ORIGINAL RESEARCH

# Evaluation of achievement development program at Riau Indonesia basketball education and student training center (PPLP)

David Chandra[1], Sumaryanto[1], Muhammad Imam Rahmatullah[2], Aulia Gusdernawati[1]

[1] Sports Science, Faculty of Sports Science, Yogyakarta State University. Indonesia. [2] Physical Education, Teaching Faculty of Education, Riau University. Indonesia.

**Abstract**

The coaching program among students, commonly referred to as Student Education and Training, has spread across several provinces in Indonesia. The target object is students, which is currently called the Student Education and Training Center (PPLP). This study aims to evaluate the context, input, process, and product at PPLP Basketball Riau Province. This study uses a type of evaluation research with the CIPP (Context, Input, Process, Product) evaluation model. The subjects in this study were the Riau Province Basketball PPLP administrators, Riau Province Basketball PPLP coaches, and Riau Province Basketball PPLP athletes. The results of the Riau Province Basketball evaluation based on the context evaluation concluded that it was sufficient with an average of 32.5. Context-based on the management percentage of 100% in terms of Context has been running quite well. The results of the input evaluation with an average based on the management of 72.5. The results of the process evaluation concluded well in terms of the coaching process and monitoring implementation with an average based on 10 administrators, based on coaches and athletes 32.5 in the good category. Product evaluation results with an ideal average of 5 in the sufficient category, in general, the achievements have progressed with achievements at the regional level, but not optimal.

**Keywords:** Achievement development program, basketball student education and training center, CIPP.

## Introduction

Rohman (2019) explained that the Student Education and Training Center (PPLP) in several provinces is a national sports development system from an early age that has a very strategic role in producing athletes who excel in sports as well as in the academic field. The existence of PPLP which has been developed in several provinces is the spearhead in capturing talented students in various sports to be fostered in stages and continuously towards achieving achievements at the national and international levels. Hambali et al. (2020) said that PPLP is a placement medium as well as a vessel for the main supplier of outstanding sportsmen in various regions. Students are the right human resource to make a target to look for the forerunners for the emergence of outstanding athletes in the future because they are at a very productive age (Purnamasari & Novian, 2021). Ariestika et al. (2020) said that the PPLP has a very strategic system in implementing the foundation for developing sports achievements in Indonesia at a potential age (golden age) in developing students' talents in sports.

Yandi et al. (2022) said that in implementing the

program at the Student Education and Training Center (PPLP), which is a complete system, it cannot be separated from the others because they are interrelated. because everything influences each other. Good sports coaching by PPLP can be seen from the presence or absence of tiered athlete development from junior to senior and adequate infrastructure. Then competition is held in stages and continues to serve as a benchmark for the success or failure of the coaching carried out (Barus et al., 2022). Sarkar et al. (2022) revealed that with the formation of the Student Education and Training Center (PPLP), it is hoped that it can become a screening vessel for fostering and developing talented young athletes who will later become benchmarks and centers for outstanding athletes.

Talking about PPLP which has spread throughout Indonesia, in Riau Province itself the implementation of PPLP has gone very well, as evidenced by the fact that it has produced professional athletes. Especially in the sport of Basketball. PPLP Basketball in Riau is a barometer of coaching in basketball at the student level, and the government's concern for PPLP is proven by the local government funding it through the APBN and APBD. In terms of infrastructure, the basketball sport is quite good, as evidenced by the hostel, the athletes live in the Rumbai Sports Center area, namely the hostel used for the 2012 PON event and Riau as the host. PPLP Riau Province basketball was also trained by professional trainers as proven by having a coaching certificate and a good track record in coaching and the coaches are also former Riau Province basketball athletes.

Even though PPLP Basketball in Riau Province is already good, it would be good if an evaluation was able to be held to find out the strengths and weaknesses of implementing PPLP, one of the best sports in Riau. Rianda, Abdurrahman, & Karimuddin (2020) explains that PPLP evaluation is well done to find out deficiencies with the hope that it can refer to improve the quality of PPLP so that it is related to increasing athlete performance. evaluation in a program is an important component that determines the success of the program made (Rahman, 2021). Soemardiawan & Yundarwati (2020) said that through this evaluation it is hoped that it will be known - effective coaching, training, and education programs are carried out according to the expected goals. In addition, it is hoped that the results of this evaluation can provide an overview as well as policy input for the Menpora in making

improvements to PPLP in particular, and other athletic schools in the region in general.

Based on these problems, the authors feel the need to conduct evaluation research on how to foster achievement at the Basketball Education and Training Center (PPLP) in Riau Province. This problem must be resolved immediately so that PPLP in the Riau Province basketball sport is no longer only capable at the regional level but can excel at the National level, get talented coached athletes, carry out the achievement coaching process following the program that has been evaluated and designed properly to be able to achieve optimal performance following the objectives of the program that has been set. This research was conducted using the evaluation method regarding the implementation of achievement coaching at the Basketball Training and Education Center for Student Sports (PPLP) in Riau Province Basketball.

## Methods

This study uses an evaluation research type with research activities collecting data to obtain information about the programs that have been implemented. The type in this study is a type of program evaluation at the Basketball Education and Student Training Center (PPLP) in Riau Province Basketball. This research uses the CIPP or Context, Input, Process, and Product model, which the CIPP model is a comprehensive framework for guiding formative and summative evaluations of projects, programs, personnel, products, institutions, and systems (Finney, 2020). The research was conducted at the Basketball Education and Training Center (PPLP) for Basketball in Riau Province and was carried out in March 2021. The samples in this study were Management, Coaches, and Athletes in the basketball sport in PPLP Riau Province, consisting of two administrators, two coaches, and ten athletes consisting of boys and girls. Data collection techniques in this study are in the form of qualitative and quantitative data. Quantitative data in this study were obtained from the results of distributing questionnaires to administrators, coaches, and athletes in PPLP for basketball in Riau Province. Meanwhile, qualitative data was collected through interviews. Evaluation instruments are based more on program objectives, program activities, and program achievement indicators (Sugiyono, 2013). Qualitative data analysis

techniques use data reduction, data presentation, and concluding, while quantitative analysis uses descriptive analysis techniques presented in percentage form.

# Results

In this study, the questionnaire contained statements regarding the achievement development of PPLP Basketball in Riau Province. This questionnaire is addressed to Managers, Coaches, up to the athletes themselves. So that the data obtained from the questionnaire can assist in collecting data regarding achievement development at PPLP Basketball Riau Province. The data that has been obtained from the questionnaire will be strengthened by data from interviews with researchers with research subjects, namely administrators, coaches, and athletes at PPLP Basketball Riau Province as follows.

### Context Evaluation

Evaluation of the achievement coaching program at the Riau Province Basketball Education and Training Center (PPLP) based on the Context evaluation in this study was obtained based on the opinions of administrators and coaches.

*a. Riau Basketball PPLP Management*

The results of the Context evaluation research based on the Management in this study were measured with 13 statement items, to obtain an ideal mean = 32.5 and an ideal standard deviation = 6.5. Furthermore, the data obtained were categorized to find out the results from the context aspect into five categories, namely very good, good, sufficient, lacking, and very lacking. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 1**

Management context evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 44.2 | 0 | 0 | Very good |
| 36.4 < X ≤ 44.2 | 2 | 100 | Good |
| 32.5 < X ≤ 36.4 | 0 | 0 | Enough |
| 20 < X ≤ 32.5 | 0 | 0 | Not enough |
| X ≤ 20 | 0 | 0 | Very less |
| Total | 2 | 100 | Good |

Based on Table 1, it is known that the results of the context evaluation research based on the management with an ideal average of 32.5 falls into the good category with a percentage of 100%. Based on the results of the questionnaire, it can be interpreted that respondents to the board stated that the results of the Context evaluation were good. This is because the budget that has been provided by the management must continue to carry out their duties optimally for the continuity of coaching PPLP Riau Province basketball to be better in the future. Based on the results of interviews conducted by researchers with respondents, it can be said that with the limited budget available, the administrators continue to carry out their respective duties properly. The management also always evaluates and coordinates with coaches and sports academics for the development of PPLP Riau Province. Besides that, a good coordinating relationship between administrators, coaches, and athletes is important to help parents supervise their children in their daily lives.

*b. Riau Basketball PPLP Coach*

The results of the evaluation research on Context based on the coach in this study were measured with 13 statement items, so an ideal average = 32.5 and an ideal standard deviation = 6.5 were obtained. Furthermore, the data obtained were categorized to find out the results from the context aspect into five categories, namely very good, good, sufficient, lacking, and very lacking. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 2**

Results of context evaluation of trainers.

| Interval | f | % | Category |
|---|---|---|---|
| X > 44.2 | 0 | 0 | Very good |
| 36.4 < X ≤ 44.2 | 0 | 0 | Good |
| 32.5 < X ≤ 36.4 | 2 | 100 | Enough |
| 20 < X ≤ 32.5 | 0 | 0 | Not enough |
| X ≤ 20 | 0 | 0 | Very less |
| Total | 2 | 100 | Good |

Based on Table 2, it is known that the results of the context evaluation research based on the trainer are mostly in the good enough category with an ideal average of 32.5, which is categorized as sufficient with a percentage of

100%. From interviews conducted by researchers with PPLP basketball coaches in Riau Province, it can be said that it is very important for coaches to first convey the goals of the program to be carried out so that athletes can motivate themselves to achieve the targets or goals of the program that has been made. This plays an important role in the process of achieving achievements. Besides that, coaches must continue to improve their quality in the process of training PPLP Riau Province basketball athletes so that they become even better.

## Evaluation Input

Evaluation of the achievement development program at the Riau Province Basketball Education and Training Center (PPLP) based on the evaluation of the input in this study was obtained based on the opinions of administrators, athletes, and coaches.

### a. Riau Basketball PPLP Management

The results of the input evaluation research based on the management in this study were measured with 29 statement items, so an ideal average = 72.5 and an ideal standard deviation = 14.5 were obtained. Furthermore, the data obtained is categorized to find out the results from the input aspect into five categories, namely very good, good, sufficient, lacking, and very lacking. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 3**

Management input evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 98.6 | 0 | 0 | Very good |
| 81.2 < X ≤ 98.6 | 2 | 100 | Good |
| 63.8 < X ≤ 81.2 | 0 | 0 | Enough |
| 46.4 < X ≤ 63.8 | 0 | 0 | Not enough |
| X ≤ 46.4 | 0 | 0 | Very less |
| Total | 2 | 100 | Good |

Based on Table 3, it is known that the results of research on input evaluation based on management are mostly in the good category with a percentage of 100%, these results can be interpreted as management stating that the input evaluation is good. The results of the interviews show that the recruitment of trainers and athletes has gone well, and so far, there have been no serious problems in the PPLP

management. Even so, there are still deficiencies that must be corrected in the selection stage, especially in athletes. In selecting athletes, coordination between administrators, coaches, related organizations (Perbasi), and sports academics should be carried out. As well as making clear details of the stages in the athlete selection process. that way the selection of athletes and coaches can be carried out properly and on target, of course, also transparent.

### b. Riau Basketball PPLP Coach

The results of the input evaluation research based on the coach in this study were measured with 34 statement items, so the ideal mean = 85 and ideal standard deviation = 17. Furthermore, the data obtained were categorized to find out the results of the input aspect into five categories namely very good, good, fair, less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 4**

Results of evaluation of trainer input.

| Interval | f | % | Category |
|---|---|---|---|
| X > 115.6 | 0 | 0 | Very good |
| 95.2 < X ≤ 115.6 | 2 | 100 | Good |
| 74.8 < X ≤ 95.2 | 0 | 0 | Enough |
| 54.4 < X ≤ 74.8 | 0 | 0 | Not enough |
| X ≤ 54.4 | 0 | 0 | Very less |

Based on Table 4, it is known that the results of input evaluation research based on trainers are mostly in the good category with a percentage of 100%, these results can be interpreted as trainers stating that input evaluation is good. In terms of input evaluation through coach interviews, it can be said to be good, but in terms of the input aspect, there is much to be evaluated including the recruitment of athletes who in the interview above gave full authority to recruit athletes. in the recruitment of athletes, PPLP should coordinate with various parties concerned, such as Pengca Perbasi and sports academics. That way the selection process can run optimally following predetermined targets. At the selection stage, you should also prepare clear procedures so that prospective athletes can prepare themselves to take part in the selection. By evaluating this, the achievement development of PPLP for basketball in Riau Province can achieve the targets set in the coaching program.

*c. Riau Basketball PPLP Athletes*
The results of the athlete-based input evaluation research in this study were measured with 20 statement items, so that an ideal average = 50 was obtained and the ideal standard deviation = 10. Furthermore, the data obtained were categorized to find out the results of the input aspect into five categories, namely very good, good, fair, less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 5**
Athlete input evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 68 | 0 | 0 | Very good |
| 56 < X ≤ 68 | 10 | 100 | Good |
| 44 < X ≤ 56 | 0 | 0 | Enough |
| 32 < X ≤ 44 | 0 | 0 | Not enough |
| X ≤ 32 | 0 | 0 | Very less |
| Total | 10 | 100 | Very good |

Based on Table 5, it is known that the results of research on input evaluation based on athletes are mostly in the good category with a percentage of 100%, these results can be interpreted as athletes stating that the input evaluation is in a good category. Based on the results of the questionnaire and interview above, it can be said that the input has gone well and is per the program that has been prepared. However, several things must be considered and evaluated so that the coaching program can run well, namely repairs to damaged facilities and the selection stage which must be managed properly and appropriately.

## Process Evaluation
Evaluation of the achievement coaching program at the Riau Province Basketball Education and Training Center (PPLP) based on the evaluation process in this study was obtained based on the opinions of administrators, coaches, and athletes.

*a. Riau Basketball PPLP Management*
The results of process evaluation research based on management in this study were measured with 4 statement items, so an ideal mean = 10 was obtained and an ideal standard deviation = 2. Furthermore, the data obtained were categorized to find out the results of the Process aspect into five categories namely very good, good, fair,

less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 6**
Management input evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 13.6 | 0 | 0 | Very good |
| 11.2 < X ≤ 13.6 | 2 | 100 | Good |
| 8.8 < X ≤ 11.2 | 0 | 0 | Enough |
| 6.4 < X ≤ 8.8 | 0 | 0 | Not enough |
| X ≤ 6.4 | 0 | 0 | Very less |
| Total | 2 | 100 | Very good |

Based on the table 6, it is known that the results of the process evaluation research based on the management are mostly in the good category with a percentage of 100%, these results can be interpreted as the management stating that the evaluation of the process is good. The results of the interview stated that the process of coaching PPLP basketball in Riau Province so far has been going well by carrying out periodic supervision by looking directly at the training location for basketball athletes in Riau Province even though there are still problems in the facilities, namely the field which has to alternate with other sports and There are facilities that are under repair.

*b. Riau Basketball PPLP Management*
The results of the process evaluation research based on the trainers in this study were measured with 13 statement items, so an ideal average = 32.5 and an ideal standard deviation = 6.5 were obtained. Furthermore, the data obtained were categorized to find out the results from the Process aspect into five categories, namely very good, good, sufficient, lacking, and very lacking. After getting the ideal average value and standard deviation then formulate based on the following criteria in Table 7.

It is known that the results of process evaluation research based on trainers are mostly in the good category with a percentage of 100%, these results can be interpreted as trainers stating that the evaluation of the process is good. The results of the process evaluation for the trainers can be said that the coaching process at PPLP basketball in Riau Province has been running optimally even though there are many obstacles in terms of facilities up to the training

time which according to the coach is not quite right. in this case evaluation must continue to be carried out to maximize the PPLP development process. The required infrastructure is expected to be able to adjust to the budget that has been provided, as well as the training time which must be balanced between training and rest periods so that athletes do not experience over-training and stress due to the heavy and continuous training process.

**Table 7**
Results of evaluation of trainer input.

| Interval | f | % | Category |
|---|---|---|---|
| X > 44.2 | 0 | 0 | Very good |
| 36.4 < X ≤ 44.2 | 2 | 100 | Good |
| 32.5 < X ≤ 36.4 | 0 | 0 | Enough |
| 20 < X ≤ 32.5 | 0 | 0 | Not enough |
| X ≤ 20 | 0 | 0 | Very less |
| Total | 2 | 100 | Very good |

*c. Riau Basketball PPLP Athletes*
The results of the process evaluation research based on athletes in this study were measured with 13 statement items, so an ideal average = 32.5 and an ideal standard deviation = 6.5 were obtained. Furthermore, the data obtained were categorized to find out the results from the Process aspect into five categories, namely very good, good, sufficient, lacking, and very lacking. After getting the ideal average value and standard deviation then formulate based on the following criteria in Table 8.

It is known that the results of the process evaluation research based on athletes are mostly in the good category with a percentage of 80% and the remaining 20% is in the sufficient category. These results can be interpreted as athletes stating that the evaluation of the process is good. The results of interviews that were conducted with PPLP Riau basketball athletes in the process evaluation at PPLP Riau Province basketball had gone well according to the program that had been prepared. Likewise, the monitoring carried out by the administrators runs in a systematic and directed manner. said that the needs and welfare had been sufficiently met by the management, both in the welfare of daily needs up to Education had been fulfilled quite well. However, the evaluation must continue to be carried out so that the coaching process can run according to the

program that has been prepared and can achieve the targets that have been determined.

**Table 8**
Results of athlete input evaluation.

| Interval | f | % | Category |
|---|---|---|---|
| X > 44.2 | 0 | 0 | Very good |
| 36.4 < X ≤ 44.2 | 8 | 80 | Good |
| 32.5 < X ≤ 36.4 | 2 | 20 | Enough |
| 20 < X ≤ 32.5 | 0 | 0 | Not enough |
| X ≤ 20 | 0 | 0 | Very less |
| Total | 10 | 100 | Very good |

## Evaluation Program

The evaluation of the achievement coaching program at the Riau Province Basketball Education and Training Center (PPLP) is based on product evaluation in this study obtained based on the opinions of administrators, coaches, and athletes.

*a. Riau Basketball PPLP Management*
The results of product evaluation research based on management in this study were measured with 2 statement items, so that the ideal mean = 5 and ideal standard deviation = 1. Furthermore, the data obtained were categorized to find out the results from the product aspect into five categories, namely very good, good, fair, less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 9**
Management input evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 44.2 | 0 | 0 | Very good |
| 36.4 < X ≤ 44.2 | 0 | 0 | Good |
| 32.5 < X ≤ 36.4 | 2 | 100 | Enough |
| 20 < X ≤ 32.5 | 0 | 0 | Not enough |
| X ≤ 20 | 0 | 0 | Very less |
| Total | 2 | 100 | Very good |

Based on Table 9, it is known that the results of product evaluation research based on management are mostly in the adequate category with a percentage of 100%, these results can be interpreted as management stating that the

evaluation of the product is quite good. With the results mentioned above, accompanied by the results of the interviews, it can be said that the process carried out has been going well, but it is still not optimal because the achievements of the PPLP basketball athletes in Riau Province are still not good. So far, it has been proven that PPLP basketball athletes in Riau Province have only succeeded in POPWIL and have not been able to maximize their performance in POPNAS (National Student Sports Week) and the PPLP National Championship itself. Coordination between administrators and coaches as well as sports academics must continue to be well-established so that the coaching process runs optimally, and always carry out periodic evaluations so that the coaching program can achieve maximum performance per the goals targeted at the achievement development. What should be highlighted is the athlete quota to the recruitment process, which is still not going well here and has not received attention. The current quota can be said to be lacking for basketball. Besides that, the facilities are still lacking, this is also the limited available budget coupled with Covid-19.

### b. Riau Basketball PPLP

Coach The results of product evaluation research based on trainers in this study were measured with 2 statement items, so that an ideal mean = 5 and ideal standard deviation = 1 were obtained. Then the data obtained was categorized to find out the results from the Product aspect into five categories namely very good, good, fair, less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 10**

Results of evaluation of trainer input.

| Interval | f | % | Category |
|---|---|---|---|
| X > 6.8 | 1 | 50 | Very good |
| 5.6 < X ≤ 6.8 | 0 | 0 | Good |
| 4.4 < X ≤ 5.6 | 1 | 50 | Enough |
| 3.4 < X ≤ 4.4 | 0 | 0 | Not enough |
| X ≤ 3.4 | 0 | 0 | Very less |
| Total | 2 | 100 | Very good |

Based on Table 10, it is known that the results of product evaluation research based on trainers are in the very good category at 50% and quite good at 50%. From the results above, the product based on the trainer can be said to be sufficient for achievement in POPWIL. However, the achievements are still not optimal because they have not been able to achieve at the national level. The existence of this pandemic has sufficiently hampered the process of fostering the PPLP achievements, but the trainers are optimistic that POPNAS 2021 will at least be on the podium.

### c. Basketball athlete PPLP Riau

The results of product evaluation research based on athletes in this study were measured with 2 statement items, so that the ideal mean = 5 and ideal standard deviation = 1. Furthermore, the data obtained were categorized to find out the results from the product aspect into five categories, namely very good, good, fair, less, and very less. After getting the ideal average value and standard deviation then formulate based on the following criteria:

**Table 11**

Athlete input evaluation results.

| Interval | f | % | Category |
|---|---|---|---|
| X > 6.8 | 0 | 50 | Very good |
| 5.6 < X ≤ 6.8 | 10 | 100 | Good |
| 4.4 < X ≤ 5.6 | 0 | 0 | Enough |
| 3.4 < X ≤ 4.4 | 0 | 0 | Not enough |
| X ≤ 3.4 | 0 | 0 | Very less |
| Total | 10 | 100 | Very good |

Based on Table 11, it is known that the results of product evaluation research based on athletes are mostly in the good category with a percentage of 100%, these results can be interpreted as athletes stating that the evaluation of the product is good. However, the achievements in PPLP basketball have not been optimally achieved, supported by statements from athletes in interviews stating that because of this pandemic, they have not been able to take part in the 2020 matches yesterday because no matches were being held. But in 2021 the athletes are very confident and optimistic to take part in POPNAS 2021 and reach the podium.

### Conclusion

Based on the known research results and discussion, it was concluded that the achievement coaching program at the Riau Province basketball PPLP was running quite well, but overall there is still a lot that needs serious attention if

PPLP Riau Province's basketball achievements want to improve performance. Context is concluded quite well with context based on the management getting a percentage of 100% in the good category. Input in the coach category gets an average percentage of 100% in the good category, then input based on athletes with a percentage of 100% is in a good category. It's just that the athlete indicator needs evaluation regarding recruitment, and the very limited funding indicator must start cooperating with donor partners. Process-based on management with a percentage of 100% in the good category, based on coaches with a percentage of 100% in the good category, based on athletes with a percentage of 80% in the good category and 20% in enough category. The product aspect based on management with a percentage of 100% is in the adequate category, based on coaches with a percentage of 50% in very good and 50% in the sufficient category, based on athletes with a percentage of 100% in the good category. The existence of the Covid-19 pandemic has quite hampered the coaching process. Periodic evaluations and also the motivation of athletes to excel as athletes assisted by PPLP Riau Province are very large with positive parental support it is hoped that they can improve the achievements of PPLP basketball in Riau Province so that they can achieve optimally.

## Conflict of interest
No potential relevant to this article was reported.

## References

Barus, J. B. N., Barus, J. B. N. B., & Tarigan K. R. B. (2022). Contribution analysis of flexibility, strength, and endurance of PPLP/D wrestling athletes North Sumatera Province. *Curere*, *6*(2), 145–155.

Hambali, S., Sundara, C., & Meirizal, Y. (2020). Kondisi fisik atlet pencak silat PPLP Jawa Barat. *Multilateral Jurnal Pendidikan Jasmani Dan Olahraga*, *19*(1), 74–82.

Purnamasari, I., & Novian, G. (2021). Self-confidence and anxiety level of West Java PPLP athletes during training from home (TFH) in the New habit adaptation period (AKB). Jurnal Patriot, 3(2), 203-213.

Rahman, M. A., & Wahyudi, A. R. (2021). Evaluasi kecepatan tendangan depan pada atlet pencak silat kategori tanding (studi pada atlet PPLP pencak silat Jawa Timur). *Jurnal Prestasi Olahraga*, 3(2), 1–9.

Rianda, P. M., Abdurrahman, & Karimuddin. (2020). Evaluasi tingkat kecemasan pemain sepakbola PPLP Aceh tahun 2018. *Jurnal Ilmiah Mahasiswa Pendidikan Jasmani, Kesehatan Dan Rekreasi*, 6(2), 41-48.

Sarkar, M., de Souza, I., Sarkar, A., Gour, A. S., & Rao, V. V. (2022). Experimental evaluation of dielectric losses of PPLP for single phase HTS cable at subcooled LN 2 temperatures . *IOP Conference Series: Materials Science and Engineering*, *1241*(1), 012011.

Soemardiawan, S., & Yundarwati, S. (2020). Workshop Evaluasi terhadap sekolah khusus olahragawan PPLP NTB. *Abdi Masyarakat*, *2*(1), 46–54.

Ariestika, E., Hita, P. A. D., & Pambayu, S. H. (2020). Pandangan filsafat terhadap ilmu keolahragaan pada pendidikan zaman now. *Riyadhoh: Jurnal Pendidikan Olahraga*, 3(2), 9–16.

Yandi, S., Batura, I., Mahata, E., Sari, W. P., Ari, M., Putri, C., … Gigi, A. (2022). Pengaruh Media Audio Visual Terhadap Pengetahuan Pusat Pembinaan dan Latihan Olahraga dalam kerangka Sistem Pembibitan Nasional. *B-Dent: Jurnal Kedokteran Gigi Universitas Baiturrahmah*, *9*(2), 161–166.