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***Liu Suyu***

*Gomel, Francisk Skorina Gomel State University*

**RESEARCH OF AUGMENTED REALITY TECHNOLOGY AMONG YOUNG BASKETBALL PLAYERS**

*Relevance.* In modern youth training, coaches usually use various new technologies in combination with old methods to improve the efficiency of training, and augmented reality technology is one of them. In basketball, adolescence is a critical period for the development of interest and the formation of technical movements.

Virtual and augmented reality technologies can effectively improve the efficiency and quality of sports training, especially in terms of mastering skills and stimulating sports motivation. The exciting experience and instant feedback mechanism inherent in technology have a positive effect on the rapid improvement of sports skills [1].

The relevance of the topic lies in the need to implement an approach that promotes the development of interests of young people and increases their competitiveness. The introduction of augmented reality technology in the training of young athletes can help in training and improve results.

*Purpose* – It is to analyze the advantages and disadvantages of the current application of augmented reality technology in youth training, provide recommendations for the actual training of coaches and athletes, and ultimately improve the results of athletes.

*Research Results.* Virtual Training Environment: Augmented reality technology can provide virtual training scenarios for teen basketball players, allowing them to practice outside of the real court. This helps players early in their careers as they can practice various skills in simulated games without being limited by weather or surface conditions.

Real-Time Feedback: Augmented reality technology can provide real-time feedback to help players improve their skills. For example, AR glasses can analyze a shot or pass and provide instant feedback. This feedback can help players quickly correct mistakes and improve their skills. 3. Interactive Training: Augmented reality technology can create interactive training modules to make training more engaging. Players can learn tactics, strategy, and teamwork through AR games, increasing their motivation to learn. 4. Data Analysis: Augmented reality technology can also help coaches and players analyze game data. With the help of augmented reality glasses or applications, players can view game recordings and analyze their team's performance to identify strengths and areas for improvement.

*Conclusions.* There are many problems in the training of young men in basketball at present, but the most important ones are:

1). The quality of training of public sports institutions is low and the professionalism is weak. At present, there are many mass sports training in basketball, which have made a certain contribution to the popularization of basketball, but in general, there are different levels of existence. Among them, many coaches do not have coaching qualifications and relevant professional knowledge. This leads to problems such as non-standard movements of students, lack of understanding of basketball, and uneven levels.

2). Low training of coaches. Many coaches do not have professional knowledge and education, which makes it difficult for them to meet the training needs of young players. Both of these factors will lead to young people learning incorrect or biased technical movements, which greatly affects their performance. Improving the competitiveness of basketball in my country. The characteristics of augmented reality technology can solve this problem to a certain extent. We can build a model of the champion and superimpose the virtual image of the champion on reality to represent it. This will allow students to appreciate the key points of movement technique more intuitively and comprehensively.

3. In addition, this technology has a certain degree of assisting effect on basic basketball technical training and tactical training.

Using augmented reality technology to assist in youth basketball training also has the following three advantages:

1). Improved participation: AR technology makes training more interesting and stimulates the interest of young players. They are more likely to actively participate in training since it is more fun.

2). Personalized training: Augmented reality technology can provide personalized training based on the needs and skill level of each player. This helps ensure that each player receives appropriate guidance and support.

3). Improved efficiency: Augmented reality technology can improve the efficiency of training. Players can train at their own time and place, without being limited by the training schedule and location.

**List of sources used**

1. Gu Zhun. Application of Virtual Reality (VR) and Augmented Reality (AR) Technologies in Sports Motivation and Skills Training / Zhun Gu // Chinese Society of Sports Science. Department of Physical Fitness and Health: Proceedings of the National Scientific Conference on Improving Physical Fitness and Health through Sports. - Harbin: Harbin Institute, 2024. - C. 3-43.