# RELATION BETWEEN INTELLECTUAL QUALITIES AND PSYCHOLOGICAL CHARACTERISTICS OF THE PERSONALITY OF PEOPLE WITH DISABILITY IN THE LOWER LIMBS WHO PLAY BASKETBALL IN WHEELCHAIRS

Preliminary communication

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#### **Abstract**

Basketball carts is a sport with great popularity in the program of the Summer Paralympic Games. It is characterized by dynamism emotion and sportsmanship. To get a better effect of this activity among many other events and tasks stands the conducting of a research aiming to determine the physiological, psychological, social and other beneficial effects of sport basketball carts for people with disabilities. In this study we aim to reveal the dependence of the intellectual qualities of the psychological characteristics of the personality of people with disabilities in the lower limbs, practicing basketball carts. Participants in the study were 12 basketball wheelchairs athletes. They had disabilities in the lower limbs. The average age of the surveyed is 41,9 years. The youngest is 18 years old and the oldest is 58 years old. We have registered five indicators to establish the level of intellectual characteristics and eight of the psychological characteristics of of the personality. Based on the results of our study has been revealed that basketball as a team sport is particularly suitable for people with disabilities.

**Keywords:** physical rehabilitation, educational-training process, attention concentration and resistance, operational thinking, personal anxiety, neuroticism, analysis of variance, r-coefficients

### INTRODUCTION

The Sport for people with disabilities is as necessary as it is for people without disabilities. It is divided in the same manner - sport for health, sport for pleasure and sport toward achieve high results. Of course there is difference in the sport for disabled people, it has its own rules. Yanev (Янев). 2008.

The sports activity for disabled is characterized by certain features, which must be taken into account in the development of theoretical-application based of the training process (Вопоv (Бонов)1999; Kichigina & Rubtzova (Кичигина & Рубцова, 2007; Тsarov (Църов), 2011).

It is exactly the sports activity that creates psychological conditions necessary for successful social integration into the society and rehabilitation of people with disabilities and their participation in relevant activities (Мітін (Митин), 2011).

At the first European Conference "WHEELCHAIR BASKETBALL TODAY AND TOMORROW," Skordilis & Gavriilidis, (2003) present data from their study, the purpose of which is the research of the differences in sports achievements and orientation among 35 professionals, 36 amateurs and 35 wheelchair basketball players. All participants were male athletes

Yasar (2008) has conducted a study with 33 wheelchair basketball athletes of age  $26.6 \pm 5,95$  years - from Turkey. He addresses the issues of training and related problems. Develops training models for basketball players in wheelchairs in Turkey.

Laurie & Cole (2002), examine the factors associated with the success rate in free throw shooting (FT) from a basketball wheelchair and analyze the mechanics of shooting. According to the authors there is no significant diff-

erences between different classes players. Mishin (Мишин), 2009 examines how the fatigue effects the shooting performance while competing on wheelchairs.

In a scientific paper Lutkova & Komisarchik (Луткова & Комиссарчик, 2001, explores how volleyball can be a tool for psychological and physical rehabilitation with people with dysfunctions of the musculoskeletal system.

Levterova (Левтерова), 2010 analyze the attitude towards sport of people with disabilities. Important interpretations are made in terms of social influences and barriers for sports activities for people with disabilities. Ideas for new classification systems for achievements in sports and motor activities for people with disabilities have been presented.

In order all these specific skills to be purposely taught, rather than spontaneously, it is necessary the trainers to be well informed and to implement and carry out a number of specific methodological approaches for a steady building up and improvement of the educational-training process.

The aim of this study is to reveal the dependence between the intellectual qualities and the psychological features of the personality of people with disabilities in the lower limbs who play wheelchair basketball.

# **METHODS**

We found the relation between the intellectual qualities and the psychological characteristics of personality of people disabled in the lower limbs who play wheelchair basketball by surveying them for two calendar years /2012 and 2013/. Participants in the study were 12 basketball wheelchair athletes. They had disabilities in the lower limbs. The average age of the surveyed players is 41,9 years. The youngest is 18 years old and the oldest is 58 ye-

ars old. The parties are engaged in a systematic/2 times per week/basketball on trolleys training in "Sports Club for people with disability - "Varna 2010".

To establish the level of some properties of the attention we used the Schulte test. The following indicators have been registered:

No. 1-concentration of the attention/CA/;

No. 2-resistance of the attention /RA/;

To assess the level of operational thinking, we used the test modified by V.Yanev/2/. The following indicators have been registered:

No. 3-operational thinking – moves/OTm/;

No. 4-operational thinking – time (speed)/OTt/;

No. 5-operational thinking – coefficient/OTc/;

To establish the level of psychological features of the individual, we registered the following indicators.

Test No. 6 temperquality of the individual.

Test No. 7 will potential of the individual (will qualities)

Test No. 8 Personal anxiety.

Test No. 9 Reactive anxiety.

Test No. 10 Extraversion-introversion (E-I)

Test No. 11 Neuroticism (N)

Test No. 12 Communication skills of the individual. Communication skills.

Test No. 13 management skills of the individual. Orga-

The survey results are mathematically and statistically processed and analysis of variance is applied. To determine the extent of the correlation between the studied indicators it is used a simple linear correlation. K. Peterson's Rcoefficients calculated through the method "All against all".

The strength and the number of significant correlation links of indicators characterizing the temperament as well as sensor and

From the total 10 correlations between the intellectual qualities and psychological characteristics of the individual, with the greatest interplay of intellectual properties is the concentration of attention (No 1). Positive and large in magnitude of dependence are the links to the will (No 7). Personal anxiety (No. 8). Management skills (No. 13), respectively r = 734, r = 749 and r = 727. A substantial force of dependency r = 607 is the link to Neuroticism

The resistance of attention (No 2) shows us interaction with the communication skills (No. 12). and management skills (No 13) with power of dependence, respectively r = 767 and r = 622.

The Accuracy (No 3) and the speed (No 4) in solving the operational tasks show us the interacting with the properties of the temper Neuroticism (No. 11) and reactive anxiety (No. 9), respectively r = 648 and r = 601. Rationality and speed of thinking (No 5) reveals interaction to a considerable extent with the temper qualities (No 6) and personal anxiety (No 8) with dependencies, respectively r = 764 and r = 588.

## **CONCLUSIONS**

1. The significant number of links in the interaction between the intellectual qualities and the psychological characteristics of our personality is revealing that basketball as a team sport is particularly suitable for people with disabilities.

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2. From the intellectual qualities, the ones with the most interactions are the attention and the speed of thinking. From the psychological features that would be the temper qualities, volitional potential and the anxiety.

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