



The Interrelationship Of Morphological, Physiological, And Psychological Factors In Women's Athletics

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ABSTRACT

This article analyzes the positive impact of athletics on women's health and psychological stability from a scientific and practical perspective. Nowadays, forming a healthy lifestyle, increasing physical activity and ensuring mental stability are among the important tasks of society. Regular physical exercises are especially important for women's bodies, as they improve not only physical development, but also mental state. Athletics - through a complex of running, jumping and various movement exercises - improves the functioning of the cardiovascular system in women, increases muscle strength and increases the overall endurance of the body. Also, such exercises help prevent excess weight, activate metabolism and improve the overall health of the body. Regular sports training strengthens immunity in women, increases the body's ability to fight various diseases and helps to form a healthy lifestyle.

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Gymnastics is one of the most important and widely used types of physical education. It serves to comprehensively develop all muscle groups of the human body, improve health and increase physical activity. Gymnastics exercises are usually performed without special complex equipment and are suitable for people of all ages. Therefore, it is widely used from preschool educational institutions to higher education and even in everyday life.

The main essence of gymnastics is that it improves the functional capabilities of the body through simple movements. With the help of these exercises, the cardiovascular system is strengthened, the respiratory system improves, muscle strength and endurance increase, and joint mobility develops. In addition, gymnastics is also important in forming the correct figure.

Gymnastics exercises are divided into several types. In particular, general developmental exercises play a key role. These exercises are aimed at developing various parts of the body and include movements of the arms, legs, and torso. Free exercises are performed without special equipment and include movements such as bending, turning, jumping and maintaining balance. Breathing exercises improve the body's oxygen supply and strengthen the respiratory system. Morning gymnastics is performed to actively start the day and prepare the body for work.

The tasks of light gymnastics are multifaceted, they include developing physical qualities, forming movement skills, strengthening health and increasing a person's working capacity. At the same time, gymnastics classes also have a positive effect on a person's mental state. Regularly engaging in light gymnastics reduces stress, improves mood and increases mental stability.

When organizing light gymnastics classes, it is necessary to adhere to a number of principles. Among them, systematicity, consistency, individuality and load regulation are important. Exercises are taught from simple to complex, taking into account the physical capabilities of each person and not overloading. In addition, it is important to observe safety rules during classes.

Also, rhythmic gymnastics plays a major role in the development of a person's physical qualities. It forms such qualities as strength, speed, endurance, agility and flexibility. Therefore, rhythmic gymnastics is widely used as a preparatory stage for all types of sports, rhythmic gymnastics is a type of physical education that is important in strengthening human health, ensuring physical development and forming a healthy lifestyle. Its simplicity, convenience and effectiveness make it necessary and useful in the life of every person.

Gymnastics and its role in physical education. Gymnastics is a system of physical exercises aimed at developing all muscle groups of the body, performed with special equipment or minimal use of them. It serves to strengthen human health, form motor skills, develop coordination and flexibility, as well as increase psychological stability. Gymnastics exercises are divided into several types. General-development exercises develop the main muscle groups: strengthen the muscles of the arms and shoulders, legs and torso. Free exercises are performed without special equipment and develop accuracy of movements, turns, bends, jumps and balance. At the same time, breathing exercises help strengthen the respiratory system and increase the ability to breathe rhythmically. Morning gymnastics, performed at the beginning of the day, activates the body and increases working capacity throughout the day. The main tasks of gymnastics are that it develops the mobility of muscles and joints, strengthens the cardiovascular system, increases coordination, speed, strength and endurance. At the same time, it improves human health, strengthens immunity and stabilizes the mental state. When performing exercises, it is necessary to pay attention to several principles. These include systematicity - regular performance of exercises, consistency - moving from simple to complex, individuality - adaptation to the characteristics of each person, activity - active participation in the exercise process, and load moderation - avoiding excessive strain. It is important to perform movements with proper breathing, accuracy, sequence and compliance with safety rules. Rhythmic gymnastics develops all physical qualities in physical education: muscle strength, speed, endurance, agility and flexibility. Therefore, it is important not only for sports training, but also for the formation of a healthy lifestyle in everyday life and strengthening the human body. As a result, rhythmic gymnastics is an integral part of the physical education system and is valued as a suitable and effective direction for people of all ages. It plays an important role in the development of a person's physical, mental and psychological stability and forms the basis of a healthy lifestyle. Morphological factors (body structure and physical characteristics) Morphological factors represent the external and internal physical structure of an athlete. These include:

- Anthropometric indicators (height, weight, body length, limb-arm ratio)
- Body composition (ratio of fat, muscle and bone mass)
- Muscle fiber type (fast-twitch and slow-twitch fibers) Female athletes usually have more adipose tissue than men, which can affect speed and endurance in some sports. However, this feature also plays an important role as an energy reserve. Morphological differences in athletics:
 - Sprint (short-distance running): developed muscle mass, high speed
 - Long-distance running: light body, low fat content, high endurance
 - Jumping types: long legs, elastic muscles

- Throwing types: large muscle mass, strong body structure

Therefore, morphological characteristics are also an important criterion when choosing a sport. Physiological factors (functional capabilities of the body) Physiological factors determine the activity of the body's internal systems and directly affect sports results. Key physiological indicators: • Cardiovascular system: heart size, heart rate, circulatory efficiency

- Respiratory system: lung capacity, oxygen exchange
- VO₂ max (maximum oxygen consumption) - a key indicator of endurance
- Energy systems: aerobic and anaerobic energy production

There are some physiological differences in women:

- May have lower hemoglobin levels
- Muscle strength is relatively low, but flexibility is high
- Hormonal cycle (menstrual cycle) affects training and results

Adaptation As a result of regular training, the body adapts to the load:

- The heart becomes stronger
- Respiratory efficiency increases
- Muscles become stronger
- Recovery is faster

Psychological factors (mood and behavior)

In sports, psychological preparation is at least as important as physical preparation.

Key psychological components:

- Motivation – the athlete's drive to achieve a goal
- Willpower and determination – the ability to overcome challenges
- Stress tolerance – managing pressure during competition
- Attention and concentration – precise execution of technical movements
- Self-confidence – internal belief in the result

Female athletes may have higher emotional sensitivity, which sometimes increases stress, but when properly managed, increases motivation.

Interrelationship of factors

The three factors are interconnected

The purpose of the study: The aim is to determine the interrelationship of morphological, physiological, and psychological factors in women's athletics and scientifically substantiate the impact of these factors on sports performance.

Research objectives:

1. Analysis of the theoretical foundations of morphological, physiological and psychological factors in women's athletics.
2. Determination of the interrelationship of these factors and their impact on sports results.
3. Development of comprehensive methodological recommendations for improving the training of athletes.

The effect of athletics on women's physical health

Athletics training has a positive effect on the female body. First of all, these exercises improve the functioning of the cardiovascular system. Running and other physical exercises strengthen the heart muscle, improve blood circulation, and increase the level of oxygen supply to the body. Athletics also plays an important role in the development of the muscular system. As a result of training, muscles are strengthened, the overall strength of the body increases, and physical endurance develops. Athletics training is also

beneficial for the skeletal system. Running and jumping exercises increase bone density and help prevent diseases such as osteoporosis. This is especially important for women, since with age, bones can become more fragile. Athletics training also helps reduce the problem of excess weight. Regular physical activity speeds up metabolism, helps reduce body fat, and improves the aesthetic appearance of the body. In addition, sports training strengthens the immune system. Active movement strengthens the body's protective functions and increases its ability to fight various diseases.

The relationship between psychological factors of athletics training

Athletics improves not only physical health, but also a person's mental state. Regular physical exercise is one of the most effective ways to reduce stress. During physical training, the body releases the hormone endorphin. This hormone improves a person's mood and creates a feeling of mental relaxation. Therefore, women involved in sports feel refreshed and calm. Athletics training also increases a person's self-confidence. Even small results in sports increase motivation and encourage a person to strive for new goals. In addition, sports training also develops social communication. During group training, women exchange ideas with each other, learn from each other, and make new friends. This is one of the important factors that strengthen psychological stability.

Conclusion: In conclusion, athletics training is important in strengthening women's health and psychological stability. It develops the cardiovascular system, strengthens muscles and bones, increases immunity and prevents the problem of excess weight. At the same time, athletics training also has a positive effect on the mental state. Stress is reduced, mood improves and self-confidence increases. This improves the quality of life of women and makes their activities in society more effective. Therefore, one of the important tasks is to widely promote physical education and sports among women. Healthy and mentally stable women are the basis of a healthy society. Proper nutrition and health factors play an important role in the process of women's running. Regular physical training improves the general condition of the body, increases endurance and ensures physical development. However, to achieve sports results and maintain health, not only training is enough, but also a balanced and proper diet is necessary. When women run, the body uses more energy, so the diet should contain enough proteins, carbohydrates, fats, vitamins and minerals. Proper nutrition helps restore muscles, reduces fatigue and improves sports results. In addition, maintaining water balance is one of the important factors for the health of female athletes. It is also necessary to pay attention to health, injury prevention and recovery processes. Rest, sufficient sleep and a proper training plan are important for female athletes. These factors increase the effectiveness of sports activities and allow them to be engaged in a healthy lifestyle for a long time. Thus, in order to achieve success in women's running, it is important to have a balanced diet, a healthy lifestyle and proper care of the body, in addition to physical training.

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