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Structure of the parameters that define the preparedness of female archers from 15 to 17 year old

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Abstract
In this study, indicators characterized the readiness of female archers from 15 to 17 year old for efficient competitive activity. A lack of readiness for competitive activity in archers as a whole requires new approaches to the organization of educational training.

Keywords: archers, competitive struggle, effective competitive activity, organization of training

1. Introduction

Currently, archery is an Olympic sport. A high level of archery skill is achieved through a high morale, excellent technical skills, and readiness for competitive activity (Bakayev, V. 2015; Bolotin, A.E, *et al*, 2014) [3, 5].

Modern conditions have raised the demands for the level of preparedness of an archer for efficient competitive struggle. The specific nature of archery contests implies that the former should demonstrate sportsmanship according to different readiness parameters (Antonov S, *et al*, 2017) [2]. Therefore, it is essential to know the parameters that indicate an archers preparedness for efficient competitive struggle (Alexander B, *et al*, 2017) [1]. The available scientific data suggest that during the formation of an archers preparedness for contests, much attention should be paid to complex use of technical, tactical, moral, psychological, and physical training.

Modern conditions of competitive struggle have raised the demands for the mastery of archery. During contests, female archers from 15 to 17 year old experience great static and psychological pressure. An archers mastery depends on many factors, including their conduct during a contest (Alexander B, *et al*, 2017) [1]. All of the above influences the efficiency of the archer (Briskin Y, *et al*, 2011; Clemente F, *et al*, 2011) [6, 7].

In this regard, coaches are facing a need for effectively managing the archery training process. In the modern conditions, an effective system of archery training management must be created to improve the archers sport mastery and psychological condition. Schemes, aimed at scientific support of the training process and achievement of an optimal physical condition, are becoming especially important. Management of the female archers 15 to 17 years old training process also implies using schemes to improve their technical skills and supporting their functioning systems to be in the best condition (Yen N.V, 2013) [11].

However, experience shows that not all female archers have a high degree of readiness for effective competitive activity. (Lee K, *et al*, 2009) [9]. Many archers have great difficulty coping with the psychological and physical stress during competitions. This adversely affects the performance of archers. (13). Insufficient readiness for effective competitive activities requires new approaches to the organization of their training.

2. Materials and Methods

Today, the competitive environment demands a very high skillset from female archers 15 to 17 years old. During competitions, archers are under a great static and psychological stress, which can negatively affect their performance (Bolotin, A.E, *et al*, 2014) [5]. Currently, coaches are faced with the need to improve the training process of archers. Of particular importance are measures aimed at the scientific support of the training process and the attainment of an optimal physical condition (13).

To identify these indicators, the performance results of high qualification sportsmen in VietNam championships and other major international tournaments were analyzed. A poll of coaches and athletes was conducted, and a correlation between the individual readiness indicators for the archery female from 15-17 years old competitive activity and the results of their performances during competitions was performed.

3. Results and Discussion

In this study, a ranking of the indicators of readiness for the competitive activity was provided, and the impact of these indicators on the success of the performances of the athletes female archers 15-17 years old during competitions was determined. The results of this research are provided in Table

The ranking results of the female archers 15-17 years old preparedness parameters shows that the main parameters are sportspeople's moral and psychological preparedness (correlation coefficient is +0.59) and the well-developed skills of smooth aiming, arrow launching, and shot completion (r = +0.62). Coaches and sportspeople noticed major difficulties in the archers' experience if they strive for high results during competitive struggle (Yen N.V, 2013) [11]. They noted that not all sportspeople can relax and concentrate on smooth aiming before launching an arrow. Many female archers also hurry when completing the shot. All of the above factors do not allow archers to use their technical potential and high individual abilities during contests (Alexander B, *et al*, 2017) [1].

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Table 3.1: Correlation analysis of successful competitive activity of the archers as a function of the indicators of readiness

S. No.	Indicators of archers readiness for competitions	Success in competitions
1	Moral and psychological readiness of the archers	+0.59
2	Well-developed skills of smooth aiming, arrow release and shot completion	+0.62
3	Proper attachment and holding of a bow	+0.66
4	Well-developed skills of correct hand position and the upper body position of the archer	+0.50
5	Proper breathing during the shot and correct location of the head and shoulders of the archer	+0.44
6	Proper use of wind and other environmental factors during competition	+0.41
7	Well-developed skills of boom loader and stability when taking a position for archery	+0.32
8	Well-developed skills of properly gripping the string and the exact location of the feet and legs	+0.39

Correct positioning and transition to holding the bow (r=+0.66) and the well-developed skills of an archers correct arm and body positioning (r=+0.50) also fit into this group. The coaches noted that at the beginning of drawing, it is essential to hold the nock in a stable position in relation to the eye. To proceed with holding the bow, some time is required to redistribute stress to the lower back muscles, (Alexander B, *et al*, 2017) [1]. If the skill of this coordination is unstable, it diminishes the shooting results during contests.

For efficient competitive activities, it is essential for a shooter to breath correctly, hold their head in the right position relative to their shoulders (r=+0.44) and use wind and other unfavorable environmental factors competently during the contest (r=+0.41). The coaches noted that breathing should be diaphragmatic to lower the blood pressure, exercise heart rate, and feeling of anxiety. During deep inhaling, the sportsperson's attention should be concentrated on the target, and during slow exhaling, they should have the feeling of stress leaving the body. Moreover, the feeling of stress leaving the body should move from the top of the head to the tips of the toes. In coaches' opinions, this allows for relaxing of muscles and making a better shot (Yen N.V, 2013) [11]. Practice of competitive activities demonstrates that correct respiration allows for fighting unfavorable wind interference and other environmental factors more successfully during a contest.

To a lesser extent, the efficiency of competitive struggle is influenced by the well-developed skills of loading an arrow and steadiness when taking a shooting position (r=+0.32) and the skills of correct bowstring gripping and exact positioning of the feet and legs (r=+0.39). Coaches note that many shooters act inconsistently when positioning their feet and legs. This leads to incorrect distribution of stress on the feet and legs. Feet positioning and distribution of stress are essential for an archers body balance. The survey revealed that many good archers use a position in which their legs are shoulder-width apart. Thus, their weight is distributed evenly on both feet. This allows sportspeople to achieve a feeling of equilibrium. If the skills of arrow loading and correct bowstring gripping are well-developed, they influence the archers efficiency in a contest as well. A steady position of the wrist resting on the bow handle guarantees an unwavering hand position. All of the above provide stability during taking a shooting position.

4. Conclusions

This research provides evidence that the revealed factors of an archers preparedness for competitive activities can more precisely aid the organization of pedagogical activities during training for contests.

5. References

1. Alexander B, Vladislav B. Structure of the parameters that define the preparedness of archers. Journal of Physical Education and Sport. 2017; 17(3):1177-1179.
2. Antonov S, Briskin Y, Perederiy A, Pityn M. Improving technical preparedness of archers using directional development of their coordination skills on stage using the specialized basic training. Journal of Physical Education and Sport. 2017; 17(1):262-268.
3. Bakayev V. Determining the significance of practical military skills applied by the special purpose regiments of the Internal Troops of the Russian Ministry of Internal Affairs to deliver combat objectives. Journal of Physical Education and Sport. 2015; 15(4):615-618.
4. Bolotin A, Bakayev V. Efficacy of using isometric exercises to prevent basketball injuries. Journal of Physical Education and Sport. 2016; 16(4):1177-1185.
5. Bolotin AE, Bakayev VV. The factors defining high efficiency of archery. Uchenye zapiski universiteta imeni P.F. Lesgafta. 2014; 3(109):33-35.
6. Briskin Y, Pityn M, Antonov S. Indicators of special training of highly skilled archers in pre mesocycle. Journal of Physical Education and Sport. 2011; 11(3):336-341.
7. Clemente F, Couceiro M, Rocha R, Mendes R. Study of the Heart Rate and Accuracy Performance of Archers. Journal of Physical Education and Sport. 2011; 11(4):434-437.
8. Chanh Thuc Dao. Measurement in sports. LAP LAMBERT Academic Publishing, 2018, ISBN 978-613-9-90198-2.
9. Lee K, Benner T. Total Archery: Inside the Archer. Astra LLC, 1st edition, 2009, 253.
10. Lam Quang Thanh, Nguyen Thanh Lam. Measurement in sports. Ho Chi Minh University Of Sport-HoChiMinh City-VietNam. (In Vietnamese), 2011.
11. Yen NV. Structure of the parameters that define the preparedness of female archers from 14 to 15 year old. Master thesis, Ho Chi Minh University of Sport, VIET NAM. (in Vietnamese), 2013.