

Preparation and Training Strategies for China National Team in the Olympic Games Tokyo 2020 under COVID-19

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Training Base of the China National Team in
Beijing Sport University

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Resume

- Bachelor in Medicine in Acupuncture, Anhui School of Traditional Chinese Medicine
- Master and Ph.D. in Sports Training, Beijing Sport University
- Postdoctoral in Control Science and Engineering, Department of Automation, Tsinghua University
- Members of the Branch of Sports Training the China Sport Science Society
- Deputy Editor-in-Chief of “Sports” Magazine, General Administration of Sports and Ministry of Education
- Standing Committee of Health Professional Committee, Chinese Medical Doctor Association
- General Secretary of the Sports Training Branch of Beijing Sport Science Society
- Research Advisor at the Graduate School of Beijing Sport University
- Former vice-president and deputy secretary of the Graduate School of Beijing Sport University
- Consultant and Deputy Director of the Competition Division’s Training Department, General Administration of Sports
- Medical experts for Chinese Delegation Support Camp for the Asian Games and Olympic Games
- Official of Chinese Delegation Support Camp Headquarters for 2008 Beijing Olympic Games
- Official of the Chinese Delegation Support Camp Sports Command Centre for 2010 Guangzhou Asian Games
- Official of the Chinese Delegation Support Camp for 2011 Shenzhen Universiade
- Member of the Safeguarding Department of Chinese Delegation Support Camp for 2012 London Olympic Games
- Official of the Competition Department of the Chinese Delegation Support Camp for the Rio 2016 Olympic Games
- The Chinese Delegation Support Camp security operations for the 2018 Pyeongchang Winter Olympics



- Has published over 10 treatises including: “Competitive Psychological Training and Regulation”, “Competition Structure Theory and Control”, “Introduction to Sports Training”, “High Quality Competitive Physical Training”, “The Movement Stretches”, “Modern Sports Training Theory and Practice.” and “The General Knowledge Manual for the 2008 Olympic Games”.
- Participated in 15 projects on national, provincial and ministerial levels.
- Carried out academic exchange programmes in 30 countries, including the United States, Germany, Poland and France.
- Won the “Outstanding Contribution Award in Science and Technology” from Beijing Sport University in 2004.
- Won the "Excellent Teacher" award from Beijing Sport University in 2004.
- Won First Prize of the “2004 Athens Olympic Games Science and Technology Award”.
- Awarded the “Advance Worker of National Sports Technology” in 2005.
- Awarded the Second Prize of “State Scientific and Technology Progress Award” in 2006. (2006-J-230)
- Won First Prize in the “National Sports Science Management Conference Paper” in 2006.
- Was selected for the Ministry of Education’s “New Century Excellent Talent” in 2007.
- Received the award for “Individual Outstanding Contributor of the 2008 Olympic Games” by the Chinese Olympic Committee.
- A former exceptional collective member of the 2008 Olympic Games Central Committee and State Council.
- Awarded the “Advanced Workers in Science and Technology for the Olympics” in 2008.
- Won First Prize in the "Beijing Teaching Awards" in 2005 and 2009
- Won the Second Prize of the “National Teaching Award” in 2005 and 2009
- Won the 2nd Nanjing Youth Olympic Games “Advance Individual” in 2015



Main Content

1. Have the courage to shoulder responsibilities. Decisive decision-making. Controlling the spread of diseases. Conduct training in a safe manner.
2. Be vigilance and cautious as always. Normalized the preventive measures of epidemic and leading up to the preparation for the Tokyo Olympics.
3. Maintain law and rules and be driven by innovation. Strive to improve the training quality and efficiency for the Olympic Games.



2020 was an extraordinary year in the history of China as well as sports in China. In dealing with a sudden outbreak of COVID-19, China's sports system is united, withstanding severity and challenges of the epidemic, and advanced the preventive work in sports through coordination, resulting in hard-earned and remarkable achievements. This demonstrated sportsmanship, strength, and responsibility.

(2020.12.26)



A meeting conducted in December by the General
Administration of Sport of China

- 1. Have the courage to shoulder responsibilities. Decisive decision-making. Controlling the spread of diseases. Conduct training in a safe manner.**

(1) Act quick and come up with organization to oversee the entire fight against the epidemic

1. The outbreak has greatly impacted the preparation of the 2020 Tokyo Olympic Games. In dealing with challenges, the General Administration acted quickly. The Administration insisted on ensuring the health of both the people and athletes. They needed to oversee the whole situation and carried out decisive decision-making. The Administration strengthen the organization, leadership, research and the deployment of their epidemic prevention efforts.
2. On January 22nd, the Administration set up a leading group for epidemic prevention, and established four offices for joint control, response, treatment and supervision. Each office is led by members of the Party and to study and formulate plans for epidemic control, especially on the mechanisms for unified command, daily reporting, supervision and control system etc.

3. Leadership Meetings on combating and containing the coronavirus and work of sport had been held 39 times in 2020. These meetings enabled us to understand and analyze different situations, report progress as well as investigate and plan major tasks to ensure a stable preparation and work.

3. Adhere to “Prevent Epidemics, Training Continuity Plan”, a meeting was held immediately after the outbreak of epidemic for National Teams to control the spread of diseases. The principles of “Avoid Unnecessary Travelling” and “Closed Management of Training Base” were proposed to prevent and control the impact of the epidemic on the preparation and training for Olympics.

4. To avoid adverse effects in relation to foreign countries’ entry restrictions on our preparation for Olympics, we systematically embarked earlier and made travel diversion. We succeed in obtaining 18 quotas for the Olympic Games, while participated in 46 Olympic qualifying races of 17 events including Badminton, Gymnastics, Cycling and Boxing etc. Basically, we achieved the goal of “getting the qualifications we ought to have”

5. After March 2020 – the epidemic was contained while the situations in overseas worsen. The General Administration of Sport of China immediately evaluated the situation and reviewed on the strategy. They proactively strived for support of various departments such as ‘Ministry of Foreign Affairs’ and ‘Civil Aviation Administration of China’, and to bring back the athletes from overseas to China. This swift decision had greatly reduced the risk of athletes’ infection.

6. After October 2020 – the epidemic rebound globally and risk of importing cases increased. We kept close observation of the epidemic’s development and to tighten measures for expats to avoid importing of diseases. Adhere to principle of “Where the team is, where the service will provide, where the cadres are there for you”. 4 batches of cadres (around 50 pax) were sent to ensure preparation in a safe manner and solved the problems encountered in relation to epidemic control and preparation for the Olympic Games.

(2) Embrace challenges, a strong sense of responsibility

1. Officers stand by in the closed training base were isolated for more than 3 months. They were fully committed to the services, even during the Lunar New Year. They encountered difficulties such as shortage of manpower, heavy workload and the intensive work all day long which exhausted officers
2. Senior management of sport centers joined officers and underwent isolation. They faced greater pressure while seeking ways to manage athletes' mental health, to relieve tension and anxiety
3. Head of the Rehabilitation Association insisted to stay with the team during the epidemic to ensure the safety and stability of the team.
4. Security personnel conducted temperature checking in the cold. Chefs tried their best to provide suitable meals for everyone. These demonstrated spirit in combat against epidemic.
5. Maintain "Closed Management of Training Base". Full utilization of different training methods such centralized training, training by batches, online physical fitness games and contests etc., which enhanced training effectiveness

(3) Restart of Sporting Events and Competitions. Strive for success and bringing positive impacts to the fight against epidemic!

The General Administration published 《科学有序恢复体育赛事和活 动 推 动 体 育 行 业 复 工 复 产 工 作 方 案 》
(Translation: The Scientific and Restoration of Sports Activities for the Resumption of Sports Industry's Development Plan)

First, different sports leagues including CBA, CSL, volleyball and China Open resumed. More than 100 international and local competitions were held. The vitality of preparation for Olympics restored, and a stimulus to boost morale.

Second, 6 out of 16 temporary shelter hospitals or fangcang set up in Wuhan were transformed from sports centres. It only took 37 hours for Wuhan Sports Center to be transformed into a shelter hospital. While COVID-19 was normalized and under control, it was the first to be converted back to a stadium. Various events and sports carnivals had been held and became a good example of the comprehensive and functional benefits of sports stadiums.

Third, embraced challenges, demonstrated China's sportsmanship and act as spiritual armament for the people. Since the outbreak of epidemic, athletes strive for excellence and success in different competitions. People of China were amazed and touched by the toughness and resilience of athletes. This unified the power to fight against epidemic.

Fourth, the China Women basketball team won all 3 matches and obtained the qualification for Olympics on the evening of Lantern Festival. A motivational video footage shot prior to the game with Spain cheered viewers up to fight against epidemic. The video quickly went viral on the internet and was reported in a news programme for 57 seconds. People in China were encouraged.

Fifth, excellent results obtained in other competitions such as track and field, swimming, weightlifting and shooting etc. In the 2020 Chinese National Swimming Championships, our athletes broke world record of mixed 4x100 medley relay made by the US team.

The 2020 Chinese National Swimming Championships in Tsingdao came to an end Goal achieved and qualified for Tokyo Olympics



The 2020 Chinese National Swimming Championships in Tsingdao came to an end

Goal achieved and qualified for Tokyo Olympics

The Championships held at the swimming and diving pool of Conson Gymnasium in Tsingdao has finally come to an end on 2 October.

1 world record, 2 Asian records and 2 national records were made in this Tokyo Olympics qualifying race, and many athletes have achieved the Olympic A-grade level. The Jiangsu, Hubei, Zhejiang and Shandong United Team formed by Xu Jiayu, Yan Zibei, Zhang Yufei and Yang Junxuan achieved a result of 3:38:41 in mixed 4x100 medley relay, which broke the world record 3:38:56 made by the US team. Zhang Yufei has not only made a new national record of women's 100m freestyle and also the Asian record of women's 100m butterfly made by Liu Zige, a famous Chinese athlete. Another athlete Wang Jianjiahe has broke the Asian record of women's 1,500m freestyle made by herself.





Li Bingjie gets back to the top level

On 2 January evening, Li Bingjie of Hebei Swimming Team won the women's 1,500m freestyle a swimming championship in Heibei. With a result of 15:52:31, she has also set a new personal best.



(4) Strengthen the management of expat coaches

As of today, there are a total of 62 expat coaches (33 fitness coaches, 19 rehabilitation coaches, 6 research coaches, 4 orthopaedic doctors) are serving in 28 units

Since 23 January, the COC Office of Expert Services Group worked restlessly setting up a “prevention and control group” to monitor and report on the health status and movement of expat coaches. On the same day, they provided all expat coaches with 《关于备战办专家团队新型冠状病毒肺炎防控工作的通知》 (Translation: The Prevention and Control of the Expat Teams on Coronavirus Notice) to strengthen the control of the epidemic by reporting the location of each expat coach.

On 29 January, published a notice on further strengthening the prevention and control of the Expat Teams on coronavirus. On 4 February, in accordance to policy on the coordination and daily needs of expat teams, anti-epidemic fund was granted by the Chinese Olympic Committee (COC) to the expat teams to assure reasonable living standards and as a compensation.

There was strict management and heavy responsibilities that came with the management of expert service groups, while sharing different useful information such as the proper use and safe disposal of masks as well as the guidance on the use of masks by national team athletes etc.

On 20 March, the prevent and control work entered a new stage and it aimed to “avoid internal spread and imported case”. Another notice published to ensure the epidemic management of expat teams during quarantine. At the same time, daily body temperature and health status checks were conducted starting from 30 March.

On 14 June, an outbreak occurred in Beijing, an emergency notice was published re the current epidemic control of the National Team to enable expat teams were fully aware of the severity and complexity of the epidemic and continued the strict implementation.

Since the outbreaks in Dalian, Qingdao and Xinjiang, a serious approach was taken to prevent and control of the epidemic. Imposing the principle of “Fight against the epidemic, protect the capital, Conduct training in a safe manner”. There was no suspected or confirmed case occurred in the expat teams and illustrated the effectiveness of the management system.

Since October, the global epidemic continued to spread and rebounded in many countries. The imported case risk of COVID-19 increased, and the work group continued to cooperate with leaders and colleagues to conduct real-time monitoring and reporting on expat coaches.

(5) Systematic support from different sectors in the society

1. In regards to the subsidy policy, the Ministry of Finance mainly applied stadium rental fee waiver or charged to areas with severe situations such as Hubei Province at low cost;
2. The Ministry of Foreign Affairs, the Civil Aviation Administration and each embassies abroad provided assistance proactively in various works for the national teams, such as rescheduling visit plans/itineraries, processing passport and visa formalities, coordinating charter flights, inbound and outbound travels, as well as taking part in competitions and external coaching;
3. Different Sports Departments of provinces rendered support proactively, especially in the field of external coaching, camp and field training, military training, quarantine for athletes. Sports Departments in Shandong, Shanghai, Sichuan, Beijing, Hainan, Guangdong, Hebei worked under tremendous pressure to take over and managed the returned national teams and provided them with training measures. This demonstrated a strong sense of responsibility and awareness;

4. To ensure training of national teams could be conducted as normal, agencies, centers, and associations of the Administration did a lot of work including coordination and management, safeguarding the health and safety of the national teams etc. Different sectors of the society contributed to the anti-epidemic work by pledging monetary and nonmonetary donations

5. 6 training bases in Beijing and more than 30 training bases including Qinhuangdao base were responsible for quarantine and isolated training of the national teams.

2. Be vigilance and cautious as always. Normalized the preventive measures of epidemic and leading up to the preparation for the Tokyo Olympics.

At present, the epidemic development has entered into a new stage in China. Imported and local cases continue to occur, and the scale is expanding. People needed to strengthen the awareness of risk prevention, to overcome complacency, and battle-weary attitudes. The management of prevention and control has to be strengthen and people to stay vigilance and cautious as always. We must focus on anti-epidemic prevention and control, work out plans under the normalized epidemic and coordinate work related to sports.

We must continue to improve the working mechanisms, shoulder responsibilities, and seek assistance from all levels of governmental and anti-epidemic workgroups. We must display our anti-epidemic attainment and focus on the key areas to strengthen epidemic prevention and control procedures and guidelines.

Adhere to the standardized emergency and dynamic changes management, fully implement the requirements of “look after people, the game, entrance to the Country, and matters”, so as to minimize the impact of the epidemic on sports.

To adapt to the new stage, think outside the box, adapt to the normalized epidemic and to hold competitions and activities to meet people’s needs. Fully utilize internet, big data, cloud computing and other information technology, to promote virtual sporting events or a mixture of both virtual and actual delivery mode. The next step is to focus on key areas, plan systematically and prepare well for Tokyo Olympic Games.

The Administration has responded to changes in a scientific and proactive manner since the postponement of the Tokyo Olympic Games. This is to keep the spirits of the teams high, ensure progress of preparation is organized and in order and ensure the understanding of goals and objectives are unified among different preparation workgroups. Different stakeholders such as athletes and coaches are motivated and live up to the values.

1. We should emphasize on the work to enhance cohesion and power. As instructed by General Secretary Xi Jinping in an order published, we should assist athletes to eliminate distractions, maintain calm and overcome any insecurities. By doing so, their spirit will be boosted. We are required to adhere to the order and apply the concept in the daily lives of the athletes, as well as in the trainings and competitions through strict management of education, ideology and politics. Ideological management should be treated as important as strategic trainings as this helps to relief tensions caused by the postponement of Tokyo Olympics both physically and psychologically.

2. Continue to be focused and strengthen the key areas of preparation work. Focus on key sports events, teams, services and assurance arranged for key athletes, in accordance with the overall goals in the preparation stage and goals in different stages. Combine the training strategies with the needs of the actual games with the utilization of scientific methods.

3. Take reference from the development of China's space technology and focus on science and technology. Improve the quality and effectiveness of the preparations through scientific training, rehabilitation, and management.

4. Consider physical fitness training as a more important part of training plan, identify weaknesses and strengthen the foundation physical fitness and eventually improve the competitive abilities and performance of respective sports events.

5. Enhance and implement the reward system to motivate athletes, coaches and frontline officers in the workgroups by means of awards and sense glory and accomplishment for the achievements of Country.

6. Adhere to and ensure fairness in the selection of delegation of national teams. Adjust and optimize the selection methods for each sports event, prepare and document selection criteria and standards in respect of politics, ideology, physical fitness level and achievements etc. Strengthen the mechanisms and form a fair selection method that recruit the best delegates.

7. Arrange and coordinate in different aspects such as systematic training, international and local competitions, delegates selection, intensive training before competitions and procedures of participation in competitions etc.

8. Identify potential risk factors in all aspects and formulate preventive measures. Establish risk and crisis management plan to strengthen anti-epidemic ability.

9. To promote revitalization and development of the "3 ball events (soccer, basketball and volleyball)" by 2035 in 15 years time. In view of the timeline, we are now required to select potential athletes and to be well prepared for the 15 years plan.

10. There will be full coverage of doping penalties, in the establishment of the "clean gold medal". There will be anti-doping laws and regulations policies and to be put in place to promote the "three zero" policy - zero mistake, zero occurrence, zero tolerance.

Overcome difficulties and strive for the best in the Beijing Winter Olympic Games

We are in the preparation for the Beijing Winter Olympic Games. All the other work such as facilities development are the foundation for our athletes to strive for gold medals. This year is the final year of the preparation. Our athletes missed the opportunities to prepare themselves for the Games as international competitions were all cancelled due to the outbreak of COVID-19 and this is the biggest obstacle for our preparation for the Winter Games, as severe as of the Summer Games. Below some points which enable us to “take part in all events” and “strive for gold medals”:

1. Selection for the best delegates. Implement the selection in stages and step by step to ensure that athletes have the ability to accomplish the tasks including “let the national flag swings, let the flag rises, let the national anthem plays”, in other words, to ensure athletes’ abilities to take part and qualified for the Winter Games.



2. Specialized training: Ensure key athletes accomplished every little tasks which enable them to get the qualifications. Set up unique training strategy for each athlete including training plan, medical assurance, requirement for qualification etc.

3. Comprehensive medical assurance and reinforce health checks for selected athletes by phases. Avoid occurrence of injuries caused by unscientific training.

4. Implement strict performance assessment to evaluate support team's performance and make necessary adjustment / reassign deployment tasks.

5. Scientific training. Effective use of high-standard scientific training bases in Beijing and Hebei and to carry out scientific trainings. To advance daily training method with technology and maximize effectiveness.





3. Maintain law and rules and be driven by innovation. Strive to improve the training quality and efficiency for the Olympic Games.

——Big data is the major battlefield for championship

——Numbers are the new driving force for technology application in preparation of Olympic Games

——Physical training is a scientific way to explore human potential

——Big data and scientific assessment for sports performance boost accuracy



“We all need a coach in this world.”


- Bill Gates

China is at a critical stage of transition in sports development as well as the preparation for Tokyo Olympics. To help athletes perform at their best, elements such as training concepts, methods and innovative ideas are essential. Coaches may feel confused and stagnated for many reasons, but among the most predominant reasons, inadequate engagement, passion and enjoyment are key factors.

1. Overloading is the origin of new training concept
2. The characteristics and patterns of games are the keys to innovative training
3. Case studies of elite coaches and categorization of elite coaches
4. Ways to implement innovations in the preparing of the Olympic Games and suggestions



1. Overloading is the origin of new training concept

1. Training is a process when overloading stimulates the complex system of human body
2. Overloading stimulation = Volume + Intensity
3. Volume = Time + Quantity + Repetitions + Sets
4. Intensity requires effective stimulations = One-time stimulus (range) + multiple-time stimulus (depth) + Consecutive stimulus (quantity) + Intermittent stimulus (volume) + Various kinds of stimulus (dimension)
5. Stimulated by loads = body structure  mechanisms to adapt
6. Training progress = Long-range and periodized training programmes to improve skill performance and

Jiang Hongwei – conduct trainings for female tennis athletes participating in WTA international women's professional tennis matches according to different levels. Illustrates the importance of scientific, systematic and quality of both trainings and competitions. Focus on the preparation for the big 4 tennis competitions with regards to training and competition periods all year round. Insist to arrange 3 times periodized training per year with each time different programmes for up to 3 weeks (macrocycle and mesocycles). This improves tactics and skill performance. Concluding critical tennis skills in international competitions: competence, speed, power and strategy.



们称霸世界网坛的“野心”。

我重视训练工作的严谨性。无论在制订训练计划，还是对待训练质量和训练效果，总是全力追求完美。训练时，我喜欢渲染训练场上的气氛，比较善于调动运动员的兴奋性和积极性。对有些教练员在训练时不善言表、明明看到问题却视而不见的现象，我比较反感。

我积极主张和努力提倡“有效训练”。训练不是反复熟练，不是量的堆积，不是时间的积累，而是通过有效的训练来提高球员的水平。一切应该以训练的实际效果为目的。

我极力推崇“高质训练”。一堂高质量的训练课应该做到因人而异，节奏清晰，训练重点突出，有针对性地解决一到两个实际问题，不应该是泛泛而练、为练而练。

A book published by Jiang Hongwei 《网事·往事》 - I promoted 'effective training' and effective training is not about repetition, quantity and time but improve athletes' performance through effective training. Effective training shall focus on goal achievements.

First, to break through your understanding of the pattern of tennis events. Formation of training in relation to microcycle, fast-paced, intensive and frequent matches structure;

Second, introduce innovations into the planning, structure, mode and form of the training programmes. That is, to implement “one-on-one”; “confronting”, “combination of games and practices” types of training programmes;

Third, to transform from “skills comes before physical fitness” to “personalized, targeted and systematic physical fitness training”;

Fourth, insist on workout for speed as speed is key to success

—— 《网事•往事》 *by Jiang Hongwei*



After Beijing Olympic Games in 2008, Sun Jinfang concluded the achievements of innovative training in tennis as 5 transformations:

1. from conventional “year-round” to “periodic” training;
2. From “training as competition” and vice versa to “combination of competition and training”, “reinforce training with competition” and “effective training leading to success”;
3. from “centralized” to “personalized” training
4. from “quantity-and-time-oriented and “low intensity” training to “quality-oriented” and “less time and intense” training ;
5. from focusing on “skills > physical fitness” to a comprehensive approach on the development of skills and physical fitness, capabilities, prevention of injuries, as well as mutual facilitation between rehabilitation training and effective recovery.



(2) The essence of innovative training is key to success

1. Follow the rules
2. Obtained essential skills for respective event are key to success
3. Skills structure movement
4. The key of movement are power and efficacy
5. Advanced movement facilitates performance
6. Essential physical fitness training is the foundation of basic physical conditions required
7. Functional physical fitness training is one transformative way for specific training programme in a particular sports event
8. Adapt to the new requirements in competition: faster, higher, stronger and better
9. Perform at your best enable you to overcome challenges and defeat your opponents

Innovative training requires continuous and structured thinking

First, system and structure are crucial. Identify problems and allow yourself to think systematically in relation to the framework and take reference from others' experience before making decisions (Systematic Thinking)

Second, reflect after competition helps reveal the truth. Establish structured framework through small scale competitions and reflect after each competition. Be imaginative, make presumptions and proactively reach out to others for comparison and verification enable us to construct, verify and enhance overall abilities to form better structure (Reverse Thinking)

Third, associative connection is the key to establish systematic thinking. Take into account all aspects enable coach to associate every single factor to the outcome (Associative Thinking)

Fourth, a coach shall analyze from various perspectives and integrate scientific and theoretical methods. Form thinking habit and come up with conclusions after analyzing different aspects.

(Diversified Thinking)

Thinking tools for coach = Systematic Thinking + Reverse Thinking + Associative Thinking + Diversified Thinking



(C) Achieve Innovation of Elite Coaches' Training

Jenny Lang's Achievement: Inheriting spirits of the women's volleyball team, leading women's team to strive for medals

1. Analysis (Asia and the West; advantages and disadvantages, etc.)

China:

- (1) Inconsistent performance, making insufficient use of rules;**
- (2) Lack of confidence in major competitions, hard to persevere;**
- (3) Unsatisfactory capability of coach;**
- (4) Shrinking amateur sports schools, lack of young athletes;**
- (5) A mere 18 teams in Groups A and B in the League;**
- (6) Without special strategies – quick attacks for a short moment, without a comprehensive set of movements;**
- (7) Incompetent and without good basic skills;**
- (8) Key players not perform at the best and lack of agility;**
- (9) Athletes have little knowledge of volleyball principles and incapable to analyze situations during competitions**
- (10) Over-training, ineffective training quality, no reasons of training and lack initiative**



2. Goals: Achieve high ranking in Asia, win the champion in Asia in qualifying event, strive to success

3. Strategies:

- a) Conduct analysis on rules, opponents' strategies for a year and a half and adjust tactical strategy
- b) Coach to comprehend the goals and are ready to adjust strategies in time;
- c) Athletes to fundamentally get rid of all deficiencies and give full play to their capabilities; Complete visual and aural athletic training;
- d) Key athletes to be trained with specific strengthening programmes;
- e) Hire physical fitness coach for: sense of balance and strengthen knee joints, posterior muscle groups and core strength

- f) Hire rehabilitation therapists: before, during and after the training; rehabilitation training, scientific training, seek advice from others to meet needs
- g) Research Team: competitors' database, variation analysis, on-the-spot command; database of Chinese players' information;
- h) Coach Team: moral, active, learning, interaction;
- i) Promote volleyball in youths, Peking University, Tsinghua University, Experimental High School etc.
- j) Spirit and honor building
- k) Selection of competitions, discard unnecessary competitions spontaneously;
- l) Strengthen athletes' self-discipline, avoid overprotection and behave during dining or meeting; reflection, keep training diary, competition journal, competition conclusion

Experiences and Enlightenment from Women's Volleyball Team winning champion at Olympics

Rio Olympics Team Sports--The U.S. and European countries are powerful in terms of team sports

Brazil won a gold medal in Men's Football and Germany won a gold medal in Women's Football.

Both two gold medals in Basketball were won by The U.S.

The gold medal in Men's Volleyball was won by the host, Brazil.

Brazil and Germany each won a gold medal in Beach Volleyball.

Denmark and Russia each won a gold medal in Handball.

Argentina and Great Britain each won a gold medal in Hockey.

Fiji and Australia each won a gold medal in Rugby.

Serbia and The U.S. each won a gold medal in Water Polo.

China lost to Netherlands 2:3, Serbia 0:3 and The U.S. 1:3 ranking the fourth in the group stage; 3:2 victory over Brazil in quarterfinals, 3:1 victory over Netherlands in semifinals; China won a gold medal again after 12 years on a 3:1 victory over Serbia in finals

Excluding other western countries, only China has repeatedly defeated The U.S. and European Countries winning the gold medal in Women's Volleyball



Breakthrough of Women's Volleyball at Rio Olympics----

Innovative Spirit, Team Spirit, The Spirit of Chinese Women's Volleyball Team



The glory of China Women's Volleyball Team was witnessed in Maruzen Intec Arena Osaka on 28 September 2019. Led by coach Lang Ping, China brought home the trophy before the final round in the 13th FIVB Women's Volleyball World Cup 2019 with perfect 10 straight wins after defeating Serbia on 3-0.



Practical Preparation and Innovative Experiences of Women's Volleyball Team at Rio Olympics



1. Activate the innovative system
2. Be decisive and well-prepared
3. Lead and move with times
4. Empathize on team with well planning
5. Well deployment of tasks with the help of technology
6. Prioritized physical fitness with the help of technology
7. Embrace challenges and eager to breakthrough
8. Pass on the spirit which is to never give up



1. Focus on the Journey with belief and objective

If you want to fulfill your goals and objectives, you'll have to be brave regardless of the obstacles before you and dare to self-breakthrough. In retrospect to how far we have come, we've definitely achieved that. **Reaching your goals is never easy, you surely need confidence the ride it over.**

In the journey to success, do the best of self although objectives cannot be achieved. At least I do well every day. This is the combatant spirit of the Women's Volleyball to do well every day. It is not the result that's important, it is doing the best in every day. Focusing on the process is the living status, the mentality of living.

When we took over the team in 2013, three days later we led the team to compete for the Asian Women's Volleyball Championship. We lost to Thailand and couldn't proceed to the finals. We also lost 2 to 3 to Korea. Therefore, we only rank fourth in Asia in 2013. But it didn't matter, it proved that we weren't good enough. If we wanted to be the world's first or Asia's first, it was going to be a tough journey.

Since 2014, we came up with a new plan to build a big national team. A normal national team consists of 12 players. That's how many I trained in 1996, the first time I led a team. Now we have a team of 28 players and train over 20 players every day. This is our idea of a big national team.

A big national team creates more competition in every position and motivation within the new players to work harder. Especially during my term, I want to focus on more than one Olympic Games. I want to nurture new players to take over in the future. Some of the young players are only 18 years old. We hope they can compete in 2 to 3 Olympic Games. This is the main purpose behind the big national team.

A new team, which sets a goal for the athletes and all the assistant coaches, has just been formed. Everyone works towards one goal and there are specific tasks when there are goals, however, how can we complete the tasks? It is significant to make extraordinary detailed monthly and annual plans. We have to implement them bit by bit and dare to make breakthroughs.

We ranked fourth in Asia in 2013, and we planned to rank top six in the world in 2014. In 2015, our plan was to carry off the Asian championship. In the World Cup Competition, we strived for medals and we must get the chance in participating in the Olympics. This is the plan for 2015. In 2016, we target for the national pride, women's volleyball won the medals at all costs. We were being criticized that our targets were unachievable as we just ranked fourth in Asia. We would be criticized during the process if we could not achieve the targets. **As being a professional coach, once you have set a goal, you must affirm that you can achieve it.**

2. Teamwork and division of labor

As being a collective and a team, coaches are not easy. You may not have noticed that the coaches have to spike thousand times every day when the athletes are practicing defend. You cannot imagine how exhausting it is when you spike for 3,000 times a day. People always neglect numerous heroes behind the team such as doctors, rehabilitation therapists and physical fitness trainers, they all work very late at night.

Rehabilitation therapists help our athletes stretch at night, some of them have to take medicine if they are sick and get hurt. They have to get recovery in every single body part. The sooner the rehabilitation time, the better. We usually get rest at three or four in the morning. Competition is a teamwork; we would only select 12 team members out of more than 20 to participate in the competitions but the other team members also have their roles. This is a big family where we can train up with one another. Therefore, we would like to appreciate this team in regarding of this aspect.

We always tell our team members that there is no perfect individual, but only the best and perfect team.

3. Prioritized physical fitness with the help of technology



Hiring a fitness trainer:

- the sense of balance
- strengthen knee joints
- strength of posterior muscle
- core strength



Introduce sports-specific training methods

Example: Women's Volleyball



1. Pillar Preparation

2. Movement Preparation

3. Plyometrics

4. Movement Skills

5. Strength & Power

6. Energy System Development

7. Regeneration & Recovery

1. 支柱准备

2. 动作准备

3. 爆发力与超等长

4. 动作技能训练

5. 力量训练

6. 能源系统发展

7. 恢复再生

Suggestion of movements for physical trainings and training programme for Women's Volleyball (any combination)

No.	Name in Chinese	Name in English	Sets/Loading	No.	Name in Chinese	Name in English	Sets/Loading
1	泡沫轴再生	Foam Roller	2 sets/ 3 minutes/	11	脚踝八点伸展练习	8 Point Touch	2 sets/side
2	超级臀肌大全	Gluteus Super-6	6 sets/ 30 seconds	12	弹力带阻力负重跑	Resistant Run	4 sets/50 meters
3	用手爬	Hand walking-	3 sets/ 5 times	13	瑞士球静力抗阻练习	Keiser Res - Swiss Ball	2 sets/3 minutes
4	侧向跨栏+向前冲刺跑	Hurdle(lateral)+ Sprint5	5 sets/ 20 seconds	14	五点追逐跑	5 Cores Run	4 sets/ 2 minutes on/off
5	弹力带负重向上跳	Super band Jump	3 sets/10 times	15	土耳其起立	Turkey Get up	3 sets/5 times
6	跳箱练习	Box Jump	3 sets/ 10 times	16	单脚八向稳定练习	8-direction Bosu Jump	2 sets/side
7	推垫跑+腹肌上推	Pat Driver+V-up	5 sets/ 10 times (reduce gradually)	17	拦网跳练习	Block Jump	3 sets/10 times
8	药球侧向砸墙	Medicine ball Throw(lateral)	2 sets/ 8 times	18	静力对抗拉伸	Racks Static Stretch	2 sets/ 15 seconds
		Keiser Y	3 sets/10			Top4	8 sets/20



2021/1/20



2021/1/20



4. Enhance skills and breakthrough continuously

During preparation of Olympic Games, we realized that if we want to reach the finals, we must defeat the US team or Brazil team.

This year, we spent one month time to study the performance and strategies of the Brazil team.

Over the past 8 years, China team failed to defeat Brazil team with a worst score of 18:0, we scored '0'.

Brazil team is strong at offensive blocking. We still have deficiencies but refuse to give up. If we give up, we cannot improve.

We must learn from Brazil team and challenge them. Before challenging them, conduct comprehensive analysis from every single part to improve. Every member in the team including assistants, coaches or athletes are all focusing on the improvement of skills.

Women's volleyball training -- coaching team evaluate athletes' performance by watching video playback.

- 1. How was today's training?**
- 2. What were the technical problems?**
- 3. Did we improve?**
- 4. Who is my target when I have a deficient?**
- 5. Review performance of opposing teams. What is the fastest speed of the best side attack in the world?**
- 6. We do plenty of learning and comparing. We also hold many technical seminars.**
- 7. Evaluate athletes' performance by watching video playback.**
- 8. We summarize our performance on a weekly basis.**

- 1. After performing analysis of the competition, we found out that the most important thing is our imposing manner in order to win.**
- 2. We must try our best and keep going. We should raid opposing teams to weaken their confidence.**
- 3. To persist**
- 4. Perform at the best, or quit**
- 5. Keep up the courage and determination**
- 6. Well prepared technically in the combat against Brazil team. Our target is to bring home the trophy once after 18 defeats to Brazil team.**

Brazil team performed very well in the first round and if this situation continued, we will have to go home. I told my girls to try their very best in every second of this competition.

5. The Spirit of the Women's Volleyball Team ----Tolerance and Unity

1. The most significant element of the spirit of the Chinese women's volleyball team is mutual tolerance.
2. Say no to negative energy —— team spirit is vital. Players should not blame one another when mistakes are made. If players keep blaming one another, the negative energy in the team will accumulated and weaken team spirit.
3. Promote positive energy —— Players should be mutual tolerant and understanding. Players should openly admit their mistakes. If they learn to be mutual tolerant and understanding, the positive energy in the team will accumulated and boost team spirit. During a competition, cooperation among players is important. If they can consider themselves as a team, then this would benefit the team during competitions.
4. Construct the feeling of togetherness and share shame and glory ——Players should understand that both winning and losing are because of them all
5. “This time I performed well but the team lost. This has nothing to do with my performance.” If a player has a thought like this, she cannot be considered as a part of the team. “Our team lost the competition this time. Although I performed well, I failed to assist my teammates. I understand that I am also responsible for the loss of my team. We should reflect on today's performance and facilitate the process of growing up.” “Our team won this time, but I performed poorly. I should adjust my mindset and try harder to do my best next time. Although my performance was unsatisfactory today, my teammates can put in more effort to win the competition.
6. Mutual tolerance is the cultural tradition of the key for the Chinese women's volleyball team to achieve success

Lang Ping: Prior to our match against Brazil, team members treated the analysis of Brazil team seriously. Many people bet us lose in match. However, all we can do is to try our best and avoid repeated mistakes.

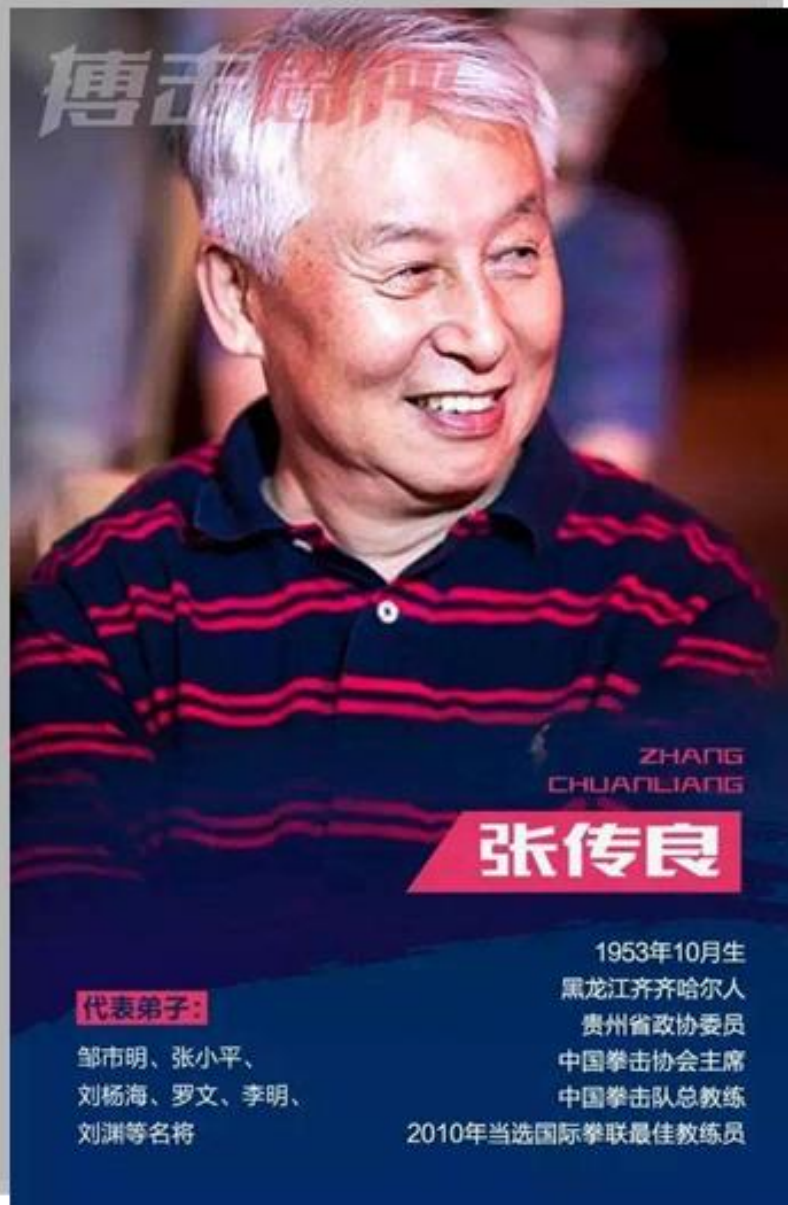
Even if we are lack of hope, we would still exert 100% effort and stay persistent throughout the game. This is the only think we want to do today. We would stay calm even if we are 10 points behind, we still have another round. We cannot lose hope and give up even we lost 2 rounds as the game is not yet over.

Before this match, we had played against Brazil team in a friendly match with 4 rounds. Half of our key players played in the match and we lost all 4 rounds. In the 5th round, Brazil team called in their substitute players, and so did we, and we won. Regardless of this round, our scoring was a tragic 4:0. I think Brazil would never have thought of that. And, they must have never thought of failing to be in the top 4.

The Women Volleyball finals kickstarted on 20 August. In this match against Serbia team, which once defeated China on 3:0, they did not have a good start in the first round. Coherence was lacking in both offence and defense, resulting in loss at 19 against 25.

Starting from 2nd round, we managed to arrange player substitution spontaneously and with a combination of tactical movements, we made effective spikes. The diversified and efficient attacks had also brought us to a favorable position. At the critical moment of our match point, another player was assigned to serve disrupting our opponent's first pass while a direct kill set the game at 3:1. China was crowned again with the championship after 12 years.





Zhang Chuanliang said: "As a boxing coach, my boxers have won more than 70 championships in various contests. I am so proud to enable the Chinese anthem plays and see our national flag flow with them for so many times. Zou Shiming, receiving training from me since his youth, have been paying huge efforts and have experienced doubtful voices repeatedly, until he won the highest awards in the boxing world with his agile movements, adept techniques, as well as sound mentality. It cannot be realized without going through a pain-taking process. Having combated in three Olympic games, Zou was already 35 in 201 and defeated Thai boxer Prasitsak Phaprom in Las Vegas on 5 November, seizing the WBO flyweight world champion."

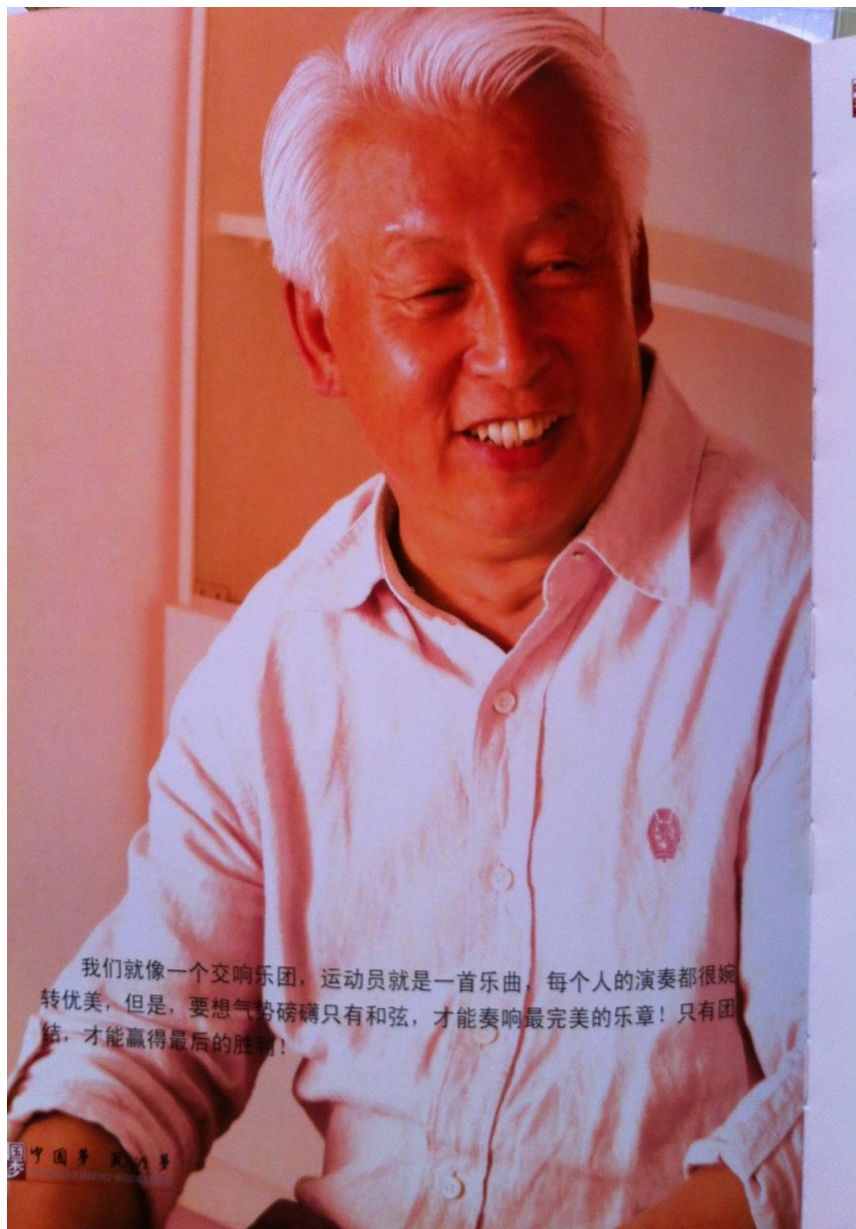
How did you develop your cutting-edge coaching theories and training modes?

“I have been adopting a unique training mode different from others in the world,” said Zhang, “It was not acknowledged until it proved to be rewarding. To draw an analogy, the modern athletic system is just like an updating encyclopedia, while training is regarded as a textbook and trainers have to keep improving this encyclopedia, even by trials and errors.”



“I design customized modes and techniques according to each boxer's unique physical performance and shape. During my coaching career, every winner, such as Zhang Zhilei, Zhang Xiaoping and Li Yang, has his own technique,” added Zhang.

“What we hear from propaganda by those media are always saying that players have to try their best, regardless of any cost. However, I mostly emphasize that it will be easier for you to lose when you try too hard. You must make full use of your limited physical performance and power in a contest, before turning them into your personal advantage, which will lead you to a final victory integrated with improving techniques.”



我们就像一个交响乐团，运动员就是一首乐曲，每个人的演奏都很婉转优美，但是，要想气势磅礴只有和弦，才能奏响最完美的乐章！只有团结，才能赢得最后的胜利！

中国梦 我的梦
CHINA DREAM MY DREAM



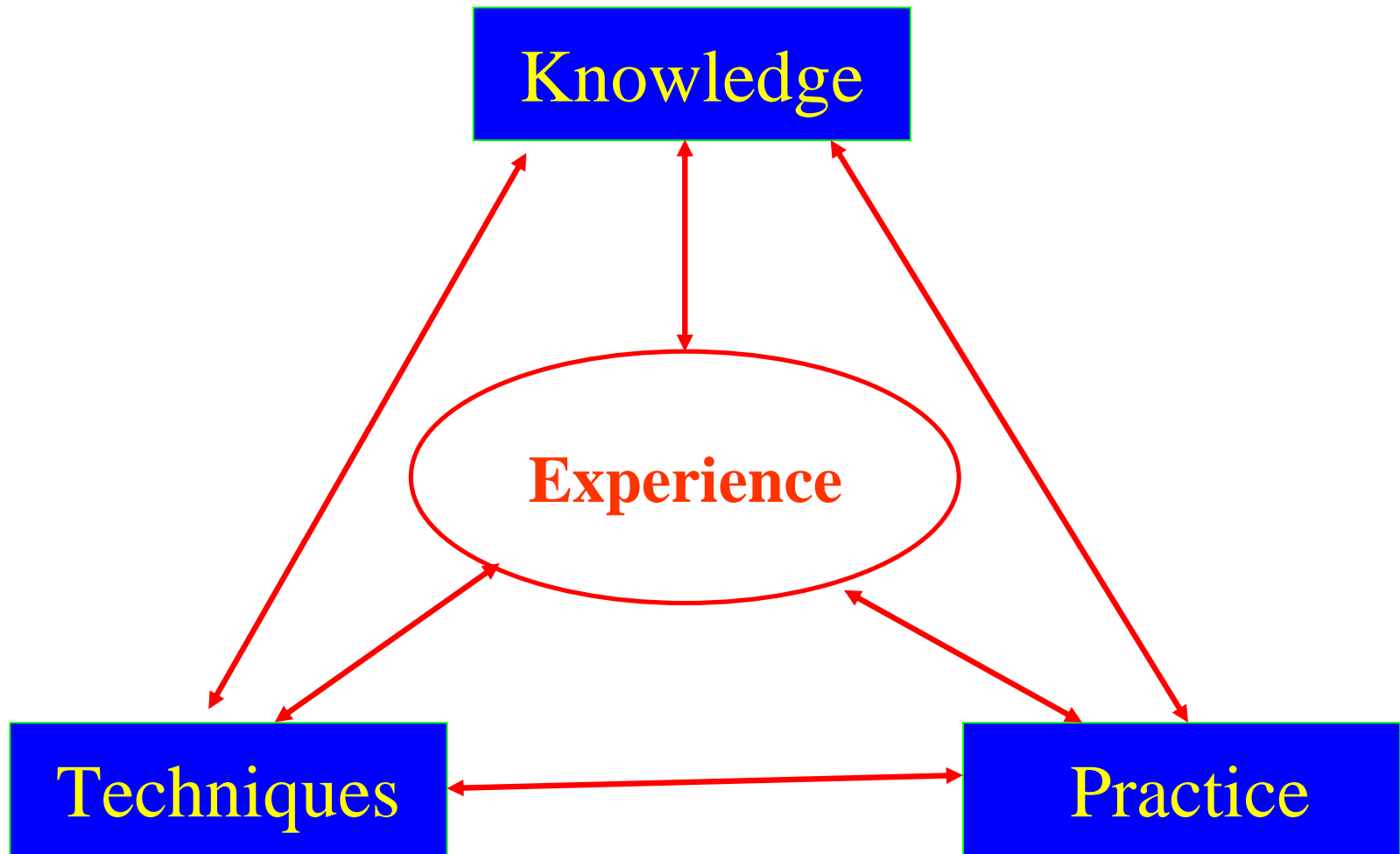
竞技体育是思想，是品质，是性格也是境界。不同程度的人表现出不同风格的比赛。境界不同对体育项目的认识自然也不一样。竞技体育是一种神圣的艺术，我们要好好去保护。

要学习体育精神思想和品质，而不是在没有认识什么是竞技体育时，就盲目地评价和批评，这样就玷污了体育本身的纯洁和神圣。

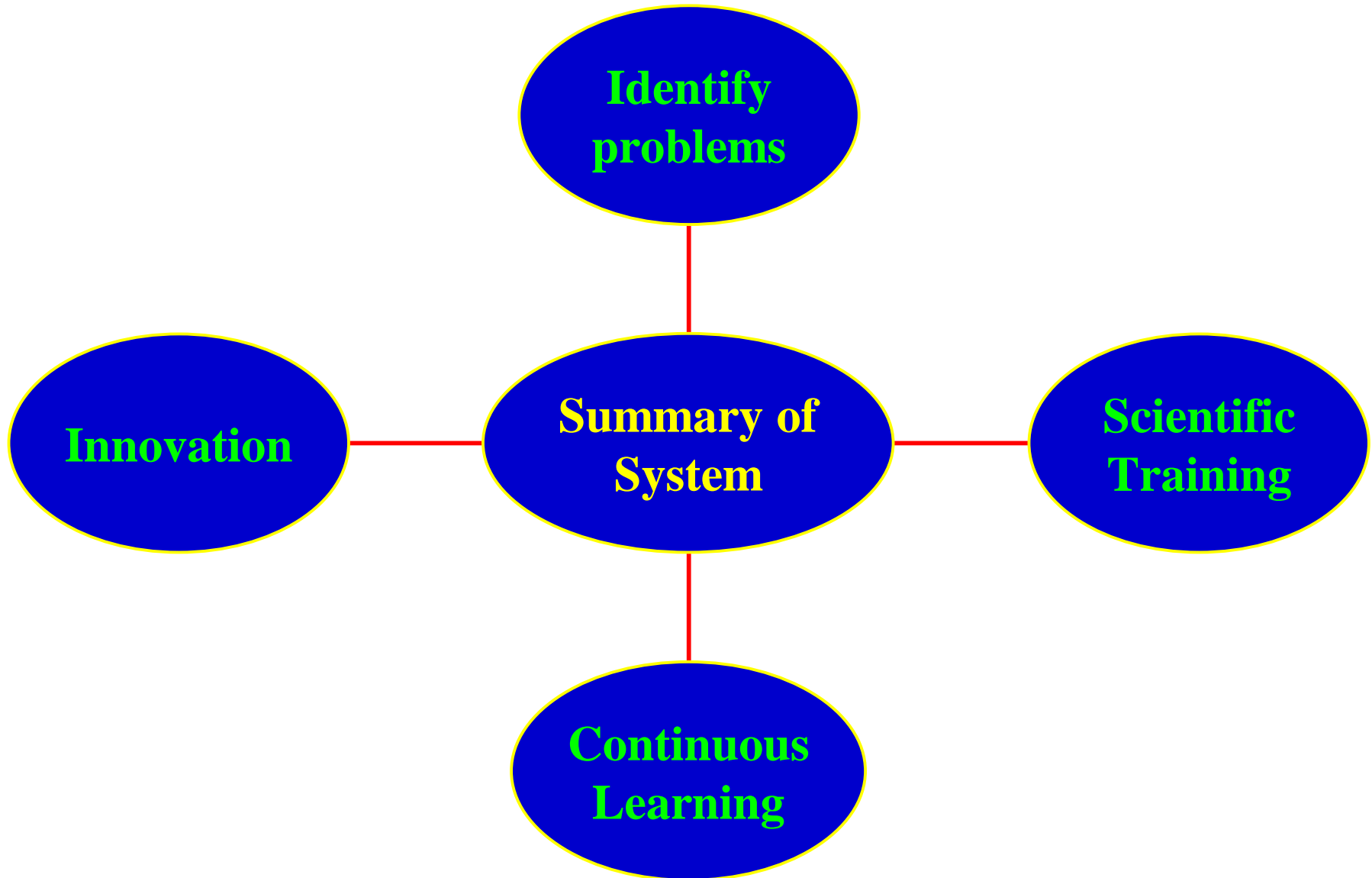
Categorization of Elite Coaches – Successful, Established and Mature

- 1. Nurture 200 elite coaches under “200 Elite Coaches Scheme”;**
- 2. coaches with strong global vision, innovative thoughts, and leadership;**
- 3. the key to success of an outstanding coach is vision, instead of knowledge.**

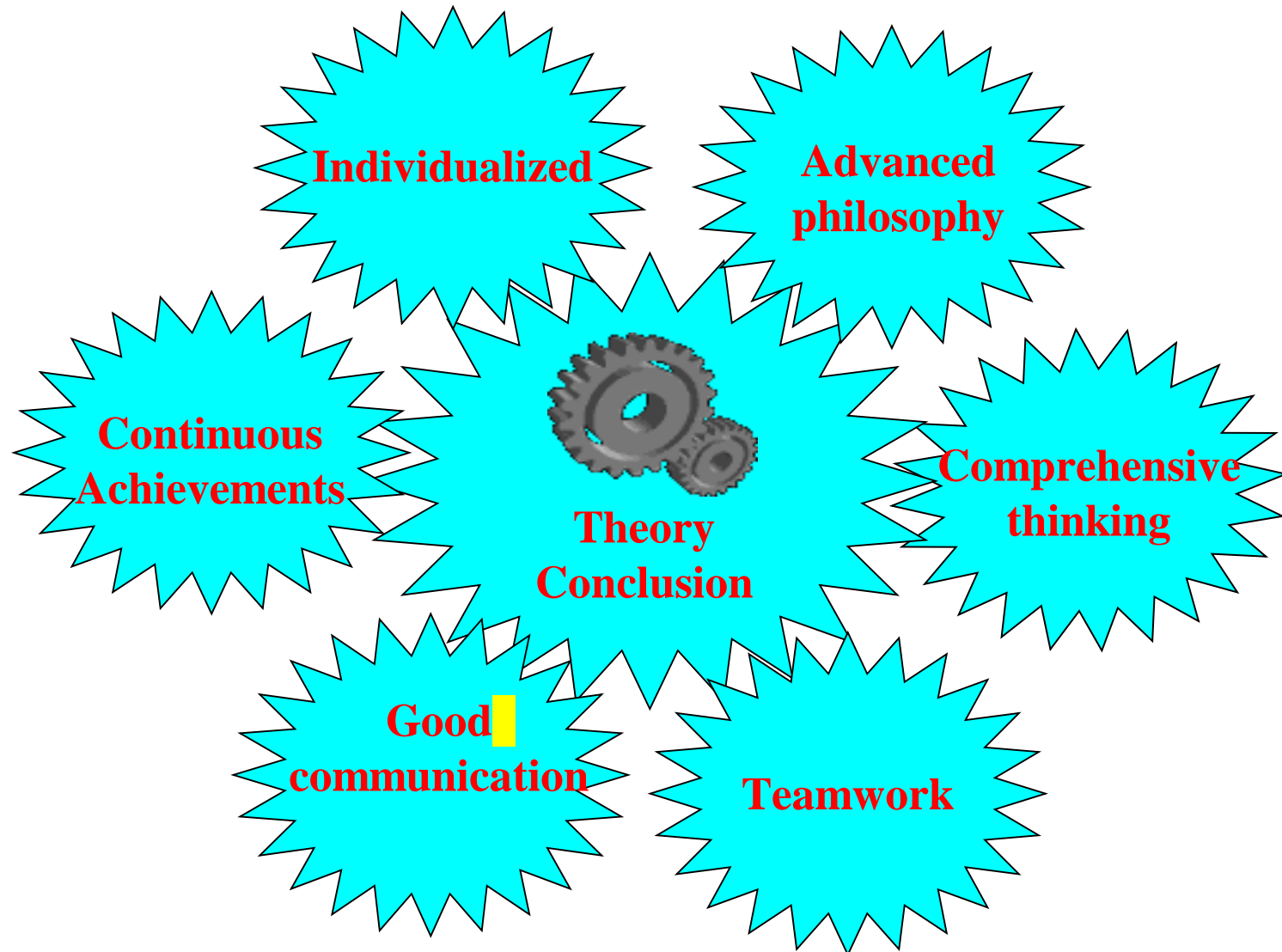
Stage 1 Becoming a Successful Coach



Stage 2 Becoming a Established Coach



Stage 3 Becoming a Mature Coach



(4) Innovative Training Method

Transition from 3-phases training to 4-phases training

In a 3-phase training:

1. Preparation: warm-up, exercise for joints, stretching, preparation of equipment etc.
2. Basics: preparation exercise, gradual increase of intensity, completion of training plans etc.;
3. Recovery: relax, jogging, stretching, massage etc.

In a 4-phase training:

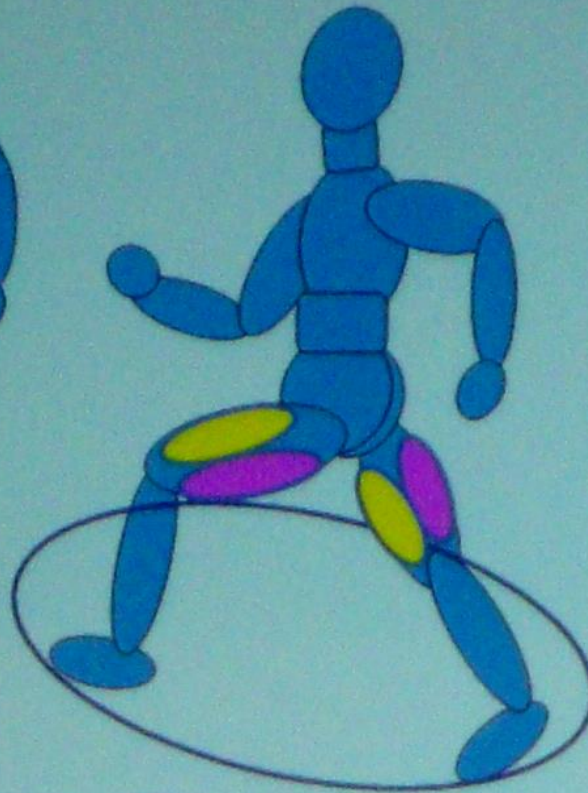
1. Activation: nerve and muscles activation, preparation, aerobic exercise
2. Preparation: core strength training, special action activation preparation exercise for skill intensity etc.
3. Basics: gradual increase of loading, simulation of special actions, completion of training plans etc.
4. Recovery and regeneration: mode of locomotion, dynamic stretching, myofascial release, high-intensity aerobic exercise etc.

Changes of Running Technique for Top Athlete



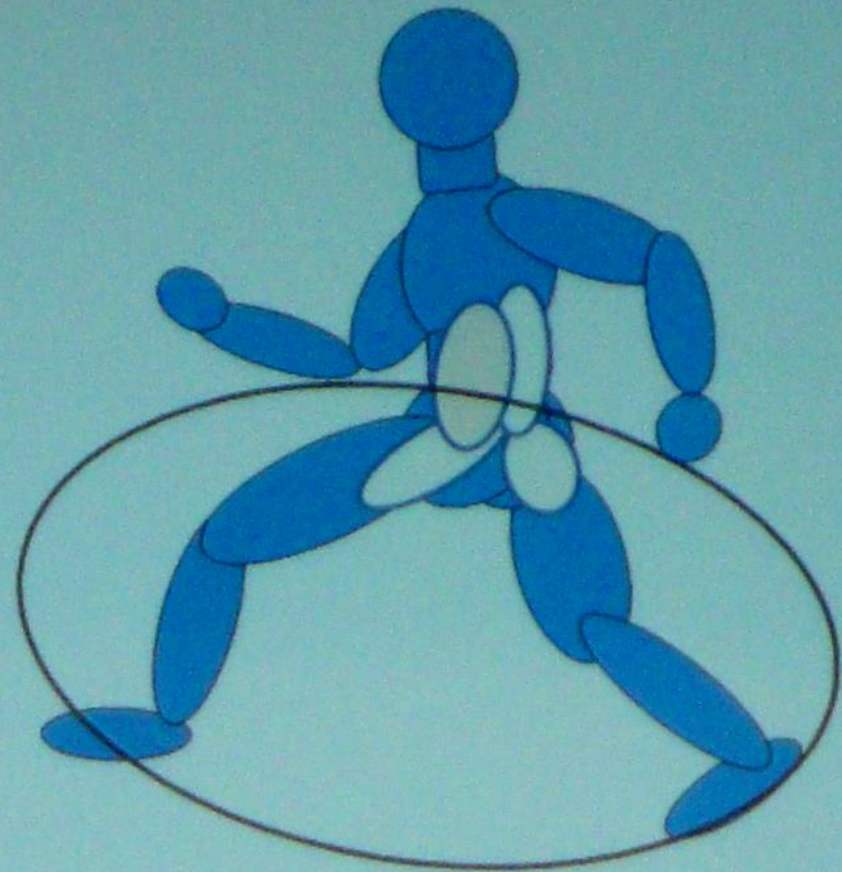
Straight kick
and high knee
Uplift style

Style I



Sweep round the
surface using thigh
muscles

Style II



Sweep round the surface
with whole leg and hip
using body inner muscles

Style III

Core training – Structural enhancement

- 1. Strength is the integration of skeletal form, function and well-being;**
- 2. Targeted at single element, such as strength and endurance etc., not at redundant perfection of gesture and shape.**

Functional training – Muscle enhancement

- 1. Healthy posture: left-right and bottom-up balance, and correct use of muscle;**
- 2. Improved efficiency: neuromuscular power, motion transmission efficiency, and body control;**
- 3. Neural control: posture training, mode of action, balance and stability.**

Performance training – Improvement of human-environment exchanges

- 1. Linking basic performance with AI and big data;**
- 2. Scientific evidence from advanced big data of recording, motion tracking, monitoring and negative feedback mechanism;**
- 3. Training of nervous system, working beyond your physiological quality and functional performance.**

Methods of Recovery & Regeneration

- 1. Power chain recovery;**
- 2. Fascia relaxation;**
- 3. Aerobic recovery;**
- 4. Stretching & relaxation (PNF/AIS);**
- 5. Freeze relaxation;**
- 6. Hot/Cold Immersion therapy;**
- 7. Massage relaxation;**
- 8. Acupoint relaxation;**
- 9. Mode of locomotion method;**
- 10. Meridian relaxation;**
- 11. Lymphatic activation;**
- 12. Yoga relaxation;**
- 13. Central Facilitation;**
- 14. Music relaxation;**
- 15. Environmental relaxation;**
- 16. Aroma relaxation;**
- 17. Nutrition recovery :**
- 18. Psychological relaxation.**



备战东京奥运会蹦床项目冬训工作推进会

会议手册

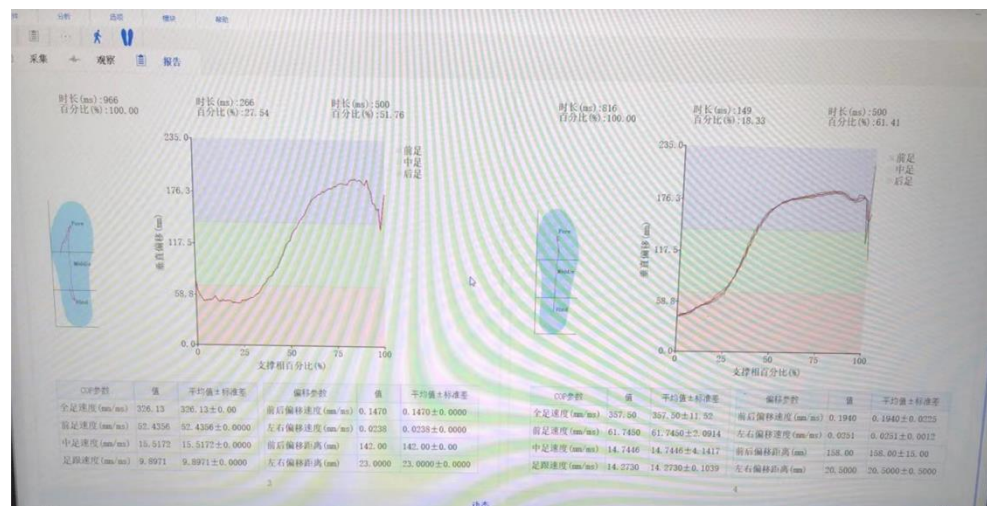
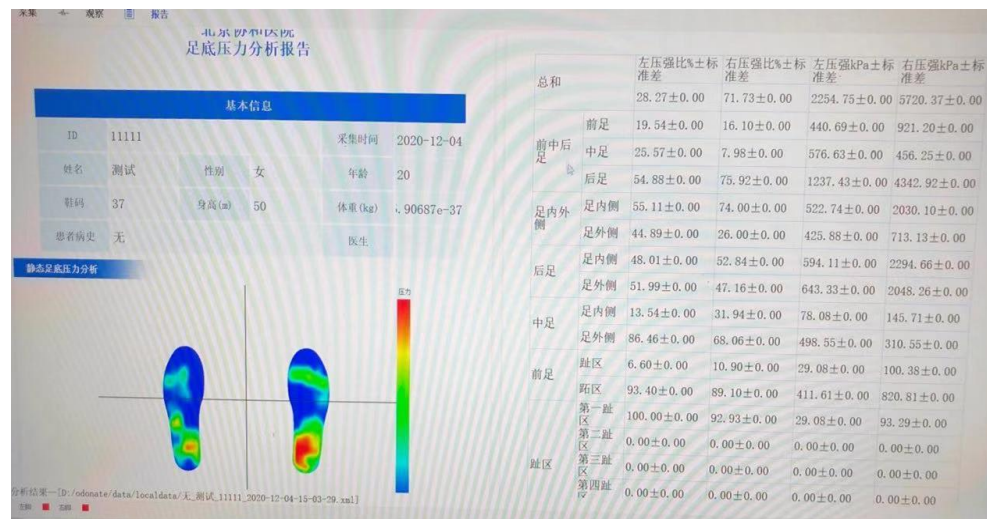


扫描二维码阅读

上海市竞技体育训练管理中心

2020/12/15

2021/1/20



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Plantar Pain & Stress Distribution

Name	Stress Point(s)	VAS Pain Score	Occurrence	Relief method
Xinyi Fan	First metatarsal (Left)	2-3	During training	Natural recovery
Dan Li	Calcaneus (Left)	3	After walk (30 minutes), jogging or training	Massage & foot bath
Dong Dong	Fifth metatarsal (Left)	2	Jogging	Natural recovery
Yunyi Yan	Lateral calcaneus (Left)	4	During training	Foot bath
Yanfei Huang	First phalanges (Left) First metatarsal (Right)	7	Jogging or training (during and post)	Massage

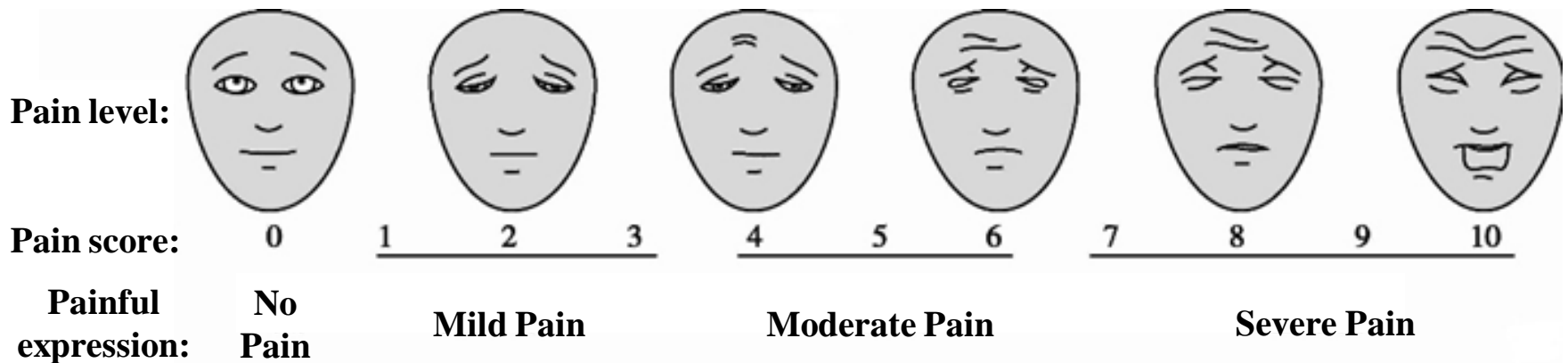
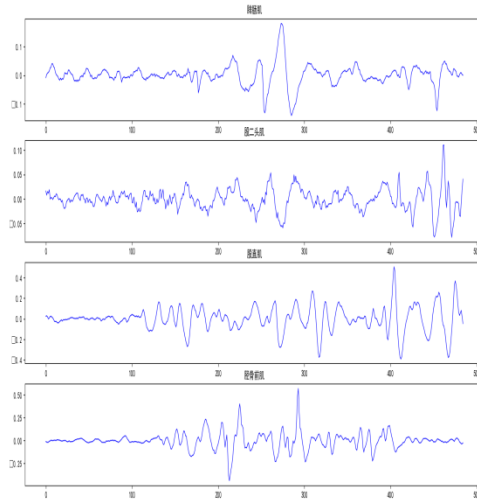


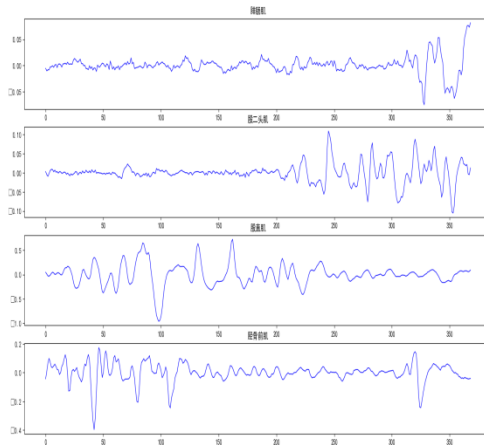
Figure 1. VAS Subjective Measurement

gaolei

Vertical Jump from the Ground

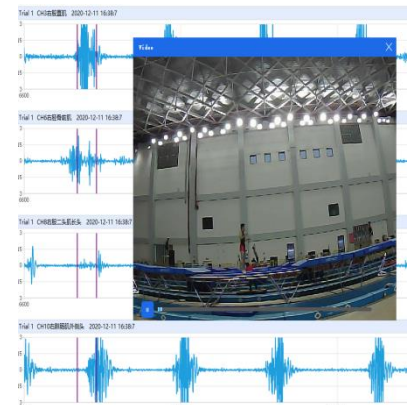


Vertical Jump from a Trampoline



An analysis of authentic Lei Gao's movement reveals:

1. Taking off from the ground:
 - Muscular power is synchronic
2. Taking off from the trampoline:
 - Delayed use of the gastrocnemius and biceps femoris, which may be advantageous to force exertion for jumping.
3. Earlier use of the rectus femoris and tibialis anterior, which helps to work against gravity when landing, and secure a stable land.



Champions are created!

Talent is key factor for competitions!

Successful coaches nurture talents!

Creativity equips successful coaches!

Scientific thinking inspires creative coaching!

