

**ANNOTATION**  
**to the dissertation of Sofiya Duisenova Malkaidarovna on the subject**  
**“Educational and scientific strategies of youth in modern Kazakhstan”**  
**presented**  
**for a Doctor of Philosophy degree (PhD)**  
**by specialty Sociology-6D050100**

**General description of the dissertational research.** Today the process of radical economic and social changes in modern Kazakhstan require highly qualified, creative professionals who are able actively influence on the level of industrial and social development of the country. Currently, one of the most important factors which determines the competitiveness of the country is the effective use of intellectual resources, the preparation of which is one of our priorities.

**Relevance of the research subject.** The relevance of specialists training is due to a number of factors. Firstly, education plays an increasingly important role in the development and formation of an innovative society in the XXI century. The global economy is based on the generation, transfer and implementation of knowledge. The development of education as a social institution, in its turn, is influenced by the economy needs, the social sphere, and the labour market. Today, the entire economy is strongly influenced by global trends such as globalization, integration and international cooperation. The educational environment of all countries involved in this process has changed in accordance with these conditions. These processes are exacerbated by demographic trends, ever increasing international competition in science, the increase in innovative technologies and the struggle for the talents and abilities of young people who set their life strategies and goals, as well

Secondly, modern challenges stimulate a critical understanding of the education system, forcing us to seek and find accurate answers. They also make us respond flexibly to the demands of time, pay special attention to the quality, fundamentality and depth of education. Obviously, training not only specialists with unique skills and qualifications, but also specialists who can quickly adapt to changing socio-economic and political conditions is a common need for the development of education in all developed countries. High qualifications and the ability to adapt quickly are the main resource and source of growth of the individual and the "knowledge society".

Thirdly, the desire of our state for sustainable development has actualized the need to change the way of life. This new way of life is based on continuous education, high intellectual readiness for self-education, professional mobility and self-expression. High rates of change in all social spheres require a high level of adaptation not only from the individual, but also from the education system as a social institution. This focus towards innovative processes and integration is based on the adequate choice and formulation of educational strategies in society.

Science is the most important element of Kazakhstan's economic and cultural asset. Radical changes in the value hierarchy in modern Kazakh society and the destruction of traditional stereotypes have led to a change in attitudes towards scientists, the scientific community, and science itself. The elite status of this social

institution began to fall rapidly in all major aspects. The prestige of the scientific profession fell, the economic impoverishment of scientists occurred, the ability of scientists to participate in the society management was minimized.

Taking into account these crisis factors, the training of young scientists in higher educational institutions is of particular importance. This is due to the fact that universities are the most important strategic resource of the country, and its scientific development is characterized by innovative ideas, unique approaches, advanced methods, and the implementation of the results will solve many socio-economic problems of modern Kazakhstan society.

**The scientific problem** is the lack of elaboration of theoretical concepts and empirical results of research on changes in the integration of the younger generation in various spheres of society, including science. Secondly, public opinion and the scientific community's assessments of the constructive and destructive results of this process are ambiguous, as the overall assessment of young people self-expression from different social groups in the changing society of Kazakhstan.

**The scientific relevance** of the research subject is related to the insufficient study of the process of young people social and professional self-determination. This process includes the formation and implementation of the professional education strategy and the formation of scientific life in a changing Kazakhstan society. The role of young scientists in the formation of new institutional, cultural and behavioural norms and practices in the field of education and science requires constant study.

**Hypotheses of the study:**

1. Educational strategies of students, as the main consumers of educational services, as well as a social phenomenon has a multidimensional nature. The mechanism of its functioning is influenced by external and internal factors defined by the state and society has a core cognitive-behavioural characteristics which are continuity and professional competence, public opinion, professional reputation and values that depend on self-assessment and identification of agents of these social actions.

2. The behaviour of young people in the education system and professional sphere at different stages of self-determination (from vocational education to entering the labour market) and due to maturity depends on an adequate assessment of the individual's capabilities and limitations, as well as on the demand for human capital in the labour market.

3. The behaviour of undergraduates and doctoral students in the education system and in the field of science is less influenced by the opinions of others. On the other hand, their own needs and interests start to have a strong influence.

4. The role of individual factors, the personalization of examples increase as the values of scientific work in society decline. In the general context of the devaluation of education and scientific values, the desire of individual scientists for self-determination is becoming more and more obvious.

**The object of the research** is students of higher educational institutions of Kazakhstan.

**The subject of the research** is educational and scientific strategies of young people in modern Kazakhstan.

**The purpose of the work** is to analyse comprehensively the formation of educational and scientific strategies of young people in the context of reforming the education system of Kazakhstan.

**Objectives of the study:**

1) to consider the main theoretical approaches in the field of educational strategies;

2) to reveal the categorical apparatus of “educational strategies” and “scientific motivations” in sociological concepts, as well as to formalize the author's definition of “educational strategies”, “scientific strategies”;

3) to contextualize the transformation of the education system in the Bologna process and the motivation of young people to learn, the impact on the scientific potential of professionally trained youth;

4) to identify the types of strategies (models) of students at the stage of selection and acquisition of professional knowledge, future behaviour in science, as well as to identify the most important factors affecting the formation of educational and scientific strategies;

5) to determine the typologies of behavior of young professionals in the field of higher education.

**Theoretical and methodological basis of the dissertational research consists of** fundamental, theoretical and methodological propositions of the classics of psychology, sociology, and modern domestic and foreign scientists and the results of applied studies in sociology of science, sociology of education, national concepts of Kazakhstan science and higher education reforming, state and regional strategies of social policy development in the field of higher education and science.

**The empirical basis for the validity of conceptual ideas** is the data of the State Statistics Service of the Republic of Kazakhstan, the experience of the Union of Young Scientists and specialists on the development of scientific and creative potential of young scientists, university researchers. Data of the applied sociological research on «Kazakhstan model of education: international experience, national traditions» project (head-Doctor of Sociological Sciences, Professor G.S. Abdiraymova), conducted jointly with the Centre for Sociological Research and Social Engineering of Al-Farabi Kazakh National University (2011). The results of the sociological study conducted in 2015-2017 on the basis of fellowship 1482 / GF4 «Integration of higher education and employers as an important condition for professional mobility of university graduates» (scientific supervisor - Doctor of Sociology, Professor G. O. Abdikerova). The empirical basis of the dissertation is the results of a study (questionnaire) conducted by a doctoral student in 2014-2016, and a revised questionnaire in 2018-2019 to determine the types of young scientists and repeated sociological research (qualitative methods), focus group studies, in-depth interviews. The clarity of the analysis results has provided the theoretical and practical validity of the main provisions and ideas of the dissertation.

A range of sociological analysis methods was used In the dissertational research. A two-stage survey was conducted. A quantitative survey of Kazakhstan university youth was conducted using a targeted sample type in 2014-2016 (N = 1200) and in

2018-2019 (N = 400). Statistical processing of survey results was performed in SPSS 19.0. statistical package

The focus group was attended by 33 people, the respondents of which were undergraduate and graduate students of Almaty universities - 2 groups (N = 12), as well as representatives of the CYSS of the University (Chairperson) (N = 9) and University young scientists (N=17).

In-depth interviews were held with young scientists of Almaty universities (doctoral, N = 10) and young scientists graduated from doctoral programs (N = 14).

The expert survey was attended by leading professors of Almaty universities, heads of departments, head of the University scientific work Department (N = 7). Such a choice was due to the need to obtain reasonable feedback and qualified recommendations on the feasibility of developing and implementing conceptual approaches to the system of scientific activity.

The dissertation was enriched by secondary data and results of sociological monitoring of leading national and regional centres on the problem of dissertation work which are BISAM research «Conditions and problems of Kazakhstan science» (701 respondents from all regions of Kazakhstan, 20 in-depth interviews), results of young scientists survey together with the Centre for Sociological Research and Social Engineering of Al-Farabi Kazakh National University «Youth of Kazakhstan – 2014», «Young scientists of Kazakhstan: fundamentals of a sociological image» 2012 (500 people from 7 regions of Kazakhstan).

**The scientific novelty of the results is as follows:**

1) the concepts of educational strategies are analyzed, social and group features of educational strategies of young people are described, educational strategies are described as a modern approach to the implementation of life plans in the educational space;

2) on the basis of “scientific motivations” discourse, the social characteristics of “young scientist” group and the author's definitions of “educational strategy” and «scientific strategy» are revealed;

3) according to the obtained empirical results, the pragmatic values (in particular, the reputation of the university and the profession), the dominant influence of parents and friends, and the distribution of scholarships by specialty are crucial in the formation of moral and ethical norms and value orientations of the younger generation;

4) elements of educational and scientific strategies are the desire to become a professional in their craft pragmatism (territorial proximity); the desire to meet the expectations of parents and relatives, etc. At the same time, an indifferent attitude to learning is also noted. Economic, institutional and personal factors influencing the behaviour of young scientists in the field of science are revealed;

5) three main typologies of students' educational and scientific strategies based on factor and cluster analysis have been developed. The types of young scientists and the stability of their professional orientations are identified, and the prevalence of these types in Kazakhstan is determined.

**The main provisions submitted to protection.**

1) educational strategies in classical sociology are evaluated in accordance with the achievement of social and professional «majority». The strategy eliminates an

uncertainty and ensures an order. The most important characteristic of an educational strategy is the mechanism of its cognitive action. Acceleration of the vertical and horizontal mobility processes led to the emergence of the «continuous learning» strategy (lifelong learning). This strategy is related to continuity, qualification paradigm, profiling and other pragmatic features of education in the XXI century;

2) scientific and creative activities of young people are based on internal and external motivation as well. The external motivation is based on the pursuit of material wealth, rank, fame, whereas the internal is based on interest in the object being studied. The leading motive for the young scientists is the value of research work, the opportunity to realize their creative potential. It is necessary to develop a set of measures to create sustainable motivation for effective research. This set of measures should include the study of the motivation structure for young people research activities of and the intensity of the impact of certain motives on it. Educational strategy is a progressive process in the higher education system aimed to obtain the necessary level of knowledge for life goals achievement. The scientific strategy is considered as further planning of scientists scientific activities in the field of education and science to achieve results;

3) integration into the Bologna process has adapted an international experience in national educational process. As a result, the scientific and practical part of the learning process has strengthened, the quality and efficiency of education has increased, the values and the value structure of young people in relation to values education has changed;

4) the factors which influence on the success of educational strategies are identified. They are good academic performance, satisfaction with the financial situation of students, satisfaction with the content of professional activities, educational programs. The main factors of students' dissatisfaction in learning are the weak educational material, ineffective communication with students, teachers' biased approach in assessing students' knowledge and the lack of "algorithmic" logic of the lesson. The strategies of young scientists are influenced by three factors such as economic, value-based and institutional. The economic factors include funding of the university research sector, development programs of the research universities, and the financial situation of young scientists. The value-based factors include self-expression, family values, health, social status, and career growth. The institutional factors include workload at work, insufficient conditions for organizing and conducting basic research, and stricter requirements for doctoral candidates.

5) the following typologies of educational strategies of young people in the higher educational institutions are identified. They are professional self-realization, development aimed at career growth, unwillingness to work (ongoing student). Three typologies of scientific strategies of young scientists such as professional scientific self-realization, status self-expression (career) and uncertainty of scientific and educational goals, as well as groups of young people who implement these behaviours. Depending on the direction of scientific activity, the types of young scientists such as enthusiast, careerist, temporary ruler are formed in the university. The most common type of young scientists in the higher education institutions is careerists, characterized by the stability of their socio-professional positions, by the presence of significant

social characteristics (family, children, housing) and by satisfaction with professional activity.

**Approbation of the research main results.** The results of the research were discussed at the Department of Sociology and Social Work of Al-Farabi Kazakh National University, at scientific and practical conferences, such as V International Scientific Conference “Innovative Development and the need for Science in modern Kazakhstan”, Almaty, December 2013, third International Conference on Psychology and Sociology, Procedia-Social and Behavioural Sciences, February 2014, Italy, Rome, international scientific and practical conference “youth in the education system and labour market: risk management” Karaganda, June 25, 2014, thirty-third conference of the association improving education and innovation management, procedia - 10-11 April, 2019, Granada, Spain.

The main provisions of the dissertation are reflected in 23 scientific publications. 5 of them are reflected in foreign publications (Turkey, Italy, Spain, Bulgaria, USA). as 3 of them are reflected in journals of the Ministry of education and science of the Republic of Kazakhstan. 1 article is reflected in an international journal included in the Scopus database in a collective monograph.

**The structure of the dissertation work** is built in accordance with the goals and objectives of the study, as well as it contributes to the disclosure of the content of its object and subject. The dissertation consists of an introduction, two chapters, conclusions, a list of cited references and an appendix.

*Summary of the work.*

**Section 1 «Theoretical and methodological conceptualization of youth strategy in the higher education environment»,** which includes 3 subsections, analyses and compares various theories, factors affecting the strategies of education and science in modern society, examines the motivations in scientific activity in the context of ongoing changes.

*In subsection 1.1 «Educational strategy in classical social theory»,* education is considered as an important social institution that determines social structure and social relations. According to representatives of classical sociology, education is a source of social inequality in society. Access to education and qualifications is limited, which in its turn contributes to increased differentiation in society. Representatives of the lower class can achieve a high educational level based on personal desires and efforts. Education does not guarantee success in life, but it increases the chances of an individual in modern society. In this regard, the classics consider the behavioural attitudes of young people in obtaining education. The behavioural factor is one of the main factors in obtaining education, in accessing to social benefits and the possibility of social mobility.

*In subsection 1.2 «Modern approaches in the analysis of educational strategies of students»,* the theoretical and methodological problems of determining the educational strategy are considered. Modern researchers consider this issue from two sides such as functional and structuralist. Functionalists consider education as one of the mechanisms of allocation and consolidation of social strata, a channel of social mobility, which provides a prestigious status in society in the future. Structuralists define education as cultural capital that reproduces cultural patterns and values. The

cultural field is the basis for the emergence of power and the acquisition of material goods and values. According to P. Bourdieu, the formation of an individual's educational strategy in the higher education system will be determined by the presence/absence of sufficient economic, cultural, social and symbolic resources. Analysing the above concepts, the author defines educational strategies as a process of promotion in the higher education system aimed at achieving the desired level of education for the life goals realization.

*Subsection 1.3 «Sociological discourse on the scientific motives of young scientists»* reveals the current theories of motivation and analyses the research activities of young people. The author conducted a comparative analysis of the procedural and content theories of motivation. In contrast to the content theories of motivation, which consider the content of human needs and their impact on behaviour, procedural theories consider needs as one of the elements of the behavioural process associated with a particular situation. Thus, it is necessary to take into account the personal desires, needs and attitudes of young people, the system of values that has developed in society when studying the educational strategies. Motivations of scientific activity serve as the basis of various interests of the individual and an indicator of satisfaction of the highest needs of a person. According to Western and domestic sociologists, the research activity of young people is based on external and internal motivation. Young people themselves are guided by education, research, and decent wages. The scientific strategies of young people are influenced by subjective factors. The author defined scientific strategies as further planning of scientific activities of scientists in the field of education and science.

**Section 2 «Analysis of the educational and scientific strategy of Kazakhstan youth in the context of socio-economic changes»** discusses the main results of the empirical study, provides quantitative data, correlations, and basic theoretical generalizations.

*Subsection 2.1 «Implementation of educational and scientific strategies of young people in the context of the Bologna Process»* presents the main parameters of education and science in the context of the implementation of the Bologna Process. Kazakhstan has established certain requirements since 2010 such as the connection of science, education and production, knowledge of an academic foreign language, doing scientific internships, the formation of applied competencies among young scientists. Kazakh universities undergo state and international accreditation procedures (institutional and specialized) and certification. Universities face such barriers in academic policy as language, organizational, resource and content, which hinder the processes of integration of Kazakh universities into the world educational community. The implementation of the principles of the Bologna Process should take into account national characteristics and interests.

*The results of quantitative and qualitative research are presented in subsection 2.2 «Results of research on determining the strategy of students in obtaining higher education».* This section of the paper examines the main factors of satisfaction with the quality of education, focused on successful educational strategies

*In subsection 2.3 «Factors influencing the formation of the educational and scientific strategy of young people»,* the empirical results of a sociological survey from

various social groups and their subsequent analysis is presented. The study identifies factors that influence successful educational strategies such as good academic performance, satisfaction with the financial situation of students, satisfaction with professional activities and the content of educational programs. Typologies of educational strategies of young students such as professional self-realization, directed development, not desire to work (eternal student) are determined.

*In subsection 2.4 «Typology of scientific strategies of youth»* the author's classification of scientific strategies is given. Three types of scientific strategies are identified. They are professional self-realization in science, career orientation, uncertain scientific goals in education. The scientific strategy of many young scientists is based on a strong desire to benefit Kazakhstan and develop domestic science. The author has identified the factors that create barriers in science as economic, institutional and personal.

In conclusion, the main results of the study are summarized, suggestions and recommendations are formulated in accordance with the set goals and objectives.

**Theoretical and practical significance of this study** is to use the main ideas and insights in the field of sociology of science, sociology of education, as well as practical contribution of the research results in the development and testing of research programs concepts of the creative motivation of young scientists (in particular universities, and at the level of individual regions). The dissertation is theoretical and applied in nature.

The data of the dissertation work can be used by the state authorities (in the development of legislative acts on scientific and innovation policy at the national and regional levels, priorities of social policy in the field of higher and postgraduate education); heads of educational institutions of higher professional education (in the development and implementation of comprehensive programs to preserve and develop the potential of university science), as well as in the process of training, retraining and advanced training of specialists in the field of sociology, sociology of education, sociology of science.