

**Development of Pencak Silat Sports Achievements in Grobogan Subdistrict in
The Preparation of The 2023 Porprov****Indah Wulandari¹, Limpad Nurrachmad²✉**Sport Science Study Program, Universitas Negeri Semarang, Jl. Sekaran Gunung Pati, Kota Semarang, Jawa Tengah, 50229, Indonesia¹²**Article History**Received January 2024
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Published Vol.13 No.(1) 2024**Keywords:**Achievement Coaching;
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The achievement development is an importance factor to achieve sports performance optimally. Therefore, the management of Pencak Silat sports in Grobogan Regency conduct achievement development in preparation for Porprov 2023. This study aims to determine the coaching of Pencak Silat achievements, challenges, and obstacles. This research uses descriptive qualitative methods with three research subjects, namely the IPSI management of Grobogan Regency. Data collection was obtained using observation, interview, and documentation techniques. Data analysis techniques used data reduction, data presentation, and conclusion drawing. The results showed that 1) Grobogan Regency's Pencak Silat achievement coaching includes the Grobogan Regency's coaching system through the 3 stages; Recruitment of athletes and coaches; facilities and infrastructure that fulfill the predetermined standards, the role of the management and fund management from KONI which is passably. 2) The challenges and obstacles include athlete discipline caused of poor training, the relationship between the athletes, coaches, and management is not good. Research results show that achievement development of Grobogan Regency Pencak Silat in preparation for Porprov 2023 is in accordance AD-ART. However, there are several obstacles and challenges. Researchers suggest that monitor the development of each athlete thoroughly, and monitor the implementation of coaching directly and establish good relationships with athletes and coaches.

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INTRODUCTION

Achievement coaching is one of the supporting factors for achieving achievement in sports. To achieve the maximum sporting achievements in increasingly sporting competitions at national and international levels, sports administrators must carry out performance coaching so their athletes can achieve achievements at regional, national, PON, SEA Games, ASEAN Games, and Olympic levels. The form of coaching to support achievements organized by IPSI is by holding sports competitions in stages starting from the regional level namely Porkab (Regency Sports Week), provincial level namely Porprov (Provincial Sports Week), national level namely PON (National Sports Week). In addition, there are the World Championship, SEA Games, and ASIAN GAMES at international levels (Rahmawati, 2020).

Sports achievement coaching aims to advance all sports branches in Indonesia optimally. Each sport has its coaching management at regional and national levels. The main objective of achievement coaching management is achievement coaching through the massing stage, the nursery stage, and the stage of increasing achievement to the maximum.

Achievement sports is the development and coaching of athletes in a planned, tiered, and sustainable manner with competition to achieve achievements with the support of science and technology (Kemenpora, 2011: 4). Meanwhile, according to (Saputra et al., 2019), achievement sports are sports managed professionally to obtain optimal performance in sports from regional to international level by having a level of fitness and skills in the pursued sport with above average of non-athlete.

According to (Ghazali., 2015), he states that various components are needed to achieve maximum and optimal performances, which form a unity. The peak of achievement coaching is an achievement. Achievement development goes through several specific stages. According to KONI Pusat, the achievement coaching is described as follows **Figure 1**.



Figure 1. National Sports Level
(Source: KONI Pusat, Garuda Emas, 1998)

Figure 2.1 explains that there are 2 tracks for national sports coaching, namely: 1) Formal track, or tracks managed by Depdiknas, and 2) Non-formal track managed by KONI (Indonesian National Sports Committee).

Implementation of sports achievement coaching carried out professionally will produce objective findings. The data, analysis, and conclusions are not manipulated to provide benefits to everyone concerned in the achievement coaching program.

According to (Pelana, 2018), Pencak Silat is a traditional martial art originating from Indonesia. Pencak Silat has several varied techniques. The techniques in Pencak Silat are kicks, punches, blocks, slamming, cutouts, sweep, and evasion. Besides that, several teachings use traditional weapons such as kerambit (knives), keris swords, sticks, sickles, spears, knives, tridents, and machetes. Pencak Silat is a branch of martial arts that is Indonesia's mainstay in international competitions such as the SEA Games. Pencak Silat in Indonesia consists of various colleges under the auspices of IPSI (Indonesian Pencak Silat Association).

IPSI in Grobogan Regency has various Pencak Silat colleges including Persaudaraan Setia Hati Teratai (PSHT), Perisai Diri (PD), Tapak Suci (TS), Pagar Nusa (PN), Gelora, Pencak Silat Nasional Ampuh Sehat Aman Damai (PERSINAS ASAD), Ikatan Keluarga Silat Putra Indonesia Kera Sakti (IKSPI Kera Sakti), and others.

There are several competitions in which Pencak Silat athletes have participated, such as PON (National Sports Week), Porprov (Provincial Sports Week), SEA Games, ASIAN Games, and others. For the first time, Pencak Silat joined a competition held in Jakarta, namely PON VIII in 1973. Some problems were faced by the athletes in this competition. However, this situation did not make the athletes give up. With the athletes' hard work, the PON VIII competition ran smoothly, and Pencak Silat became known throughout the world (Nizam, 2019).

Athletes from all these colleges compete to become the Grobogan Regency Pencak Silat team in a prestigious event at the provincial level, namely Central Java Provincial Sports Week (Porprov) held every 4 years to obtain superior seeds for the next sports competition PON (National Sports Week). Therefore, IPSI in Grobogan Regency carries out coaching for selected athletes through a selection process carried out by administrators and coaches in preparation for the 2023 Porprov competition.

The development of Pencak Silat sports

achievements carried out by IPSI in Grobogan Regency in 2018 did not obtain maximum results, only getting 2 bronze medals in the 2018 Porprov. These results were much lower than the previous Porprov. Therefore, IPSI in Grobogan Regency prepared better achievement coaching in the preparation for Porprov 2023 to achieve the target optimally.

Previous research regarding achievement coaching has been conducted by several researchers. (Allung et al., 2019) entitled "Evaluating Coaching Achievement Taekwondo Sports Branch of Students Development Center and Sport Training NTT" states that the facilities and infrastructure have not been fully met. However, funding originating from the Ministry of Youth and Sports Affairs and supported by the local government budget (APBD) of NTT Province funds has gone well.

(Saputra et al., 2019) in their research study entitled "Management Analysis of Indonesian Petanque Federation Province (FOPI) Central Java in Supporting Sports Achievement in Indonesia" explain the results of their study regarding the management analysis of the Central Java FOPI in improving the achievements of athletes and coaches. In addition, the implementation is by the main tasks and functions, but there are still deficiencies and weaknesses that must be corrected to achieve maximum goals.

According to (Dawi et al., 2020) conducting research entitled "Manajemen Pembinaan Prestasi Tinju PETINA di Provinsi Nusa Tenggara Timur" states that planning is good because it complies with established standards. However, the overall organization is not good because the arrangement of infrastructure and funding is not yet optimal and the implementation is not good due to limited infrastructure facilities and funding. Infrastructure facilities and funding are still minimal and overall constraints are not good because the supervisory commission does not carry out routine controls.

(Firmansyah et al., 2020) with their research entitled "Evaluation of Women's Volleyball Coaching Program on Student Sports Training Education Center in Musi Banyuasin Indonesia" states that the results of their research show in achievement coaching, funding, implementation of training programs, facilities, and infrastructure have been running well and following standards but the product of the coaching program is match results that show instability or less than optimal performance.

The research from (Fakhrudin et al., 2021) entitled "Evaluasi Program Pembinaan Prestasi

Pencak Silat Perguruan Naga Hitam Kota Semarang" explains that the results of the research in the management of Pencak Silat in the Naga Hitam College did not go well. The socialization of the vision and mission was not given to coaches and athletes. In addition, the training program, funding, and transportation during the championship are very lacking. Therefore, it can be seen from the achievements obtained by the Naga Hitam College athletes which are less than optimal.

The difference between several previous studies and researchers is in the focus of the research regarding achievement development efforts in increasing Pencak Silat performance to the maximum with several supporting factors. The researchers focus more on the achievement coaching, the challenges, and obstacles experienced during the implementation of achievement coaching so that the achievement coaching runs smoothly and can achieve optimal performance.

Previous research contains information about how achievement coaching management will be carried out well and achieve optimal performance by paying attention to factors that support the coaching process, such as the role of coaches and administrators, athlete potential, training programs, physical, and techniques provided, the availability of facilities and infrastructure, and sufficient funding for achievement development activities. Based on the background that has been described, the Grobogan Regency Pencak Silat or IPSI sports administrators and coaches experienced obstacles in implementing achievement coaching to achieve the target of winning medals in the 2023 Porprov competition of the Pencak Silat sport.

Achievement development is carried out by Grobogan Regency Pencak Silat administrators and coaches supported by parties. The success in developing performance cannot be separated from the role of competent administrators and coaches in implementing the training program that will be provided for athletes with supervision and direction from the coaches. Joint training and independent training carried out by athletes are implemented by evaluating each athlete's development. The training program provided by the coaches has been modified to be more effective, efficient, and able to measure the goals to be achieved by the research method.

METHODS

This research is qualitative and descriptive. This research aims to describe coaching of Gro-

bogon Regency Pencak Silat achievements in preparation for the 2023 Porprov carried out by the Grobogan Regency IPSI branch management. This research will reveal how the achievement management process is carried out in preparation for the 2023 Porprov.

Location and Research Targets

This research was conducted at Pusdiklat (Education and Training Center) which is used by the Grobogan Regency Pencak Silat provincial team to conduct training centers located at Kepuh Hamlet, Toroh Sub-district, Grobogan Regency. This research uses purposive sampling with the condition that the position is in a strategic position, and employees have worked for a long time (more than one period).

Data Collection Instruments and Methods

The instrument used in this research was direct observation at the Pusdiklat (Education and Training Center) which was used by the Grobogan Regency Pencak Silat provincial team to conduct a training center located at Kepuh Hamlet, Toroh District, Grobogan Regency. Then, conduct direct interviews with the head of the IPSI administrator, head coach, and provincial athletes. Then, the researchers conducted documentation as a complement to the data in the research using tools. The tools used in this research are interview guides and voice recording equipment. The methods used in this research are direct observation, interviews, document tracing, and documentation.

Data Validity Checking

In qualitative research, the validity of the data is very important to objectively test the truth of the research. According to (Moleong, 2010), research efforts that use triangulation techniques, investigations, or checking the validity of data are used to determine the truth of the research that will be carried out. In this study, data validity was checked using triangulation. Triangulation according to (Sugiyono, 2015) is defined as a data collection technique that combines various data collection techniques and existing data sources.

Data analysis technique

According to (Sugiyono, 2015) data analysis is the process of searching and forming a structured arrangement to obtain results used in interviews, observations, and documentation of the research forming planned parts, and making conclusions so it can be understood easily. The data analysis techniques used in this research are (1) data reduction, (2) data presentation, and (3) conclusions.

RESULTS AND DISCUSSION

Observation Results

The results of observations made by researchers on the Grobogan Regency Pencak Silat team are achievement development carried out by administrators and coaches through achievement development planning including achievement development activities such as a test match. It is conducted outside the city or it is conducted with other districts/cities. Training programs use medium-term training programs so that the athlete's body condition reaches in its maximum peak. A refreshment is given so that the athlete does not experience boredom in practicing activities such as swimming as a recovery after a test match. Achievement development is carried out by Grobogan Regency from an early age using talent identification selection and talent coaching carried out by each college in Grobogan Regency. There is a replacement of athletes if the athlete is not disciplined in training and the athlete is also not responsible for the weight. Their weight must be maintained according to the class being competed.

Appreciation is given to athletes to motivate athletes to always become champions and also motivate athletes who have not yet achieved achievements to be enthusiastic about achieving achievements. Coach recruitment is based on the coach's experience in bringing in outstanding athletes. There is a replacement of the coach if the coach is not responsible for coaching. The Grobogan Regency Pencak Silat management has a work program to improve the performance of Pencak Silat athletes in the Grobogan Regency. Maintenance of the facilities and infrastructure used by the Grobogan Regency Pencak Silat team is carried out properly by the management. In addition, they make the maintenance of damaged facilities and infrastructure every year. The budget provided by Grobogan Regency KONI to Pencak Silat administrators is managed as optimally as possible to facilitate achievement development activities.

The coaching system carried out by the Grobogan Regency Pencak Silat team involves recruiting athletes through the massing, nursery, and achievement stages, namely by calling several athletes who won at the previous event and carrying out an open selection to fill classes that have not yet been filled by athletes. Then, they are given physical tests and techniques. Recruitment is carried out openly. Athletes must go through several selection processes that have been determined by the management, such as physical tests,

technical tests, and mini-competitions. Athletes who have entered the competition stage are athletes who have passed the physical and technical tests and then competed. After that, the first winner is taken to join the Grobogan Regency Pencak Silat team in preparation for the 2023 Porprov competition. After the Grobogan Regency Pencak Silat team was formed, there will still be natural and scientific selection of athletes as seen from the athlete's body posture and the athletes will be given technical skills.

The coaches of the Grobogan Regency Pencak Silat team creates a training program that was carried out through preparation, competency, and transition stages containing four aspects, namely physical aspects, technical aspects, tactical aspects, and mental aspects which notice the training volume, training intensity, and performance of Pencak Silat athletes. The Grobogan Pencak Silat trainer took part in a coaching seminar aimed at increasing knowledge about basic techniques and new match tactics as well as improving athletes' skills. The Grobogan Regency Pencak Silat management carries out its main duties and functions to implement the achievement development to improve athletes' achievements and produce the seeds for outstanding athletes.

Another supporting factor in developing Pencak Silat achievements in Grobogan Regency is that athletes have good skills in competitions and strong motivation to achieve achievements in training and competing. The Grobogan Regency Pencak Silat trainer had achievements when he was an athlete and has experience in training by bringing many athletes to achieve achievements. Because the trainer has been an athlete, the trainer understands the condition of athletes on the field when competing. The organizational structure of the Grobogan Regency Pencak Silat administrators is appropriate in carrying out their duties and working together with KONI as a supporting party in developing Grobogan Regency Pencak Silat achievements.

Several inhibiting factors are experienced in developing Pencak Silat performance in Grobogan Regency, such as distance and time constraints because some athletes are already working and studying outside the area. Therefore, the coach also experiences problems in controlling all athletes because they cannot join in training together 3 times per week. However, the coach tries to ensure that the athletes continue to train together even though they train 2 times per week and the other exercises are done independently by the athletes.

Interview results

Development of Pencak Silat Achievement in Grobogan Regency

The achievement development carried out by IPSI in Grobogan Regency in the preparation of Porprov in 2023, has become the IPSI Grobogan Regency work program. It has been structured and planned the management for achieving optimal athlete performance so that the medal target can be achieved with the Grobogan Regency Pencak Silat team development program, recruiting Grobogan Regency Pencak Silat coaches, recruiting athletes as the Grobogan Regency PORPROV team, and conducting training program through general preparation, competition, and transition stages. Grobogan Regency Pencak Silat trainers use variations in their training programs.

The head of Grobogan Regency IPSI states that one of the work programs implemented by Grobogan Regency IPSI is Porprov which has been prepared by the management with the stages of forming a team manager, selecting the best coach in Grobogan Regency, and selecting Pencak Silat athletes in Grobogan Regency. The plan is made by the management to form a team of managers led by the coaching and achievement team (Binpres) of Grobogan Regency IPSI.

Recruitment of Grobogan Regency Pencak Silat coaches is carried out by administrators and a team of managers who have been formed. The selected coaches are seen from the coach's experience in bringing athletes to win championships, the coach who has been an athlete, the coach who has a coaching license of the Central or Central Java IPSI standard, and the coach who is capable of high commitment to the team. However, if the coach is not disciplined in training, the coach will be replaced with another coach who has been prepared by the general chairman.

The budget for developing the achievements of Grobogan Regency Pencak Silat athletes in preparation for the 2023 Porprov obtained by Grobogan Regency IPSI from KONI is still insufficient and there are no external sponsors or funds. The budget used by the management is for the costs of sparring partners for Pencak Silat athletes, the need for facilities and infrastructure during training and test matches, and transportation for athletes and coaches. The facilities and infrastructure owned by Grobogan Regency are following the number of Grobogan Regency Pencak Silat athletes and they are suitable to be used. The nutritional factors provided by administrators to athletes are very lacking due to the minimal budget, so the athletes maintain and fulfill

their nutrition.

The Grobogan Regency IPSI management stated that in developing Grobogan Regency's Pencak Silat achievements for the 2023 Porprov championship, it has been well structured in the selection of a team of managers, coaches, and athletes by physical tests, techniques tests, and talent skills from various colleges in Grobogan Regency. Then, those selected athletes in the Grobogan Regency Pencak Silat team carry out training camps and carry out the training program given by the coach. Coaches also evaluate the training program given to athletes by having sparring partners so it becomes a benchmark for implementing the optimal training program or whether there must be changes that will be given to athletes to maximally meet the targets given by the management.

The training program uses preparation, competition, and transition stages which contain aspects of physical, technical, tactical, and mental training with attention to volume and intensity to maximize the athlete's abilities. Grobogan Regency Pencak Silat trainers also take part in coaching seminars to increase knowledge and update information on techniques and tactics at provincial and national levels of Pencak Silat and can provide variations in training. Therefore, athletes don't get bored and they are always enthusiastic.

Funding management provided through KONI is used to support coaching activities, but achievement coaching carried out is very lacking. Therefore, the test matches faced by athletes are only carried out twice. According to the coach, it is very inadequate to evaluate the athlete's abilities and the training program. from the coach. In addition, the training camps are only held once or twice a week and the other training is carried out by each individual. Therefore, the trainers are limited to monitoring the progress of each athlete. Athletes are also still not disciplined in training due to other activities such as work or study. It influences the preparation for the match. The coach is only the designer of the training program and the athletes themselves who carry it out to get optimal results.

Challenges and Obstacles Experienced by the Grobogan Regency Pencak Silat Team

In performance development, various parties often experience challenges and obstacles. Several factors hinder them, such as athletes who work, study outside the area, and become undisciplined when training. Therefore, coaches experience problems in providing training programs and direct monitoring of each athlete who cannot

participate in joint training directly.

The challenges and obstacles experienced in carrying out achievement development for the Grobogan Regency Pencak Silat team are arranging the training schedule for the Grobogan Regency Pencak Silat athletes because many athletes work and study outside the area so they cannot control the athletes directly. Problems were also experienced by the distance between the location of the training camp and the location of the athletes' homes. Therefore, training is based on their respective colleges, and athletes are given an independent program to be carried out at home which will be evaluated during direct joint training. That case makes it a little difficult for the coaches. Coaches also have difficulty controlling the weight of each athlete due to the lack of direct training intensity or interaction carried out directly by the coach. The challenge is maintaining body weight during training until the competition happens because the nutrition provided is far from sufficient by the administrators and coaches. Therefore, the athletes can maintain their nutritional needs.

Achievement Coaching

The research results show that achievement coaching is carried out by administrators and coaches to achieve optimal athlete achievements in preparation for the 2023 Porprov by preparing a systematic and tiered achievement development program, including the formation of teams from managers, and coaches, to athletes, training programs, and other supports such as managing funds, facilities and infrastructure to support achievement coaching. The achievement coaching carried out by Grobogan Regency IPSI is based on the guidelines (AD-ART, IPSI National Conference, 2016).

The Pencak Silat achievement development system implemented by Grobogan Regency includes the stages of massing, breeding, and achieving achievements. According to (Eko Rudiandiyah, 2017), sports coaching aims to guide and direct an athlete or team through a continuous, planned, and tiered process by participating in competitions so they can achieve achievements with the support of sports technology and science. (Effendi, 2016) expresses his opinion that several factors influence achievement, such as the athlete's lack of physical ability, athlete skills, athlete psychology, facilities, and infrastructure.

Challenges and Obstacles Experienced

The research results show that there are challenges and obstacles experienced in developing Grobogan Regency Pencak Silat achieve-

ments. The challenges experienced by Grobogan Regency Pencak Silat athletes are the body weight and physical condition of each athlete. The weight must always be stable according to each category. In addition, there is the challenge of passing the Pre-Porprov qualifying round so that they can continue to compete in the 2023 Porprov. Meanwhile, the obstacles experienced by Grobogan Regency Pencak Silat athletes are the poor schedule management of several athletes due to study activities outside the area and work which can affect the athlete's discipline in practice. In addition, the other obstacles are improving human quality by focusing on improving physical, spiritual, and mental health, and forming character and personality (discipline and high sportsmanship) by increasing a sense of national pride in achieving optimal achievements (Jamalong, 2014).

Grobogan Regency Pencak Silat athletes have obstacles in their daily habits, especially in the food that enters the body must be following needs, but athletes must meet their own needs. There is no financial budget given to athletes to meet the required nutritional needs. (Cherian et al., 2020) states that athletes' habits of consuming unhealthy food can disrupt achievements coaching so that athlete performance will decrease. Therefore, coaches must monitor the unhealthy food habits consumed by athletes because the nutrition that enters an athlete's body is the key to performance that needs to be considered.

The challenge experienced by the Grobogan Regency Pencak Silat trainer is the limited funds for test matches with other regions. The coach must maximize the training program given to athletes so that when the test matches are carried out the athletes can improve their performance in the arena. Meanwhile, the obstacles faced by the Grobogan Regency Pencak Silat trainers are not being able to directly monitor the progress of athletes in training because the overall training camp is held once a week. On the other hand, the training will be returned to the athletes' respective colleges and the athletes will be given additional training independently which is carried out every day. (Budiwanto, 2012) states that an athlete's lifestyle needs to be considered, such as regular and sufficient sleep hours, avoiding smoking, alcohol, and drugs, nutritious food, having time for recovery or recreation, and monitoring health. Unhealthy lifestyle habits for athletes make coaches experience problems in monitoring their daily lives, especially sleeping hours and nutritional intake for athletes. The minimal budget is a bit of an obstacle in providing a budget for athletes'

nutrition and a budget for maximum concentration.

The challenges and obstacles in developing Grobogan Regency Pencak Silat achievements at this time are awareness of the importance of training for Grobogan Regency Pencak Silat athletes. The obstacles faced by athletes in preparation are weight issues and training schedules which must be divided with other activities such as study or work. The Grobogan Regency Pencak Silat trainer experienced challenges given by the administrators in the training program created for the 2023 Porprov qualification (Pre-Porprov) with minimal evaluation in the form of sparring partners given to athletes due to constraints on funding provided by the administrators. Therefore, the trainer prepared several training programs. The problems faced by the coach, namely not being able to control several Grobogan Regency Pencak Silat athletes who are unable to take part in joint training directly due to the distance from the training places or due to other activities. In addition, the relationship between administrators and coaches which is not good, there is still a feeling of putting each other down which creates obstacles in the implementation of achievement coaching. Nutritional and psychological factors in coaching have not been fulfilled because funds are allocated to test matches and competition needs, but athletes are still enthusiastic about achieving optimal achievements.

CONCLUSION

The development of Grobogan Regency's Pencak Silat achievements in preparation for the 2023 Porprov is carried out by the management with the initial stages of coaching, namely the massing stage, the nursery stage, and the achievement coaching stage. In addition, an open athlete recruitment system is held through physical selection and intercollegiate competitions. The management also implements a recruitment system by calling athletes based on the acquisition of Porprov medals, then monitoring the training program through preparation or general training, special training, pre-competition, and competition with the evaluation of periodic test results.

The coach recruitment system is carried out by the management based on the experience and certificates the coaches have at least at the regional level. Facilities and infrastructure are only punch boxes and body protectors and the others are borrowed during the preparation for the 2023 Porprov.

REFERENCES

- Allung, J. R., Soegiyanto, & Kusuma, D. W. Y. (2019). Evaluating Coaching Achievement Taekwondo Sports Branch of Students Development Center and Sport Training NTT. *Journal of Physical Education and Sports*, 8(2), 116–120. <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/27486>
- Cherian, K. S. ., Gavaravarapu, S. M. ., Sainoji, A. ., & Yagnambhatt, V. R. (2020). Coaches perceptions about food, appetite, and nutrition of adolescent Indian athletes. *A Qualitative Study*, 1, 2.
- Dawi, F. K., Soegiyanto, S., & Irawan, F. A. (2020). The Coaching Management of Boxing Achievement in PERTINA East Nusa Tenggara Province. *Journal of Physical ...*, 9(3), 226–232. <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/42707>
- Effendi, H. (2016). Peranan Psikologi Olahraga dalam Meningkatkan Prestasi Atlet. *Ilmu Pengetahuan Sosial*, 1(1), 22.
- Eko Rudiansyah, S. T. (2017). Pembinaan Olahraga Prestasi Unggulan di Kabupaten Melawi Kalimantan Barat. *Jurnal Pendidikan Jasmani Kesehatan Dan Rekreasi (Penjaskesrek)*, 1–14.
- Fakhrudin, M., Amin, A., Pramono, H., Woro, O., & Handayani, K. (2021). Evaluation of Pencak Silat Sports Achievement Coaching Program at Naga Hitam College in Semarang City. *Journal of Physical Education and Sports*, 10(1), 70–74.
- Firmansyah, A., Rahayu, S., & Nasuka, N. (2020). Evaluation of Women's Volleyball Coaching Program on Student Sports Training Education Center in Musi Banyuasin Indonesia. *Journal of Physical Education and Sports*, 9(3), 289–296.
- Ghazali. (2015). Pendataan Dan Pemetaan Olahraga Prestasi KONI Kabupaten Pidie Dari Tahun 2006 s/d 2012. *Jurnal Megister Administrasi Pendidikan*, 3, 17–32.
- Jamalong, A. (2014). Peningkatan Prestasi Olahraga Nasional Secara Dini Melalui Pusat Pembinaan Dan Latihan Pelajar (PPLP) Dan Pusat Pembinaan Dan Latihan Mahasiswa (PPLM). *Jurnal Pendidikan Olahraga*, 156–168.
- Moleong, L. J. (2010). *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya.
- Nizam, M. . S. M. . K. J. . T. W. . & E. M. S. (2019). Silat Tempur: Tehe Combat Sport for Children . *Proceedinge of the 3rd International Colloquium on Sports Science, Exercies, Engineering and Technology*.
- Pelana, R. (2018). Weight Loss in Pencak Silat Art Performance Category. *International Conference on Sports Science, Health and Physical Education*, 1(2017), 111–113.
- Rahmawati, A. S. . & D. R. P. (2020). Pengaruh Penggunaan Pasta Labu Kuning (Cucurbita Moschata) Untuk Substitusi Tepung Terigu Dengan Penambahan Tepung Angkak Dalam Pembuatan Mie Kering. *View Metadata, Citation and Similar Papers at Core.Ac.Uk*, 274–282.
- Saputra, M. F. B., Kristiyanto, A., & Doewes, M. (2019). Management Analysis of Indonesian Petanque Federation Province (FOPI) Central Java in Supporting Sports Achievement in Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 837. <https://doi.org/10.18415/ijmmu.v6i2.895>
- Sugiyono. (2015). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)*. Alfabeta.