

SPLISS models analysis: Elite Sports Development System on Aspects of the Competition System in Central Java

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Abstract: The competition system must be carried out in a systematic, programmed and sustainable manner, so it requires good governance and policy systems. This study analyzes the system policy of fostering and developing achievement sports in Central Java on the aspect of the competition system. This research uses a survey method with a qualitative approach. The research sample consisted of 7 administrators, 24 coaches and 156 athletes from 21 sport federation in Central Java as respondents. The analysis of the study uses the SPLISS Models 2.0 evaluation approach and competition networks based on long term athlete development and the sports industry. Quantitatively the average score of the competition system in Central Java is 20.2 with the average category. With the lowest score on the sponsorship support aspect and the highest score on the facility support aspect. on the score of the sports federation The highest score is obtained by athletics with a score of 29 and the lowest score of the squash federation with a score of 14. It is necessary to reorganize governance and policy systems from both the government and KONI of Central Java Province in restoring the system for organizing competitions based on long term athlete development and the sports industry.

Keywords: SPLISS models, Sport Policy, Elite Sport, Competition System

INTRODUCTION

The development of elite sports requires an elite approach and support from all elements in a country through sports policy (Houlihan, Hoyer, & Nicholson, 2010). Sports policy plays an important role in the sustainable development of sport. The rise of modern sports development systems is heavily influenced by political systems (Pike & Smith, 2023), sports governance (Geeraert, Alm, & Groll, 2014) and policy structures (De Bosscher, 2020) in force in a country. All three revealed the government's involvement in determining the direction of sports development within a certain period of time.

One of the factors that play a role in the development of elite sports is the competition system (Koprivica & Petrovic, 2022, Smrdu, 2015). Sports competition is an integral part of a sustainable sports development system (De Bosscher, 2018). The principle of competition is directly proportional to the principle of elite sport development which must be implemented in a programmed, systematic and sustainable (Balyi, Way, & Higgs, 2013). Competition besides having an important role as a training benchmark, and mental development to compete, competition has a more important role, namely as a system for the development and sustainability of athletes.

Competition in elite athletes requires special practice and training. Participating in high-performance level training and seeing improvement helps the athlete to understand the weaknesses and strengths during the training period. Competition is an important element for diagnosing performance during training (Smith, 2003) and evaluating the success of training periodization (Matomäki & Rantilä, 2022). Competition in the modern era has an important role in determining the success of modern sports. The demands of modern sports in the future will require sports to be able to organize a professional competition system

Khimenes, Kharchenko-Baranetska, & Edeliiev (2021) reveal that modern competition systems are developing rapidly and dynamically orientated towards the development of professional sports. Several studies have also revealed how competitions held in Europe, America and Australia changed the paradigm of the competition system towards professional competition (Koprivica & Petrovic, 2022, Morgan, 2002). The key to the success of implementing a modern competition system that is carried out professionally is the level of economic development, in the field of technology and information (Chalip, Green, Taks, & Misener, 2017), a growing community in business aspects and the sports industry (Teletov & Karpets, 2015)

The need for competition ratios at the age of elite athletes requires intensity and duration at a high level. Where the competition ratio is 75% versus 25% practice (Balyi, 2001). This means that the competition system at the elite level requires the support of an adequate competition ratio to be able to produce athletes at top performance. According Carlsson (2021) Elite athletes need a training to compete in competition ratios to develop skills, emotional and maintain fitness and prevent injury and fatigue. The most important thing is to keep athletes in top performance condition for a relatively long time and to reach peak performance according to their age.

The results of the study show that athletes with heavy training and competition intensity based on epidemiological studies show that long-term strenuous exercise training can have a positive impact on mortality and longevity (Teramoto & Bungum, 2010). In Indonesia, the competition ratio of almost all sports has not shown an adequate competition ratio for high level performance athletes. Sports branches that have an adequate competition ratio of no more than 20% of all sports in Indonesia.

Policy structure through the sports committee in organizing competitions requires a comprehensive review. This is necessary because of weaknesses, opportunities, strengths and treats in the competition system in Central Java. system competition in Central Java in particular is still seen as a benchmark for training in several types of sports. The competition system is run as a routine program from sports organizations which cannot ensure the continuity of athletes through sports. From the aspect of competition ratio, budget support and facilities are the most basic weaknesses.

Based on the reviews above, the researchers carried out research related to the implementation of the existing competition system in Central Java using the SPLISS model perspective. The research aims to determine the implementation of competition programs at regional, national and international levels

METHOD

This study is oriented toward content analysis of policy document and key informant with qualitative and quantitative research technique (Bryman 2016). Content analysis is carried out through document review and quantitative field data studies as standard methods. Analysis in flexibility for analyzing text data using account language characteristics (qualitative) with attention to the content or contextual meaning of the text.

The sample consist of 156 athletes, 24 Coach and 7 members/administration of sport federation in Central Java. The entire sample has filled out the questionnaire as field data. Supporting data sources come from sports policy documents in the province of Central Java and nationally as well as interviews with Central Java Sport Committee (KONI) members.

Data collection techniques used Questionnaires & Interviews using SPLISS 2.0 instrument. Data analysis used the SPLISS Models 2.0 scoring which was adjusted for 1 pillar of competition as a research variable. The SPLISS score is analyzed qualitatively based on the

competition sub-factor contained in the Sports Policy factors Leading to International Sporting Success (SPLISS).

RESULTS

From the results of the study, there were 21 sports federations that answered the questionnaire that had been distributed consisting of 156 athletes with the characteristics of 64 women and 92 men, 25 coaches 7 administrators. This is the distribution of respondent data in the table below

Table 1. Demography Participant/Respondent

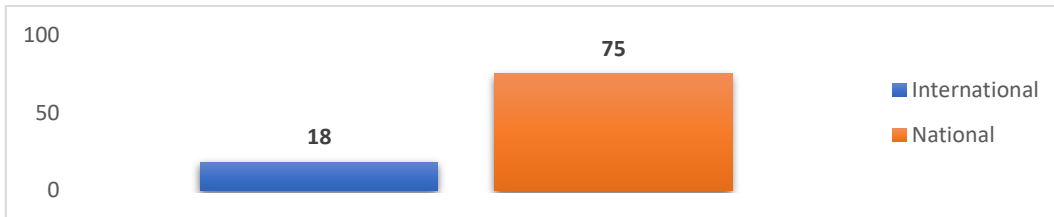
NO	SPORT FEDERATION	ATHLETE	COACH	ADMINISTRATORS
1	Handball	12	2	1
2	Tenis	8	1	0
3	Tarung Derajat	7	1	1
4	Fencing	7	1	0
5	Aeromodelling	4	1	0
6	Squash	7	1	0
7	Indoor Hockey	13	2	1
8	Gymnastic	8	1	1
9	Athletic	8	1	1
10	Roller Skating	8	1	0
11	Football	8	2	0
12	Karate	6	1	0
13	Wushu	4	1	0
14	Archery	4	2	0
15	Sport Climbing	7	1	0
16	Shooting	4	1	0
17	Indoor Volleyball	12	1	1
18	Paralayang	5	1	1
19	Sepaktakraw	9	1	0
20	Sport Rafting	7	1	0
21	Pencak Silat	8	1	0
Total		156	25	7

From the results of the process that has been distributed to athletes then analyzed based on the components of successful sports development in Central Java on the aspects of organizing competitions. Proportion analysis is presented based on 10 sub-factors consisting of 1) level competition, 2) type of competition, 3) participation2) type of competition, 3) participation, 4) Standard Competition, 5) Competition Ratio, 6) Competition Impact, 7) Competition Sustainability, 8) Facility Support, 9) Financial Support & 10) Sponsorship Support

This is a description of the results of the research arranged as follows:

The Level of Competitions

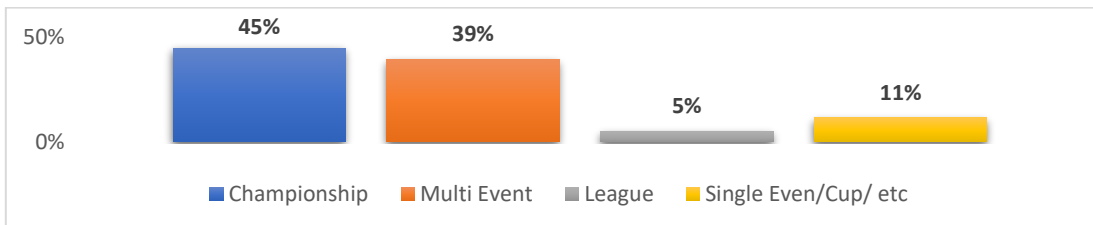
Research data shows that at the competition level it shows that the participation of the province of Central Java to hold events in Central Java is in the good category with 75 holding national competitions in the last 2 years 18 international. These results indicate that Central Java is active in organizing competitions at the national and international levels. Support by active sports federations at the national level.



Picture 1. Level of Competition

Type of Competitions

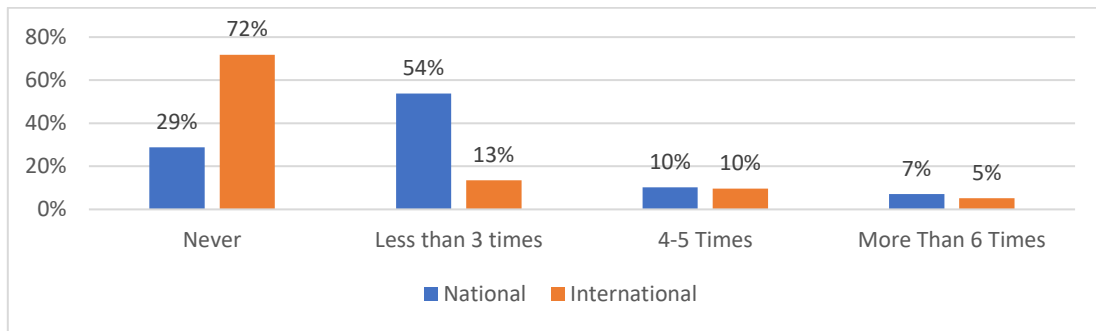
In the type of competition component, the participation of athletes in competitions in Central Java mostly took part in championships, both single and multi-events. most sports federations organize championships as much as 45%, both at level, and as many as 39% organize multi events. What is still very low is in the form of league competitions which only 5% of all sports federations, the remaining 11% organize using other formats such as series or tournaments.



Picture 2. Type of Competition

Participation of the Competition

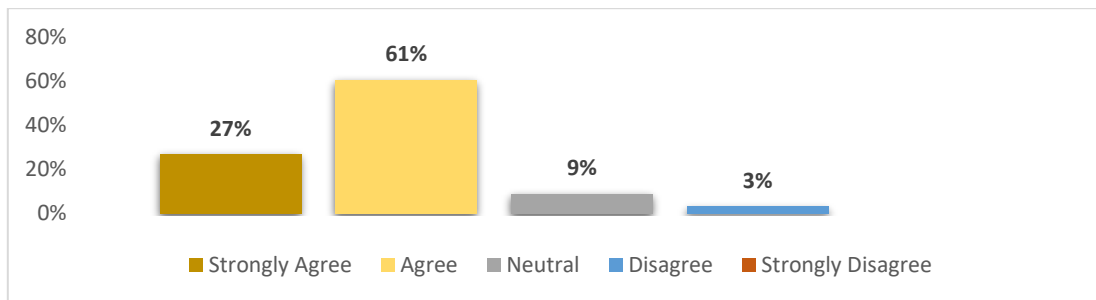
Participate in competitions all respondents said that participation in national and international competitions was concluded to be still very low. In national competitions only 54% stated that they had participated less than 3 times in the last 2 years and 29% had never participated. While those who participated 4 to 5 times were 10% and 7% were more than 6 times. 72% have participated in international competitions, said they have never participated, 13% less than 3 times, 15% more than 4 times in the last 2 years



Picture 3. Participation of Competition

Competition Standard of Implementation

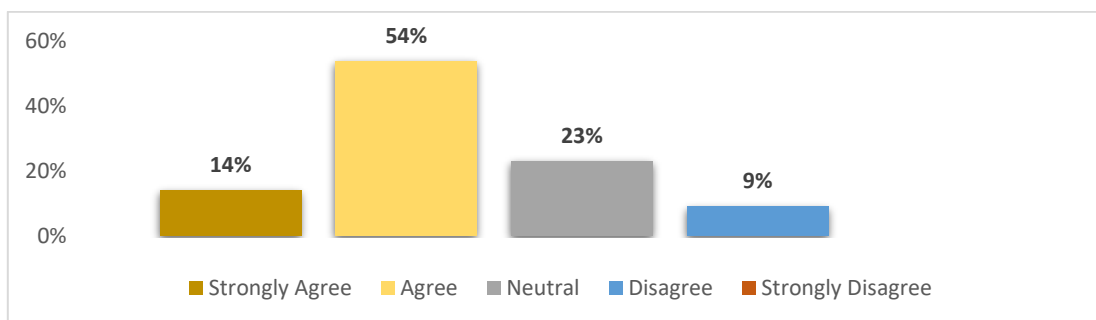
Implementation quality standards are symbolized in the good category, namely 61% agree with the implementation standards carried out by sports federations and 27% strongly agree that the implementation of competitions in Central Java has quality standards



Picture 4. Competition standard of implementation

Competition Ratio

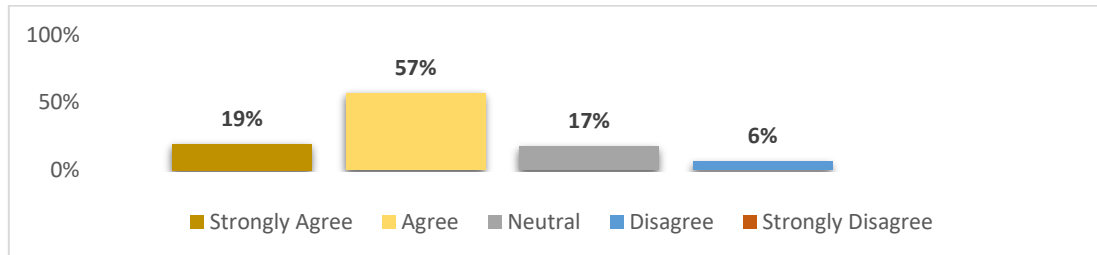
Based on the questionnaire, it stated that the aspect of the competition ratio showed that 54% agreed and 14% strongly agreed that the competition carried out had fulfilled the competitive ratio. However, if seen on average for elite athletes in Central Java, it is still very low where the average competition ratio is 2 to 3 times per year with an average ratio of 15-20% compared to the training ratio for elite athletes.



Picture 5. Competition Ratio

Competition Impact

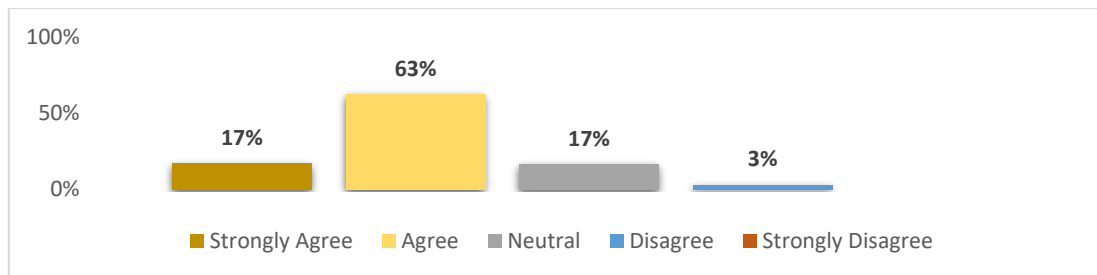
In the impact component, the results of the questionnaire showed that 57% said that competitions organized by sports federations had a significant impact on athlete performance, 19% said they strongly agreed and only 23% disagreed



Picture 6. Competition Impact

competition sustainability

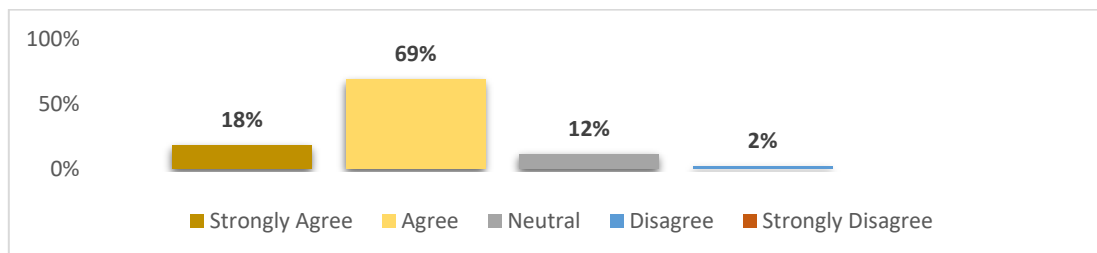
In the aspect of competition program sustainability, 63% answered that they agreed that competitions organized by sports federations were carried out on an ongoing basis, and 17% respectively strongly agreed and answered neutral.



Picture 7. Competition Sustainability

Financial Support

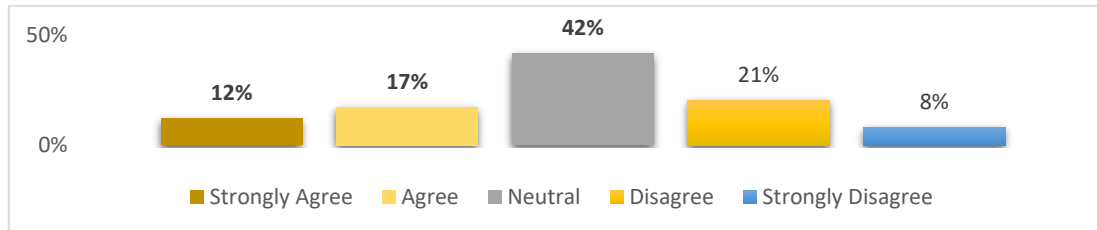
In the aspect of financial support, it shows that 18% of respondents strongly agree and 69% answered that they agreed that competition in Central Java was supported by adequate funding. However, when viewed from KONI's financial support data for the province of Central Java, it shows that financial documents on the competition aspect are still very low.



Picture 8. Financial Support

Sponsorship Support

Sponsorship support in organizing competitions can be concluded very low compared to 21% answering Disagree and 42% answering Neutral on aspects of competition supported by sponsors



Picture 9. Sponsorship Support

SPLISS Models Score

In the quantitative analysis of the study using the SPLISS models score on the competition aspect. the score is assessed from 10 sub factors. The results of the analysis using the SPLISS Models score can be seen in Figure 10 below:

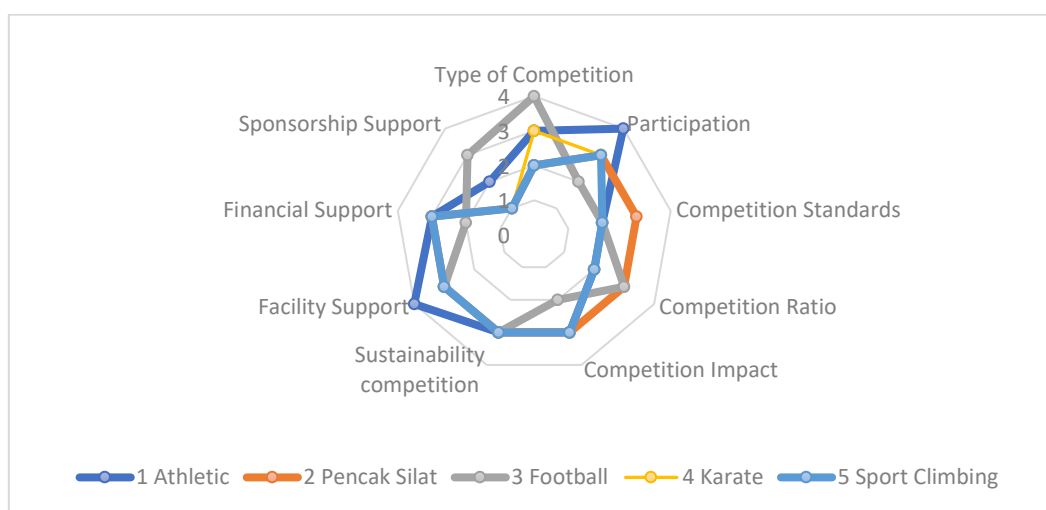
No		Level of Competition	Type of Competition	Participation	Competition Standards	Competition Ratio	Competition Impact	Sustainability competition	Facility Support	Financial Support	Sponsorship Support	Score	Average
1	Athletic	●	●	●	●	●	●	●	●	●	●	29	73%
2	Pencak Silat	●	●	●	●	●	●	●	●	●	●	27	68%
3	Football	●	●	●	●	●	●	●	●	●	●	27	68%
4	Karate	●	●	●	●	●	●	●	●	●	●	25	63%
5	Sport Climbing	●	●	●	●	●	●	●	●	●	●	24	60%
6	Indoor Volleyball	●	●	●	●	●	●	●	●	●	●	23	58%
7	Tarung Derajat	●	●	●	●	●	●	●	●	●	●	22	55%
8	Roller Skating	●	●	●	●	●	●	●	●	●	●	21	53%
9	Wushu	●	●	●	●	●	●	●	●	●	●	21	53%
10	Sepaktakraw	●	●	●	●	●	●	●	●	●	●	20	50%
11	Tenis	●	●	●	●	●	●	●	●	●	●	20	50%
12	Fencing	●	●	●	●	●	●	●	●	●	●	19	48%
13	Archery	●	●	●	●	●	●	●	●	●	●	18	45%
14	Gymnastic	●	●	●	●	●	●	●	●	●	●	18	45%
15	Handball	●	●	●	●	●	●	●	●	●	●	17	43%
16	Paralayang	●	●	●	●	●	●	●	●	●	●	17	43%
17	Indoor Hockey	●	●	●	●	●	●	●	●	●	●	16	40%
18	Aeromodelling	●	●	●	●	●	●	●	●	●	●	16	40%
19	Shooting	●	●	●	●	●	●	●	●	●	●	16	40%
20	Sport Rafting	●	●	●	●	●	●	●	●	●	●	15	38%
21	Squash	●	●	●	●	●	●	●	●	●	●	14	35%
Score Average		2.0	1.9	2.1	1.9	1.7	2.2	2.3	2.5	2.2	1.4	20.2	

Note : ● Poor ● Average ● Good ● Very Good

Picture 10. Competition aspect analysis on SPLISS Models.2.0

from the results of the SPLISS models score it can be concluded that the competition system held in Central Java has weaknesses, including in the aspect of the type of competition, competition standard, competition ratio and the lowest is in the aspect of sponsorship support. The highest score in the implementation of the competition is in the aspect of facility support with an average score of 2.5.

From all research samples, there are 5 big sports federations with the highest scores, including athletics, pencak silat, soccer, karate and sport climbing. The 5 federations with the lowest scores included squash, sport rafting, shooting, aeromodelling and indoor hockey. as for the overall n total average score is 20.2 in the average category.



Picture 11. Demograph the best of five sport federation on SPLISS models score

The picture above shows that the top 5 sports federations have relatively the same weaknesses, including in the aspects of sponsorship support and budget support. of the five sports federations have strengths in aspects of competition that are carried out sustainably. the characteristics of the sports federations in the top 5 are that they are popular sports and have good support from the government through the KONI of Central Java Province.

Football athletics and pencak silat are popular sports in Central Java and have good organization. Football is a sport that already has financial support from sponsors. so that football can develop even without financial support from the government in organizing competitions. some athletes have income from sports, including from football, volleyball, besides these sports athletes get income from the government through incentives and bonuses when winning competitions. In this aspect athletes with income from the government still do not have guarantees in their lives on the economic aspect

DISCUSSION

The research findings show that there is a need to improve the existing competition management system in Central Java. The competition system paradigm which is only used as a benchmark and based on multi-events such as the Provincial Sports Week needs to be reviewed because the lighting system will always need government budget support

The competition ratio aspect needs to be directed at fulfilling the competition ratio in accordance with the elite athlete category for the train to win stage, how does the competition ratio reach 70% versus 30% with the training ratio for athletes (Balyi, 2001). How many sports that emphasize a single event-based competition system still find it difficult to achieve a competition ratio especially in the absence of adequate budget support. So far, the budget given to sports federations has been very limited and there has only been twice the funding for holding competitions as an average of all research samples. it means that the main sports branch will find it very difficult to be able to organize events according to the ratio of competition

From all sports federations only have the ability to be able to carry out one to two competitions under the sports federation. In addition, there are only a few that organize competitions conducted by private parties. Several sports that can be held include football, pencak silat, karate and volleyball which receive support from the private sector.

In the management system of competition implementation policies, provincial KONI, government and sports federations have not made competition a part of building the sports industry. this can be seen in the policy of organizing sports events which are only oriented towards organizing multievents such as POPDA, Porprov, and PON

The pattern of competition that has been held so far in Central Java and in Indonesia still refers to the holding of multi-events at both the district and national levels. this is a necessity for many sports federations because it is this pattern where government policy can finance sports activities and competitions that are held or participated in. even though if we do a study on the pattern of competition that has been carried out so far which is oriented towards multi-event competition not much can be capitalized and leads to the sports industry. funding for athletes will depend heavily on financing provided by the government. meaning that it can be analyzed that the sustainability of a career as an athlete will depend heavily on the government. because so far athletes will be very dependent on the system of giving bonuses when they get achievements, not on the salary system that can guarantee life economically.

Innovation is needed for how to make government policies in regulating competitions and stimulating sports federations to be able to organize a major league-based competition system that has a very large impact (Bloyce & Smith, 2009). Another innovation is organizing sporting events that are attractive and have an element of entertainment by attracting many spectators so that they can also be attractive to sponsors. government policies are needed to stimulate sports federations to be able to organize modern competitions and to be broadcast in the national media

CONCLUSIONS

It can be concluded that in the qualitative analysis there are findings including:

1. The fundamental weakness is the competition system in Central Java which is not yet oriented towards the sports industry
2. SPLISS sub-factor: the weakness of the competition system in Central Java is on the aspect of competition, the ratio of competition, financial support from the government and sponsors
3. The competition system is still only considered as their training, which is not yet oriented to an integral part of sports development.

Quantitatively the average score of the competition system in Central Java is 20.2 with the average category. With the lowest score on the sponsorship support aspect and the highest score on the facility support aspect. on the score of the sports federation The highest score is obtained by athletics with a score of 29 and the lowest score of the squash federation with a score of 14.

Based on the conclusions, the following recommendations can be given

1. Comprehensive analysis is needed regarding the impact of competition programs on a macro basis
2. There needs to be a Sport Policy for the development of sports competition that is oriented towards the development of the sports industry
3. Managers at sports federations must understand and seriously develop a competition system.

Conflict of Interest

The author(s) declare that they have no conflict of interest.

Acknowledgment

A thank you to the agencies and parties who supported this research

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