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## **Evaluation of Ping-Pong Team Achievement Development Program on Cirebon Regency**

Ayu Lestari Yajid ™, Sulaiman Sulaiman, Agung Wahyudi

Universitas Negeri Semarang, Indonesia

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#### **Abstract**

This study aims to: (1) Evaluate human resources, including coaches and athletes' ping-pong in the Cirebon regency at Porprov 2022, (2) Evaluate the training program implemented by PTMSI in the Cirebon regency at Porprov 2022, (3) Evaluate the source of funds for the Cirebon regency at Porprov 2022, (4) Evaluating the role of the government in the Cirebon regency at Porprov 2022. For evaluation research using qualitative research methods, with the Stake Model Countenance Model program evaluation model. The source of this data is the administrators, coaches, and ping-pong athletes of the Cirebon district in Porprov 2022. Data collection techniques use observation, interviews and documentation, and data triangulation. Data analysis includes 1) data reduction, 2) data presentation, and 3) conclusion. The results showed that: (1) human resources, including the admission of athletes, were carried out through a selection process, and the admission of coaches was carried out by the appointment process by the management, (2) the preparation of training programs, the implementation of training programs according to design, the success of the training program has not been fulfilled, (3) government support exists during training and championships, limited government involvement, the role of the government has not been maximized, (4) the source of funds comes from KONI and volunteers from the management and parents of athletes. Management of funds for training, championships, and welfare. Research on the achievement coaching program evaluation shows that the achievements achieved by the Cirebon regency ping-pong team in Porprov 2022 need to follow the target. So PTMSI needs to change the achievement coaching program so that the achievement results can follow the desired target.

#### INTRODUCTION

Ping-pong is one of the most famous small ball games in Indonesia. This game is much loved by all levels of Indonesian society ranging from children, teenagers, and adults to the elderly. Because ping-pong is so integrated with the community, ping-pong is a sport that can be used as a recreational sport, a health sport to mark the achievement. Ping-pong is one of the sports favored by the wider community. Ping-pong games include games that athletes can play for all fields for achievement, recreation, and health (Indrawan, 2008).

The coaching of ping-pong achievements here is coaching carried out at PTMSI Cirebon. Ping-pong is a pioneer of ping-pong in region III West Java covering Ciayumajakuning, Cirebon, Indramayu, Majalengka, and Brass. This is due to many athletes in Cirebon, both women, and men, ranging from juniors to seniors. However, only a few athletes can compete in the region, regionally, and nationally. Due to the lack of regional clubs that can accommodate the talents of athletes, so many of the athletes are born self-taught.

The ping-pong team always attends and in prestigious championships, participates including formal under the auspices of the government, such as the championship between students, namely Popwilda. The interagency championship, namely Porpemda, the interagency border championship is Porsenitas, and the most prestigious championship is Porprov. Although not all athletes in the ping-pong team excel, the strength of the ping-pong team is undoubtedly for regional championships. The ping-pong team has consistently been ranked at the top for regional championships such as the Popwilda, Porsenitas, and other local single-event championships. However, the team still needs to qualify for the top rank in the Porprov event.

Pekan Olahraga Daerah (PORDA), also called Pekan Olahraga Provinsi (PORPROV), is a prestigious championship event in every province in Indonesia. The championship is a multievent folk sports party for all Indonesian citizens in each province which is held every four years. This championship is held as an event to attract talented

athletes in each province in Indonesia which will then continue to the next event, namely PON to the Olympic Games. Therefore, the sports competed in Porprov refer to the Olympic Games event. In this championship, there are approximately 33 sports that are competed. This includes the sport of ping-pong.

The process of coaching ping-pong achievements still needs to be considered. Although one of the factors supporting the achievement is the facilities and infrastructure considered adequate, this has yet to be able to make ping-pong successfully achieve achievements in Porprov. Many obstacles still hinder the process of fostering the achievements of the ping-pong team, especially for the Porprov event, including human resources, sources of funds, and government roles as supporting aspects.

Facilities and infrastructure are among the supporting factors for the development of reasonably good achievements. Ping-pong in Kabupaten Cirebon already has tools for training that have been standardized, starting from tables and balls to sports technology, namely ping-pong ball throwing devices (Robopong). Furthermore, ping-pong already has its training building made by DISBUDPORA as a reward for the achievements of Porsenitas athletes.

Therefore, in terms of facilities and infrastructure, it should be able to support the preparation coaching program and achieve the highest achievements.

Nevertheless, one factor alone cannot support this. Several other factors must be met to achieve achievements. Another factor is the human resources that must be met. The ping-pong team in the Porprov event only has one excellent athlete in the women's or men's teams. In addition, the level of discipline of athletes still needs to improve, which is one of the inhibiting factors, especially the distance of athletes' residences that are far from the building where they are tired. It can travel for approximately one hour. In addition, several athletes running education outside the city, such as Bandung, Tasikmalaya, and Majalengka, and one athlete in a Jakarta club had to stay there. Although these athletes can train independently outside the city, the team's strength can be measured by joint

training. It should be possible to centralize the exercise by PTMSI and KONI, but this cannot be implemented because it is related to costs. In addition, human resources still needed to be improved, namely from the coaching team; at that time, the Cirebon regency only had two certified coaches but counted only one coach active in the coaching process. This is a factor in the coaching process.

The lack of athletes' flying hours is also an obstacle to achievement coaching. Many local and regional events are often held, but PTMSI only sends its athletes due to cost constraints. Moreover, events are held outside the city and even outside the province of West Java. This needs to be realized by the management of PTMSI and KONI to evaluate the ping-pong achievement coaching program. The evaluation of achievement coaching is hoped to provide an overview of how the ping-pong achievement coaching program has been running and is expected to measure the success rate of achievement coaching itself.

The peak in sports can only be achieved through a systematic, planned, orderly, and continuous coaching process (Candrawati et al., 2018). Achievement must be improved through a coaching program with the holding of a well-planned or designed training center, arranged regularly, run under good management, control as the program progresses, and the holding of program evaluations. If the achievement coaching program has been carried out properly, there must be a program evaluation. This is useful as a measuring tool to find out the achievement of achievements in programs that have been run. Furthermore, to find out what shortcomings are contained in the program.

Implementing the evaluation achievement coaching program to find concrete evidence that occurs in the field, both positive and negative. Evaluation that is carried out correctly and adequately will produce accurate results according to what happens in the field, be it data, analysis, or conclusions without manipulation. This will provide benefits for all aspects related to the program's implementation.

The existence of research to determine how the condition of the ping-pong achievement coaching program in Cirebon regency has been running. What weaknesses in the program, and what efforts can be put into fixing that program? So that PTMSI Cirebon regency can be tricked to make improvements in the following program, which aims to achieve achievements in the form of medals at Porprov West Java 2022.

#### Evaluation

Evaluation is the first step in supervision, namely collecting the correct data to be continued with appropriate coaching (Sari Helen Purnama, 2017). Evaluation is very important and beneficial, especially in decision-making. Purwanto et al. (2021) the evaluation is oriented attention to the policy determinants of the funder characteristically, including the level at which the program has achieved the desired goals. Evaluation can be used to check the success rate of a program related to the program environment with a judgment of whether the program is continued, postponed, improved, developed, and accepted or rejected. In evaluating a program, it cannot be separated from existing research models.

Evaluation activities must-have criteria. Evaluation criteria can be obtained by the group or itself or outside standards (R Lumintuarso, 2020). Criteria are material for the appeal to data obtained from measurement results. Using criteria as a comparison material, we can give meaning to the data obtained from the measurement results.

Stake offers three phases in evaluation: antecedent (introduction or preparation), transaction (process), and outcomes (results). Here are the stages in the Stake countenance model research:

- Antecedent, intended to assess sources/capital/inputs such as financial personnel, student characteristics, and goals to be achieved.
- The transaction is intended to assess the activity plan and its implementation process, including the sequence of activities, schedule, interaction form, etc.
- Outcomes are intended to assess the effects of the program after its completion of the program.

According to Stake, it is an attempt to describe programs and give justice to them. Evaluation countenance is an approach to the evaluation of education and other programs. Compared to the align approach, countenance evaluation is more oriented toward the program's activity, uniqueness, and social diversity (Adzalika, 2018).

This model is of the view that research activities do not only end in a description of circumstances, events, events or objects but must come to a judgment about good and bad, whether or not the process and the final result of the program are effective (Diatmika et al., 2021). Stake said that evaluations are only perfect if they provide judgment. In providing judgment can be used standard or absolute, or relative performance.

#### **Ping-pong Sports**

Ping-pong is a small ball game played by two or more people by hitting the ball using a bet. Tomoliyus, (2017) states that ping-pong is a sports game that is as good as techniques, including a group of net games. Ping-pong is a game that uses a table with equipment, a ball, and a racket as a tool. The games are played using tables, balls, and bets as equipment. Ping-pong is one of the sports that is favored by the wider community.

Ping-pong games include games that can be played for all fields, achievement, recreation, and health. Therefore, ping-pong is much loved by the wider community. Besides that, ping-pong does not require an ample space, so it can be played by all groups ranging from children, teenagers, and adults to the elderly. Ping-pong is a small ball game that uses a bet to hit the ball on the ping-pong table. The wider community loves ping-pong because the game can be played in all fields and all circles. Some of the techniques that must be learned and mastered are as follows.

- 1) push forehand and backhand.
- 2) drive forehand and backhand.
- 3) spin forehand and backhand.
- 4) smash forehand and backhand
- 5) chop forehand and backhand.
- 6) flick forehand and backhand.
- 7) forehand and backhand service

#### **Sports Coaching**

Coaching is generally defined as providing direction and guidance to achieve a certain goal. Coaching is a common thing used to improve knowledge, attitudes, and skills in the fields of education, economy, society, society, and others. Coaching emphasizes a practical approach, attitude development, abilities, and skills (I bagus Endrawan et al., 2020).

There is an exercise program in sports coaching, and many factors exist in compiling an exercise program. States several factors that need to be considered when compiling an exercise program, namely: 1) The amount of time available on the field, 2) The number of athletes who will train, 3) The level of age and gender, 4) The condition of the sportsman at that time, 5) The length of training time at that time, 6) The attitude of the sportsman towards training, 7) The motivation of the sportsman Pearce, (2013).

In the context of achievement, to achieve the optimal achievement of the athlete, it is also necessary to have the effort and training power outlined in the written exercise program plan, which is systematically arranged as guidelines for the direction of activities to achieve goals effectively and efficiently. Programmatic, directed, and continuous coaching is needed and supported by adequate support to achieve maximum athlete achievements. To achieve optimal performance of athletes, it is also necessary to have intense training and have fun, sometimes causing boredom (boredom). This problem can cause a decrease in achievement; therefore, prevention is needed, namely by planning and doing various exercises. There needs to be more than just practicing intensively to guarantee the achievement of an increase in achievement this is because an increase in achievement is achieved when in addition to being intensive, exercise is carried out with quality and quality.

#### **Sports Coaching Pyramid**

The coaching pattern based on the pyramid is as follows:



**Figure 2.3** National Sports Coaching Level (Source: Ghazali, 2015)

The stages of coaching based on the pyramid are 1) the forcing stage, 2) the seedling stage, and 3) the achievement improvement stage. These three elements are interrelated and inseparable. The pattern of coaching based on the pyramid applies to all sports in question. The picture above regarding the stages of the sports coaching pyramid can be described as follows:

#### **Forcing Stage**

Forcing comes from the base of the syllable "mass" which involves crowds. In this stage, sports are carried out by involving as many people as possible. Such people do sports for various purposes. Sports carried out aim to be recreational, health, or achievement sports (Prasetyo et al., 2018).

The primary basis of the sports movement, the main goal of forcing, is to involve many people in sports. Participants comprised various levels of society, students, farm workers, ABRI, and others. The purpose of people doing sports here is different, for physical freshness, recreation, rehabilitation, health, and others. Forcing is patterning the athlete's physical skills and fitness in a multilateral and specialized manner. The purpose of forcing is to involve as many athletes as possible in achievement sports so that awareness arises of the importance of achievement sports as part of

efforts to increase improvement in sports nationwide.

The strategies for forcing early sports include the following:

- a) Prepare adequate sports facilities and infrastructure in elementary schools.
- b) Preparing the procurement of sports teaching staff who can drive sports in elementary schools.
- c) Holding matches between classes at school.
- d) Provide motivation both from inside and outside the school.
- e) Holding demonstrations of the games of outstanding athletes.
- f) Stimulate children's interest through mass media, television, video, and others.
- g) Collaborating between schools and the community, especially parents.

#### Seedling stage

KONI (1998) breeding is an effort to be applied to attract talented athletes in the sport of achievement, which is researched in a directed and intensive manner through parents, parents, and coaches at sports. The purpose of the nursery is to provide prospective talented athletes in various sports of achievement so that it can be continued with more intensive coaching, with a more innovative system, and able to take advantage of natural results as well as modern technological devices (Cross & Fouke, 2019).

Seeding is a process of continuation of the forcing process. Seeding is the stage after the occurrence of the forcing movement. The more or more people are involved in the forcing movement, it is expected that more high-yielding seeds will be found. This nursery is carried out meticulously intensively through, among others: older people, teachers, and coaches through a sport. Some important considerations for acquiring superior athlete seeds are as follows:

- a) The talents and achievements brought since birth have a more dominant contribution compared to the coaching and other supporting processes.
- b) Avoid wastage from the coaching process if the athlete being coached has a high potential to be carried from birth.

c) Indonesia needs to be encouraged to search for superior athletes early (Ria Lumintuarso, 2013).

Some indicators that must be considered as criteria for identifying and selecting talented athletes objectively include:

- Health (medical examination, particularly the cardiorespiratory, nervous, and muscular systems.
- b) Anthropometry (height and weight, size of body parts, fat need, and others)
- c) Physical ability (*speed, power, coordination, VO2 Max*)
- d) Psychological abilities (attitude, motivation, tolerance)
- e) Descendant's
- f) The length of the exercises that have been followed before and is there any opportunity to grow.
- g) Maturation (Ria Lumintuarso, 2013)

#### **Achievement Coaching Stage**

Turang (2021) states that the target of the stages of coaching is so that athletes can achieve peak achievements, which is generally called the golden age. This stage is supported by a good exercise program, where the progress is evaluated periodically, continuously, and continuously. The peak of athlete achievement generally ranges from the age of 20 years, with a coaching stage of 8 to 10 years, then a person must have started to be fostered and trained at the age of 3 to 5 years. Combining athlete talent with the correct coaching process will result in the athlete's peak achievement. The correct coaching to achieve peak achievements is 40%, and at a percentage of 60%, it is produced by the athletes themselves (Anggara, 2020).

Heriyanto (2022) The coaching movement in sports must be adapted to the growth and development of the child. Sports training can be done through:

- (1) Education pathways (elementary, middle, high school, and college
- (2) Government lines (output, sub-district, district, and province)
- (3) Private lines (sports clubs, companies, and so on)

#### **Sports Coaching Process**

Coaching is generally defined as providing direction and guidance to achieve a particular goal. Coaching is a common thing used to improve knowledge, attitudes, and skills in the fields of education, economy, society, society, and others. Coaching emphasizes a practical approach, attitude development, abilities, and skills (I Bagus Endrawan et al., 2020).

In sports coaching, there is an exercise program. There are many factors in putting together an exercise program. States several factors that need to be considered when compiling an exercise program, namely: 1) The amount of time available on the field, 2) The number of athletes who will train, 3) Level age and gender, 4) The condition of the sportsman at that time, 5) The length of training time at that time, 6) The attitude of the sportsman towards training, 7 ) The motivation of the sportsman.

In addition to a thematic exercise program, it is necessary to note the following elements:

- a) The ability of the athlete, both physically and mentally.
- b) The timing of implementation in the exercise program to develop strength, endurance, speed, flexibility (*flexibility*), and others to be developed as well as possible.
- c) Regarding the sports to be prepared.
- d) Specific sizes will be used as a national or international benchmark (standard or level).
- e) The state of the local area (tradition or climate).
- f) Exercise factors: achievement, volume, intensity.
- g) Schedules for matches or races and trials.
- h) Periodization of exercises.

The exercise program is as follows:

- a) The preparation of the training program is a guideline for organized activity leaders to achieve peak achievements in the sport.
- b) To avoid the coincidence factor in achieving excellent achievements in sports.
- c) Effective and efficient in the use of time, funds, and energy to achieve goals.
- d) To find out the obstacles quickly and avoid wasting time and energy.

- e) Clarify the direction and goals to be achieved.
- f) As a control tool whether the predetermined target has been achieved or not Alim (2020).

### The Role of PTMSI and KONI Coordination in Sports Coaching

Ulfah (2009) KONI is an organization founded by the organization of the sports industry with a focus on managing the development of existing and competitive sports at the national, state level, counties, or cities. KONI assists the district or city government manage sports at the district or city level. Through systematic and quality sports coaching, human resources should be directed to the improvement of self-control, responsibility, discipline, and sportsmanship, which in the end, will arouse the pride of the nation. KONI has a Vision; "To become an independent, modern, and professional organization to build the character of the Indonesian nation, strengthen unity and unity and uplift the dignity and dignity of the nation through Sports coaching achievements, "with a mission" provides support to athletes to achieve achievements, and promotes Olympic values to be a source of inspiration for all Indonesians (Herman, 2015).

Under the auspices of KONI stands various sports, one of which is the parent sport of pingpong which we usually know as the Indonesian Ping-pong Association (PTMSI). PTMSI, as an organization that accommodates talented athletes from various ping-pong clubs, is the spearhead at the forefront of coaching athletes towards the desired achievement goal. This case includes the PTMSI Cirebon regency, which has talented athletes from all regions. The position of PTMSI is critical in terms of coaching athletes who want to excel optimally. Thus the importance of PTMSI plays a role in sports coaching, so it requires the best management so that achievement goals can be achieved.

#### **METHODS**

This research uses qualitative research methods because the approach used is the naturalistic approach. This naturalistic approach is directed at symptoms or phenomena that are set in

a natural and individual way holistically (intact). So, this study intends to understand the phenomena about what the subject of study experiences, for example, behavior, perception, motivation, action, etc., holistically and by way of description in the form of words and language in a specific context that is natural and by utilizing various natural methods.

Qualitative research on the countenance stake model is carried out in a natural setting that requires the existence of reality as a wholeness that cannot be understood if separated from the context (Moleong, 2017: 5). This is based on several assumptions: 1) the act of observation affects what is seen. Therefore the research must take place on wholeness in the context of understanding. 2) The context is decisive in determining the discovery of meaning to another. A phenomenon must be contextually examined and is determinative of what yang will be sought.

#### **RESULTS AND DISCUSSION**

The results of this study were obtained from observation, interviews, document clearing, and documentation. Researchers interviewed speakers, namely administrators, coaches, and athletes (Cirebon Porprov 2022 district ping-pong team). Based on the analysis of data on human resources, namely coaches and athletes in this study, including the acceptance of coaches and athletes (antecedent), the quality of coaches and athletes (transactions), and achievements achieved by athletes (outcomes) at the Porprov 2022 event. Athletes who are members of the Cirebon regency ping-pong team at the Porprov 2022 event have been selected from the selection stage.

The recruitment of coaches to foster a pingpong team at the Porprov 2022 event was carried out by PTMSI based on the direct appointment of the chairman. The two designated coaches are one coach for the men's team and one for the women's team. The designated coach is county certified. PTMSI Cirebon chooses coaches based on the responsibilities and programs owned by the coach to improve the achievements of the ping-pong team at the Porprov 2022 event. The coach of the ping-pong team prepared a training program in the achievement coaching program at the Porprov 2022 event. Coaches also provide physical, technical, tactical, and mental training programs for athletes. In addition, the coach also compiled a try-out program to maximize the athlete's participation in Porprov 2022. The training program of the Cirebon regency ping-pong team has been running according to the provisions scheduled by the coach.

The exercise program is in the form of physical, technical, tactical, and mental exercises. The government is directly involved in the coaching program launched by PTMSI for the PORPROV 2022 ping-pong team. The government aids through funds and moral seamanship and provides a special GOR ping-pong. The moral support provided by the government to the Cirebon regency ping-pong team is to monitor training activities directly. However, the role of the government in the training program run by the Cirebon regency ping-pong team cannot be optimal because the assistance in the form of distributed funds still needs to be improved.

Fund management by PTMSI is carried out optimally. PTMSI allocates funds for intensive coaches and athletes, financing training programs, transportation for athletes and coaches, repairs to facilities and infrastructure, and field maintenance. The source of funds obtained by PTMSI is quite a lot, but it has yet to be said to be optimal. The budget financing has not been adequate because it still needs to be biased to meet the target of the ping-pong team at the PORPROV 2022 event.

#### **CONCLUSIONS**

Human resources, which are included in the Cirebon regency ping-pong team at the PORPROV 2022 event for admission (antecedent), both men and women, are obtained from the selection results for juniors and appointments for seniors made by PTMSI. Athletes' quality (transaction) must follow the existing coaching program to develop potential physically, technically, tactically, and mentally, and the coach must have a certificate in coaching. Athletes' achievements (outcomes) achieved at the Porprov 2022 event have yet to be satisfactory.

The exercise program run by PTMSI Cirebon regency in preparing the exercise program (antecedent) has yet to be fully implemented textually. The exercise program (transaction) implementation has been running according to what was prepared. The training program's success (outcome) related to athletes' ability has yet to be fulfilled.

The role of the government in the Cirebon related to government support (antecedent) is clear and exists during training and the championships. The involvement of the government (transaction) to improve the achievements of the ping-pong team contributed maximized. The government's leading role (outcome) has yet to be following the expectations of the PTMSI management. It is still limited to directing, facilitating, and minimally assisting operations.

The funding obtained by PTMSI Cirebon regency, the source of funds (antecedent), comes from KONI, donations from administrators, and parents of athletes. The management of the funds (transactions) obtained is allocated for the pingpong team in the Porprov 2022 event. The maximum funding (outcome) has not been achieved because the funds obtained are minimal, and many coaching programs needs still need to be met.

#### **REFERENCES**

Adzalika, A. R. (2018). Evaluasi pembinaan prestasi atlet cabang olahraga terukur (atletik, angkat besi, panahan dan renang) di provinsi lampung. *Jurnal OOf Physical Education and Sport*.

Candranegara, I. M. W., & Mirta, I Wayan dan Putra, K. A. F. (2021). Kebijakan dan Strategi Pembinaan Olahraga Prestasi Daerah. *Jurnal Sport Science*, 1(1), 31–37.

Candrawati, Y., Sugiyanto, S., & Ilahi, B. R. (2018). Evaluasi Program Pembinaan Prestasi Olahraga Bola Voli Pada Smk Negeri Di Kota Bengkulu. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, *2*(1), 44–48. https://doi.org/10.33369/jk.v2i1.9186

Diatmika, I. P. W., Yoda, I. K., & Tisna, G. D. (2021). Evaluasi Program Pembinaan

- Prestasi Cabang Olahraga Bulutangkis di Persatuan Bulutangkis (PB) Anugerah Denpasar dengan Metode Contex, Input, Procces, Product (CIPP)). *Indonesian Journal* of Sport & Tourism, 2(1), 21. https://doi.org/10.23887/ijst.v1i1.34832
- Effendi, H. (2016). Peranan psikologi olahraga dalam meningkatkan prestasi atlet. *Nusantara (Jurnal Ilmu Pengetahuan Sosial)*, 1, 27.
- Golovachev, A. I., Kolykhmatov, V. I., & Shirokova, S. V. (2019). Model indicators of physical preparedness of elite female skiracers in preparation for the 2022 winter olympic games in Beijing (CHINA). *Human Sport Medicine*, 19(2), 81–87. https://doi.org/10.14529/HSM19S211
- Hermawan, E., Isnurhadi, & Muktamar, R. N. (2021). Pengaruh Pelatihan dan Disiplin terhadap Prestasi Atlet Cabang Olahraga Beladiri Kabupaten Ogan Ilir Sumatera Selatan. *Jurnal Ilmu Keolahragaan*, 20(1), 110–115.
- I bagus Endrawan, Tjetjep, Sulaiman, S. R. (2020).

  \*\*Pembinaan Atlet Unggulan Berbasis Sosial Budaya\* (M. Hilmi (ed.); I). Forum Pemuda Aswaja.

  https://www.ptonline.com/articles/how-to
  - https://www.ptonline.com/articles/how-to-get-better-mfi-results
- Indrawan, B. (2008). *Tenis Meja*. Universitas Siliwangi.
- Ismail, M. T. (2019). Survei Tingkat Kesegaran Jasmani Pada Ektrakurikuler Dalam Permainan Bulutangkis Siswa Sma Negeri 3 Kabupaten Pinrang.
- Olahraga, K. (2019). *Jurnal IPTEK Olahraga*. Asdep IPTEK Olahraga, Deputi Peningkatan Prestasi dan IPTEK Olahraga, Kementrian Pemuda dan Olahraga.
- Pearce, G. (2013). Why Children take part in, and remain involved in sport? A Literature review and discussion of implication for sport coaches. *International Journal Of Coaching Science*, 7(September).
- Portenga, S. (2021). Performance Skills for Academic Talent Development: Integrating Sport and Performance Psychology Into the Classroom. In *Talent Development as a*

- Framework for Gifted Education: Implications for Best Practices and Applications in Schools. https://doi.org/10.4324/9781003238454-8
- Purwanto, P., Nopembri, S., Burhaein, E., & Phytanza, D. T. P. (2021). Evaluation Of The Venue Management Program Of The National Sports Week (Pon) Xvii Of Riau Province, Indonesia. *Sport Science*, *15*(1), 86–96.
  - https://www.scopus.com/inward/record.ur i?eid=2-s2.0-
  - 85125096796&partnerID=40&md5=e7207c d4ceabf10f278cb44fa7e66ccb
- Rasyono. (2016). Ekstrakurikuler Sebagai Dasar Pembinaan Olahraga Pelajar. *Journal of Physical Education Health and Sport*, 3(1), 44–49.
- Sari Helen Purnama, O. W. K. H. & T. H. (2017). Evaluasi Program Pembinaan Atlet Pekan Olahraga Nasional Cabang Olahraga Bulu Tangkis Provinsi Sumatera Selatan. *Journal of Physical Education and Sports*, 6(3), 261–265.
  - https://journal.unnes.ac.id/sju/index.php/jpes/article/view/15076
- Scharfstein, M., & Gaurf. (2013). Sumbangan Fisiologi Olahraga dalam Menunjang Puncak Prestasi Optimal. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Suci, I., Kadir, A., & Arifin, I. (2011). Upaya Pemerintah Daerah dalam Pembinaan Olahraga Cabang Taekwondo di Kabupaten Polewali Mandar. *Jurnal Ilmu Pemerintahan*, 4(2), 79–88.
- Tanzila, R. A., & Febriani, R. (2019). Korelasi Kapasitas Vital Paru dengan Prestasi Atlet Di Sekolah Olahraga Nasional Sriwijaya Palembang. *Syifa' MEDIKA: Jurnal Kedokteran Dan Kesehatan*, *9*(2), 79. https://doi.org/10.32502/sm.v9i2.1661
- Tomoliyus, M. . (2017). Sukses Melatih Keterampilan dan Dasar Permainan dan Penilaian. In Sukses Melatih Keterampilan dan Dasar Permainan dan Penilaian.