

IMPORTANCE OF INTERHEMISPHERICAL ASYMMETRY INDIVIDUAL PROFILE TAKING INTO ACCOUNT IN PEDAGOGICAL PROCESS: SIDE AND OWN EXPERIENCE

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The article deals to discussing the interhemispherical asymmetry individual profile contribution in pedagogical approaches of students, doctors (in part surgeons, dentists), pupils teaching while emphasizing a tight connection between this typological aspect and others, particularly ethnic, ethnic-age, ethnic-gender, on information receiving major canal.

Key words: left-handedness, ambidextrism, pedagogical approaches.

Human typologies are paid much attention to be studied in different countries by the specialists of various branches of Science about Human Being. Age, gender, interhemispherical asymmetry individual profile (sinisters, dexters, ambidexters, ambisinisters), temperament (choleric, sanguinics, phlegmatics, melancholics, choleric with melancholism, melancholics with cholerism), control locus (externals and internals), behavioral strategies (people using coping and avoiding), classification on information receiving canal (audials, visuals, kinesthetics), ethnic belonging belong to the major ones. Study individualization is considered to be Pedagogy direction in priority. Its reaching is impossible without taking into account the

students' belonging to typologies. The given direction actuality is also based on the students huge exchange between various countries for education and post-graduation.

The sinisters amount on the Earth gets increased from year to year while reaching 85-90% in the USA and Japan, 15% (with ambidexters) in Iran. Left-handers amount has increased in 3-4 times for last 50 years in Europe. Although there is following problem in Arabic countries: left-handers can not eat with their left hand because of cultural forbidding. It creates additional overloading to their brain in part while studying. Unfortunately there is a tendency of stigmatizing the left-handed children in Africa and the mothers' negative stereotypes towards left hand dominance in part in Nigeria. The left-handers percentage in such countries is 5% of all. They say about real sinisters (they comprise only 5%) of all, hidden sinisters, unreal sinisters. Also there exist ambidexters (they are skillful with both hands) and ambisinisters (they are not skillful either with right or left hand). The ambidextrism second name is mixed handedness.

The Canadian trainees surgeons managed bone drilling better with tools designed for the left hand. Saudi Arabian medical students right- and left-handers did not demonstrate valuable differences while working with the tools for left- and right-handers. There is recommendation to put left-handed surgeons at national level with common teaching programs creating if right-handed trainees work with them. Left-handedness disadvantage in a given case is more due to barriers than inherent lesser ability. Left-handed surgical instruments were created not so long ago; there is a real beginning for special devices usage for left-handers in dentistry in part in Turkey and in Belgorod (Russia). There exists Chapman's handedness inventory in junior high school Iranian students. There was a study of the relationship between handedness and academic achievement in secondary schools Iranian students.

Intellectual disability in children is considered to be connected to the sinistrality. There is a point of view about learning developmental disorders, dyslexias, dysgraphias, attention deficiency and hyperactivity syndrome, autism distribution in left-handed pupils and students, speech disturbances (in part stuttering) are met only in boys and guys with left hand dominance because testosterone in

pregnant mother will influence onto the son's brain so that the callosal body will grow in its anterior part with right hemisphere dominance and brain ambilateralism in males. It means that males use only one brain hemisphere while solving the tasks and while speech processes in part. Female callosal body will have its increase in its posterior parts that will define less ambilateralism or, with other words, both hemispheres participating in the different tasks solving and while speech processes in part. Although many scientists emphasized to the geniuses bigger percentage among the left-handers comparatively to the right-handers, some scientists consider dyslexia only as special way of the left-handed people's reading. Bergen Dichotic Listening was proposed in Iran for determining the effect of handedness and gender on auditory attention.

Ambidextrism or mixed-handedness is rather "non-comfortable" state for human being because he/she "can not decide what hemisphere to use". Ambidexters can have language and mental health problems in childhood and that these persist into adolescence. They have atrophy of hippocamp and amygdale in old people.

It is known that ambidexters and lefties can write with "mirror writing". It creates the difficulties to the students while their managing the foreign languages. Left-handers are hard to differentiate the similar. It hardens Arabic, Persian alphabet studying and such people usually use English and Russian letters while Arabic and Persian words writing. Also there is a problem of the foreign letters recognizing and reading on the board and even in the copy-book that is why the students ask the teacher to write with separate letters on the board and into their copy-books. It is explained by the fact that right hemisphere dominant in left-handers possesses information processing simultant way without being able to analyze, to split while dominating the synthetic process, perception as a whole and inductive thinking usage. Right hemisphere dominance creates the difficulty in the tests writing comparatively to the right-handers with their left hemisphere dominance that possesses the information processing successive way, analysis process good performance and deductive thinking usage while studying. Left-handed students ask for their own manuals with multiple schemes, figures and short material explanation. And such

manuals in part in Physiology are present for example in Moscow. The teacher should also remember that the left-handed students writing velocity is much less comparatively to the right-handed ones. Left-handed students will work with the best results only without time limit and without pressure from the teacher's side. It is known that the attention highest degree, so-called post-arbitrary attention, is based on interest. It is especially so for left-handed students. It is so desirably to use specific education forms and methods, new and non-repeating especially for left-handed students. If to choose between active, passive and interactive education methods they will prefer the interactive one with colorful multimedia presentations. UMSA left-handed non-Ukrainian students from different countries were visuals mostly (approximately 90%, except the Egyptians) and preferred mentioned colored presentations. Our observations showed also that bi- and trilingualism problems were more actual to the left-handed and ambidexters comparatively to the right-handers though if no language difficulties were, the lefties and ambidexters were able to manage English, Russian very well and some of them were speaking these foreign languages fluently. Left-handers and ambidexters among UMSA foreign students told about managing the bigger number of foreign languages comparatively to the right-handers. It can be explained by the fact that right hemisphere dominant in left-handers and rather well-developed in ambidexters contains foreign languages centers. There is an opinion that left-handers should be taught by left-handed teachers. We can agree with such a statement though unfortunately it is difficult to be reached actually. Teachers also should remember that co-ordination disorders are met more often in left-handers than in right-handers.

There is a hypothesis about pathological right-handedness: temporal epilepsy is accompanied by early damaging the right hemisphere that leads to left hand hypofunction in real weak right-handers that makes them to switch strong right-handedness on. It can be, to the Korean scientists point of view, the first statement for mentioned hypothesis.

Some scientific works results say about absence of any differences between right- and left-handers: in idiopathic bilateral tunnel syndrome treatment and course. This syndrome for sure will create big problems while writing and drawing.

Individual profile of interhemispherical asymmetry contribution to the left-handers psycho-physiological and psychological peculiarities and thus Pedagogical peculiarities for the left-handers best study and optimal social adaptation can't be assessed without taking into account the students belonging to other typologies mostly ethnic, age, gender, according to the information main perception canal. Pedagogy should have separate approaches for the best study of left-handed people and ambidexters as well as their best social adaptation.