CONTROL LOCUS AND BEHAVIORAL STRATEGIES AS NEURO-DYNAMIC PROFILE
IMPORTANT INDICES IN UMSA FOREIGN STUDENTS: THEORETICAL SIGNIFICANCE AND APPLIED ROLE

Summary. The article is devoted to assessing the control locus and behavioral strategies in Ukrainian Medical Stomatological Academy (Poltava) Iranian and Egyptian students. The results received are preceded with big literary review on the topic concerning these neuro-dynamic profile important indices, their study theoretical and applied significance. Left-handers and ambidexters among Ukrainian Medical Stomatological Academy students had mainly control external locus while dexters – the internal one among 63 UMSA Egyptian and 63 Iranian students of different courses and faculties both medical and dental profile. Left-handers (80%) preferred avoiding while right-handers (also 80%) – coping. The present work actuality is determined by following: assessing the control locus and behavioral strategies can be fruitful in Psychology, higher nervous activity Physiology, Dentistry, Pedagogics, Gynecology, Family planning, General medicine, Nephrology, Endocrinology, Pediatrics, management and agriculture in part.

Key words: control locus, behavioural strategies, interhemispherical asymmetry individual profile.

The problem formulation. Typologies study attracts many scientists attention both of theoretical and practical subjects but the publications biggest amount is dedicated to clinical area. There exists students vast exchange according to Bolon education system and in UMSA (Poltava) in part. We had and have Iranian and Egyptian students. The biggest scientific publications analyzed were taken from Iranian scientific journals.

The investigations and publications analysis. Personality one of the most important characteristics represents the degree of human independence and activity in his goals reaching as well as developing the personal responsibility for the events which happen with him/her [2, p.490-491]. First this characteristic investigative methods has been established in the USA in the 60th years of last century. “Locus of control” scale of J.Rotter belongs to one of the most known among them. Two locuses of control – external and internal as well as two people types – externals and internals – are differentiated. Externals think that environmental (natural and social) factors such as God, Destiny, happy case, success, other people are responsible for events in their life while the internals consider that only they are responsible for all, can do and can change everything what they want in their lives.

Locus of control characteristics for a definite personality behavior both during non-luck and achievements. Externals can’t live without communication and work better under the control. Internals don’t want to be under the control and resist when someone manipulate them and try to deprive freedom from them. There is a consideration that psychological and psycho-omatic problems in externals are more often. J.Rotter created a theory of social learning.

Externality was associated with greater distress, suggesting a relationship between perceived helplessness in controlling one’s life and distress [67, p.423-427]. Higher level of education and lower level of internal beliefs were related to better knowledge and safer use of pesticides among Egyptian farmers [41, p.3]. Adolescents with low internal health locus of control and high chance external health locus of control were more likely to have depressive symptoms than others [7, p.1043-1052]. There exists study of health locus of control in children suffering from asthma [40, p.439-461]. Obese pupils had significantly higher mean scores of internality [37, p.443-468]. Depressive inpatients are more depressive, more hopeless, more external, and less internal than patients with medical diseases; the Egyptian patients reach in general markedly higher level in depression (BDI) than the patients in the German samples, similar difference in the H-Scale (Hopelessness Scale) was only observed for the depressive samples [69, p.207-214].
By Iranian scientists data Holy Quran locus of control is the middle of external (outside) and internal (inside) [13, p.113-126].

The work about external control locus training recommending to enforce self-efficacy in women in part at using the counseling programs in fertility clinics represents a good example of control locus assessment in a complex with ethno-gender typological aspect [52, p.41].

Many publications are devoted to locus control assessment in Iranian students reflecting ethno-age and ethno-gender-age typological aspects. We met Iranian scientists work about interrelations between locus of control and academic degrees [48, p.117-143]. Locus of control is thought as rather important factor of family communication patterns [18, p.86-88], in part relatively to self-esteem in students [88, p.114-134]. There exist to be found tight correlations between creativity and internal control locus in Iranian students [63, p.145-182], between optimism and control locus in students [62, p.165-182], between internal (inside) control locus and self-efficacy in the students [14, p.115-125], between internal control locus and health-prompting behavior [8, p.7-16]. There is a work without these correlations between creativity and internal locus of control, only with emphasizing the necessity to develop creativity and control locus [30, p.139-159].

Other works touched necessity of determining the internal and external locus of control in the patients with diabetes mellitus for the doctor and the patient optimal conversation as well as following the therapy [89, p.249-258]. Mother’s internal control locus in Iran is considered as positive for children creativity, for diabetes mellitus treatment in children in Yazd [64, p.85-96; 19, p.804-813], positive correlation between internal control locus and good self-care behavior in the patients with insulin-independent diabetes mellitus while speaking about so-called health locus of control [50, p.17-22]. Iranian scientists study locus of control in the students in gender aspect in Tabriz [42, p.76-82]. Iranian scientists from Tarbiat Modares University as well as Medical school of Shahid Beheshti University proposed the term “creative defensive strategies” for people with increased creativity [66]. There is a work dedicated to comparison of Persian, Kurdish and Turkish ethnic groups in Iran on this subject moreover in gender aspect [20, p.71-75].

Ethno-gender-age aspect is reflected in the works about positive relations between internal locus of control and marital adjustment in fertile and infertile couples [11, p.137-156], comparison of behavioral activation/inhibition systems and locus of control among girls and boys university students [75, p.7-26], asthma in adult Iranian men and women with emphasized tendency to externality [51, p.137-143], about alexithymia in Iranian students boys and girls [12, p.13-32], control locus in normal hearing students (more internal) and the ones with hearing impairment (more external) [28, p.67-73], students’ (boys and girls) control locus relationship with the teachers disciplining various types [70, p.83-97], between control locus, cognitive self-consciousness and fear of failure in the students with and without learning disabilities [46, p.44-59], control internal locus dominance in women who are undergone to breast self-examinations [71, p.43-51]. Ethno-gender-age aspect was found to be informed in the work which main statement is that control locus is social adjustment related factor in the intelligent school students and gender is a related factor in their social adjustment (the results say that there was no significant difference between personal adjustment and gender, but social adjustment in the intelligent girls was more that intelligent boys [47, p.159-165]. Creativity creating necessity in the employed mother and their children together with locus of control was discussed in [9, p.29-40].

We met following data while analyzing the scientific sources from Iraqi journals. Cognitive styles are known to be applied in management [22, p.810-812]. We met work about control locus connections with ethno-typological aspect of the Greek scientists on internal control locus positive association with self-esteem in dialysis patients [82, p.136-140].

Locus of control measurement can influence on study achievement in Egypt, there are tryings to modify students’ locus of control [6, p.64-71], can be important in time management for games trainers and teachers in physical education [10, p.232-239]. A direct significant correlation exists between psycho-cognitive attitude towards mental training and the locus of control among the couches with internal control [36, p.97-102], in companies because of relationships between accounting figures objectivity and locus of control [33, p.157-163]. There are special multidimensional scales for assessing the locus of control in the students for instance the Levenson’s one [32, p.258470].

Control locus is described together with ethno-age aspect. There exists study about children’s health locus control scale Egyptian version (in primary and preparatory schools students) [3, p.139-173].

Ethno-gender-age aspect in a complex with control locus assessment found its reflection in the work about sociodemographic factors in Arab children (Egyptians, Jordanians and Saudis) with autism spectrum disorders [15, p.65].

Locus of control is described in the scientific literature in dentistry in ethnic typological aspect. Australian and Swedish dentists works are devoted to assessing the anxiety and fear at a dental reception [84, p.453-459], separately the Australian ones [17, p.179-186], the Finnish ones in the diabetics (with finding out the correlation between dental and diabetic locus of control [56, p.127-131].

Control locus is also described in a complex with ethno-age aspect. For example, it was assessed at decay and gingival problems before and after conversations about dental health in the Indian students [68, p.42-48], in a complex with assessing the anxiety at dental reception in them [5, p.9-14], separately without assessing the anxiety – in the Swedish teenagers [65, p.249-265].
Control locus is described in dentistry together with ethnic-gender-age typological aspect in the Spanish students [26, p.327-337], in the dental students from India [4, p.110-115].

Locus of control is assessed together with behavioral strategies in part at stress for predicting the students' general health [39, p.630-635], in females at group reality therapy [16, p.59-68].

Behavioral strategies (coping and avoiding) belong to another important typological aspect, study and taking into account of which is rather actual in dentistry. We found works about coping in the American patients at surgical preparing [58, p.435-439; 57, p.1237-1243].

American dentists assessed children's coping patterns with aversive stomatological treatment [61, p.236-246], the Irish ones - while anesthetizing at caries [25, p.30-36].

Coping strategies study represents important and interesting problem which is in scientists focus in different branches of theoretical and practical medicine, in various countries: Iran (with age and gender-age aspects adding) [31, p.1-9; 86, p.208-215; 85, p.36-40; 54, p.16547; 87, p.18944], Sudan [55, p.489-512], in part in men (with gender aspect adding to the ethnic one) [49, p.1177-1196], with ethno-gender-age typological aspect adding [80, p.1631-1636], in women with gender aspect adding [21, p.944-953], in children with age aspect adding [29, p.12-22], in Australia [73, p.383-388], Canada [79, p.199-212], in the USA [72, p.993-1003; 60; 81, p.300-315], with age aspect adding [23, p.631-648; 43, p.389-396; 44, p.585-591], Ethiopia and Kenia [59, p.203-211], Turkey [83, p.79], England (there is a link between parental locus of control and the locus of control, self-esteem in children [38, p.41-55]. And moreover this personality cognitive style is described taking into account other human typological aspects representing one of them like in the works from other countries.

There is so-called internalizing syndrome (depression, anxiety) described in part in England in children, adolescents and young men (after these people growing) [53, p.938-946]. Internalizing behavior has positive correlation in boys further parenting behavior [74, p.969-986]. These problems are described and compared in the Americans different populational groups [27, p.22-31].

There are also the terms “externalizing behavior”, “externalizing syndrome”. In part it is known that children’s externalizing behavior predicts maternal and paternal consistency lower levels [24, p.1387-1398; 35, p.1-14]. Externalizing problems high levels at 30 and 42 months negatively predict children’s effortful control a year later and intrusive parenting in the adulthood [34, p.953-968]. These problems are described and compared in the Americans different populational groups [45, p.838-843]. The scientists from Netherlands found out that there had been a link between borderline intellectual disabilities and externalizing behavior in part concerning parenting [77, p.1-12; 76, p.237-251]. They also assessed executive functions and processing speed in children with mild to borderline intellectual disabilities and externalizing behavior problems (differences in inhibition and cognitive flexibility were more expressed at impaired executive functions together with externalizing behavior problems that only at impaired executive functions) [78, p.442-462].

Unsolved problems parts the given article is dedicated to. The problem is interrelations between interhemispherical asymmetry individual profile and neuro-dynamic profile indices (control locus, behavioral strategies). Such problems like other human typologies represent the subject of differential psychology which belongs to the scientific directions in priority nowadays. To our mind this investigation results can emphasize this as well to widen not only the theoretical but the applied aspects of the questions discussed.

The data about mentioned interrelations between interhemispherical asymmetry individual profile, control locus and behavioral strategies are rather absent in scientific literature.

The work aim: to assess control locus and behavioral strategies in UMSA Iranian and Egyptian students dependently on their interhemispherical asymmetry individual profile.

The investigation tasks:
1. To assess interhemispherical asymmetry individual profile in the investigated people group: number of dexters, sinisters as well as ambidexters.
2. To assess personality cognitive style parameters: locus-control (internal and external); reacting styles in complicated life situations (coping and avoiding).

We performed our work on 63 UMSA students from Iran and 63 from Egypt from different courses, fellows (50) and girls (13), 19-27 years in age.

The results received
Left-handers and ambidexters among Ukrainian Medical Stomatological Academy students had mainly control external locus while dexters – the internal one among 63 UMSA Egyptian and 63 Iranian students of different courses and faculties both medical and dental profile. Left-handers (80%) preferred avoiding while right-handers (also 80%) – coping.

The results received discussion
Control locus is an index characterizing human feature to consider external factors (external control locus) or internal factors as well as human own abilities and forces (internal control locus) as the responsible ones for his activity results. Lefties are considered to be more emotional, sometimes living in their own, often surrealistic, world, possessing extrasensory abilities (as a result of right hemisphere bigger development in them) and that is why they believe in miracles, help from the Skies, Destiny in bigger extent in comparison with dexters. Dexters are realists more, they use to do something for their aims reaching.

There are 2 main ways of reacting to the situation: 1) coping; 2) avoiding.

Avoiding is refusal from the problem solution and corresponding concrete actions for comfortable state saving. Coping represents constructive activity directed to solving the situation, coming through it. Lefties give
the preference to avoiding while dextrales to coping as reacting styles in difficult situations. We suggest that it can be connected to the peculiarities described above according to which dextrales are bigger realistic in life and often act by themselves without other people help.

As a conclusion

As a conclusion, we would like to mention that assessing the control locus and behavioral strategies can be fruitful in Psychology, higher nervous activity Physiology, Dentistry, Pedagogics, Gynecology, Family planning, General medicine, Nephrology, Endocrinology, Pediatry, management and agriculture in part.

Further investigations directions. Our further investigations will be dedicated to personality other cognitive style parameters assessment in HSEEU “UMSA” students from Iran, Egypt and other countries.

Литература


