Abstract Book

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Welcome Message

Life is always with challenges. Some time with pandemic and some time with war. In all conditions, successful people, continue life powerful and solve problems intelligently. Every loss of life is a tragedy and still, we are in the condition of a pandemic in addition, we have wars in several places in the world. We always pray for peace for all.

On behalf of the Asian Exercise and Sports Science Association and conference organization, it is my great pleasure and honor to welcome all researchers and scientists to this event at this moment. Also, a warm welcome to all our participants from everywhere, hoping the most benefits from this online conference.

Nowadays sports science is developing and growing faster than previous. Improving a healthy lifestyle, developing the ability to work, preventing several chronic diseases, and improving athletes’ performance at the highest level of competition all are resulted by developing all aspects of sports science. Because of these, we need to share researches results at any time. This event is the place for knowledge sharing in the area of sports science.

Much thanks are endorsed to our valuable teams, and colleagues in our Association and from outside who spend much time and effort and are dedicated to the success of this conference.

Dr. Alireza Amani
President of The Conference
March 10, 2022
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An overview of anti-doping rule violations in Sri Lankan sports from 2014 to 2020

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ABSTRACT:

Although information related to anti-doping rule violations (ADRVs) within the doping control procedure is very useful, no studies have been carried out regarding the ADRVs in Sri Lanka. This study aimed to explore the ADRVs occurred in Sri Lanka from 2014 to 2020. The data related to ADRVs in official records of Sri Lanka Anti-Doping Agency, World Anti-Doping website and official sports websites were explored quantitatively and qualitatively in this study. Qualitative data was content analyzed under the themes of reasons to dope, deterrents to doping, impacts of doping, modes of doping substances (DS) used to dope and supply of DS while quantitative data was presented in frequencies and percentages.

Sri Lankan athletes have committed 35 ADRVs from 2014 to 2020 and out of which 31 of them were analytical ADRVs and 2 were non-analytical ADRVs. Most of the ADRVs have been reported among male athletes (32,91.4%) and who are within the age group of 20-29 years (20,60.6%). The commonly used DS were anabolic androgenic steroids (AAS) and other anabolic agents (21), diuretics (6), stimulants (5) and the substance used was specific for the sport that they play. Cyclists have used prednisolone and salbutamol, bodybuilders have used diuretics, AAS and other anabolic agents, powerlifters and rugby players have used AAS and stimulants and track and field athletes have used AAS. Some athletes had used few DS simultaneously and most of them (50%) were bodybuilders. Higher number of ADRVs were reported in bodybuilding (9,25.7%), powerlifting (7,20.0%) and rugby (7,20.0%). The charge of a doping rule violation was accepted by 21 athletes and their reasons to use DS were to build muscle mass and improve strength (14.3%), to build their body (14.3%), to increase body weight (14.3%), to improve endurance (7.1%), to win the tournament (7.1%), and as a medicine (42.8%). In most of the instances, gyms, bodybuilding supplement shops and personnel who live in abroad have promoted and supplied DS to these athletes. Some of the athletes have used DS with the awareness of sanctions that could be imposed by their use and some of them have already participated for anti-doping seminars as well. Majority of them highlighted that these sanctions had affected their sporting career, economy and social status adversely. The ADRVs related trends which were observed in Sri Lanka are mostly equivalent to the trends observed in the world.

KEY WORDS Anti-Doping, Anabolic steroid, Athletes, Doping substances

Reference:


Physical Activity in Children Aged 8-9 Years
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ABSTRACT:
Physical activity provides significant physical, mental and social benefits. In children participation in physical activity is associated with improved musculoskeletal, cardiovascular, and mental health systems, including the reduction of anxiety and depression. The study aims to support the assessment of physical activity in school-age children. During the months of April-May 2021 we conducted a transversal study with children aged 8-9 years. A transversal (cross-sectional) study was undertaken which included primary sampling units in 16 public schools and 747 pupils. All data analysis was performed using the statistical package SPSS (Statistical Package for Social Sciences, version 20.0) and M. Office. Excel 2010. Pearson correlation coefficients were used to estimate the linear relationships of numerical variables, where they were considered statistically considerable values p≤0.05. Reported 26.1% of children are involved in physical activity 3-4 days a week. Boys do more physical activity per week compared to girls. Three in four children aged 8-9 spend more hours a week watching TV or video. In our study it was found that boys perform more physical activity compared to girls, and the level of physical activity decreases with age.

Keywords: children, social, body image, emotional wellbeing, physical activity, sedentary life.

References:

Examination of the relationship of perfectionism, pre-competitive anxiety, motivation and perceived legitimacy of unsportsmanlike behavior of basketball players

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DOI: https://doi.org/10.30472/aesa-conf.v6i1

ABSTRACT:
In contemporary sport, the role of sport psychology has been increasingly recognized as an important factor for optimal preparation of athletes. Accordingly, the importance of investigating the effect of various psychological factors on performance in sport has also been widely addressed. In the conducted research, the aim was to examine the relationship of perfectionism, pre-competitive anxiety, motivation, goal orientations, perceived legitimacy of unsportsmanlike behavior and situational efficiency of basketball players, the participants of the Croatian Telecom Premier league. The research was conducted through the following questionnaires: Exercise self-regulation questionnaire (SRQ-E)(Ryan and Connell, 1989; Silva, 2010), Task and ego orientation questionnaire (TEOSQ) (Duda and Nicholls, 1992; Moran, 2004), Questionnaire for the assessment of perceived legitimacy of unsportsmanlike behavior (Greblo, Grujić, Ohnjec, Segedi and Pedišić, 2009), Multidimensional inventory of sport excellence (Sindik, Schuster, Botica and Fikuš, 2015) and Sport multidimensional perfectionism scale (Dunn, Causgrove and Syrotnik, 2002; Sindik, 2009). The research was conducted on a sample of 150 players. It was found that the inside players have higher situational efficiency than outside players. Moreover, the players with less playing time perceived a greater pressure from their parents and the coach and are generally more concerned about the errors than their teammates with more playing time. Furthermore, the players who, besides in the home league, play in the regional one, have a greater degree of controlled regulation and higher total index of external regulation. What is more, they show greater ego orientation and achieve higher scores on the personal standards subscale (perfectionism). Moreover, significant correlations between dimensions of perfectionism, motivation, pre-competitive anxiety and perceived legitimacy of unsportsmanlike behavior were found. It was also shown that the concern about the errors, as well as the controlled regulation, are good predictors of the cognitive anxiety. Also, concern about the errors is predictor of the somatic anxiety. Moreover, it was also found that task orientation is predictor of perceived legitimacy of unsportsmanlike behavior.

Key words: perfectionism, motivation, pre-competitive anxiety, perception of the legitimacy of unsportsmanlike behavior, situational efficiency, basketball
Effects of Plyometric Training on Serve Performance of Male Adolescent Tennis Players
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ABSTRACT:
Tennis players must possess a combination of speed, agility, and power, as well as a high level of cardiovascular fitness, due to repetitive high-intensity efforts of the game. The purpose of this study was to evaluate the effects of an 9-week plyometric training (PT) combined with regular tennis training on serve performance of male adolescents tennis players. With institutional ethics approval, twenty-four adolescent male tennis players (16.01 ± 1.34 years) were randomly assigned to a plyometric training group (PG, n = 12), and a control group (CG, n = 12) before the pre-test. Both groups continued their regular technical and tactical tennis training. Additionally, PG attended plyometric training through 9-week, two days per week and two sessions (60 min, d-1) while CG restricted from plyometric training. Pre- and posttests included: anthropometric measures; Sargent jump test (SJT); Medicine Ball Javelin Quadrathlon test (MJQT); and ITN test. All the differences were considered significance 95% of confidence level (P<0.05). The “Paired T test” analysis showed significant improvement in all the parameters analyzed (P-value = 0.000). The plyometric training programme improved explosive power and serve performance of the subjects. PT has been demonstrated to be a significant stimulus for improving explosive movements in young tennis players. Therefore, PT can be recommended to the tennis players and their coaches in addition to the regular technical training.

KEY WORDS: adolescent players, tennis serve, plyometric training, medicine ball

Reference:
Effects of sprint training using a surgical mask on repeated-sprint ability in ultimate frisbee players

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Purpose: Ultimate frisbee is a high-intensity intermittent sport, in which both aerobic and anaerobic capacities are important to optimize the performance (Palmer et al. 2020). Therefore, it may be useful for players to train under hypoxic conditions. An easy and low-priced way to induce hypoxia appears to be the use of surgical masks during training (Egger et al. 2021). The purpose of this study was to analyse the effects of a 6-week sprint training program, performed with or without wearing a surgical mask during the sprinting bouts, on repeated-sprint ability (RSA) in competitive female ultimate frisbee players.

Methods: 9 elite (1st Italian league) female ultimate frisbee players were involved (age: 19.8 ± 3.0 years; height: 166.8 ± 6.8 cm; weight: 58.2 ± 6 kg). All athletes were tested 1) before (T₀) and after (T₁) a 6-week period of normal sprint training, constituted by short and long sprints performed without wearing any mask, and 2) before (T₂) and after (T₃) 6 weeks of sprint training, where training volume and exercises were identical to the previous program and the athletes wore a surgical mask during the sprinting bouts, but not during the recovery phases between sprints. A 6 x 20+20m sprinting test was performed at any time point. Velocity of the fastest sprint (RSA BEST), average velocity (RSA MEAN), and percentage decrement (RSA DEC) across sprints, were examined. Between T₁ and T₂, there was a 6-week detraining period for all athletes.

Results: At T₁, as compared with T₀, RSA BEST showed a significant (p<0.05) increase of +0.43km/h (+2.43%, ES= 0.74), while RSA DEC showed an almost significant (p= 0.06) increase of 1.01% (ES= 0.76). RSA MEAN showed no significant (p>0.05) increase 0.23km/h (+1.35%, ES= 0.42). At T₃, as compared with T₂, RSA BEST and RSA MEAN showed significant (p<0.05) increases of respectively +0.36km/h (+2%) and +0.54 (+3.17%), with effect sizes of 0.72 and 1.09, while RSA DEC showed no significant (p>0.05) decrease -1.1%, ES= 0.56. Between the two training periods, there was a significant (p<0.05) difference in the variation of RSA DEC (ES= 1.86), while no significant (p>0.05) differences were observed in the improvement of RSA BEST and RSA MEAN (ES= 0.24 and 0.77, respectively).

Conclusions: The results suggest that wearing a surgical mask during sprint bouts, and not during the recovery phase, can be an effective way to train ultimate frisbee players because, compared to standard sprint training, this methodology is able to improve RSA DEC without impairing the improvement in RSA BEST, and to improve RSA MEAN by a greater extent than standard sprint training. This could probably be due to a state of hypoxia induced by the surgical mask, that stimulates the anaerobic metabolism during sprints, while generating a great oxygen deficit that stimulates the aerobic metabolism during the recovery phase. It must be noted though that all athletes perceived higher exertion after training with mask as compared
to the standard sprint training, so the use of surgical masks during training must be planned accordingly.

KEY WORDS: ultimate frisbee, surgical mask, face mask, hypoxia, repeated-sprint ability, sprint training, team-sports, anaerobic, aerobic metabolism, competitive players

Reference:
Effects of a 6-week detraining on repeated-sprint ability and power in competitive ultimate players

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DOI: https://doi.org/10.30472/aesa-conf.v6i1

**Purpose:** Ultimate frisbee is an invasion team sport played with a plastic flying disc, requiring high levels of agility, aerobic fitness, power and repeated-sprint ability (Palmer et al. 2020). As in other disciplines, it is important to limit detraining of players during the off-season period. The purpose of this study was therefore to analyze if performing two training session per week (based on running and strength training, respectively) was sufficient to maintain the end-season repeated-sprint ability (RSA) and power levels in competitive ultimate players.

**Methods:** 11 elite (1st Italian league) female ultimate frisbee players (age: 19.6 ± 3.0 years; height: 1.66 ± 0.8 cm; weight: 58.2 ± 6 kg) and 10 sub-elite (2nd Italian league) male players (age: 21.6 ± 3.2 years; height: 1.81 ± 0.6 cm; weight: 76.6 ± 9.5 kg) were involved. All athletes were tested before (T₀) and after (T₁) a 6-week detraining period, during which they performed no field training, but one body weight strength training session (focused on power and explosive strength) and one running training session (high-intensity interval training or sprint training) per week. All athletes were tested before and after the examined period. Tests included a CMJ test, a SJ test, and a 6 x 20+20m repeated-sprint ability test, in which velocity of the fastest sprint (RSA_BEST), average velocity (RSA_MEAN), and percentage decrement (RSA_DEC) across sprints, were examined.

**Results:** At T₁, RSA_BEST and RSA_MEAN showed significant (p<0.05) decreases of -0.19km/h (-1.04%) and -0.24km/h (-1.24%) respectively, with a trivial to small effect sizes (0.16 and 0.22), while RSA_DEC (-0.2%, ES= 0.16), CMJ (+1.36cm, +4.23%, ES= 0.15) and SJ (+0.95cm, +3.04%, ES= 0.12) showed no significant changes (p>0.05).

**Conclusions:** The results suggest that performing two training sessions per week, one based on running drills (with a duration of 40-50 minutes) and one based on body weight power exercises (with a duration of 60-70 minutes), can allow to maintain fitness levels in ultimate frisbee athletes during the off-season. Remarkably, running sessions should be focused on anaerobic rather than aerobic training, as RSA_BEST and RSA_MEAN were the only parameters tested with a significant, though trivial or small, decrement. The present findings also support the hypothesis that field-based ultimate-training, mostly performed during the competitive season, tends to improve anaerobic power rather than aerobic power.

**KEY WORDS:** ultimate frisbee, detraining, off-season, running, strength training, power, explosive strength, field training, body weight, high-intensity interval training, repeated sprint ability, sprint training, squat jump, countermovement jump, end-season, fitness, competitive players, anaerobic power, aerobic power

Reference:
The Role of Physiotherapy in Psychomotor Development in Persons with Disabilities
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DOI: https://doi.org/10.30472/aesa-conf.v6i1

ABSTRACT:

Introduction People with disabilities have the same health needs as people with disabilities, they need immunization, screening, etc. But they are also more vulnerable to an illness or health problem, due to social exclusion, also because they may be more vulnerable to secondary illnesses, such as wounds or infections. Evidence shows that people with disabilities face barriers to accessing health and rehabilitation services for which they need more facilities.

Goals of Study The role of physiotherapy on patients in psychomotor development with brachial plexus.

Material and methods The study is a statistical type-series of cases-with descriptive and analytical components, based on clinical record review of 232 patients with physical disabilities presented at the National Center of Good growth, Child Development and Rehabilitation and in the Department of Obstetrics, in the Gynecological Clinic and Obstetric in Tirana during the period May - November 2021. The dates are analyzed by SPSS 20.0 statistical package. Statistics Physiotherapy was performed in 18 patients (64.3%). At the end of treatment the deformation was present in 1 (3.6%), Horner syndrome in 2 (7.1%), contracture of the shoulder and elbow in 8 (18.8%), biceps and forearm circumference and in 18 (62.9%), 5 (17.9%) and 6 (21.4% paralysis of the right was more frequent than the left). Erb paralysis consisted of 71.4% of cases. The recovery was satisfactory in most cases. Treatment Through physical therapy, manual techniques and electrotherapy.

Results 28 cases were treated and expected recovery in 15 (53.6%) of whom 9 (21.4%) had complete recovery, moderate in 10 (35.7%) and less in 3 (10.7%) cases. Most of the children (97.3%) recovered normal function of brachial plexus, except one case (2.7%). Not refer to any surgical intervention, the prognosis is positive because most of the cases have recovered satisfactorily. All children who suffered a complete recovery, 14 (38.8%) was recovered in less than two weeks. Discussion and recommendations Educating families to care that should show continuity to their children. The role of physiotherapy in psychomotor development, assisting patients during treatment. Use of manual and electrotherapeutic methods to recover lost abilities. Educate family members about the care they need to show on an ongoing basis for their children.

KEY WORDS physical disability, psychomotor development, brachial plexus damage, role of physiotherapy, rehabilitation methods.

Reference:


Effects of Exercise on labor time in Pregnant Women: A Systematic Review and Meta-analysis of Randomized Controlled Trials

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ABSTRACT:

Background: Pregnant women are most concerned about the pain and discomfort during the labor process. If the labor process can be shortened, the pain and discomfort during the process can be reduced. According to the literature, results on whether exercise can reduce labor time in pregnant women are controversial. Therefore, whether pregnant women perform regular exercise can reduce labor time needs to be further explored. Objective: To explore whether specific exercise programs can reduce the labor time in pregnant women by using systematic review and meta-analysis. Materials and Methods: Literature search using five databases was performed to search for randomized controlled trials (RCT) on the effect of exercise programs on the duration of labor in pregnant women. The data was searched through September 30, 2020. The included studies were RCTs with uncomplicated pregnant women performing exercise programs during pregnancy. A total of 289 related studies were found. After removing duplicates, review studies, and clinical trials, 9 RCTs met the inclusion criteria and was included in the meta-analysis. Results: Six studies had significant positive effect on shortening the first stage of labor in uncomplicated pregnant women after performing an exercise program, while significant effects were not found in the other 3 studies. Meta-analysis showed a significant total positive effect on shortening the first stage of labor, but non-significant total effects were found in the second and third stages of labor. The included RCTs indicated that yoga might be the most effective.

KEY WORDS: pregnant women, exercise, labor time, meta-analysis
The effectiveness of coordination exercise on cognitive function in community-dwelling older adults

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ABSTRACT:

Background: Most studies have concluded that physical activity and exercise can benefit cognitive function and can reduce the progression of cognitive decline and Alzheimer’s disease. This study aimed to explore the effect of a coordination exercise program in improving the cognitive function on the community dwelling older adults.

Methods: A non-equivalent control group with a pretest-posttest quasi-experiment design method was used. The subjects consisted of 46 adults aged 65 and older (experimental group: 26, control group: 20). The experimental group participated in a coordination exercise program for 12 weeks, for 90 mins/week. The control group received no intervention.

Results: Attention and orientation improved showed significantly (p<.05) after the 12-week intervention of coordination exercises. Non-significant changes in other areas suggest additional effects may be possible in future investigations. In contrast, there no significant pre-post differences in the control group. Comparing the progress scores across the study period, the experimental group exhibited more relative change in attention, language and abstraction dimension than counterparts of the control group.

Conclusion: Coordination exercises could be considered as a potential strategy to prevent cognitive function decline, as well as increasing exercise program diversity for older adults.

KEY WORDS coordination exercise, cognitive function, older adults
Consumer behavior of energy gel in male runners

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ABSTRACT:

Over recent years, running have become one of popular sports events. Energy gel is one of sport supplement that runners choose in the competition. Energy gel is carbohydrate supplement in semi-solid form. It contains in a small packet with a convenient and easy to carry. Most of energy gel provides high carbohydrate and other electrolytes that suitable for endurance athletes. This research has attempted to assess consumer behavior in energy gel among a sample of Thai male runners (n = 404) age between 30 – 39 years. The result showed that Thai runners consuming energy gel in various distances; Most runners consume energy gel in mini-marathon 10 km (39.49 %) follow by half-marathon 21.1 km (25.93 %), fun run <10 km (18.86 %), full marathon 42 km (10.02 %) and ultra-trail (5.70 %), respectively. Thai runners chose energy gel for various reasons for example, give rapid energy, fullness, and convenience. The duration time that runners chose to ingest gel were before the competition 49%, during the competition 43% and after the competition 8%, respectively. The most popular flavor were fruits, cola, and chocolate, respectively. Factors that influenced consumers to buy energy gels were flavor, nutrition value, and convenience. In conclusion, this study showed the energy gel consumption behavior of Thai runners and this study will be a guideline for further development of suitable energy gels for runners.

KEY WORDS energy gel, consumer behavior, runners, sports supplements

Reference:


Effect of half squat training with blood flow restriction under different external load on strength and power of well-trained volleyball players

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ABSTRACT:

Purpose: To examine the effect of blood flow restriction training under different external load on strength and power of volleyball players.

Methods: Eighteen participants were divided into 3 groups. One group (low load with blood flow restriction, LL-BFR; n=6) completed squat with 30% 1RM for 4 sets with 30 repetitions performed in the first set and 15 repetitions performed in the following 3 sets. The following two groups (high load with blood flow restriction, HL-BFR; n=6; high-intensity resistance training, HI-RT; n=6) completed squat with 70% 1RM for 4 sets with 8 repetitions. Each set was separated by 60 seconds of rest.

Results: 1) There was no significant difference between LL-BFR and HI-RT on strength and vertical jumping (P > 0.05). 2) Under the same arterial occlusion, compared with LL-BFR, HL-BFR can significantly increase strength and power (P < 0.05); 3) Under the same heavy external load (70% 1RM), there was no significant difference between HL-BFR and HI-RT on strength and power (P > 0.05).

Conclusion: The effect of LL-BFR on strength of volleyball players can achieve the same effect of HI-RT. Under the same arterial occlusion, in a certain range, the higher the external load, the better the effect on strength and power; Under the same heavy external load, the effect of blood flow restriction resistance training on strength and power is equivalent to that of no blood flow restriction resistance training.

KEY WORDS: volleyball players, blood flow restriction, strength, power

Reference:


The effect of Oral exercise on neurodegenerative diseases via alter cerebral blood flow

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ABSTRACT:

Oral exercise could significantly enhance the bite force and tongue strength by improving the masticatory function. The effects of oral exercise on the brain structure and function have numerous mechanisms. However, we focused on the effect of brain blood flow. Due to increase of cerebral blood flow (CBF), elders can prevent cognition impairment and neurodegenerative diseases. During mastication, the stimulation on alveolar baroreceptors and dental baroreceptors increasing blood supply in the brain. This will affect the baseline of cerebral blood flow resulted improved levels of brain-derived neurotrophic factor (BDNF) and catecholamine, which will increase neurogenesis and neuroplasticity in the dentate gyrus markedly. Furthermore, it will reduced inflammation and hippocampal Aβ deposits in the brain. Chewing exercise may have greater impact on occlusal force and masseter muscle thickness in elderly individuals. It also had positive effects on mood, reaction, and concentration as well as with the improvement of the learning ability. However, there still need more studies to elucidate underlying mechanism. Oral exercise is necessary for prevention of dementia, dysarthria, and apraxia etc. Therefore, promote and wide spread this kind of exercise program in nursing home or long-term care facility is worthy and important in the future.

KEY WORDS Oral exercise, cerebral blood flow, neurodegeneration
The influence of performance indicators in the passing action between the passer and receiver in football

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ABSTRACT: Football involves a direct confrontation between two teams (cooperation and opposition), with a specific objective, to score a goal. The pass is the technical offensive action that creates a connection between two players of a team, through the concession of the ball by means of a touch. The aim of the study was to analyse the passing action in terms of the trajectory of the receiver of the ball and the space of reception of the ball in terms of the success in finishing the play. Twenty LaLiga 2018/2019 matches of two elite teams were analysed. A notational analysis system was used to create 11 categories based on context, timing and pass analysis. The data were analysed using chi-square analysis. The results indicated that the main performance indicators were pass efficiency, field zone, receiver trajectory and ball reception spacing, which were moderately associated with the end of the play (p < 0.001). We concluded that receiving the passes in separation and approach improved the probability of success by 7% and 5%, respectively, and making a diagonal run to receive increased the probability by 7%. Furthermore, the combined analysis of these variables would improve team performance.

KEY WORDS effective indicators; performance analysis; tactical behavior; elite soccer
A brief analysis of the main court competitive sports in qing Dynasty --
Take the Four Things of The Feast as a starting point

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ABSTRACT:
In the process of historical development, sports culture was integrated with history, reflecting the political, economic, diplomatic and other aspects of the society at that time, and sports gradually became a "living fossil" of culture. In the qing court, people enjoyed the fun brought by fierce confrontation and competition through competitive sports activities. In addition, influenced by politics, economy and other factors, some large-scale competitive sports appeared in the qing court. As a part of the qing dynasty court culture, the birth of competitive sports in the Qing Dynasty court created the historical precedent of the feudal rulers of "sports stage, political play". If we can look beyond sports and take on political mission and social responsibility, it is of great significance to people in today's world. Italian missionary, painter in qing dynasty lang shining do feast plug figure four things, into the picture time is about qing qianlong 25 to 28 years, painting depicts emperor qianlong in "mulan autumn rh" after the banquets held when the Mongolian aristocrats "four" (competitive sports activities), now in the Palace Museum in Beijing, the event lasted 140 years. In this study, literature review and historical research methods are used to analyze the "four things about stuffing feast". By summarizing the contents and forms of Shi bang (Mongolian music), Buku (Wrestling), Trick horse (Horse racing), Jiaotiao (Horse training), and Hunting, Bing xi (Ice sports) and other major court competitive sports in the Qing Dynasty, it is found that the court competitive sports in the Qing Dynasty have the characteristics of majesty, entertainment, fitness, trend, education, inclusiveness and stage. The significance of selecting talents, serving in politics and military affairs, promoting foreign exchanges and promoting the dissemination of sports culture. At present, some suggestions are put forward for its inheritance and development: selective inheritance and promotion of excellent court competitive sports culture; Excavate diversified function deeply, promote the development of youth sports; Develop corresponding sports economy and form industrial chain.

KEY WORDS Physical activity; Feast four things diagram; Qing dynasty. The court; Athletics;

Reference:


ABSTRACT:

The disabled are an important part of the country and society, because they have certain particularity, so as to do a good job in the protection and services for the disabled, so that the majority of the disabled group effectively enjoy social care, which is the outcome of national development is also an important symbol of social civilization and progress. Sitting volleyball movement originated in the Netherlands in 1956, to meet the needs of the disabled community fitness and to participate in volleyball and founded, sitting volleyball team of China in recent years has made great achievement in the international competition, but influenced by multiple factors, with the development of the project, the team scores decline, public participation decline, the lack of related research issues highlighted, for this, it is worth studying in related fields. In recent years, core stability training has become an important part of competitive sports training, and has achieved fruitful results in competitive sports. The research on core stability training is mainly focused on able-bodied sports, while the research on sports and skills training for the disabled is less. This study uses the method of literature, expert interview, experimental method, mathematical statistics and other methods to study the combination of core stability training and volleyball frontal spike technology, to explore the impact of core stability training on volleyball frontal spike aerial action. In the experiment, 20 Men's provincial team sitting volleyball players were selected as experimental objects, and they were divided into experimental group and control group, for 12 weeks of training, the experimental group for core stability training, the control group for routine training. After 12 weeks of experiment, the results were as follows: 1. The core stability and core explosive power of experimental group were significantly enhanced (P<0.05), while the core stability and core explosive power of control group were not significantly enhanced (P>0.05). 2. In the experimental group, the increase of core stability and core explosive force changed the joint Angle when hitting, and the angular displacement of hip joint, shoulder Angle and trunk Angle significantly increased compared with before (P<0.05), and the swing speed significantly increased (P<0.05); In the control group, there were no significant changes in hip joint Angle, shoulder Angle and trunk Angle (P>0.05), and no significant changes in arm swing speed (P>0.05). 3. In the experimental group, at the moment of hitting, the speed of shoulder, elbow and wrist of hitting arm increased by nearly multiple, indicating that the transmission efficiency of force from the core to the extremity was significantly improved; In the control group, the speed of the shoulder, elbow and wrist of the hitting arm did not increase by nearly multiple at the moment of hitting, indicating that the transmission efficiency of the force from the core to the extremity was not significantly improved. Conclusion: In the sitting volleyball training, the core stability can improve the athletes' spiking action and enhance the spiking effect. Suggestions: 1. The time of the study is short. If the experiment is carried out for a long time, the results will be more convincing and have greater reference value. 2. This study is only a preliminary attempt for the core stability training method of sitting volleyball players. In the later stage, athletes of different ages, genders and training years can be studied to provide a better reference for sports teams. 3. Both core stability training and traditional strength training have their own advantages and disadvantages. They should use their advantages to jointly serve special strength training and selectively conduct core stability training according to the characteristics of the project.

KEY WORDS Core stability training; Sitting volleyball; Spike

Reference:


Theory and Practice of Ideological and Political Design of Specialized Physical Education Course ——Take Volleyball Special Training Practice and Theory as an example

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ABSTRACT: Objective: to deeply explore the ideological and political elements of the professional sports, take the sports culture as the starting point, refine the sports spirit and strengthen the cultural construction of sports. Methods: This paper mainly adopts the methods of literature, behavior research and expert interview, takes the theory and practice of Ideological and political design of sports special courses as the research object, and deeply excavates and analyzes the coincidence between sports special training courses and the ideological and political elements of "physical education spirit" according to the curriculum characteristics of sports special training courses, Combined with the concept of "curriculum thinking and politics" and the outline of various special training courses of physical education, the special training courses of physical education integrating "sports spirit" are redesigned. Research content: Taking the ideological and political elements of "The Spirit of Chinese Women's Volleyball Team" integrated into the volleyball special training course of Beijing Sport University as an example, this study first analyzes the ideological and political elements in the course, and then practices these spirits into the course, so as to play the leading role of the demonstration course for the ideological and political courses of other brother colleges and universities, and guide volleyball professional athletes to take the lead in inheriting the red gene of sportsmen, Inherit the red sports culture and enhance the cultural self-confidence of sports people. Conclusion: when integrating the ideological and political content into the curriculum, there should be strategies to improve the professional teachers' awareness of Ideological and political education and optimize the teaching content; Innovative teaching methods and strategies to stimulate students' subjective initiative; Institutionalized design and strategies to highlight the teaching effect. At the same time, we should abide by the principle of combining physical education with education when integrating physical education spirit into the curriculum; Adhere to the principle of step by step; Adhere to the principle of appropriate integration and implement the fundamental task of Building Morality and cultivating people in the classroom.

KEY WORDS: University; Volleyball special training course; Women's volleyball spirit; instructional design

Reference:

The effect of rapid power squat training on the jumping ability of professional female volleyball players

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ABSTRACT:

Purpose: To test the role and effect of fast power squat training in improving fast power and vertical jump touch performance of volleyball players by comparing the experimental results of maximal power squat training in the control group, with the aim of enhancing volleyball players' bouncing power by improving their fast power.

Methods: Twelve professional female volleyball players were selected and divided equally into two groups. The traditional maximum strength squat training (N=6) used the method of incremental %1RM to set the load, and the fast strength squat training used the method of controlled speed to set the load. Results: 1) Both fast power squat training and maximal power squat training significantly improved the performance of professional female volleyball players in longitudinal jump touch height (P<0.01), and there was no significant difference between the two training methods after 8 weeks of experiment (P>0.05). 2) Fast power squat training had a significant difference in the number of 30-second repetitive squats after the experiment (P<0.05). 3) Maximal power squat training showed a highly significant difference in the number of 30-second repetitive squats after 8 week experiment showed a highly significant difference in maximal strength after the experiment (P<0.01). Conclusion: 1) Fast power squat training method is more effective in improving the performance of professional female volleyball players in longitudinal jump and touch height compared to maximal power squat training method. 2) Traditional maximal power squat training is a more suitable training method to improve maximal power, but it focuses more on the increase of absolute muscle strength and is subject to a higher risk of injury. The risk of injury is greater. Long-term use of maximum strength training method training, maximum strength training to improve the efficiency will be reduced.

KEY WORDS Jumping power; Physical training; Fast power; Maximum strength

Reference:

Association Between Oral Exercise, Chewing Dysfunction, and Spatial Memory Impairment

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DOI: https://doi.org/10.30472/aesa-conf.v6i1

ABSTRACT:

Background and Motivation: In worldwide, approximately 35.6 million people with dementia and the victims are expected to increase to over 115 million by 2050. Alzheimer's disease (AD) is the most common neurodegenerative disorder that produces dementia. Teeth health affects mastication, overall nutrition and general health, including cognitive function. Tooth loss is associated with an increased risk for obesity, diabetes, cardiovascular diseases, certain types of cancer, and AD in adults. Growing researches focus on the relationship between dental health and cognitive function. However, the molecular pathogenesis association between tooth loss and AD is still unclear. One hypothesis indicates that chewing muscle training can improve chewing ability, which can maintain the cognitive function of spatial memory. Molars are strongly associated with chewing ability. Previous studies found that dysfunctional mastication causes deficits in spatial memory, with various pathological changes, such as degeneration of hippocampal CA1 pyramidal cells and reduction in the number of hippocampal CA1 dendritic spines in the aged mice. This systematic review aimed to identify, appraise and synthesise studies of molarless-induced pathological changes of hippocampal pyramidal cell dendritic spines, furthermore, we focus on a special animal model of SAMP8 (Senescence accelerated mice P8).

Methods: Database searching include: Ovid-Medline, CINAHL, ProQuest, Pubmed, Airiti Library, and CNKI search engine. In our study, we just focus on a special animal model of SAMP8 (Senescence accelerated mice P8). SAMP8 mice were used in this study. The Morris water maze test was performed as described previously after exposure to the enriched environment for 3 weeks. We examined the effect of the molarless condition on the dendritic spines of hippocampal pyramidal cells in SAMP8 mice in comparison to its effect on learning ability in a maze test.

Results: Molarless-induced pathological changes of hippocampal pyramidal cell dendritic spines may advance the age-related decline in learning and memory—the involvement of the molarless condition in attenuation of input activities in the hippocampal synapses.

Conclusion: Using oral exercise to enhance related muscle function and coordination ability can train chewing ability and prevent oral weakness, and reduce the probability of dementia.

KEY WORDS: Oral exercise, Chewing ability, Hippocampus, SAMP8, Morris water maze test
A Review on Aquatic Exercise in Patients with Knee osteoarthritis

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Abstract:

Knee osteoarthritis (KOA) is a degenerative joint disease and is the most common joint disease. KOA is an important cause of functional limitations and pain in adults. Obesity is a risk factor for osteoarthritis, and due to pain and stiffness, most KOA patients are less active and are often obese, and have poor muscle strength. Different treatments for this disease have been studied, the most important of which are surgery, medication, and physiotherapy. Surgery for osteoarthritis of the knee is used in the final stages and has a high cost. Drug therapy has many side effects because many patients with osteoarthritis of the knee have other internal diseases at the same time and are often obese, so they are less tolerant of the drug and have many side effects. One of the best treatments for patients with osteoarthritis, especially in the mild and moderate stages is physiotherapy and its supplement, exercise. Various exercises have been studied to treat patients with KOA and to prevent mild to moderate cases from becoming. The most important exercises to treat this disease are aerobic, water sports, and balance exercises such as yoga and tai chi.

There is no significant difference between exercises and most patients benefit from different types of exercise because it was found that the quality of life and improvement of pain and stiffness in all groups that exercised was better than the control groups.

In this review study, several articles were studied on the effect of water exercise on KOA disease. In most studies, no significant difference was observed between Aquatic exercise and land-based exercise. One of the most important benefits of Aquatic exercise in patients who are candidates for Total Knee Arthroplasty is that 4 to 8 weeks of water exercise significantly improves postoperative results and depression. It also lowers postoperative blood pressure.

Exercising in water improves pain and improves the quality of life, and counteracts muscle weakness. Several studies have found that Aquatic exercise has fewer side effects than other sports. Exercising in the water reduces pain and disability compared to regular care and not exercising, and improves physical function. Aquatic exercise, like other sports, should be done at least 8 to 12 weeks regularly at least 3 times a week and one-hour session to see positive results.

References:

A Review on Different Approaches to Doping in Sports and Anti-Doping Policies

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Over the past decades, there has been an increase in the rules and protocols which help sportsmen play fair and make sure every athlete has an equal opportunity in the competitions. The International Olympic Committee (IOC) started to set rules against doping in 1961, by letting out a list of prohibited substances and methods during or out of the competitions, such as blood infusions, gene doping, and the use of performance-enhancing drugs (PEDs). In 1999 the World Anti-Doping Agency (WADA) was also created by the authorities, which later on, let out the World Anti-Doping Code to systemize the regulations against doping. The Code was first published in 2002. The two main reasons for the anti-doping policies are the health of the competitors, and to ensure that all the competitors are equal in sports events. Although eliminating doping in sports would be unreachable, the main goal should be to control the behavior. In this article, we intend to review the development of anti-doping policies and different approaches to doping in sports and also explore related cases.

KEY WORDS: Anti-Doping, Sports, WADA

Reference:

Investigation on Professional Paid Social Practice of Physical Education Students in Beijing Universities

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ABSTRACT: Social practice is one of the educational activities to cultivate students in colleges and universities, and it is an important way for contemporary college students to contact the society, increase their talents, understand the national conditions, cultivate their character, enhance their will and improve their social responsibility. Sports is a theory closely related to practice, requires students must have the ability to transform theoretical knowledge into practice, physical education professional more and more students in spare time spontaneously participate in various forms of professional paid social practice, which can not only promote the development of social sports, at the same time physical education students in the process of practice, constantly enrich their social experience, improve professional quality.

This paper takes the current situation of professional paid social practice of physical education students in Beijing universities, and investigates the physical education students in four Beijing universities by literature data, questionnaire survey, interview, mathematical statistics and logical analysis. The research conclusions are as follows:

1. The participation and cognitive status of professional paid social practice in Beijing University accounts for the highest proportion, higher graduate students than undergraduates and boys higher than girls. The acquisition of information mainly comes from the introduction of classmates or friends and network information, with relatively few ways.

2. The working institutions of physical education students in Beijing universities are mainly universities, primary and secondary schools, outdoor development training institutions, entrance examination for secondary school or college sports training courses and gyms. The main type of work is physical education teachers, referees, coaches, etc. The main projects are mainly three balls, track and field, badminton.

3. With the increase of physical education students in Beijing universities, the improvement of professional knowledge, professional skills and abilities in all aspects, and their salary increases with the increase of grade. From the perspective of the difference between boys and girls, the income of boys is higher. There is no big difference between students' colleges and universities.

4. Beijing university physical education students professional paid social practice value orientation, it is very important to improve the teaching level, rich teaching experience value
orientation and value orientation for the purpose of employment, it is important to understand the social, improve the social adaptability value orientation, to expand the scope of communication, accumulate human value orientation and earn money for the main purpose of value orientation, shows that students to participate in professional paid social practice goal is very clear.

**KEY WORDS** Beijing universities; physical education major; paid social practice;

Reference:

Effect of unstable training on balance ability and ankle joint proprioception of volleyball students

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ABSTRACT:

Volleyball as a skill leading type of separate net antagonistic project, a number of technologies need athletes to jump to complete, which undoubtedly brings a large load to the body's joints, and in the state of fatigue, the athlete's emergency stop, rapid change to move will greatly cause joint damage Good joint proprioception function and balance ability play a crucial role in maintaining the stability of body posture, which can effectively reduce the acute injury caused by the spatial position change of body posture in the process of exercise. However, in the current training, the coaches focus on how to improve the offensive and defensive ability, and do not pay enough attention to the training of preventing joint injury and enhancing joint stability. If there is injury, the training effect and competitive ability of athletes will be greatly affected.

The purpose of this study is based on the volleyball students training in routine training to increase the stability, will explore the unsteady training for volleyball the balance ability of students and ankle proprioception function, so as to enhance volleyball students in the process of movement's ability to maintain a stable posture, reduce the risk of injury. This paper uses documentary expert interview method, Questionnaire survey method, mathematical statistics and experimental method to Beijing sports university education college class of 2019 men's volleyball special class 16 players as experimental object, randomly divided into experimental group and the control group, each group of eight people, in the experimental group for 8 weeks unsteady control group for 8 weeks the normal balance of training, training before and after the experiment respectively on two groups of subjects of ankle proprioception Static balance ability and dynamic balance ability are tested and analyzed, and the following conclusions are drawn:

(1) Unsteady training for the location of the plantar flexion of ankle joint varus outer movement has significant positive influence, has a positive effect on dorsiflexion movement but not significantly, with the raised under the imbalance of the muscle group and the activation degree of the nervous system, under the imbalance body forward actively, leading ankle dorsiflexion movement to smaller activation degree of the tibialis anterior muscle and muscle fibers to raise fewer.

(2) Unsteady training for volleyball students ankle proprioception function improvement of have obvious effect, after standing on one foot Swan to balance this kind of static movement, unstable plane makes body shaking, proprioceptive sensitivity joints and nervous system control of the muscles are enhanced, prompting of volleyball rapid change in the joints and muscles to move The perception of spatial position changes in the form of take-off and landing is enhanced, and the risk of injury caused by spatial position changes is reduced.
(3) The unstable training of volleyball students' static balance ability has been significantly improved, in the unstable plane to complete the static movement of the center of gravity is not stable to stimulate the deep more core muscle group to participate in the work, enhance the core stability of the trunk, to ensure the stability of the body posture to lay a good foundation.

(4) According to the experimental results, it can be found that the dynamic balance ability of volleyball students has been significantly improved, and they can complete lunge and knee lifting with one foot and four-way ground in unstable state. The dynamic exercises such as standing on one foot bent over the little motor neuron was first raised, the small muscles around the ankle was drastically, ankle proprioception function of ascension can effectively improve proprioception system's ability to control body movement, the muscle coordination in the movement to maintain body balance in volleyball has a crucial impact on fast attack and defense conversion.

**KEY WORDS**: Unsteady training, Proprioception, Balance Ability, Volleyball Major student

Reference:


Analysis of spike attack tactics in the final of the Chinese women's volleyball Super League from 2020 to 2021

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Abstract:
The 2020-2021 China Women's Volleyball Super League will be held at the Jiangmen Sports Center in Guangdong Province from November 8 to December 19, 2020. It is the premier competition of high-level teams in China, which can be called the “fight of the gods”. Tianjin Bohai Women's Volleyball team won the gold medal and Jiangsu Zhongtian Iron and Steel Women's Volleyball team took the second place, both of which supplied a large number of players to the national team. This paper takes the attacking tactics of spiking in the three finals between Tianjin Bohai Women's Volleyball Team and Jiangsu Zhongtian Iron and Steel Women's Volleyball Team in the 2020-2021 China Women's Super League as the research object, studies the attacking tactics of spiking of the two teams, which is helpful to improve the attacking tactics of spiking of the two teams. This paper will use literature method, video observation method, mathematical statistics method, comparative analysis method and logical analysis method to deeply explore and analyze the application of the attacking tactics of the smash in the three matches between Tianjin Bohai Women's Volleyball Team and Jiangsu Zhongtian Iron and Steel Women's Volleyball Team in the 2020-2021 China Women's Super League final. To understand the advantages and disadvantages of the spiking attack of Chinese women's volleyball team in the highest level competition, to provide theoretical reference for further perfecting and optimizing the tactical attack combination of the two teams and improving the attack quality, and to put forward feasible suggestions for the existing problems.

KEY WORDS: Chinese Women's Volleyball Team, Super League, spike attack tactics analysis

Reference:

On the development of volleyball from the change of Volleyball Rules

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DOI: https://doi.org/10.30472/aesa-conf.v6i1

ABSTRACT:

It has been 127 years since the emergence of volleyball. From the original sport for the entertainment of the elderly, it has developed into a collective sport with influential international events on all continents. It has a large family of volleyball, including indoor volleyball, beach volleyball and snow volleyball. With the increase of the number of volleyball participants and the expansion of the scope of popularization, the development of volleyball rules follows closely. The rules carry the function of standardizing volleyball behavior and ensuring the fairness and smooth progress of the game. Different periods and regions have their own rules with their own characteristics. After the establishment of the International Volleyball Federation in 1947, the rules of international events were formulated uniformly. After the establishment of the International Volleyball Federation, the rules had been revised many times. The main basis for each revision is to promote the development of volleyball. The development of volleyball has become more and more mature, but in the era when the third technological revolution is coming, the direction in which volleyball should further develop and adapt to the epoch is a question worthy of our consideration. Taking history as a mirror and creating the future. By reviewing the evolution process of volleyball rules in the past century, I believe we can find the answer.

KEY WORDS: volleyball rules, history of volleyball, development of volleyball, Sports events

Reference:

Investigation and research on extracurricular physical exercise of high school students

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DOI: https://doi.org/10.30472/aesa-conf.v6i1

Abstract:

As an important part of the healthy development of middle school students' physical education, extracurricular physical exercise is an indispensable existence in the development of school sports. As an extension outside the classroom, extracurricular physical exercise plays an important role in cultivating students' lifelong sports awareness. This paper mainly uses the questionnaire survey method to analyze the differences in the main motivations, sports items and organizational forms of high school students participating in extracurricular physical exercise, and analyzes the factors that affect the physical exercise behavior of high school students. Through the investigation of high school students in school, this topic analyzes the current situation of extracurricular physical exercise, and puts forward feasible methods and suggestions, so as to make the extracurricular physical exercise of high school students get better development. The analysis shows that there are many motivations for students to participate in sports, mainly including physical exercise and leisure and entertainment, because they believe that appropriate sports activities are conducive to strengthening the body, preventing diseases, and pleasing the body and mind. Students still do not pay much attention to extracurricular physical exercise. The "National Fitness" plan has been promoted and implemented in the whole society. With the help of social influence, schools, parents and students can fully realize the importance of exercise and the need for sports development. Sex, to prevent the rigidity of thinking.

Key words: extracurricular physical exercise; high school students; investigation and research

References:


The study of Partnership in Chinese DanceSport Couples
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ABSTRACT:
Dancesport is a kind of male-female partner dancing. Its vital to understand Partnership between them so that athlete couples’ competitive performance can be effectively supported. However, there is a dearth of empirical research in the relationship between dancesport partnership and competitive dancing due to a lack of developmentally appropriate assessment tools. This multi-study paper outlines the development, content and construct validity of a novel, mixed-method tool to assess Chinese Dance Sport Partnership. The development of the PS-CDSC included 3 stages and data from four samples of athletes (N=914 total). In stage one, outlined in study one, PS-CDSC items were generated and then refined using feedback provided by academics, sport coaches, and athletes. In stage two, outlined in studies two and three, exploratory factor analysis, confirmatory factor analysis, and exploratory structural equation modelling techniques were used to examine the structure of PS-CDSC items. In stage three, outlined in study four, discriminant validity was assessed by estimating the nomological network of relations between test scores on the PS-CDSC. The result of this process was a 13-item five-factor instrument that shows evidence of good factorial validity. Based on these initial findings, the PS-CDSC provides the first valid and reliable way of measuring athlete-athlete relationship in sport. This study has taken a promising first step in developing a tool to comprehensively measure Chinese dance sport partnership.

KEY WORDS : Chinese dancesport couples, partnership

Reference:
Comparative analysis on the offensive and defensive effects of the auxiliary offensive players in the final four teams of the 2019 Women's Volleyball World Cup

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Abstract:

To understand the Chinese and foreign women's volleyball team had member technique features, and had the players in different positions and different block cases smash attack effect were analyzed, find the gap with the Chinese women's volleyball players had opponents, analyze its reasons, in order to further improve the women's volleyball team had team offensive and defensive ability and the score level scientific and reasonable Suggestions are put forward. Paper through women's volleyball World Cup semi-finals in 2019 had team in the offensive and defensive technology using the analysis of the effect of China, the United States, Russia and Brazil through the literature material law, video statistics, logic analysis, statistical analysis, mathematical statistics method to the Chinese and foreign women's volleyball team had players with other opponents in the main body quality indicators serve characteristics and effect and smash way and the effect and the blocking effect analysis, find out the Chinese women's volleyball team in these areas with foreign women's volleyball team, to find the countermeasures and Suggestions of improve the effect of attack tactics had players. The conclusion is as follows:

(1) The height, spike height and block height of the Chinese women's volleyball team are all higher than the average, and the physical indicators are better than the opponent's attack..

(2) The secondary attack of Chinese women's volleyball team mostly uses the floating ball and jump serve in place. The quality of the secondary attack of Chinese women's volleyball team is obviously better than that of its opponents. But there are also serves on the self-loss, unstable..

(3) The auxiliary attack of Chinese women's volleyball team has many lines of attack, and the attack is flexible and changeable and the position is scattered.

(4) In the back row defense aspect, our country assistant spiker still has the limitation, for the opponent hits to come over some heavy spike ball and the ball that hangs the heart is difficult to prevent.

Key words: 2019 Women's Volleyball World Cup; An auxiliary offensive player; Offensive and defensive

Reference:


The Research on the Teaching Ability of Students Majoring in Volleyball of Physical Education in Beijing Sport University

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Abstract:

In order to give full play to the physical education students "a multi-skilled" advantage and find out their shortcoming through self-teaching ability, we can make students major in physical education have a deeper understanding of self-teaching ability. Among the previous studies on the teaching ability of physical education major, there is rare research on the teaching ability of undergraduate students major in volleyball. In order to adapt to the development of modern society and meet the needs of the development of physical education, it is necessary to strengthen the reform of volleyball curriculum, the renewal of teaching content and the improvement of teaching methods, so as to train physical education professionals with modern educational concepts, professional ethics and basic professional knowledge and skills to serve basic education. Teaching ability is the most basic quality of students majoring in physical education. Scientific and accurate evaluation of the teaching ability of students majoring in physical education will help students improve their teaching ability comprehensively and make preparations and accumulation for future teaching work. Many domestic scholars mostly carry on the correlation research to the physical education major teaching ability, but the research on the undergraduate volleyball teaching ability is not very rare. Therefore, the thesis of Beijing sport university sports education professional volleyball teaching ability of students to study, through understanding their own teaching ability and put forward effective countermeasure, in view of the lack of overall effective improve their professional knowledge and can guide the student to the teaching ability, for teachers of physical education professional volleyball in the cultivation of students to provide certain reference value. Therefore, the paper will adapt the questionnaire survey method to analyze the data; the internship units think that there is a better general evaluation in the Beijing Sports University of physical education professional 2019 class volleyball students. Teachers and students recognize the demonstration ability by the interns; the planned teaching documents are fairly standardized, which basically meet the teaching practice requirements. But the ability to reflect on unexpected events and problems in the classroom is poor. Interns need to pay attention to the ability of correction and encouragement and organizational management, and need to further improve the self-evaluation ability and teaching and reconstruction ability. From the ranking of the importance of the internship teaching ability indicators high to low, the first five is grasping the key and difficulty of teaching, clearing teaching objectives, classroom organization, choosing the teaching methods and means, and writing teaching document. This article USES the literature material method, and contrast analysis method, mathematical statistics method, questionnaire survey, in Beijing sports university sports education professional volleyball students teaching ability as the research object, 19 in Beijing sports university volleyball interns as experimental object, through questionnaire survey, students of Beijing sport university sports education
professional volleyball teaching ability to analyze and explore, The following conclusions are drawn: 1. The internship unit thinks that the volleyball interns of the PHYSICAL Education major of Beijing Sport University have good preparation ability before class, can understand the teaching concept of physical education, and can formulate standardized teaching plan files, basically meeting the requirements of teaching practice. 2. The internship unit thinks that the volleyball interns of The Physical Education major of Beijing Sport University have the best classroom teaching practice ability overall. Interns' ability of explanation and demonstration has been recognized by instructors and students, but their ability of correction and motivation and organizational management need to be further improved. 3. The internship unit thinks that the volleyball interns of The Physical Education major of Beijing Sport University are relatively poor in after-class evaluation ability, and their abilities in self-evaluation, classroom emergencies and handling, problem reflection and teaching reconstruction need to be valued. 4. According to interns, the importance of teaching ability indicators is ranked from high to low, and the top five are grasping the key points and difficulties of teaching, clarifying the teaching objectives, classroom organization, selecting teaching methods and writing teaching documents.

**Key words:** physical education; volleyball special students; teaching ability

Reference:


Feasibility study of volleyball teaching club in primary and secondary schools in Shandong Province

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ABSTRACT: “Education without physical education is incomplete, and physical education without education is not solid.” Under the general trend of deepening the integration and in-depth development of physical education, volleyball teaching in primary and secondary schools actively carries out innovative exploration of ideas, ideas and practice, so as to fully release the potential power of volleyball teaching club. Based on the field investigation of more than 50 primary and secondary schools with volleyball characteristics in Shandong Province, combined with coach interviews, this paper analyzes and considers the existing conditions, challenges and expected results of volleyball clubs in primary and secondary schools in Shandong Province from the aspects of ideology, resource allocation, working measures and mechanism guarantee, so as to face the difficulties and pain points of “the last mile” of sports and education integration. Put forward a series of reasonable suggestions that comprehensively consider the factors such as campus environment, academic pressure and parents’ mentality, in order to give full play to the role of sports in promoting the all-round development of students through Volleyball Teaching Clubs, and cultivate the spirit of unity and cooperation and the willful quality of tenacious struggle of students, Lay a solid physical and mental foundation for cultivating Chinese youth with ideals, skills and responsibilities in the new era.

KEY WORDS: Integration of sports and education, campus volleyball, club, feasibility

Reference:
Effects of Plyometric Training on Vertical Jump Performance of Volleyball Players: Meta-Analysis of Randomized-Controlled Trial

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ABSTRACT:
Volleyball is a very explosive and fast-paced sport in which plyometric training is widely used. Purpose: This meta-analysis aimed to assess the effects of plyometric training (PT) on volleyball players’ vertical jump performance (VJP), comparing changes with control group. The emphasis is on the search was on interventional studies in which volleyball athletes of experimental group underwent a plyometric program. Method: A literature search was conducted according to the preferred reporting items for systematic reviews with meta-analyses (PRISMA) guidelines using PubMed, EBSCO, Web of Science, CNKI, Wanfang, Weipu for articles published no later than December 2021. Inclusion criteria: 1) PT was the intervention of the experimental group; 2) at least one control group; 3) the subjects were healthy volleyball players; 4) VJP as an outcome variable. To the 1195 articles found, another one were added, identified through other sources. Duplicated files were removed, titles and abstracts were screened, which left 11 remaining studies for systematic analysis. Only randomized-controlled trials studies that included post interventions assessment of VJP were included. Moderator analysis considered include training frequency, training period, participants’ sex, and age. Effect sizes (ES) of each intervention were calculated and subgroup analyses were performed. This meta-analysis provides effective evidence from multiple perspectives. Result: plyometric training can effectively improve the performance of volleyball players vertical jump. Nevertheless, more studies are needed to better research the benefits of plyometric training in volleyball players’ performance.

KEY WORDS: plyometric training, volleyball player, vertical jump, Meta-analysis, RCT

Reference:

The significance of promoting gas volleyball to the construction of sports power

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ABSTRACT:
As one of the most popular sports events in China, air volleyball has the diversified functions of improving people's health level, carrying forward the spirit of women's volleyball, promoting the development of sports industry and strengthening social and cultural exchanges, and undertakes the important mission of developing sports for all and building sports power in China. Studies have proved that regular practice of air volleyball can effectively improve human health. Gas volleyball entertainment, mass, fitness, so that it has a wide range of adaptability, the significance of promoting gas volleyball is also to promote the development of sports industry, promote social exchanges; Thus cultivate people's collectivism spirit, conducive to social unity and harmony. Therefore, it is of great strategic significance to actively promote the sport of air volleyball.

KEY WORDS: Air volleyball, sports power, promotion

Reference:
Research on evaluation Index construction of Volleyball Students' administrative competence in physical education colleges

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ABSTRACT:

With the enhancement of my country's comprehensive national strength, sports are becoming more and more important in people's daily life. The development trend of contemporary volleyball is getting better and better, and the society's attention to volleyball is gradually increasing. Nowadays, there are more and more volleyball events, and the demand for volleyball referees is gradually increasing. A young and energetic referee team with refereeing ability is an important way to promote the vigorous development of volleyball. As an important position for the cultivation of outstanding sports talents, sports academies should make full use of resource advantages to cultivate students' refereeing ability, and bring out the professional skills and theoretical knowledge learned by volleyball students in sports academies.

The research object of this paper is the construction of the evaluation index of the refereeing ability of volleyball students in sports colleges. The experts surveyed in this paper are some domestic volleyball referees at the national level, as well as some volleyball experts and professors in various sports colleges. The subjects of the student survey are volleyball students in sports colleges. Using research methods such as expert interviews, questionnaires, Delphi method, mathematical statistics, and analytic hierarchy process, the evaluation index system of volleyball college students' refereeing ability is constructed, and the following conclusions are drawn:

1. Combined with the results of the expert questionnaire, an evaluation index system for the refereeing ability of volleyball students in sports colleges was finally constructed. There are 3 first-level indicators, namely moral quality, basic business ability and physical and psychological quality; 8 second-level indicators; 33 a three-level indicator. The entire evaluation index system has a clear logical relationship, interrelated and progressive, which can more systematically reflect the relevant requirements of the volleyball students' refereeing ability in sports colleges.

2. The evaluation index system of volleyball students' refereeing ability constructed in this study was confirmed after communicating with many experts and teachers in this field. Its various requirements are in line with sports evaluation rules and statistics, and the distribution of the weights of each index is also more reasonable. Therefore, the index system constructed in this study is scientific and objective. Experts from sports institutes and some domestic referees believe that the evaluation index system is highly operable, and can faithfully reflect the basic quality and ability level that sports college volleyball students should have in the refereeing process.
3. The weights of the three first-level indicators in this study are Professional ethics (0.2777), basic business ability (0.3882), physical and psychological quality (0.2230) in descending order. From the data I got, it can be seen that for an excellent college referee, the primary task is to be proficient in the rules and to lay a solid foundation for himself through continuous learning. Secondly, "taking the referee's work seriously" is the basic quality that an excellent referee must have, and other abilities can be said to be the icing on the cake. However, the basis for achieving these abilities mentioned in the indicator system is to learn more, practice more, and accumulate more, so as to truly change from quantity to quality. Practice is the only way to high-level referees.

4. The evaluation index system of volleyball students' refereeing ability constructed by sports colleges and universities can provide certain suggestions and references for related sports colleges and universities in cultivating college volleyball referees, and to a certain extent, it can also provide reference for the realization of refereeing in the future. Ability evaluation and training lay the theoretical foundation.

**KEY WORDS**  sports academies, volleyball students, referee ability, evaluation index

Reference:

Construction of the evaluation system of the first-class Indoor Volleyball Referees in Beijing

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ABSTRACT:

Purpose: To preliminarily construct the evaluation system of the executive ability of the first-class indoor volleyball referees in Beijing.

Methods: The evaluation indexes were determined by expert interview, Delphi method and questionnaire survey. The index weights at all levels were calculated by scoring method, and the evaluation criteria were determined by hierarchical evaluation method. Results: 1) The evaluation index of 4 first-class indexes, 12 second-class indexes and 30 third-class indexes. 2) Determine the weights of indicators at all levels, the business ability accounts for the first in the first level indicators, the observation and judgment ability accounts for the first in the second level indicators, and the accurate handling of difficult balls accounts for the first in the third level indicators. 3) The sum of the product of the score and the weight value of each index is taken as the overall score of its executive ability, and five grade scoring standards are set, which are 90.00 ~ 100.00 points for excellent, 80.00 ~ 89.99 points for good, 70.00 ~ 79.99 points for average, 60.00 ~ 69.99 points for poor, and below 60 points for poor. Conclusion: The evaluation index system of the executive ability of the first-class indoor volleyball referees in Beijing consists of four first-class indexes: professional ethics, professional quality, psychological quality and physical quality, 12 second-class indexes and 30 third-class indexes. Among them, the professional ability is extremely important for the referees, and handling knotty balls accurately, making the timely decision on the foul and mastering the relevant theoretical knowledge of volleyball competition rules and referee law have a great impact on the executive ability of volleyball referees. The five-level evaluation standard can objectively and scientifically evaluate the referee's ability of volleyball first-class referee, and realize the inspection and test of referee's ability from multiple indicators.

KEY WORDS: Volleyball; First-grade Referee; Executive ability; Evaluation system

Reference:


Analysis of Functional Movement Screen Scores among Adolescent Professional Ballet Female Dancers

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ABSTRACT:

Purpose

Ballet is a kind of artistic form which takes "body" as the carrier and conveys emotion and meaning through "action". Supernormal physical fitness is the foundation of becoming an excellent ballet dancer, and good movement function is the prerequisite of various physical trainings. In this study, the functional movements of professional ballet dancers with different training years were screened to explore the physical and motor functional characteristics and weaknesses of adolescent professional ballet dancers as well as their influencing factors, so as to provide the basis for ballet training and injury prevention for professional ballet dancers.

Method

According to the age and professional training duration, 44 adolescent professional female ballet dancers were divided into three groups, one group (lower grade, age = 11.56 ± 0.43 years, n=15), the following two groups (middle grade, age = 14.75 ± 0.42 years, n=16, upper grade, age = 16.64 ± 0.49 years, n=13), for functional movement screening and the quality of their seven movement was evaluated, and the weak links and imbalance that are easy to cause damages in the movement were found.

Result

The FMS average total score of the adolescent professional ballerina is 15.32, with a minimum score of 11 and a maximum score of 17. The average scores of each group were higher than the injury risk threshold of 14, and a few students ≤14 (n=9). The FMS total scores of dancers with different training years were ranked as: senior grade (15.77) > junior grade (15.47) > middle grade (14.81). The scores of FMS of adolescent professional female ballet dancers ranged from high to low as follows: Straight Leg Raise (3.00) > Shoulder Mobility (2.80) > Hurdle Step (2.77) > In-line Lunge (2.35) > Deep Squat (2.25) > Rotational Stability (1.25) > Trunk Push-up (1.00).

Conclusion

Adolescent professional ballet female dancers have good mobility of the shoulder and hip joints, but generally face the problems of insufficient trunk pillar strength and hip muscle strength, poor dynamic stability of the lower limbs and asymmetry of the left and right sides of the body. Some dancers lack ankle dorsiflexion, which has a negative impact on their lower limb movement pattern. The total scores and individual motor scores in the middle grade were lower, which might be related to the special stage of growth and development and the arrangement of professional training content, and further research is needed.

KEY WORDS FMS; adolescent; ballet dancers;

Reference:


1. McGinnis, P.M. Biomechanics of Sport and Exercise; Human Kinetics: Champaign, IL, USA, 2013.
China Volleyball Super League Tianjin women's volleyball competitive ability Study on unbalanced structure and compensatory property

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ABSTRACT:

In this study, video observation method was adopted to repeatedly watch the 2018-2021 China Volleyball Super League matches of Tianjin Women's Volleyball Team, record the relevant data by means of pause or replay, and sort out and analyze the match data published by FIVB official website and the relevant data recorded by the author. The set pair analysis method (SPA) is used to compare and analyze the similarities and differences and counter-trends of the techniques (serving, spiking, blocking and passing), and make a horizontal comparison between Tianjin Women's Volleyball Team and the top three teams, so as to find out the advantages and disadvantages of the Chinese women's volleyball team and other strong teams in the use of techniques and tactics. It also makes a vertical comparison of the technical and tactical effect of Tianjin Women's Volleyball team in the three China Volleyball Super League competitions to understand the advantages still maintained in the technical and tactical aspects of Tianjin women's volleyball team and the deficiencies that need to be improved. The research conclusions are as follows:

The technical application effect of Tianjin Women's Volleyball team in the 2020-2021 season is excellent in the overall spiking, blocking and two technical links. No matter how the uncertain factors are transformed, Tianjin Women's Volleyball Team has the advantage in the top three teams. The technical application effect of Tianjin Women's Volleyball team in the 2020-2021 season shows poor performance in the first pass, serve and two technical links. No matter how uncertainty factors are transformed, Tianjin Women's Volleyball Team has disadvantages in the top three teams, and it cannot impact the opponents in serving. On the contrary, there will be some problems in the first pass of Tianjin Women's Volleyball Team when it meets the teams with good service. Although the serve of Tianjin Women's Volleyball team is at a normal level, there are still some gaps compared with the other top three teams. The first pass and serve lack stability, and there are many mistakes of Tianjin Women's Volleyball team.

Season through the 2018 to 2021 of Tianjin women's volleyball team of China volleyball super league season data analysis, in serving, spiking, receiving, blocking technology improving effect on a certain extent, the drop shot and block the two technical advantages, the most obvious is Tianjin team become the champion of the assassin's mace, however, the first pass and serve are the weak skills of Tianjin Women's Volleyball team, and there is still much room for improvement.

KEY WORDS: Tianjin Women's Volleyball Team, China Volleyball Super League, unbalanced structure of competitive ability, compensatory

Reference:


The relationship between job insecurity and job burnout of school sports coach in Taiwan

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ABSTRACT: The purpose of the current study aimed to explore the moderating effect of organizational identification in the relationship between job insecurity and job burnout. We recruited full-time sports coaches working in schools in Taiwan as research participants. By using structured questionnaires, a sample of 316 participants were valid. Pearson correlation and hierarchical regression were used to validated the hypotheses. The results of current study indicated that there is a positive correlation between job insecurity and job burnout. Organizational identification was negatively related to job insecurity and job burnout. When sports coaches perceived high level of organizational identification with their school, the relationship between job insecurity and job burnout got weaker. On the contrary, when they perceived low level of organizational identification, the relationship between job insecurity and job burnout got stronger. This study improved moderating effect of organizational identification in the relationship between job insecurity and job burnout. It also provided empirical support that job demands-resources model can be applied to explain the working context of school sports coaches.

KEY WORDS: intention to quit, job demands-resources model, exhaustion.
ABSTRACT:

With the development of Chinese Volleyball in recent years, training motivation plays significant force on its merits training effects and game results. All players participate in China Women Volleyball Tournament regard as professional one, they are exposed to more stimulation than normal people physically and mentally to a certain extent. Therefore, these athletes are required to with present the tremendous physical and psychological excitement by enough training motivations. We performed methods of expert review, questionnaire, factors analysis and literature review, and took ten province teams compete in Chinese Women Volleyball Tournament as the objects of study, investigating the influencing factors of training motivation of Chinese women volleyball players. Promoting the orderly development of Chinese Women Volleyball Tournament by understanding in deep the behavior of psychological in order to assisting coach， team management staff to help and guide their players appropriately at the proper moment. Analysis shows that following factors are affecting players’ training factors: Coach, Athletic, Social and Team. We draw a conclusion from the coach factor that coach’s behavior and characteristic have the biggest effects on players, women players in particular, In which training motivation is easily effected by coach’s behavior since they are more sensitive. From the social perspective, motivation of players tend to be influenced by family, education and other reasons. As for team one, players in the same position are effecting each other, moreover, training financial aids also play an magnificent role. Training motivation is the issue that every female athlete in volleyball will encounter, it takes change with ages and years of participation in the sports of volleyball, Hopefully, it goes thorough with this academic researches can improve the cognition of training motivation and improve player’s performance in China Volleyball Tournament.

KEY WORDS Sport Psychology, Motivation, Volleyball

Reference:

Effects of COVID-19 infection on physical performance

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ABSTRACT:

Background: COVID-19 infection, besides many other consequences, might have an impact on physical performance and strength even in healthy sportmen. Cardiotoxic complication can be a threat long after the infection therefore time of returning to training is an important question. It is widely known that returning to training after COVID-19 infection must be careful and gradual, but sport medicine specialists need practical tools to make a medically safe decision regarding the timing of going back to physical activity and work. The aim of the present study was to determine the effects of COVID-19 symptoms on post infection physical performance.

Methods: In our research we have analyzed the data of 47 divers and parachuters (age: 36.43 ± 9.52 years, with average BMI of 26.59 ± 2.44 kg/m²) physical performance with a modified Bruce treadmill protocol after an average of 66.91 days following COVID-19 diagnosis. The ‘Bruce protocol’ is performed on treadmill with standard workload by stages, setting the speed and the elevation starting with 2,7 km/h and 10% inclination in the 1st stage. For non-athletes each stage is 3 minutes, for athletes each load stage is usually 1 minute. For patients after COVID-19 infection we focused on moderate and more gradual increase of workload to ensure a longer warm up and medically well-monitored reaction to work load. Therefore in our modified Bruce protocol we used 2 minutes stages and the 1st stage was divided into 3 stages, 2,7 km/h with 0% inclination in stage 0, than 2,7 km/h with 5% inclination in stage ½ and then reach the 2,7 km/h speed with 10% inclination of the standard Bruce protocol stage 1. After this, the workload in the following stages were according to the standard Bruce protocol. The test included the continuous monitoring of pulse, blood pressure, ECG, blood oxygen level with a peripheral pulse oximeter and physical performance in term of metabolic equivalent (MET). Self-reported data on symptoms (fatigue, fever, loss of smell or taste perception, and cough) during COVID-19 infection were collected also.

Results: Maximum level of physical performance (MET) was negatively associated with pulse reaction in each stage of workload (r= -0.374 - -0.706; p<0.01). Fever and loss of smell or taste perception were not associated with maximum MET, pulse reaction, blood pressure or changes in systolic and diastolic blood pressure. Cough was significantly related to pulse rates in stage 3 and stage 4 (p<0.05), participants reporting cough during COVID-19 infection had significantly lower pulse rates in the last two stages of examination. Fatigue was significantly associated (p<0.05) to the % of the age-adjusted vitamax pulse in stage 0, stage ½, stage 2, and to pulse rate in stage ½ (fatigue had marginally significant effect on pulse rates in stage 0, stage 1, stage 2, and on the % of the age-adjusted vitamax pulse in stage 1). Nevertheless, cough and fatigue had no effect on maximum MET, blood pressure and changes in systolic and diastolic blood pressure during the test. Participants having a chronic disease had significantly higher pulse rates in stage 0, stage ½ and stage 1, and marginally lower maximum MET. Having a chronic disease was significantly associated with having fever during COVID-19 infection (p<0.05), but not with other symptoms.

Discussion: Our preliminary data suggest that among the typical symptoms of COVID-19 infection, fever or loss of taste and smell do not have significant effect on physical performance after approximately 2 months following the infection. Oppositely, the presence of subjective complain of fatigue and cough may have a significant impact on physical performance at the same time interval. Moreover it seems that this
modified Bruce treadmill protocol is a safe way to measure the physical condition and may help to determine the date of safely returning to training or help to define the level of rehabilitation in case of more severe COVID-19 infection in gradual training programs.

**KEY WORDS:** COVID-19, post-COVID syndrome, post infection physical performance, post-COVID fatigue, metabolic equivalent (MET)

Reference:
A Study on the Construction of "One School, One Product" Volleyball Characteristic School --Take the sixth primary school in Zhijin County, Guizhou Province as an example

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ABSTRACT:

In recent years, with the continuous deepening of education reform, various reform plans have been continuously updated and developed on the basis of the socialist development needs of the new era. Among them, the "one school, one grade" physical education reform has become the new direction of school physical education reform. New goals and new requirements.

The sixth primary school in Zhijin County, Guizhou Province is the first batch of primary schools in Zhijin County to promote volleyball, is an earlier school in Guizhou Province that implemented the "one school, one product" school physical education reform. This article uses literature data method, expert interview method, questionnaire survey method, field investigation method, mathematical statistics method and logical analysis method to analyze the basic situation of the construction of the sixth primary school in Zhijin County, Guizhou Province volleyball characteristic school, the construction of volleyball courses, all-staff sports games, and the special volleyball courses. The investigation and analysis of the development of time, volleyball home sports homework, sports fun class exercises, and training competitions are conducted, and the value of volleyball characteristic schools to the Pearl School and the lessons that can be provided for the reform of school sports are studied. The conclusions and recommendations of this study are as follows:

1. Through the construction of "one school, one grade" volleyball characteristic school, the school has stimulated students' interest in sports, achieved the purpose of training students' physical fitness, so that students have basically mastered a sports skill, effectively cultivated students' comprehensive quality, and promoted all-round development of students' physical and mental health.

2. The sixth primary school in Zhijin County, Guizhou Province adheres to the concept of "student development-oriented", relying on the characteristics of volleyball to carry out school physical education, and the teaching results obtained by all walks of life and students' parents have been recognized by the society and the school sports brand with Zhijing characteristics has been formed. The regional influence of the country provides a reference and reference for other regions and schools to construct a school with "one school, one product" sports characteristics.

3. This study addresses the problems of insufficient teachers, lack of professionalism, and the need for improvement in the construction of venues and facilities during the construction of the Pearl School's "one school, one grade" volleyball characteristic school. It proposes to actively organize physical education teachers to participate in training and promote the in-depth integration of sports and education. Increase the investment in venue facilities and other suggestions.

4. In order to promote the development of the Pearl School’s “one school, one product” volleyball characteristic school, this research also proposes to optimize the physical education curriculum based on the results of the reform, strive to create excellent courses and high-quality courses with the Pearl’s characteristics, and actively promote the development of physical education. The class teaching model is integrated into the sports of the Pearl School. Attention should be paid to the construction of school sports culture, so that the sixth primary school in Zhijin County, Guizhou Province will become a sports school with profound sports culture.

KEY WORDS one school, one product, School physical education reform, volleyball characteristic school
Research on the Effects of Gluteal Activation Exercises on Volleyball Players’ Knee Joint Muscle Strength, Proprioception and Dynamic Balance

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ABSTRACT:
With the development of functional training and the continuous application and improvement of sports training, the importance of gluteal muscles in sports has been gradually recognized, especially its role in preventing injury and improving pain. In volleyball, athletes' knee injuries and pains account for the highest proportion of all sports injuries. For volleyball players who need to take off frequently and stay in a half-squat position, once knee injuries occur, the athlete's injury will be affected. The level of competition has a huge impact.

The purpose of this study is to explore whether gluteal activation exercises have an impact on volleyball players' knee joint muscle strength, proprioception and dynamic balance, thereby increasing joint stability and reducing sports injuries by adding gluteal activation exercises to volleyball players during training and before games. Using the method of literature, experimental research and mathematical statistics, this paper takes 14 members of the men's volleyball team of Beijing Sports University as the experimental objects, and randomly divides the experimental subjects into an experimental group and a control group, with 7 people in each group. The experimental intervention lasted for 6 weeks. The experimental group was given gluteal activation exercise intervention, and the control group was given static stretching exercises. Before and after the experiment, the knee joint muscle strength, proprioception and dynamic balance of the two groups of subjects were tested.

Indicators include: relative peak torque of knee flexor and extensor at 60°/s and 180°/s speed and ratio of knee flexor and extensor torque, knee position perception difference and Y-Balance test scores. The test results of the experimental group and the control group before and after the experiment were analyzed by mathematical statistics, and the following conclusions were obtained:

(1) By activating the gluteal muscles and peripheral muscles, the movement ability of the hip joint is improved and strengthened, and the action pattern of the volleyball player is optimized, so that the weak knee flexor muscle of the volleyball player can be improved, and the knee flexor and extensor muscles tend to be balanced and obtained. Balance development and maintain knee stability.

(2) The gluteal activation exercise can effectively improve the joint position sense of the knee joint of volleyball players, strengthen the sensitivity of proprioceptors through the activation of muscles, mobilize the control of the nervous system on muscles, improve the proprioceptive function of volleyball players, and make volleyball players in The knee joint can be kept relatively stable during exercise.

(3) By effectively activating the gluteal muscles, making them actively participate in exerting force during exercise, strengthening the stability of the hip joint and the control ability of the body posture, improving the dynamic balance ability of the lower limbs of the volleyball players, and enhancing the transmission efficiency of power.

(4) The gluteal activation exercise can effectively improve the problem of volleyball players' knee joint muscle imbalance, improve the proprioceptive function of the athlete's knee joint, strengthen the dynamic balance ability of the lower limbs, and comprehensively improve the function and stability of the knee joint, thereby reducing the volleyball player's knee joint. Risk of knee sports injuries in athletes.

KEY WORDS: gluteal activation• isokinetic test• proprioception• dynamic stability• volleyball players

Reference:
Comparative analysis of technical and Tactical Attack Effect in Stalemate Stage of sub competition process in world high-level women's volleyball match -- Taking 2019 World Women's Volleyball League as an example
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ABSTRACT:
Purpose: The outcome of a game requires multiple games, the outcome of a game requires multiple games, and the outcome of a point game requires at least one shot or multiple shots. In the game, every point is the most basic unit that determines the outcome of the volleyball game. We named the one point competition process as the sub competition process. In order to study the technical and tactical laws used in the Stalemate Stage of the sub competition process of the world's High-Level Women's volleyball team, this paper takes the Stalemate Stage of the sub competition process and the application of technology in the Stalemate Stage as the research content, takes the top three teams of the 2019 World Women's Volleyball League as the research object, and through the reference of relevant literature, Using the methods of literature, video observation, logical analysis and mathematical statistics, this paper takes the data of the Stalemate Stage in the sub competition process of three games and 10 innings between the top three of the 2019 World Women's Volleyball League as the investigation object, compares and analyzes the gains and losses of the technical application of the main attack, secondary attack and response in the attack in the Stalemate Stage of the sub competition process, and finally comes to the following conclusions: 1) In terms of the distribution of attack organization positions in the Stalemate Stage of the sub competition process, the main attackers of the Chinese team mostly attack, while the players of the United States and Brazil attack less. Brazil and the United States play in the stalemate mainly by strong attack, while the Chinese team mainly by hanging ball in the stalemate stage. Most of the hanging balls are active and purposeful attacks, which are flexible and light. In the stalemate stage, the Chinese team has a low rate of defensive kicking in place, resulting in less spiking; In the comparative analysis of the attack effect in the Stalemate Stage of the sub competition process, the direct scoring ability of the American team is stronger than that of the Chinese team, the attack speed of the Chinese secondary attack is faster than that of the American and Brazilian players, the personal ability of the secondary attack is strong, and the attack effect and the application of techniques and tactics are slightly stronger than those of other teams. 2) On the attack system in the Stalemate Stage during the sub competition, in the strong attack organization, the strong attack of the Chinese team at position 4 is easy to be prevented back, and the Brazil team scored well in the strong attack organization at position 4. The Chinese team needs to strengthen the offensive organization in position 2; In the flat attack organization, the Chinese team's No. 3 is close to the body and fast, and the No. 4 is flat and open, with good performance, few mistakes and strong stability. It is a powerful scoring means.

KEY WORDS: World Women's Volleyball League, China volleyball, Sub competition process, Offensive effect

Reference:
QIONG SHI Quantitative analysis on the application characteristics of offensive organization in the sub competition of world High-level Men's volleyball [D] Beijing Sport University, 2010
Study on the factors affecting the effect of receiving service in gas volleyball

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ABSTRACT:

Gas volleyball is a sport which was first created in 1984 by the hubhhot jining railway branch according to the form and rules of the 6-man hard volleyball. Because of the unique characteristics and requirements of the sports, it has become a popular sport among men, women and children. With the further promotion and development of gas volleyball and the further study of gas volleyball, make gas volleyball technology unceasing innovation, the technology has made great breakthrough, especially on the serve, serve team technology is more and more high, to serve more and more powerful, make the receiving player receivers difficulty gradually rise. Receiving service is the primary link for the defense to change from passive to active. The success rate of receiving service will affect the arrival rate of the pass and the quality of the attack. Therefore, the factors affecting the success rate of receiving service in gas volleyball should be studied deeply, and the effective methods to improve the receiving service in gas volleyball are summarized. This paper through consulting related to gas origin and gas volleyball volleyball technology and tactics of a large number of literature, watching the receiving gas volleyball training and competition, and interviews with relevant experts and scholars in communication, on the basis of gas volleyball system analysis, summarized the concept and tactics, affecting the gas volleyball receiving the success rate of equipment, lighting, wind and other objective factors as well as receiving technology, proficiency, the athletes' physical quality and psychological factors in-depth research on the subjective factors such as the summary, and according to the relevant factors affecting the training method and put forward the corresponding improvement measures, and improve the success rate of gas volleyball receiving, Lay the foundation for a quality pass and attack.

KEY WORDS: Gas volleyball receiving Influencing factor

Reference:


Cai Qingju Research on the function and influence of physical fitness training in air volleyball [J] Contemporary sports technology, 2018,8 (24): 41 + 43
Comparative analysis of the attack effect of Chinese women's volleyball team and the top four other teams in the 2018 World Championships

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ABSTRACT:

Purpose: As the first team to win five consecutive championships in the history of world volleyball, Chinese women's volleyball team experienced a trough and all kinds of difficulties and obstacles. Until the Athens Olympic Games in 2004, Chinese women's volleyball team made another brilliant achievement, which perfectly explained the Chinese sports spirit of tenacious struggle and United struggle. The spirit of women's volleyball was raised again. The spirit of "unity and cooperation, tenacious struggle and never give up" inspired generations of people. This paper provides a reference for the targeted training of Chinese women's volleyball team and the effective use of spiking attack technology in the competition. By using the methods of video statistics, literature and logical analysis, this paper analyzes the attack effect of the main players in the 2018 World Championships of Chinese women's volleyball team and other top four teams. Through comparative analysis, it can be concluded that: 1. The main attack players of Chinese Women's Volleyball Team have high physical quality and outstanding height on the net, which helps to improve the spike effect. 2. The main attack players of China Women's Volleyball Team and other top four teams often use offensive means. Compared with the main attack players of the other top four teams, the main attack players of China Women's Volleyball team have better effect on the smash and are not easy to make mistakes, but the back attack is less used. Finally, compared with the main attack players of the other top four teams, the main attack players of the Chinese women's volleyball team have a higher scoring rate of fast break, but fast break is seldom used. 3. There is little difference in the scoring rate between the main attack players of Chinese women's volleyball team and those of other top four teams.

KEY WORDS: World Championships; Chinese women volleyball team; Key player; Attack effect

Reference:
Cao Ruixue Comparative analysis of attack effects of Chinese and foreign women's volleyball teams in the 17th World Women's Volleyball Championship in 2014 [D] Zhengzhou University, 2015
Sun Hongwei Analysis on the attack effect of the main attacker of Chinese women's volleyball team based on the three-dimensional attack system -- Taking the 2018 World Women's Volleyball Championship as an example [J] Journal of Longyan University, 2020,38 (02): 118-122
Effects of different exercise intensities in the morning on volleyball performance components in the afternoon

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ABSTRACT:

The aim of this study was to investigate the effect of two different exercise interventions in the morning on volleyball-specific components of performance in the afternoon under conditions simulating a competition day. In the morning on 3 experimental days, 12 volleyball players (age 24.1 ± 5.5 years) completed three different preload interventions that were applied in a counter-balanced order: (1) no intervention (NI); (2) moderate-intensive exercise (MI); and (3) high-intensive exercise (HI). The subjects performed the preload exercises, consisting of a small-sided game and repeated maximal sprints, from 10:00–11:00 a.m. At 3:00 p.m., the Bangsbo test (BT) was applied to examine the effects of the different morning interventions on volleyball-specific endurance capacity. The results showed that the HI led to significantly higher blood-lactate concentrations (moderate to very large effect) and heart rates (very large to extremely large effect) compared to the MI. In addition, there was a significant measurement × intervention effect on concentrations of adrenaline and noradrenaline in the urine, which reached higher values immediately after the HI (very large effect) and MI (moderate effect) compared to NI. All effects disappeared by the time of the BT in the afternoon. During all trials, after the preload intervention, reaction time and critical flicker fusion frequency increased significantly compared to the baseline morning values (reaction time: small; critical flicker fusion: trivial to small effect), but no measurement × intervention interaction was found. During the BT, the mean total distance covered (trivial to small effect) and the pacing pattern did not differ significantly among the trials despite numerous small individual effects. We conclude that exercise interventions of various intensities in the morning have no general effect on volleyball-specific components of performance in the afternoon despite significant metabolic, endocrinology and cognitive short-term effects. Coaches should consider individual preferences when prescribing competition day procedures.

KEY WORDS: volleyball · match preparation · Preload exercise · Cognitive effect ·

Reference:


2. Ekstrand, LG, Battaglini, CL, McMurray, RG, Shields, EW. Assessing explosive power production using the backward overhead shot throw and the effects of morning
12. Kilduff, LP, West, DJ, Williams, N, Cook, CJ. The influence of passive heat