APPLICATION OF SPORTS ELEMENTS DURING PHYSICAL TRAINING OF PUPILS WITH MENTAL RETARDATION IN THE AGE OF 12-15 YEARS

Baryaev Alexey, Misharina Svetlana
(St Petersburg Research Institute of Physical Culture, St Petersburg, Russia)

The methods development problem of an estimation and correction psychomotor and sensory-perceptive abnormalities at pupils of 12-15 years with mental retardation can be considered as one of priority directions of physical activity's perfection.

At the first investigation phase was made the analysis of medical data, individual development and reports of the psychological commission. It testifies that at all pupils has mental retardation.

We used in work the complex of automated diagnostics psychomotor and sensory-perceptive abilities (Research Institute of physical culture, Saint-Petersburg), including 13 tests. Test time for one person occupies about 20 minutes. The pedagogical technology of the control represented testing in the form of a test's set spent in the beginning and in the end of year. All complex of tests was carried out within one day; the sequence of tests was kept in all four experimental groups.

Three blocks of parameters have been generated: 1) coordination and sensory-perceptive abilities: ability to reproduce linear size (50cm), Romberg's test, reaction to moving object, reproduction of 50 % from the maximal frequency of movements during 10 sec, reproduction of time interval (7sec); 2) speed abilities: run of 15 m., time of simple reaction for a sound, the maximal frequency of movements during 10 sec; 3) speed & power abilities: a broad jump from a place, quantity of knee-bends during 15 sec.

Realization of the experimental program was carried out at special (correctional) schools of 7-th kind (pupils with mental retardation) in Saint-Petersburg (50 lessons). 96 pupils with mental retardation in the age of 12-15 years have taken part in experiment (two skilled groups (12-13, 14-15; n = 64) and two control groups (n = 32)). Pupils of control groups were engaged under the state program in a subject “Physical training”. In the basic part of lesson pupils from experimental groups studied exercises based on sport's elements (volleyball, football, basketball). The complex program was realized also during 30-minute dynamic pauses in second half of day (100 lessons). For lessons with children we used author's development – game "Brosay-ka". It represents the modified type of boccia and includes 3 spheres of the red and dark blue color having the different sizes and weight.

By results of the analysis positive changes are registered in development of ability to support the maximal rate of movements – on 12.8 % under maximal frequency of movements during 10 sec and for 5.5 % by quantity of knee-bends for 15 sec. The similar picture was observed in the second age group in which appreciable distinctions between experimental and control groups are revealed. So, in experimental group authentic shifts (p<0.05) in ability to perceive and reproduce a time interval and linear size and keeping static balance. Positive changes (p<0.05) also were on a parameter " knee-bends for 15 sec ", reflecting ability to maintenance of the maximal rate of movements. On average parameters the level of development for pupils with mental retardation on which correctional influence has been directed, has come nearer to a level of development of pupils from comprehensive schools. Also during research were certain leading factors of psychomotor and sensory-perceptive development for pupils with mental retardation at the age of 12-15 years.

Keywords: Sport Games, Mental Disability, Adapted Physical Activity