Central Region	Total of school	Eastern Region	Total of school
Banyuglugur	2	Panarukan	5	Jangkar	2
Besuki	2	Panji	8	Arjasa	4
Bungatan	1	Mangaran	4	Asembagus	4
Jatibanteng	1	Situbondo	7	Banyuputih	2
Kendit	3	Kapongan	2		
Mlandingan	2				
Suboh	2				
Sumbermalang	1				
Total	14		26		12

From table 2 above, it can be seen that in the western subdistrict of Situbondo district, there are 14 schools, 26 schools in the central region, and 12 schools in the eastern area.

# **3.3.** Description of the School and Total of Students in Each Sub-District in Situbondo

This research was conducted on students as respondents, with 925 students at 52 schools scattered in the Situbondo district. The western region, which consists of 14 schools, has 228 respondents, while the middle area, which consists of 26 schools, has 502 students who are respondents, and the eastern region, which consists of 12 schools, 195 students are respondents.

# 3.4. Descriptions of the percentage of sports

The results of the portion of marks are obtained from the number of sports recommendations based on the filling of respondents on the sportkompas application. The data is presented in table 3.

**Table 3.** The result of the percentage of sports in the

 Situbondo

No	Sports	Total	Percentage
			(%)
1	Fencing	46	4.97
2	Running Athletics	17	1.84
3	Athletics Jump	2	0.22
4	Athletics Throw	2	0.22
5	Bike racing	23	2.49
6	Baseball / Softball	33	3.57
7	Basketball	41	4.43
8	Horse riding	3	0.32
9	Handball	21	2.27
10	Badminton	26	2.81
11	Paddle	5	0.54
12	Relay Run	1	0.11
13	Golf	45	4.86

Hockey	11	1.19
Judo	1	0.11
Canoe	10	1.08
Karate	2	0.22
Korfball	34	3.68
SailingSport	8	0.86
Archery	16	1.73
Rock climbing	1	0.11
Surfing	20	2.16
Swimming	18	1.95
Rugby	186	20.11
Gymnastics	2	0.22
Football	172	18.59
Roller skates	4	0.43
Water ski	3	0.32
Taekwondo	2	0.22
	Hockey Judo Canoe Karate Korfball SailingSport Archery Rock climbing Surfing Swimming Swimming Rugby Gymnastics Football Roller skates Water ski Taekwondo	Hockey11Judo1Canoe10Karate2Korfball34SailingSport8Archery16Rock climbing1Surfing20Swimming18Rugby186Gymnastics2Football172Roller skates4Water ski3Taekwondo2

30	Dance	2	0.22
31	Tarung Derajat	1	0.11
32	Tennis	38	4.11
33	Table tennis	39	4.22
34	Shot put	1	0.11
35	Trampoline	3	0.32
36	Triathlon	43	4.65
37	Volleyball	43	4.65
	Total	925	100

The percentage data for sports was obtained from 925 students in Situbondo district as respondents who filled in the questions on the sportkompas application. From these data, it is found that rugby is the most recommended sport with the highest percentage, 20.11% of the total 186 respondents who chose.



Figure 1 Pie chart of sports percentage in Situbondo

# 3.5. Descriptions of the percentage of sports in each region in Situbondo

After knowing the total percentage of sports in the Situbondo district, the data is synchronized with regional data, divided into three regions: west, center, and east. These data are presented in table 3.

Table 4. Percentage of sports recommendations in each region in the Situbondo

Region	School	Sports	Recommended Sports	Percentage %
Western	SMP 1 Banyuglugur	Rugby	Football	21.43
Region	SMP 2 Banyuglugur	Baseball/Softball	Rugby	21.43
	SMP 1 Besuki	Football	Volleyball	14.29
	SMP 3 Besuki	Football	Baseball/Softball	7.14
	SMP 1 Bungatan	Volleyball	Tennis	7.14
	SMP 1 Jatibanteng	Archery	Surfing	7.14
	SMP 1 Kendit	Handball	Swimming	7.14
	SMP 2 Kendit	Rugby	Handball	7.14
	SMP Satap Tambak Ukir	Swimming	Archery	7.14
	SMP 1 Mlandingan	Rugby		
	SMP 2 Mlandingan	Volleyball		
	SMP 1 Suboh	Football		
	SMP 2 Suboh	Tennis		
	SMP 1 Sumbermalang	Surfing		
Central Region	SMP 1 Panarukan	Rugby	Rugby	42.31



	SMP 2 Panarukan	Rugby	Football	34.62
	SMP 3 Panarukan	Swimming	Baseball/Softball	7.69
	SD integral luqman al hakim	Rugby	Tennis	3.85
	SMP 4 Panarukan Satap	Rugby	Table Tennis	3.85
	SDN 2 Mimbaan	Tennis	Volleyball	3.85
	SDN 2 Tribungan	Volleyball	Swimming	3.85
	SDN 8 Mumbai	Football		
	SMP 1 Panji	Rugby		
	SMP 2 Panji	Football		
	SMP 3 Panji	Rugby		
	SMP 4 Panji	Football		
	SMP 5 Panji	Rugby		
	SDN 2 Tanjung kamal	Football		
	SMP 1 Mangaran	Football		
	SMP 2 Mangan	Rugby		
	SDN 2 Tanjung Glugur	Baseball/Softball		
	SDN 3 Patokan	Table Tennis		
	SMP 1 Situbondo	Rugby		
	SMP 2 Situbondo	Football		
	SMP 3 Situbondo	Football		
	SMP 4 Situbondo	Rugby		
	SMP 5 Situbondo	Rugby		
	SMP 6 Situbondo	Tennis		
	SMP 1 Kapongan	Football		
	SMP Satap Kandang	Baseball/Softball		
Eastern Region	SDN 1 Pesanggrahan	Rugby	Rugby	33.33
	SMP 1 Jangkar	Volleyball	Badminton	16.67
	SMP 1 Arjuna	Football	Football	25.00
	SMP 2 Arjasa	Badminton	Bike Racing	8.33
	SMP 3 Arjuna	Football	Volleyball	8.33
	SMP 4 Arjasa Satap	Table Tennis	Table Tennis	8.33
	SMP 1 Asembagus	Rugby		
	SMP 1 Banyuputih	Rugby		
	SMP 3 Asembagus	Football		
	SMP 4 Asembagus	Badminton		
	SMP 2 Banyuputih	Rugby		
	SMP 3 Banyuputih	Bike Racing		

From the table above, it can be seen that in the western region of Situbondo, the most consecutive recommendations are football (21.43%), rugby (21.43%), volleyball (14.29%), baseball/softball (7.14%), tennis (7.14%), Surfing (7.14%), swimming (7.14%), handball (7.14%), archery (7.14%). These results can also be seen in Figure 3.



Figure 2 Pie chart of sports percentage in the western region

In the central part, the results obtained consecutively from the large portion of sports are rugby (42.31%), football (34.62%), baseball/softball (7.69%), tennis (3.85%), table tennis (3.85%), volleyball (3.85%), swimming (3.85%). These results can also be seen in Figure 4



Figure 3 Pie chart of sports percentage in the central region

In the eastern area, there are five recommended sports. The results of the consecutive recommendations from the large portion of sports are rugby (33.33%), football (25.00%),



badminton (16.67%), bike racing (8.33%), table tennis (8.33%), volleyball (8.33%). can also be seen in Figure 5



Figure 4 Pie chart of sports percentage in the eastern region

### 3.6. Sports Recommendation in Situbondo

Based on the study results, it was found that rugby got the highest percentage, 21.11% of the 186 respondents who chose by sportkompas application. The following sports recommendation is football with 18.59%, fencing 4.97%, golf 4.86%, triathlon 4.65%, volleyball 4.65%, basketball 4.43%, korfball 3.68%, and so on (see table 4 and figure.1).

Talent identification is vital to determine the potential of children from an early age so that they can provide recommendations for appropriate sports to be developed [14]. Bulgaria's success in winning a medal at the 1976 Olympics is one example of identifying role talent. 80% of Bulgarian medalists were the result of applied talent identification. Likewise, Romania and East Germany at 1972, 1976, and 1980 Olympics. Their success is because they have been implementing talent identification since the 1960s [15].

Screening and identification systems of talents in children are still debated. All are still looking for the right and effective way to find someone's sports talent [16]. Participation in sports training at a young age is associated with selecting athletes with specific prerequisites and the development of certain anthropometric, motor, and physiological characteristics of a particular sport [17]. Based Muniroglu (2018), genetics, socio-cultural structure, economics, and education is a factor that needs attention in talent identification. Meanwhile, Bompa & Buzzichelli (2015) stated that the factors influencing talent identification were motor capacity, psychological capacity, and biometric anthropometric. However, in this study, researchers used sportskompas as a test instrument to determine sports talent in elementary and junior high school children. Sportkompas is an interactive web application that can provide sports recommendations based on participants' answers [9]. The 'I like' module of the Sportkompas is an App that takes the child on a space excursion through sports planets to identify sports within the child's sphere of interest, based on 'exercise preferences' [17].

# 3.7. Sports Recommendation in Each Region in Situbondo

The results showed that from 17 sub-districts in Situbondo, which were divided into three western, central

and eastern regions, sports recommendation data in the western region were obtained from the largest percentage of football (21.43%), rugby (21.43%), volleyball (14.29). %), baseball / softball (7.14%), Tennis (7.14%), Surfing (7.14%), swimming (7.14%), handball (7.14%), archery (7.14%). While in the central region, sports recommendation data were obtained from a large percentage of consecutively, namely rugby (42.31%), football (34.62%), baseball/softball (7.69%), tennis (3.85%), table tennis (3.85%), volleyball (3.85%), swimming (3.85%). The eastern region also obtained sports recommendation data in a row from a large percentage, namely rugby (33.33%), football (25.00%), badminton (16.67%), bike racing (8.33%), table tennis (8.33%), volleyball (8.33%).

Situbondo district covers stretches from west to east with a distance of about 150 km [12]. To make it easier, the 17 sub-districts are divided into three regions: the western region consisting of 8 sub-districts and 14 schools, the middle part consisting of 5 sub-districts and 26 schools, and the eastern region composed of 4 sub-districts and 12 schools. The total of all respondents in all schools is 925 students. The percentage of sports recommendations for each student who enters each region is calculated then the highest percentage is looked for as the primary recommendation for sports in that region.

It is hoped that knowing sports talent in each region in Situbondo can help sports coaches to develop sports talents for their athletes. Because according to li et al. (2014), the environment is one factor that determines success in developing sports talent [20].

### 4. CONCLUSION

The recommended sports in the Situbondo district are rugby, fencing, golf, triathlon, volleyball, basketball, and korfball. But sports recommendations for the western region in the Situbondo are football, rugby, volleyball, baseball/softball, tennis, Surfing, swimming, handball, archery. Sports recommendations for the central region are rugby, football, baseball/softball, tennis, table tennis, volleyball, swimming. And sport recommendations for the eastern part are rugby, football, badminton, bike racing, table tennis, volleyball.

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