INNOVATIONS IN SCIENCE: THE CHALLENGES OF OUR TIME

Monograph

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The Actualization of Threelingualism Problem as Neurotization Factor in the Occupational Training of Future Physicians

Socially-psychological problems related to language contacts, interaction and interpenetration of two or more language systems repeatedly attracted the attention of scientists of philological, pedagogical culturology, ethnography, sociolinguistics fields. In the presence of intraand interlanguage oppositions usually different types of interference occur. Current researches of interference are mainly conducted in two ways: firstly aspects of the interaction and interpenetration of languages are analyzed, and, secondly, this question is studied in connection with the method of teaching non-native languages at the theoretical level.

Monographs researches analysis reveals many fundamental papers about interference phenomenon under bilingualism condition (A.O.Anisimova, N.V.Baryshnikov, R.Y. Barsuk, I.V. Dubko, A.V. Schepilov, L.A. Sazhko, F.S.Usmanova, B. Hufayzen etc), while threelingualism situation in this context was not a separate subject of scientific psychological researches.

The purpose of the study is actualization of threelingualism problem as neurotization factor in the occupational training of future physicians.

Foreign students-medics as a rule are African-Asian origin, derived from one language system, as the first foreign language speak English (not always sufficient), and as they study in Ukraine should master second foreign language (Ukrainian or frequently – Russian).

In this context it is appropriate to consider firstly - the question of similarity of language, secondarily - the level of language skills and thirdly – sphere and degree of all three languages using. Almost naturally, that the interaction of three language systems will cause different types of interference. In this connection, we agree with T.M.Chevanina opinion that threelingualism is more complex (compared to bilingualism) linguistic phenomenon that should be viewed as a special type of multilingualism.

Threelingualism is appropriate to be considered using personality approach, in particular – genetic- psychological (S.D. Maksymenko). Personality is a complex and multilevel phenomenon. On the one hand personality is a community of biological and psychogenic base units, on the other - a stable system of socially, ethnically significant features that characterize the individual as a member of a community. Interaction of all these elements forms a certain type of personality. Personality manifests and reveals its intrinsic properties primarily in the language. Because, being associated with thinking and psychology of man, his life and public consciousness, it reflects ethnic, social, psycholinguistic features of its carrier.

Educational space, according to many scientists has expressed personality dimension. It realizes in activity and communication relating to a personal educational environment of both-teaching and learning person (O.H.Kuzminska, M.M. Nazar).

Changes in the socio-cultural environment, pace of life, information overload, increasing this stress, often provoke emergence and development of borderline states of mental pathology that brings issues of psychohygiene, psychoprophylaxis and psychological correction in the list of the most important tasks of mental health (K.V.Aymedov, F.B.Berezin. T.P.Viskovatova, B.S.Polozhiy, B.D.Karvasarskyy, H.M.Yakovlev, etc). It is known that most sensitive age to different stress factors that influence on person is a student age. This age is the most important intermediate period in the development of personality – from teenager to adult, (leadership activities within which is an occupational skills development).

Analysis of the leading researches (O.P.Venher, V.H.Hamov, O.D.Hrechvshkina. N.M.Dvatlenko, H.P.Levkivska, S.D.Maksymenko, Ye.O.Reznikova, O.H. Soloduhova, F.G. Khayrullin, A.V.Furman, N.Kotsur, L.V.Klochek, L.V.Kosaryeva, N.V.Lyubchenko, O.V.Prudska, I.M.Shapoval) into the problem of adaptation to study at universities reveals that there is influence of psychological factors at different levels (psychophysiological, individually-psychological, sociallypsychological). Based on a comprehensive analysis of the interactions between factors and manifestations of adaptation were found differences in the nature of (T.V.Aleksyeyeva, adaptation. its stages and forms Yu.L.Trofimov, S.I.Yakovenko).

Theoretical analysis and scientific researches into the problem of threelingualism of co-operation in the educational space led us to generalize the psychological characteristics of students in Arab countries. Data from the dissertations of Mohammed Osman Necati (1974), Ali Hussein Tahsina (1979), Ahmed Shaaban Atyyya (1979), Siham Abu Darwish Atyyya (1986), Mohammed al-Mutavva (1991), Ahmad Abad and Cihan Al-Imran (1992), Ahmed al-Abadi Kamiha (1996), Ahmed al-Samad Mohammed and Khaled al-Tahhanom (1997) are summarized in Table 1. Not being able to explore the Arab youth in learning in their home countries (as a control), we consider it necessary to determine their psychological characteristics, using materials of other researches.

In general, it should be noted similarities of psychological characteristics of Arab and Ukrainian students on condition of education in home countries. However, adaptation of foreign students to the educational space in another country remains interesting question.

Table 1

Content analyze of dissertations researches into problems of psychological characteristics of Arab countries students

Researchers	The sample of researches	The main results
Mohamed Osman Necati (1974)	866 students(males and females)of all faculties of Kuwait University	This study demonstrated that psychological problems of students occupy one of the first five places on the list. Comparison of male perception of psychological problems importance with female revealed considerable coincidence. In addition, this study showed that students from Kuwait and the United Arab Emirates are equally concerned with the problems of personal relationships and psychological harmony.
Tahsin Ali Hussein (1979)	The sample group consisted of 640 students (males and females) of Basra, Mosul and Sulaimaniyah Universities	Study on the university youth problems in Iraq was intended to familiarize with the most important problems of Iraqi universities students and show to what extent they relate to the factors of gender and the environment (geography). In the questionnaire were questions on the nine groups of problems: educational, recreational, social, religious, emotional, relating to health, economic, sexual and family. The results showed the presence of differences with statistical confidences in the range of 0.05 to 0.01 between nine different groups of problems.
Ahmed Shaaban Atyyya (1979)	555 students (males and females) of teacher training colleges in Alexandria and Damanhur	Conducted survey revealed that students care about such social problems as a contradiction between what is taught in the colleges and everyday life, ignoring the views of young people, confusion of religious issues, struggle between the desire to express themselves and difficulty of implementation, loss of aspirations in life crush, ideological backwardness of society.
Siham Abu Darwish Atyyya (1986)	420 students(males and females) of different faculties of Kuwait University	Results of survey showed that students need more academic and occupational guidance than the recommendations for adapting to environment and psychologist help. It was found that men need occupational and psychological guidance more than women.
Mohammed al-Mutavva (1991)	548 young people, citizens of the United Arab Emirates, school and college age.	The problems of youth were studied in general. The results showed the presence of complex of problems in UAE youth, although their degree and kind differ from the problems faced by young people in the Arab and non-Arab countries. The author found that mental and emotional health of young people is one of the factors that influence on their psychological stability. One of the main problems faced by young people is fear of the future. This is typically for 66% of the surveyed group. Also, 50% suffer from nervous disorders, 57% - unexplained depression, 47% - inability to express their views on many issues and 66% are given to fantasies too much.

Ahmed Abad and Cihan Al- Imran (1992)	431 students (males and females) of the University of Bahrain, whose ages ranged from 18 to 25 years.	Research on Bahraini youth emotional problems. The results indicate that university students have 30 emotional problems among 100 contained in the survey. These problems can be divided into eight categories: weak innate ability and inability to make decisions, anxiety, inattention and inability to concentrate, inability to achieve emotional balance, lack of confidence, excessive sensitivity, fear of failure, fear of committing errors.
Ahmed Kamiha al- Abadi (1996)	Conducted in selected group of pupils and students of secondary schools and universities across the country. The object of the study was the prevalence of the four types of problems: problems of the dangers and challenges, problems of health and finance, problems of conflict with customs and traditions, problems of frivolous attitude towards the future.	The views of young people on prevalence of social problems among young people in Saudi Arabia were explored. It notes the wide prevalence of above mentioned problems among Saudi youth.
Ahmed al- Saadi and Mohammed Khaled al- Tahhan (1997)	UAE University students	At an introduction to the needs of a guideline based on several factors. The measurement was carried out on five groups of problems: psychological, social, vocational, educational, information knowledge sources. The results revealed the presence of 20 needs guidance of university students in the following order of significance groups: educational, occupational, informational, psychological and social.

Studying the spectrum of the most common problems of foreign students J.S. Orudzhev and V. V. Delaryu obtained results that the most important among them are the material and everyday problems, then in descending order of importance, concern about the state of their physical health, education and the last- interpersonal relationships.

The social situation turned out interesting. Analysis of M.V.Popuhaylo and A.I. Tsalkovsky sociological research revealed that 80% of foreign students pointed out that in the process of learning a second foreign language they did not have much difficulty. Every third believer student after arrival to other country stops performing religious rites. Most students show declining interest in native culture in general, although they speak the native language, read national literature, listen to the national music. There is increased interest in Western culture.

Ben Barek Abdulhakim Mohamed Hussein research reveals the psychological characteristics of neurotization of Yemeni students' personality during the study at the University of Russia Federation. The researcher notes that the Yemeni students have more intensity of neurotic symptoms severity (with the dominance anxiety, excessive fixation on negative events, and trends to isolation), higher levels of psychological distress and breadth of symptoms compared to Russian students, indicating higher probability of neuropsychiatric and psychosomatic disorders.

Intensity of neurotization signs in women was reliably more than that in men. Yemeni students are generally satisfied with the quality of their lives and evaluate it higher than Russian. No significant differences according to the main areas of life quality evaluation were found. Yemeni students are characterized by expressive virtually all types of character accentuation. The most severe type of character accentuation among men is exalted and women - emotive. Yemeni students have more expressive intrapersonal psychological conflicts in comparison with interpersonal.

At the same time, Yemeni students, in general, characterized by constructive coping strategies of behavior, but trend of passive coping strategies appears.

The main indicators of mental distress in Yemeni students are syndromes "depression", "interpersonal sensory" and "hostility". The main factor that hinders the development of psychopathology is hypertimic type of character accentuation.

E.Yu. Sahorova studied dynamics of the life quality and physiological adaptation of foreign students of medical university. Scientific notes that the study of life quality is an informative criterion for evaluating of the level of foreign students adaptation to the learning conditions at the university. The quality of foreign students' life is directly proportional to the level of adaptability. Personal characteristics and the factors that determine work and lifestyle features of university students affect the assessment of foreign students' life quality. Factors of foreign language and novelty of socio-cultural environment significantly affect the process of adaptation of foreign students to the new conditions of life, but are not leading. The latter argument, in our opinion, needs to be clarified. However, the findings of scientist supported by our observations that it is the initial stage of adaptation of foreign students to learning university conditions characterized by the presence of their high psycho-emotional tension that appears predominance of sympathetic autonomic reactions orientation. Thus, attempt to generalize many studies on the specific adaptation to the occupational training of foreign students under threelingualism conditions leads us to the needs of own scientific and psychological research.

The ability to mix in one research context threelingualism concept, adapting to learn in institute of higher education, personality formation and learning in our view is entirely justified and up-to-date. In this regard, it is appropriate to identify specific reference points of threelingualism adaptation in the context of receptive language competence development by Englishspeaking foreign students. Genetic determination of interdependence of psychological characteristics of personality neurotization (psyhosomatization) and success of occupational language mastering under threelingualism conditions remains relevant question. Determination of foreign students' personality neurotization and selection of the methods of psychological influence on them in the learning process and psychocorrection practice are also unclear.

Among disciplines of the first courses studying, which actually occurs under threelingualism condition, importance is given to medical microbiology, virology and immunology. Theoretical concepts, obtained in this course, are a basis for future clinical discipline -"infectious disease". Active use of science theoretical concepts for building practice as a doctor is not possible without a generalized ways of mastering scientific concepts that can be transferred to new content. Such a transfer is possible when generalization techniques have become for the student "instrument of his thinking" (S. Rubinstein), when students can independently acquire new knowledge. G.S. Kostyuk states that at the beginning in the learning process should be created conditions for generalizations, mastering generalized knowledge, abilities and skills that to be applied in the future to individual cases. However, unfortunately, there is lack of researches on summarize of processes of subjects interaction under threelingualism condition.

So, in the study of microbiology foreign students of englishspeaking forms of education should form a theoretical concepts and appropriate the conceptual framework of science and learn to use it yourself when studying clinical disciplines. These skills, in our opinion, will be the key to master occupational medical language and affect on adaptation processes in educational activities of threelingues.

However, teaching microbiology courses experience suggests that issue of generalized way is neglected, psychological characteristics of educational actions in mastering the concepts of microbiology are not well-considered and three linguistic situation of educational interaction is not took in the account in the curriculum of microbiology.

In consequence, some students developed indifferent, sometimes even negative attitude towards microbiology as an educational subject. Consequently, students often demonstrate a superficial knowledge, there is no development of creative thinking, and, as result, interference of old and new knowledge in microbiology occurs.

Numerous studies revealed the psychological features and the need to form a system of educational actions, based on which general interaction, underlying theoretical concepts of knowledge content is apportioned.

In our case, this genetic interaction may be dichotomy "microorganism - macroorganism", which will allow to form and appropriate the system of microbiological concepts associated with clinical presentation of infectious disease.

Therefore, it seems appropriate to apply experimentally-genetic approach to microbiology teaching. The logic of this method according to Maksymenko S.D. "... involves more than simply recording during the observation or forming experiment (in our case - learning system of microbiological concepts) features of various empirical manifestations of the human psyche, but their active modeling and reproduction in special circumstances" (in our case – under threelingualism condition). Moreover, specific feature of this method is that model established researcher with cognitive purposes is consistent with the real internal structure of mental process.

Conclusions and prospects

Thus, the need for specification of basic statement of experimentallygenetic approach to teaching microbiology for English-speaking students of higher education under threelingualism condition and practical need for the development and implementation in high school practice more effective forms of learning activities to prevent factors of neurotisation of students of English - speaking education under threelingualism condition determined the problem choice of our study.

Promising concept of further researches is clarifying certain theses relating to both theoretical and applied aspects of the implementation of genetic-modeling techniques in object-practical situations of solution of specially gradated experimental and genetic problems by students. It is advisable to identify psychological and linguistic characteristics of microbiology conceptual apparatus appropriation by students. It is necessarily to develop basic forms of psychological and didactic means of formation of generalized methods of action in mastering the conceptual microbiology base clinically-oriented apparatus on of approach "microorganism-macroorganism", prove original model of generalized methods of action and guiding system.

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