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STRUCTURAL CHANGES OF MOTOR DIMENSIONS IN SEVEN-YEARS OLD FEMALE PUPILS

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The problem

We very often discuss a social, political, economic, alternative and other factors which influence our knowledge about physical education process. And that is all correct. And necessary. But is sometimes too global.

All models must be created on the only one basis. Basis of our knowledge about maturation and growth.

Once was written: Anything to be done, must be done well. All countrys and national representations in sport are only a final selection of earlier phases of integrated preparing of children for future life. We must keep in mind that very small number of children is included in exclusive sport creation. It is obvious that we can recognise malfunctions and deseases which are generated because og degenenerating biological material. And that is going to be a great problem. Finaly, if total base is going down, it is clear that selection for sport is not a help mechanism, because that influence in not strong enough in genotipe categories for total human area.

The level of human motor abilities are the result of both quantity and quality changes and interaction of maturation and conditioning process during one's life. The intention of this research was to determine the structural changes after the period of 6 months in the frame of teaching physical education in the first class of the elementary school. It considers the influence of the treatment on the transformation of motor dimensions of the seven years old girls. It is well known that the child is intering a school institution with a lot of bio-psycho-social need. A major need is a need for movement. It is biotic motiv and movin is not, as we often call, an instrument. It is more than that. Because the moving is integrated in global maturation, it is a chance to develop all capacities, all abilities, and it is a change to generate a complete human been.

Methods of work

The structural changes are such a changes wich represent the different relations of parameters signed to describe some transformation process. In this case lsdif, qdiff and krzanowsky model.

Results and discusion

Table 1. Results of the analysis of structural changes the experimental (e) and control (c) group

LSDIF	E	C
Real matrix trace	1,75	3,06
HI-sqare	150,20	210,99
Degrees of freedom	12,00	12,00
Probability	0,00	0,00

This results are the little part of one global investigation in split, Croatia. And some ideas are generated from many other derived results, not only by presented tables.

In this research we can recognize four levels of development possibilities:

1. What happens if the child is not included in any transfomation process. We call it minimum influence, and is only determinated by genetic dispositions, and is primarily stohastic.
2. The transfomation process followed by standard school program. We call it a lower limit, with positive repercussions of transformation process on the child growth. That was our control group.
3. Our experimental program which was specialy composed for our global project needs. We call it approaching to optimal development limits. That was our experimental group.

The differences under qdiff1 (q) and cramer (c) model, similarities under krzanowsky (k) model. Global measurement changes (g), vector coefficient of correlation (VKK).

Variables	Q(E)	C(E)	K (E)	Q (C)	C (C)	K (C)
MKUS	0,37	0,49	0,98	0,42	0,43	0,99
MPOL	0,22	0,25	0,86	0,36	0,43	0,60
MP20	0,58	0,58	0,74	0,46	0,59	- 0,01
MPRR	0,17	0,18	0,54	0,11	0,13	0,71
MTAP	0,44	0,37	- 0,57	0,27	0,30	- 0,48
MTAN	0,33	0,35	- 0,68	0,33	0,41	0,26
MSDM	0,16	0,16	0,41	0,31	0,30	- 0,16
MBLD	0,18	0,18	0,29	0,22	0,25	0,19
M20V	0,19	0,21	0,53	0,21	0,23	0,48
MDTS	0,22	0,22	0,64	0,29	0,33	0,06
MVIS	0,17	0,18	0,09	0,35	0,29	0,02
MT3M	0,14	0,16	0,92	0,19	0,22	- 0,24

4. Such a program which will totally satisfied all child needs and is ideal construction which is very hardly to reach. We call it optimal process.

The result shows us that after 6-month transformation process we can recognize the following situation:

1) Experimental group is much better in all parameters.

2) Child maturation is followed by higher level of motor functioning.

3) Structural changes after only 6 months identify that our experimental group is passing through process of the differentiation of abilities, and a „normal“ group is passing through the process of motor integration.

4) It is obvious that specialy programmed tretment is a chance for a motor functioning on a higher level. (Called: approaching to an optimal level).

5) Finally we can recognize the timing, biochemical timing, which is most important generator of changes. That means that our influence by physical education and sport is not a development tool. The situation is totally reversed. If we do not help that genetically determinated deare impossible to compensate in future life.

All limits are in the period between 5th and 10th year of life.

And is our duty to support normal growing.