STUDY ON INFLUENCES OF VOLLEYBALL GAME USED MEANS OF SPECIFIC CAPACITY ON DRIVING STUDENTS IN HIGHER AGRONOMIC

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Key words: development, motor capacity, operational programs, structures means , game actions , volley-ball

Educators have always been concerned about the instructive efficiency of practical activity. In the context of searching the efficiency training solutions and the optimization of students influences on driving ability is recorded the present research which assumes that in terms of subject content training and the methodology used regarding the development the echelon motricity agronomists students are progress reserves to be identified, verified experimentally and then used.

Discipline of physical education as part of the educational training process of multilateral training future graduates must reflect the content of its orientation towards fast and efficient properties of future professions student armed him with all the qualities and skills specific to different specializations and driving to prevent incorrect attitudes and counteract negative influences exercised by their specificity.

The paper is divided into three parts:

PART I - Scientific substantiation of work

PART II - The operational framework of preliminary research

PART III - Contributions to optimize some specific programs of volleyball game, to improve the driving ability of students

Starting from the observation that the development level of motor ability of agronomists students do not achieve optimal, I thought that there are still reserves that can be exploited regarding the content and the methodology used to achieve at a superior level of quality these educational objectives.

The study is conducted in the context of the following assumptions:

- Different professional specializations of agronomic education require that in objectives and instructive content of the physical education lesson to find their specific aimed required skills (abilities), the nature of the effort and the motor qualities necessary for the future profession.
- The agronomic student has the motric potential with minimal level of development achieved in the previous accumulations stages of high school, which allows and favors further the development of his entire driving skills.
The progress achieved in The physical education activity of for students can be increased by assimilating the methodology and content news (updates) taken and adapted from similar activities belonging to the professional sports.

Volleyball can be seen as a way to exercise which can stimulate students due to his formative valences stemming from the actions content, from the potential bio-motor requested, from the spectacularity and the satisfaction produced by practitioners, his content and methodology of the actions appropriation (properties) can be taken over and adapted to the physical education lesson.

Based on these prerequisites I formulated the following assumptions on which the research activities check them experimentally:

- In the context of the physical education lesson content of the students by using specific means of volleyball game can affect their driving capacity development.
- Motor structures, technical-tactical and volleyball game’s specific exercise can be adapted and used in agreement with the requirements of the agronomic profession.

Research has been organized and staged between the years 2006 - 2012, including all stages and methodological demarches proposed (envisaged): scientific documentation, conceiving trials and tests to determine the level of driving ability, initial and final tests, the elaboration of structures means for the motor component, the elaboration of operational programs for acquiring the volleyball game actions, unfolding the experiment –lessons of ameliorative type, the analyze, the processing and data interpretation, drafting the thesis.

In order to complete assumptions and methodological context of their experimental verification was driven a stage of preliminary research whose purpose sought the extent evaluation to witch the motor capacity of students from agronomic environment is influenced in physical education lesson by using specific means of volleyball playing.

In this context we set the objective to establish an instructional content and to test the effects of his appropriation by both samples (experimental and control) for comparison.

The sample examined included a number of 110 subjects, 50 girls and 60 boys of the University of Agronomic Sciences and Veterinary Medicine of Bucharest.

To assess potential as completely as was designed and applied a complex of samples and tests compressing six samples for general motricity and three tests for the specifies one.

Instructional objectives, content and calendar staggering were common to both samples, according to the curriculum and of those proposed for the study.

The difference between groups was limited to the game of volleyball practice option by experimental group students.

Regarding the objectives of driving capacity, both groups went through the same instructional content.
Preliminary study drew the following conclusions:

Final evaluation results showed significant values in terms of statistical and mathematical, between subjects expressing a detachment of the experimental group which achieved a significant increase in testing speed / power, strength / resistance and at all four parameters of the sample of auto takeover coordination as a result of actions involving of volleyball game chosen by.

The experimental group's progress with regard to the influence that volleyball game brings the driving ability of subjects shall be constituted in formulating an argument of experimental research hypothesis, according to which in the use of specific means of volleyball in physical education lesson students can influence their driving ability.

Part III of the study reserved to improvement driving ability by using the volleyball game 's specific means in the physical education lesson was aimed at experimentally verify the effectiveness of operational programs designed to acquire volleyball game actions and complex structures and means for influencing driving ability.

- In the context of experimental instructional objectives and content intended for the work groups involved were common and in agreement with the provisions of curriculum and their performance was achieved by using the same methodology and workload allocated.
- Difference in expected instructional content for both groups refer to influence driving ability, for which experimental group have been designed and implemented complex circuits aimed at developing specific motor qualities through use of the game of volleyball, and the control group were means applied to complex circuits general nonspecific of volleyball game.
- The difference in instructional content planned for the two groups, refers to the influence driving ability, for which experimental group have been designed and implemented complex and circuits aiming to develop specific motor qualities through the use of specific motor qualities volleyball game, and to the control group were applied complex and circuits with general means, nonspecific volleyball game.
- In lesson structure, experimental work was placed in rings whose objectives pursued these goals, allocate their time proportionately distributed without affecting the performance of other educational objectives of the lesson.
- The content of volleyball game scheduled for experimental research was staggered during 2 semesters and was materialized by the composition of the operational programs for each action.
- Elaboration of programs was performed in accordance with the sequence of operators methodically planned route of "Unitary orientation training volleyball players" (Stroe S., D. Lăzărescu, 1990), whereby the first 3 stages are addressed to initiation operations, fixation and consolidation, stages corresponding instructional objectives intended to analytical programs requirements for first year students.
- For each action were selected exercises structures, grouped and used in accordance with the requirements of each sequence (operations) of the methodological route of their properties.
- Regarding the influence driving ability was designed structures means grouped in the form of complexes and circuits regarding the qualities and basic motor skills.
- For each group were used complex circuits for R, F, V
The results obtained from testing each sample applied were statistical and mathematical processed favoring evaluation objectives:

- Comparative analysis revealed a more substantial progress made by the experimental group at final testing.
- Verification of parametric statistical significance values I performed by using the "t" test and ANOVA which indicate statistically significant differences between the two tests of paired samples.
- Appreciation of the importance of the environments in the two dependent test results (same sample), we performed using Cohen's index.
- Statistical and mathematical evaluation of all evidence and indicators show a more homogeneous structure of data dispersion experiment group and Cohen's effect size index indicates a high to very large difference between averages of the two groups.
- ANOVA variance test found that the average difference between the groups reached statistical significance threshold \( p < 0.05 \), all samples included in the test rejects thus the null hypothesis and validate the research hypotheses.

**Experimental research conclusions:**

1. Instructional content and methodology proposed and experimentally verified by threshold difficulty containing it and requires the students in an effort designed to influence driving ability by means of volleyball proved to be adequate somato-functionals and psycho-motor possibilities of the echelon of I and II year students and the educational level of previous accumulations.
2. Teams involved in experimental work showed somatic growth, level of general motor skills and potential skills of appropriation specific skills of the game of volleyball comparable both among themselves and also with the student echelon of origin and which they represent ,the degree dispersion of values for these indicators guaranteeing thus in terms of statistical and mathematical designated representative teams.
3. Increases in motor function test values in general are superior general for group experiment: 0.13 sec. the speed test 4 sec. the strength test, 6 cm. the standing long jump (DX), 0.95 rep. the rise of lying dorsal trunk and 1.10 in flexion-extension repetitions elbow joint, proving efficiency means structures used to influence driving ability, confirming the first experimental hypothesis.
4. The study allowed verification of the conditions of increased efficiency which can be achieved by training programs with the use of specific-volleyball in physical education lessons. Testing coordination, reaction speed and orientation space-time by samples, of the acquisition over the net and the ball ricocheted playing, record substantial progress on three of the four parameters of each sample: 31.37 compared to 25.83 no. total of hits, 37.57 against 25, 09 no. maximum flicks in a cycle and 17.01 sec. to 12.20 sec. actual time of execution, the fourth parameter (total number of cycles) recorded balanced values, validates the first hypothesis.
5. Through structure and dosages intended all the means used (complex exercises, action), the dependent variable, proved to have the addressability and solve instructional tasks for which they were designated ,constituting thus as optimization solutions with methodological and operational aspect training foreseeing the development of motor skills of the students according to the demands of the profession of agronomist, validated the second experimental hypothesis.
6. Final elevations recorded in the potential of motric tested it's constituted in an objective argument of the appreciation that: use in physical education lessons of the students of such instructional content and methodology aimed at influencing driving ability by specific volleyball game, has favorably influenced both achievement of the objectives concerning development of motor qualities as well as the other objectives and educational content on the development motor qualities expected curriculum, confirming experimental hypothesis.

7. Since somatic factor has not influenced the final results differently (tests proving its level fairly similar for both groups: 171.79 cm. 171.36 or height, 66.16 kg. and 64.84 weight, 4.91 cm. respectively 5.32 and 3.67 cm chest elasticity, to 4.04 cm. mobility) we can appreciate that the final gap marked between the two samples is the direct consequence of content and methodology used by each group.

8. Expected and experienced instructional content as well as his scheduling in line with the priorities of the action learning route proved to be consistent with intended methodological steps of uniform orientation training volleyball players, being accessible with adjustments determined by the particular biomotric potential and skills of the students agronomists age.

9. Reference items they offer content and methodology of training, designed and experimentally verified, may offer operational modalities useful for teachers, able to potentiate the effectiveness of training to increased rates, on the driving capability line through the use of volleyball. Proving its effectiveness in the context of experimental, these methodological guidelines can be adapted to the particular conditions, specific conduct similar training process.

10. Conceiving and use of evidence and assessment tests proposed to check the general and specific motor skills, the preparedness and efficiency of experimental proved to be true on highlighting appropriation expected instructional content, objectives (in the assessment of experimental progress and effectiveness) and stimulating (for the interest of students concerning their progress made in training).

11. Along with the findings on the effectiveness of training drawn from the results of evaluations, I appreciate as being important (pedagogically point of view) permanently remark noted concerning constant interest and total employment of the students in this instructive project, fact which signifies the availability and active participation to such an approach.