



Assessment of Sports Development Patterns, Mountain State Physical Training Approaches, and Physical Ability

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Abstrak

Pekan Olahraga Provinsi (Porprov) yang diselenggarakan KONI Provinsi Bali setiap dua tahun sekali diikuti oleh 9 (sembilan) Kabupaten atau Kota. Salah satu cabang olahraga yang menyumbangkan medali terbanyak adalah atletik, baik pada cabang olahraga jalan raya, lari, lompat, dan lempar terukur maupun perorangan. Pengelolaan pola pembinaan atletik belum merata dan mengalami penurunan perolehan medali. Tujuan penelitian adalah untuk menganalisis pola pembinaan olahraga, pendekatan latihan jasmani Njegara Gunung, dan kemampuan fisik atlet PASI pada Porprov Bali Tahun 2022. Penelitian ini menggunakan metode deskriptif dengan kombinasi data kuantitatif dan kualitatif melalui survei. Sampel penelitian adalah atlet atletik peserta Porprov Bali Tahun 2022 yang berjumlah 49 orang. Data diperoleh melalui observasi, wawancara, angket, tes atau pengukuran, arsip, dan dokumentasi. Analisis data yang digunakan adalah korelasi product moment dan analisis triangulasi data untuk mengkaji pola pendekatan pembinaan dan latihan jasmani atlet PASI Bali. Hasil penelitian menemukan terciptanya pola dan strategi pengembangan atlet melalui pengurus PASI kabupaten atau kota, penyelenggara di Provinsi Bali untuk mencapai tujuan pembinaan prestasi, menetapkan sasaran, dan sasaran dalam pengembangan model pembinaan, pendekatan latihan jasmani dan peningkatan prestasi atletik daerah.

Kata Kunci: Pola pembinaan, pendekatan latihan jasmani, PASI

Abstract

The Provincial Sports Week (Porprov) which is held by KONI Bali Province every two years is attended by 9 (nine) Regencies or Cities. One of the sports that contributed the most medals was athletics, both in road, running, jumping and throwing as measured and individual sports. Management of athletic development patterns it has not been evenly distributed and has experienced a decrease in medal tally. The aim of the study was to analyze the pattern of sports coaching, the physical exercise approach to Njegara Gunung, and the physical abilities of PASI athletes at the Bali Porprov in 2022. This study used a descriptive method with a combination of quantitative and qualitative data, through surveys. The research sample was 49 athletics athletes participating in Porprov Bali in 2022. Data obtained through observation, interviews, questionnaires, tests or measurements, archives, and documentation. The data analysis used is product moment correlation and data triangulation analysis to examine the pattern of coaching and physical training approaches for PASI Bali athletes. The results of the research found the creation of patterns and strategies for athletic development through the management of district or city PASI administrators in the province of Bali to achieve the goals of achievement coaching, setting targets, and targets in developing coaching models, physical training approaches and improving regional athletic achievements.

Keywords: Pattern of coaching, approach to physical training, PASI.

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1. INTRODUCTION

Until now, the Indonesian government continues to improve sports coaching programs, both short and long term programs to optimally improve sports performance. This is because the sporting achievements displayed by Indonesian athletes have fluctuated and even decreased. Indonesian athletes are far behind other countries, both regionally and internationally (Karakullukçu, 2020; Miller, 2013; Parena et al., 2017). Indonesia has not been able to beat Thailand and Vietnam in the SEA Games. One of the sports that competes for the most medals is athletics, so that it becomes a priority in sports coaching. However, the Indonesian athletics branch has not been able to produce the expected number of medals,

even though the medals up for grabs in athletics are classified as the highest number, namely walking, running, jumping and throwing. Various athletic numbers require prime physical condition in every championship (Parena et al., 2017; Ruskin & Liputo, 2021). The physical condition of these athletes needs to get special and important attention as a whole for both the development and coaching of sports in Indonesia, in order to increase the number of medals in athletics at regional and international events (Nasrulloh et al., 2021; Viet & Hanh, 2021).

Athletic development needs to be improved through various continuous, comprehensive training programs, periodic evaluations and competitions as well as continuous sports coaching. Various efforts need to be made in optimizing forums, centers and sports clubs at various levels of sports development starting from students, university students and sports in the community (Loland, 2002; Suratmin, 2019). Sports club development needs to be maintained so that the potential of athletes can develop optimally. A serious commitment to improve the quality of long-term sports development certainly requires good management. Efforts that need to be made are (1) increasing the quantity and quality of sports clubs both at the level of promotion, nursery and peak performance. (2) improve management (Miller, 2013; Rustiadi, 2016). The national sports system has outlined that coaching and development of athletic coaching to achieve the expected achievements is carried out from an early age by utilizing and based on sports science and technology studies. Sports science and technology is used as the basis for achieving achievements, therefore training programs and the quality of trainers in an effort to carry out their functions to improve athlete performance need to understand sports science and technology in depth (Ismail et al., 2018; Li et al., 2017; Mali, 2020). Many factors influence sports achievement. In addition to the luck factor, very important factors include mental, physical, technical, and athletic competition tactics or strategies. Training is needed to achieve physical fitness, improve physical condition, technique, tactics, and mental maturity. adjusted to the demands of athletic competition numbers with planned, systematic, tiered (progressive overload) and ongoing training (Chan, 2018; Viet & Hanh, 2021; Wu & Wang, 2022). The degree of physical fitness, improvement of physical condition, technique, tactics and high mental maturity can be achieved by athletes at a certain time and it is impossible to be maintained in the same position all the time, but fluctuates depending on the training carried out. Athletics is a sport that requires high power, strength, speed, flexibility, endurance, reaction, agility, balance, accuracy, coordination, and stamina. The physical condition of athletes is required to always be prime in the athletic competitions they participate in. Athletics also requires stabilizing locomotor conditions to gain muscle endurance (Loland, 2002; Thomas & Gilbert, 2016). In fact, it really needs strengthening of the heart and breathing, flexibility, and dynamic relaxation. Regular physical training can improve physical fitness and optimal physical condition. Basically every sport has different characteristics and energy demands, so different training models or methods, training programs and management in training are needed (Tudor & Gregory, 2009; Viet & Hanh, 2021; Wu & Wang, 2022).

The Porprov Bali was attended by 9 (nine) regencies/cities in Bali, namely; Buleleng, Jembrana, Tabanan, Badung, Gianyar, Bangli, Karangasem, Klungkung and Denpasar. Porprov held in Bali include: management and implementation, coaching and training programs, recruitment systems, training programs, training strategies and methods, coaching evaluation, and so on. The pattern of coaching is very important to do with the hope that athletes are able to obtain optimal performance. The highest sporting achievement is a direct result of the organism's adaptation to the type and method of training (Annas et al., 2021; Lubis & Evalina, 2007). The pattern of coaching is very important to do with the hope that athletes are able to obtain optimal performance. The highest sporting achievement is a direct result of the organism's adaptation to the type and method of training (Juliandi et al., 2020; Lubis & Evalina, 2007). The pattern of coaching is very important to do with the hope that

athletes are able to obtain optimal performance. The highest sporting achievement is a direct result of the organism's adaptation to the type and method of training (Juliandi et al., 2020; Lubis & Evalina, 2007).

The training program is one of the coach's business strategies to achieve optimal athlete performance in the future. To achieve prime performance, effort and effort is required to train, which is outlined in the training program plan as a guideline for the direction of activities to achieve goals effectively and efficiently. Planning a good training program needs to consider these aspects, including the potential of the athlete, age, gender, ability level of the athlete, the age of the trainer, facilities, infrastructure, and, available time, trainers, and environmental factors (Aldapit & Suharjana, 2019; Darmaji et al., 2019). Training is a work process that is carried out systematically and continuously, where the load and intensity of training increases day by day. thus providing overall stimulation of the body and aiming to improve physical and mental abilities together. Physical training in principle is to put physical stress on the body regularly, systematically and continuously, so that there is an increase in ability to do work (Banat & Martiani, 2020; Hall et al., 2020).

Athletes in training need to be equipped with knowledge related to the sport of their choice. Physical training is intended to prepare oneself to achieve certain goals. The purpose of physical training is to improve abilities at a higher level (Nasrulloh et al., 2021; Udomtaku & Konharn, 2020). In movement skills training, success in sports performance is not only determined by the achievement of the physical domain, but also determined by the psychomotor, cognitive, and affective domains. The application of science and technology in coaching has resulted in sporting achievements. The application of training based on the predominant energy system is a guideline in preparing training programs. To increase the best energy capacity in sports, the mechanism of aerobic and anaerobic energy is increased in the right proportion (Owen et al., 2020; Schippers et al., 2021). Physical training involves various training programs from various sports methods and approaches. Aerobic training programs consist of training over long periods of time, usually repeated at low intensity and anaerobic training over short periods of time, at high intensity. The purpose of this study is to analyze the pattern of sports coaching, the physical exercise approach to Njegara Gunung, and the physical abilities of PASI athletes at the Bali Porprov in 2022.

2. METHODS

Descriptive research was conducted using a survey method. The method used is descriptive qualitative and quantitative methods. The method for studying patterns of sports development, the mountaineering physical training approach, and the physical abilities of PASI athletes at the 2022 Bali Porprov, in Buleleng Regency is in the form of a single event. Data and information can be obtained through PASI districts or cities in the province of Bali. This research was conducted to make decisions by choosing the best decision (Sugiyono, 2019). The data analysis used is product moment correlation, and triangulation data analysis. Triangulation is a method used in qualitative research, often also done in quantitative methods. The instruments used in this study were observation, interviews, physical ability tests, questionnaires and documents. The data collection was carried out in stages (1) observation was carried out directly by researchers on the implementation of athletic development patterns, (2) interviews with PASI coaches, (3) results of athletes' physical ability tests, (4) PASI athlete achievements. Then calibrate the instrument by analyzing the result data from the trial to determine its validity and reliability. The validity of the PASI athlete instrument items was analyzed using the product moment formula from Pearson. The population of this study were all athletes, coaches, PASI administrators who participated Porprov Bali in 2022, and officials and supervisors for regency administration,

city administration, Bali provincial PASI supervisors. The data analysis techniques of this research include: (1) calculate the validity and reliability of the questionnaire athletes and coaches, (2) analyzing the results of interviews with coaches, officials and PASI teachers, (3) describe the results of interviews and documents/archives obtained in collecting research data., (4) analyzing patterns of sports coaching, physical abilities of PASI athletes, (5) calculating the physical abilities of PASI athletes, and (6) analyzing and triangulating data or information related to research.

3. RESULTS AND DISCUSSION

Result

Analysis of PASI Bali Athletic Development

Table 1. Analysis of Porprov Athletic Development for 2022

PASI Regency/City	Athlete Recruitment	Training Program	Evaluation of Sports Coaching	Target	Science and Technology Approach
Denpasar	- Recruiting Porjar athletes - Fostering senior athletes still dominates - Implemented the athlete selection model	- Periodization and annual training program - Routine training - Porprov single event, well prepared, but the stadium facilities are not optimal	- Regular physical tests and measurements are carried out - Evaluation with sports science and technology approach	Province Champion	-Professional trainer, sports education graduate
Badung	- Recruiting junior athletes - Fostering senior athletes still dominates - Implementing an athlete recruitment approach with sports science and technology	- Periodization and annual training program - Routine training - Porprov single event is well prepared	- Regular physical tests and measurements are carried out - Evaluation with sports science and technology approach	Province Champion	Professional coach, sports education graduate
Buleleng	- Recruit students and students - Porjar athlete - Fostering senior athletes	- Periodization and annual training program - Routine training - Porprov single event	- Regular physical tests and measurements are carried out - Evaluation with sports science and technology approach	Aim for the gold medal	Professional coach, sports education graduate
Gianyar	- Recruiting student athletes - Fostering senior athletes	- Periodization and annual training program - Routine training - Porprov single event	- Not carrying out regular physical tests and measurements - The approach has not yet been optimized for sports science and technology	Aiming for silver and bronze medals	Professional coach, sports education graduate
Bangli	- Recruiting	- Periodization and	- Regular physical	Aiming	Professional

PASI Regency/City	Athlete Recruitment	Training Program	Evaluation of Sports Coaching	Target	Science and Technology Approach
	student athletes - Fostering senior athletes - Limited athletes sent	annual training program - Routine training - Porprov single event	tests and measurements are carried out - The approach has not yet been optimized for sports science and technology	for silver and bronze medals	coach, sports education graduate
Karangasem	- Fostering senior athletes - Limited athletes	- Periodization and annual training program - Routine training - Porprov single event	- Not carrying out regular physical tests and measurements - The approach has not yet been optimized for sports science and technology	Aiming for silver and bronze medals	Professional coach, sports education graduate
Klungkung	- Fostering senior athletes - Limited athletes	- Periodization and annual training program - Routine training - Porprov single event	- Not carrying out regular physical tests and measurements - The approach has not yet been optimized for sports science and technology	Aiming for silver and bronze medals	Professional coach, sports education graduate
Tabanan	- Fostering senior athletes - Limited sending of athletes	- Periodization and annual training program - Routine training - Porprov single event	- Regular physical tests and measurements are carried out - Evaluation with sports science and technology approach	Gold medal	Professional coach, sports education graduate
Jembrana	- Fostering senior athletes - Very minimal athletes	- Periodization and annual training program - Routine training - Porprov single event	- Not carrying out regular physical tests and measurements - The approach has not yet been optimized for sports science and technology	Aiming for silver and bronze medals	Sports Coaching

Physical Capability of Porprov Athletes in 2022

Table 2. Physical Ability of Back Muscles of Porprov Athletes in 2022

No	Category	Amount (N)	Percentage (%)
1	Very well	17	0.35
2	Good	20	0.41
3	Enough	9	0.18
4	Not enough	2	0.04
5	Less Once	1	0.02
Amount		49	100

Based on [Table 2](#) sample (N=49) it shows that the level of physical ability of the back muscles of Porprov 2022 athletes, namely very good category = 17 people (35%), good = 20 people (41%), enough = 9 people (18%), poor = 2 people (4%), and very bad = 1 person (2%). Porprov athlete's physical capability is show in [Table 3](#).

Table 3. 2022 Porprov Athlete's Physical Capabilities

No	Category	Amount (N)	Percentage (%)
1	Very well	23	0.47
2	Good	13	0.27
3	Enough	9	0.18
4	Not enough	3	0.06
5	Less Once	1	0.02
Amount		49	100

Based on [Table 3](#) show the sample (N = 49) it shows that the level of physical ability of the limb muscles of Porprov 2022 athletes, namely very good category = 23 people (47%), good = 13 people (27%), enough = 9 people (18%), poor = 3 people (6%), and very bad = 1 person (2%).

Table 4. Physical Ability to Squeeze the Right Hand Muscle Strength

No	Category	Amount (N)	Percentage (%)
1	Very well	19	0.39
2	Good	18	0.37
3	Enough	12	0.24
4	Not enough	0	0
5	Less Once	0	0
Amount		49	100

Based on [Table 4](#) show sample (N = 49) it shows that the level of physical ability in the right hand squeeze muscle strength of Porprov athletes in 2022, namely very good category = 19 people (39%), good = 18 people (37%), enough = 12 people (24%), less = 0 people (0%), and very less = 0 people (0%). Physical ability to squeeze left hand muscle strength of porprov athletes in 2022 is show in [Table 5](#).

Table 5. Physical Ability to Squeeze Left Hand Muscle Strength

No	Category	Amount (N)	Percentage (%)
1	Very well	15	0.31
2	Good	18	0.37
3	Enough	12	0.24
4	Not enough	4	0.08
5	Less Once	0	0
Amount		49	100

Based on [Table 5](#) show sample (N = 49) it shows that the level of physical ability of the left hand squeeze muscle strength of Porprov athletes in 2022, namely very good category = 15 people (31%), good = 18 people (37%), enough = 12 people (24%), poor = 4 people (8%), and very bad = 0 people (0%). Physical ability strength arm shoulder muscle strength athletes porprov 2022 is show in [Table 6](#).

Table 6. Physical Ability Strength Arm Shoulder Muscle Strength

No	Category	Amount (N)	Percentage (%)
1	Very well	5	0.1
2	Good	11	0.23
3	Enough	21	0.43
4	Not enough	12	0.24
5	Less Once	0	0
Amount		49	100

Based on Table 6 show sample (N = 49) it shows that the level of physical ability of the tensile shoulder arm muscle strength of Porprov athletes in 2022, namely very good category = 5 people (10%), good = 23 people (23%), enough = 21 people (43%), poor = 12 people (24%), and very bad = 0 people (0%). Physical ability strength arm shoulder muscles push athletes is show in Table 7.

Table 7. Physical Ability Strength Arm Shoulder Muscles Push Athletes

No	Category	Amount (N)	Percentage (%)
1	Very well	9	0.18
2	Good	13	0.27
3	Enough	20	0.41
4	Not enough	7	0.14
5	Less Once	0	0
Amount		49	100

Based on Table 7 show sample (N=49) it shows that the level of physical ability of the pushing arm muscle strength of the Porprov athletes in 2022, namely very good category = 9 people (18%), good = 13 people (27%), enough = 20 people (41%), poor = 7 people (14%), and very bad = 0 people (0%). Physical abdominal muscle strength athletes porprov 2022 is show in Table 8.

Table 8. Physical Abdominal Muscle Strength Athletes

No	Category	Amount (N)	Percentage (%)
1	Very well	6	0.12
2	Good	23	0.47
3	Enough	11	0.23
4	Not enough	8	0.16
5	Less Once	1	0.02
Amount		49	100

Based on Table 8 show sample (N = 49) it shows that the physical ability level of abdominal muscle strength of Porprov athletes in 2022, namely very good = 6 people (12%), good = 23 people (47%), enough = 11 people (23%), poor = 8 people (16%), and very bad = 1 person (2%). Porprov athlete balance physical ability in 2022 is show in Table 9.

Table 9. Porprov Athlete Balance Physical Ability

No	Category	Amount (N)	Percentage (%)
1	Very well	24	0.50
2	Good	9	0.18
3	Enough	8	0.16

No	Category	Amount (N)	Percentage (%)
4	Not enough	4	0.08
5	Less Once	4	0.08
	Amount	49	100

Based on [Table 9](#) show sample (N=49) it shows that the level of physical ability is balanced by Porprov athletes in 2022, namely very good category = 24 people (50%), good = 9 people (18%), enough = 8 people (16%), poor = 4 people (8%), and less = 4 people (8%). The 2022 porprov athlete's physical power power of leg muscles is show in [Table 10](#).

Table 10. The 2022 Porprov Athlete's Physical Power Power of Leg Muscles

No	Category	Amount (N)	Percentage (%)
1	Very well	40	0.82
2	Good	8	0.16
3	Enough	1	0.02
4	Not enough	0	0
5	Less Once	0	0
	Amount	49	100

Based on [Table 10](#) show sample (N=49) it shows that the level of physical ability of leg muscle power of Porprov athletes in 2022, namely very good category = 40 people (82%), good = 8 people (16%), enough = 1 person (2%), less = 0 people (0%), and very less = 0 people (0%).

Discussions

Analysis of Athletic Coaching

The 2022 Bali Porprov will be attended by 9 (nine) regencies or cities, namely; Buleleng, Jembrana, Tabanan, Badung, Gianyar, Bangli, Karangasem, Klungkung and Denpasar. The Porprov is organized based on management and implementation, coaching and training programs, recruitment systems, training programs, training strategies and methods, and so on. The coaching system is very important in the hope that athletes will be able to obtain optimal performance. The highest sporting achievement is a direct result of the organism's adaptation to the type and method of training ([Juliandi et al., 2020](#); [Lubis & Evalina, 2007](#)). One of the objectives of coaching is to become a regional development priority so that it can reach national and international levels or levels. Athletics as a sport with some combination of types of sports, such as running, throwing, jumping and walking. According to previous study explaining athletics is an amalgamation of various sports, athletics is also referred to as the mother of other sports (mother of sport) ([Suratmin, 2019](#)). In addition, athletics is a branch of sport which requires biomotoric abilities and good movement abilities between other members of the body. Biomotor abilities are very important in a process of increasing achievement in sports.

Systematic, directed and sustainable athletic development to encourage, foster and develop the physical, spiritual and social potential of athletes through competitions aimed at achieving and increasing achievements in order to elevate the nation's prestige, dignity and honor ([Kweon et al., 2017](#); [Loland, 2002](#)). The national sports system has outlined that coaching and developing athletics to achieve national and international achievements which are expected to be important for structuring and coaching starting from an early age by utilizing natural potential and based on sports science and technology studies ([Rizkian &](#)

Nurrachmad, 2022; Sembiring et al., 2020). Sports science and technology is the basis for achieving achievements, therefore training programs and the quality of trainers in an effort to carry out their functions to improve athlete performance need to understand sports science and technology in depth.

It is clear that the position of a coach cannot be ruled out in athletic development, so the need for professional trainers with scientific capacity to support and experience in the field of sports as well as motivation as coaches. Through the improvement of athletic achievements, it will accumulate towards the achievement of national sports achievements (Harris & Bacon, 2019; Thomas & Gilbert, 2016). Athletic development needs to be improved through various continuous training programs, periodic competitions and regular try out or try in programs as well as championships as a form of evaluating athletic development. Various efforts need to be made in optimizing athletic clubs at various levels of coaching starting from students, university students and those in the community. The existence of athletic club development needs to be maintained so that the potential of athletes can develop optimally (Harris & Bacon, 2019; Thomas & Gilbert, 2016).

Athlete's Physical Ability

Athletics is a sport that requires high power, strength, speed, flexibility, endurance, reaction, agility, balance, accuracy, coordination, and stamina. The physical condition of athletes is required to always be prime. Athletics also requires stabilizing locomotor conditions to gain muscle endurance. In fact it really needs heart and breathing stabilization, flexibility and dynamic relaxation. Regular physical training can improve physical fitness and optimal physical condition. Basically every sport has different characteristics and energy demands, so different training models or methods, training programs and management in training are needed (Thomas & Gilbert, 2016; Tudor & Gregory, 2009). Maximum athletic achievement can be achieved with a coaching process that is structured, directed, sustainable, and accompanied by adequate supporting facilities. In an effort to improve athletic performance, a pattern of good and structured coaching is needed which includes coaching, talent, management, organization, and infrastructure (Harris & Bacon, 2019; Kweon et al., 2017).

Training is a work process that is carried out systematically and continuously, in which the load and intensity of training increases day by day, thus providing overall stimulation to the body and aiming to improve physical and mental abilities together. Physical training in principle is to put physical stress on the body regularly, systematically and continuously, so that there is an increase in ability to do work. Training is an activity carried out over a long period of time and systematically and progressively according to the athlete's level of ability, aiming to form physiological and psychological functions that meet the requirements for sports performance (Cook & Ogden, 2021; Viet & Hanh, 2021). Athletics competition numbers require various physical abilities, different physical elements, both track and field numbers. The level of physical ability of athletic athletes varies according to the race number; brisk walking, numbers run, jump, and throw different needs and physical abilities. The training provided by the trainers is in periodization and the training program is adjusted according to the analysis of the needs of athletic competition numbers (Harris & Bacon, 2019; Thomas & Gilbert, 2016).

Endurance training performance increases as a result of changes in growth and development. Increasing muscle mass and increasing the size of the cardiovascular and respiratory organs will increase the athlete's capacity to use oxygen. An increase in blood hemoglobin (Hb) concentration also causes a maximal aerobic increase. In most sports, early specialization and heavy training are of no real benefit. Doing physical activities that athletes do greatly impact the state of physical fitness. In the process of training efficiency and effectiveness play a very important role which is influenced by elements, namely: 1) training

volume, 2) training intensity, 3) training density, 4) complexity (Mustapha et al., 2020; Suratmin, 2019). The level of physical fitness of athletes in athletics matches the character of the race number, each race number requires different physical fitness. The development of overall physical condition is very important, because without good physical condition the athlete will not be able to follow the training perfectly (Basoglu, 2018; Ivanii et al., 2020). The main goal is to increase the potential for physiological function and develop biomotor abilities to a high level, so that achievements can be achieved. Regular and continuous physical training as outlined in the training program will significantly improve physical abilities in achieving achievements. Suggestions from the research results are (1) overcoming obstacles, gaps, and obstacles faced by PASI districts or cities in the province of Bali, (2) Undiksha which has teaching staff in the field of sports science and technology implementation are expected to work together with PASI districts or cities in the province of Bali, and (3) Sports staff at the Undiksha Faculty of Sports and Health can make a real contribution to the district or city PASI sports development pattern in the province of Bali

4. CONCLUSION

The results of the study can be concluded (1) the creation of patterns and strategies for athletic development through the management of district or city PASI administrators in the province of Bali to achieve the goals of fostering sports achievement, setting targets, and targets in developing coaching models, approaches to physical training and improving regional athletic performance, (2) fostering athletic PASI districts or cities in the province of Bali through approaches and exploiting the natural potential of mountain states and sports science and technology, due to the natural texture of hills and beaches, and (3) the level of physical ability of athletic athletes varies according to competition; fast walking, running, jumping, and throwing numbers have different needs and physical abilities, so the models and training methods carried out are in accordance with the race numbers.

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