

DISTINCTIVENESS OF SOME CHARACTERISTICS OF ATTENTION AND EFFECTIVE THINKING, WITH STUDENTS FROM BOTH HIGHER SCHOOLS

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ABSTRACT. Certain specific qualities and skills are required by the practitioner of any profession, which have to be further developed and maintained. The realization of any activity is impossible without the participation of attention. It has been established that for professions, including the economic ones, the concentration and steadiness of attention are indicated as qualities needed for the successful practicing of these professions – in 11 and in 3 profession-grams, out of 17 analyzed ones. In the same investigation, the requirement of excellent indices for effective thinking is indicated in 14 of them. *Aim* of the investigation is to make a comparative analysis of some intellectual qualities of students – men, from the University of National and World Economy (UNWE) – Sofia, and the University of Economics (UE) – Varna, taking part in the trainings on physical culture and sport, of the respective universities – basketball optional sport. *Tasks* include investigation of literature sources on the theme, establishment of the level of attention and effective thinking of students from the University of National and World Economy – Sofia, and comparative analysis of the average values of indices with these students, from the University of Economics - Varna. The comparative analysis made has established that better results, regarding the concentration and steadiness, are reached by the students from the University of National and World Economy - Sofia, while regarding the effective thinking, the students from the University of Economics – Varna dominate over their colleagues from the University of National and World Economy, on its all three parameters of time, train and coefficient.

Key words: higher school, intellectual qualities, comparative analysis, students, physical education and sport

Introduction

Nervous-psychic qualities - they characterize some of the most important sides of the fitness of human beings for a certain profession. Attention, quick wits, memory, correct logic thinking and reaction are referred to it. Some of indications,

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measuring these qualities are intensity and steadiness of attention, reaction speed, maximum frequency of hand movements, fingers skill, static tremor, balance steadiness, and etc. (Спасов, 2004).

For individual professions, economic ones included, certain qualities for the better practicing and establishment of same are needed (Информационна папка И-041, Икономист (код 2441), 2000). From the analysis made of 17 profession-grams of economic profession, it has been established that concentration (in 11 of them) and steadiness of attention (in 3 of them), are indicated as qualities required for the successful practicing of these professions. In the same investigation, authors - Ставрев & Цветков (2011) found the necessity of excellent indices for effective thinking in 14, from the analyzed 17 profession-grams.

In their surveys, the experts make comparison of the levels of indices for effective thinking and the features of attention between students, attending trainings on basketball and volleyball, from the University of Economics – Varna, as well as the intellectual qualities between students from groups, attending basketball and fitness classes, in Russe University (Илиев, 2008; Bozhkova, 2011).

Other authors investigate the qualities indicated and compare the indices with students – economists, from various specialties (Илиев & Чакова, 2009). In the analysis of literature sources made, a survey is missing of the comparison of indices for effective thinking and qualities of attention (concentration and steadiness), between students from various economic higher schools.

Aim of the investigation is to make a comparative analysis of some intellectual qualities of students – men, from the University of National and World Economy – Sofia, and University of Economics - Varna, taking part in trainings on physical culture and sport, of the respective universities – basketball optional sport.

Tasks of the investigation are:

1. Survey of the literature sources on the subject.
2. Establishment of the level of concentration and steadiness of attention, as well as the level of effective thinking, with students from the University of National and World Economy – Sofia, and University of Economics – Varna, engaged with basketball optional sport, on physical culture and sport classes.
3. Preparation of comparative analysis of the average values, with students from both universities.

Methods

The investigation was conducted in the period 2009-2011, with students – men, of whom 70 were from the University of National and World Economy – Sofia, and 35 – from the University of Economics – Varna.

For establishment of the level of some qualities of attention, the Test of Шульте has been used, representing 5 tables with numbers (from 1 to 25) in different combinations, given consecutively to the individuals, under investigation.

The following indices have been registered:

No.1 – concentration of attention /CA/;

No.2 – steadiness of attention /SA/.

Effective thinking is graded by Test of A. B. Родионов, modified by (1982), through trains, time and coefficient.

The following indices have been registered:

No.3 – effective thinking – trains /ETtr/;

No.4 – effective thinking – time /ETt/;

No.5 – effective thinking – coefficient /ETc/.

Results from the investigation are processed mathematically-statistically, applying variety and comparative analysis.

Analysis of the results

On **Table 1**, data from the investigation of students is presented, as comparison of the results achieved – average mathematical on all tests, the data from previous conducted investigation has been used (Илиев, 2008).

Table 1.

Data of the indices registered

Higher school	n	Indices				
		Qualities of attention		Effective thinking		
		No.1	No.2	No.3	No.4	No.5
		Concentration /CA/ \bar{X}	Steadiness /SA/ \bar{X}	Trains /ETtr/ \bar{X}	Time /ETt/ \bar{X}	Coefficient /ETc/ \bar{X}
UNWE -Sofia	70	34,90	0,99	96,84	66,49	2,55
UE - Varna	35	35,25	1,22	91,51	63,86	2,40

Note: Data on Index No.1 is presented in s, No.3 in number, No.4 in s and No.5 in grades

On **Fig. 1**, the level of two of qualities of attention – concentration and steadiness, with students from the University of National and World Economy (UNWE) – Sofia, and University of Economics - Varna has been graphically compared.

Average values at the survey conducted by us of concentration of attention /No.1/ are 34,9 s for the students from the UNWE – Sofia, and 35,25 s – for UE - Varna. The small difference of 0,35 s, regarding the concentration of attention is in favor of students from the UNWE - Sofia.

Regarding the steadiness of attention /No.2/, the average achievements are 0,99 for the UNWE - Sofia, and 1,22 - for the UE - Varna. Results reveal an extremely high steadiness of attention, with students from UNWE – Sofia (steadiness is the biggest, with index equal or close to 1). Significantly poorer are the results with this index, with the students from the the UE - Varna.

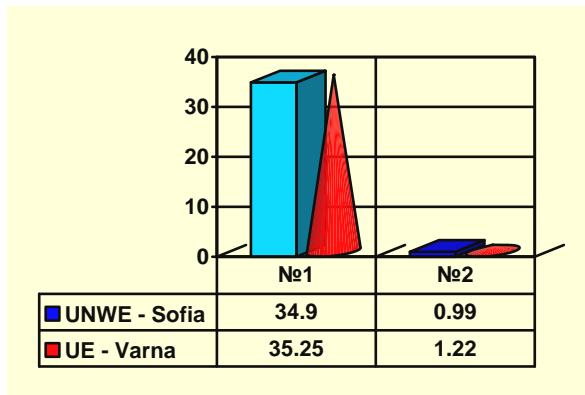


Fig. 1. Comparison of indices for attention of students from UNWE – Sofia and UE - Varna

For assessment of the level of effective thinking, we have used the modified Test of В. Янев (1982), and on **Fig. 2**, we have compared the average values of indices – effective thinking – trains, effective thinking – time and effective thinking – coefficient of students from the UNWE - Sofia and UE - Varna.

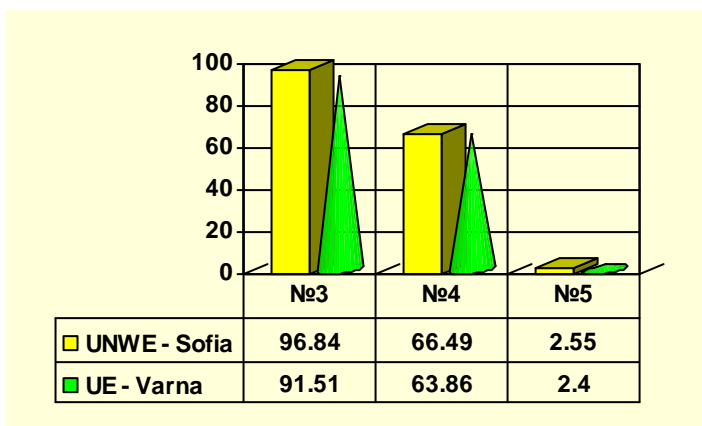


Fig. 2. Comparison of indices for effective thinking of students from the UNWE – Sofia and UE – Varna

The average values of index No.3 – exactness of effective thinking, measured by the number of trains are 96,84 trains for the UNWE – Sofia, and 91,51 trains – for students from UE - Varna. At the comparison, students from UE – Varna solve the effective problems by 5,33 trains and less than their colleagues from the UNWE - Sofia.

Picture of the speed of effective thinking, measured by the time for settlement of problems (tasks), gives us index No.4. With this test, the students from the UE – Varna have coped better - by 2,63 s.

Index No.5 – coefficient of effective thinking, gives us information of the quality of effective thinking – rationality and speed. The minimum difference in the coefficient of 0,15 grade is in favor of the students from UE - Varna.

Conclusions

1. Regarding the concentration and steadiness of attention, students from the UNWE – Sofia have superiority over their colleagues from the UE – Varna, on both indices.
2. Regarding the effective thinking, students from the UE – Varna dominate over their colleagues from the UNWE - Sofia, on its all three parameters for time, trains and coefficient.
3. In the educational programs, on physical culture and sport of the Economic Universities, we recommend to use ways and methods, developing the qualities of attention and thinking – qualities of extreme significance for the professional growth/advancing of economists.

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