Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 4, 7790 – 7796

ABOUT THE PROBLEMS OF RETAINING TALENTED YOUNG SPECIALISTS IN REGIONAL SCIENTIFIC INSTITUTIONS AND UNIVERSITIES OF KAZAKHSTAN

[1]Gulzhan Baibosynova, [2]Ulmeken Makhanbetova, [3]Saule Mazhikeyeva, [4]Nursulu Shaimerdenova, [5]Zulfinur Butayeva

[1]Khoja Ahmed Yasawi International Kazakh-Turkish University, Turkestan, Republic of Kazakhstan, info@ayu.edu.kz
[25]Khoja Ahmed Yasawi International Kazakh-Turkish University, Turkestan, Republic of Kazakhstan
[3]Abai Myrzakhmetov Kokshetau University, Kokshetau, Republic of Kazakhstan
[4]Al-Farabi Kazakh National University, Almaty, Republic of Kazakhstan

Abstract

The article presents the scientific results of the study, which, through the use of methodological developments, determine the main reasons for the internal migration of talented Kazakh youth from the regions to large domestic research centers and universities. In addition, the aim of the research work was to identify the factors hindering the activities of talented youth in regional education authorities. In accordance with this, the authors consider the main task to determine the criteria of the heads of the regional education system in the inability to adequately assess the values of young human capital. Based on the results obtained, measures are proposed that will motivate talented young specialists to refuse migration to other regions, which will avoid their scientific degradation and activate the process of leveling the level of socio-economic development of the subjects of Kazakhstan. Basically, these proposals relate to increasing the level of financial incentives in regional academic organizations and the introduction of the institute of postdoctoral studies, which allows obtaining a synergetic effect from the professional cooperation of experienced and young professionals.

Keywords: motivational profile, education system, regional education system, science, young professionals.

INTRODUCTION

The process of rejuvenation of scientific personnel in modern Kazakhstan has two important aspects that have not yet been resolved in our country both in terms of comprehensive scientific research and at the practical level when regulating key aspects of state youth policy. Firstly, it is the retention of truly talented young people in the academic labor market. Secondly, the cessation of the outflow of promising specialists from the regions to the major cities of Kazakhstan, Almaty, Nur-Sultan and beyond the country, in other words, "brain drain". The unresolved nature of these problems hinders the modernization and innovative development of the Republic of Kazakhstan and requires constant investment in the system of training academic personnel, which do not give their effect due to the migration of talented young specialists to large megacities or abroad.

The situation is further aggravated by the fact that at present in modern Kazakhstan science there is practically no comprehensive scientific

research in this area, knowledge that, in our opinion, must necessarily be interdisciplinary, because they affect the subject areas of different sciences: sociology, economics, law and political science. In our opinion, a special role in retaining promising scientific personnel in the regional scientific centers of the country is played by the motivational attractiveness for talented Kazakh youth in the regions of building their career trajectory in the field of activity under consideration, without changing their place of permanent residence, especially since modern digital technologies, in many ways, as the practice of organizing scientific research in a pandemic, caused by COVID-19, ensure its academic mobility without the need to physically move to the leading science cities of the country. The purpose of this study is to clarify the main causes of the "brain drain" from the regions to the megacities of Kazakhstan, as well as outside our country. In order to achieve this goal, the paper attempts to solve two problems:

- determination of differences in motivational preferences of talented young people living in the megacities of the country and their peers from the regions of Kazakhstan;

- identification of the reasons that make the idea of moving to megacities attractive for talented young people.

Literary review

The first attempts of fruitful and intensive scientific research on the problems of youth and the role of the state in their solution date back to the first half of the twentieth century. First of all, in our opinion, they should include the fundamental work of the American psychologist G.H. Stanley (1), the Russian sociologists M. Pinskaya, A. Ponomareva, S. Kosaretsky (2) and the Belarus psychologist O.V. Tumasheva (3).

The period of the most active scientific interest in the formation of optimal state policy in the field of regulation of the youth labor market can be attributed to the time interval from 1992 to our time. As the most interesting from a scientific point of view publications of domestic authors on the problem we are investigating, we can single out the works of M. Nauryzbayev et al. (4), R. Taigen (5), M. Gorshkov and F. Sheregi (6), Yu.A. Zubok (7) and a number of other specialists. Some of these scientific publications contain generalizations of empirical studies previously conducted by other specialists, others have significant aspects of scientific novelty and, as a rule, include the formulation of new concepts, the significance and effectiveness of which have yet to be evaluated in the foreseeable future.

Modern domestic scientific publications related to the formation of the mechanism of effective state policy in the field of regulation of the youth labor market in general and its academic segment in particular, are mainly normative in nature. For the last 6-7 years, in the systemic aspect, this topic has not been the subject of special research, although there are a number of works dealing with narrow problems of youth policy in our country. All scientific research in the field of formation and implementation of the state youth policy is usually carried out in three generalized versions. Firstly, scientific research from the standpoint of classical sociology and pedagogy, the most interesting of which is the work U.M. Iskakov (8). Much attention is paid to similar problems in a number of publications of the authors L.M. Protopopova, U.S Borisova (9), A.A. Litvinyuk et al. (10).

Secondly, these are scientific developments in the field of jurisprudence, which most often consider and analyze all possible forms of social deviation in the organizational behavior of young people T.V. Sheludyakova (11) and A. Tay (12). The main emphasis in them is placed on the formation of a legal mechanism for solving the issues discussed in this article.

The third group of works is mainly focused on the regulation of the participation of modern Russian youth in the socio-economic life of society and (16, 17).

In their publications, based on the existing foreign and domestic experience, proposals are

made for the formation of mechanisms for the socialization of modern Russian youth. In order to have a clear idea of the current and unresolved problems of youth policy in the field of retaining promising and talented specialists in the regions of Kazakhstan, it is necessary to carefully study the experience of such work in the regions of Kazakhstan and abroad. Only a comprehensive, interdisciplinary scientific study will lead us to a correct understanding of youth policy on a nationwide scale. In scientific works devoted to the peculiarities of socio-economic development of certain regions of the Republic of Kazakhstan, youth policy, as a rule, is not isolated as a separate research topic. Some exceptions are the following works (4, 5, 9), in which, to one degree or another, it is the regional aspects of youth labor behavior and the characteristic features of the regulation of the youth labor market at the regional level that are analyzed. From the experience of other countries, we are interested in the developments of prominent Hungarian specialists in this field of knowledge (18, 19).

The analysis of the results of the above-mentioned results of scientific research by Hungarian scientists suggests an interesting analogy. In general, Hungary can be considered as a small and not the most prosperous region of the European Union (EU). For it, as well as for the regions of the Republic of Kazakhstan, the outflow of talented young scientists and university teachers to the leading scientific centers of Europe and the USA is very characteristic. This process leads to the fact that the majority of Hungarian students in the framework of academic mobility is trying to get an education outside their country, since a diploma, for example, from a good German university is considered much more prestigious than a diploma from a Hungarian university. Many talented young professionals, settling in more developed EU countries, do not plan their return to their homeland in the future, thereby provoking a decrease in intellectual potential in Hungary. But unlike Kazakhstan, this trend is not perceived as negative in this country, since, according to many experts (19, 20), this contributes to the increase in the effectiveness of scientific research in the EU as a whole, the results of which are then broadcast to all countries included in the The European Union. For Kazakhstan, such a position is currently unacceptable due to the vast territory and multinational population. The uneven development of individual regions of the country, which has sharply intensified in the last decade, leads to the outflow of the most qualified specialists to large scientific centers. All this drains the remote regions of the Republic of Kazakhstan, which in political terms can strengthen separatist sentiments among the population and the reorientation of its political motivation from the development of the country as a whole to close cooperation with nearby neighbors (China, South Korea, Turkey, etc.In this regard, it is necessary to investigate the underlying causes of the outflow of young and talented specialists from the regions to Almaty and Nur-Sultan.

As a first step in identifying these underlying causes, we will consider the main differences in the structure of motivational profiles of Moscow and regional young scientists and talented students. As a methodological support, we use the author's digital development "Test system for determining the structure of a person's motivational complex", the content and calculation algorithms of which are described in detail in (13, 14). The respondents were 157 young teachers, scientists and talented students of the International Khoja Ahmed Yasawi Kazakh-Turkish University and 168 young scientists, teachers and talented students of the Korkyt Ata Kyzylorda University. The main criterion for selecting respondents for young professionals was the opinion of their immediate supervisors and the indicators of the h-index. For the selection of talented students, the average score in the record book (W) was used, which must meet the criterion W 4.5, their course of study is not lower than the third. The average motivational profiles of respondents calculated by us have the following form (Table 1). What conclusions can be drawn from the data given in Table 1? Firstly, young teachers and scientists working in the regions are more psychologically dependent on the differentiation of their

material remuneration; they experience less positive emotions from the results and the process of their professional activity; more inclined to fulfill group norms of labor behavior.

Table 1 *Averaged motivational profiles of Almaty and regional young scientists and talented students (conditional scores)**

Name of the basic groups of motives**	Averaged profiles (Almaty megapolis)		Averaged profiles (Turkestan region)	
Acquisition motives	3	4	4	5
Motives of satisfaction	2	2	1	4
Security motives	3	4	3	4
Motives of submission			3	
Energy saving motives		6	2	3

Source: compiled by the authors.

* The ideal indicator of the strength of the action of motives and the quality of motivation, according to the concept of the "Test system for determining the structure of a person's motivational complex" is zero. All other indicators are interpreted here as deviations from the ideal parameters of motivation in a greater or lesser direction.

** The definition of basic groups of motives and algorithms for analyzing motivational profiles are described in detail in Table 2.

The results of the comparative analysis according to the above-mentioned table will be considered as follows. Firstly, they are more creative than their Moscow colleagues and are less satisfied with the system of work motivation used in their educational institutions. Secondly, if we compare the motivational profiles of talented students of the megacities of Almaty, Astana and the regions by the same criteria, then the differences in the nature of their organizational behavior are as follows:

- the motivation of regional students is also more influenced by the factors of the material standard of living;

- the process of getting an education brings them more emotional satisfaction than their Moscow peers;

- on average, they show a lower level of creativity than students of Moscow universities. The general conclusion that can be drawn from the data given in Table 1: the labor behavior of young scientists, teachers and talented students from the regions is more influenced by factors related to the amount of material rewards they receive than by their peers from megacities. Consider the data on the possible average salary of scientists in a number of regions of Kazakhstan (Table 2).

Table 2 *The average cost of open vacancies in scientific organizations and its ratio to the subsistence minimum in the region**

Name of the region of Kazakhstan	Average salary according to the results of current vacancies on 05.02.2022 (**)	The ratio of the proposed salary and the subsistence minimum by region
The five most prosperous regions according to offers in open vacancies and the metropolis of Nursultan		
Kyzylorda region	61630	5,81
Turkestan region	58.162	4,71
Nur-Sultan	47.595	4,26
Aktobe region	63.300	3,87
Shymkent	63.392	3,14
Almaty region	53.209	3,11
The five least prosperous regions		
Kostanay region	12.130	1,17
North Kazakhstan region	12.533	1,20
Atyrau region	13.000	1,26
Dzhambul region	14.463	1,33
West Kazakhstan region	15.719	1,49

*For those who believe that the salaries of Kazakhstani scientists are uncompetitive in the domestic labor market, we provide the following data: the ratio of the average salary of an Azerbaijani scientist and the subsistence minimum is only 1.19, which roughly

corresponds to the level of the Turkestan region in Kazakhstan. As can be seen from the data in Table 2, the megacities of Almaty and Shymkent, although they are not the undisputed leaders in terms of the material well-being of scientists and university teachers, if we consider not absolute, but relative indicators of the ratio of material rewards and the subsistence minimum, but as real life shows, they are quite attractive for the employment of young professionals within the academic labor market. According to an express survey of 120 teachers under the age of 35 of regional universities, in addition to high salaries, they are attracted to relocation to Almaty and Shymkent: the possibility of faster career growth in the academic environment (84%); a wide range of scientific communication (78%); the presence of a large number of dissertation councils, which significantly reduces the material and the time spent on obtaining an academic degree (74%); the growth of opportunities for "fast" scientific publications (61%), the territorial proximity of federal government structures (52%), etc.

The possibilities of organizing all these processes without changing their place of residence through the use of modern online technologies, as shown by the work done during the COVID-19 pandemic, are not perceived by young scientists as effective and successfully replacing offline contacts (20). Therefore, if we do not modify the system of motivation for the work of scientists and teachers in the Republic of Kazakhstan, we will continue to have a constant outflow of talented young specialists from the regions to large scientific centers of the republic. And this migration flow is unlikely to be redirected to the regions by creating territorial divisions like the innovative scientific and technological center "Daryn" and other similar entities (21). For the majority of young specialists, they will serve only as a springboard, where it is possible to form a sufficiently acceptable scientific status for migration to the megacities of Almaty, Shymkent and Nur-Sultan.

Conclusion

What mechanism of state regulation of youth policy, if not stop, then at least reduces the migration of talented youth from the regions of Kazakhstan to such megacities as Almaty, Shymkent and Nur-Sultan? In our opinion, it makes sense to study the successful world experience of solving this problem. In China, in order to stop the "brain drain", since the 90s, funding for science and higher education has been sharply increased, which made it possible to keep young scientists from moving to other countries for financial reasons. All this has allowed China to become one of the leading world powers in terms of innovative development. In India, which also demonstrates the innovative nature of the development of its economy, thirty years ago they began to pursue a policy of increasing the salaries of researchers and university teachers to the level of the United States, which significantly reduced the motivation of talented young people to emigrate to more developed regions and countries3. Consequently, the "tightening" of the material standard of living of regional scientists and university teachers to the level of their colleagues in Almaty and Nur-Sultan, Shymkent can become a significant reason to keep them in the regional segments of the academic labor market.

A similar view of this problem is supported and justified by a number of regional researchers, for example. Another important aspect of retaining talented specialists in regional research centers is the development of digital technologies of academic communication. It is no secret that participation in scientific conferences and similar events, which is very important for the scientific development of scientists, is carried out in most cases at the expense of personal funds of academic staff. This gives rise to a whole system of organizing pseudoscientific events, where, for a relatively moderate fee, abstracts of their speeches are published to everyone and diplomas and certificates of participants are issued. The translation of all such events strictly into an online form would enable regional specialists to actively participate in scientific events with the practical absence of overhead costs. The

predisposition of age-related and highly professional specialists to a motivational failure of the type of "cognitive dissonance" hinders the development of academic communication in online form. This circumstance once again underlines the importance of rejuvenation of personnel in the academic community and the introduction of postdoctoral experience in Kazakhstan, in which an experienced specialist transfers experience, knowledge, connections and professional competencies to his ward, and a young scientist (teacher) ensures the effective use of modern digital technologies in scientific and teaching activities.

ACKNOWLEDGMENT

The authors would like to thank the library of Akhmet Yasavi University in Turkestan for facilitating access to the literature search database.

CONFLICT OF INTEREST

The author declares no conflict of interest in preparing the manuscript.

Reference

[1] Hall GS. Youth: Its Education, Regimen, and Hygiene. N.Y., Chicago; 1906.
[2] Pinskaya M, Ponomareva A, Kosaretsky S. Professional Development and Training for Young Teachers in Russia; 2016; (2): 100-124.
[3] Tumasheva OV. The readiness of the future teacher to form students' functional literacy. Vestnik of Minin University; 2021; 9(3): 52-61.
[4] Nauryzbayev M, Dzekunov V, Meirmanova A, Yerkimbayev B, Mogilny V. Integration of education and science as a necessary condition for the innovative development of the domestic chemical industry. Industry of Kazakhstan; 2011; 4 (67): 38-43.
[5] Taigen R, Meirmanova A, Rustemova A, Dzekunov V. Qualified personnel — the basis for the development of the chemical industry. Industry of Kazakhstan; 2013; 6 (81): 26-32.
[6] Gorshkov MK, Sheregi F.E. Youth of Russia: sociological portrait. Moscow, TSSPIM; 2010.
[7] Zubok YuA. Theories of youth: Interdisciplinary analysis. Moscow, Canon; 2020.
[8] Iskakov UM. High - quality higher education is the key to achieving high results in the activities of the members — participants of the Integration Union. Transit Economy; 2014; 3(8): 33-42.
[9] Kazakhstan's way - 2050. Book 2: Socio-political and Social Development. Under the general editorship of B.K. Sultanov. Almaty, KISI under the President of the Republic of Kazakhstan; 2014.
[10] Protopopova LM, Borisova US. Analysis of professional expectations of students of creative youth. Modern studies of social problems; 2017; 2(9): 102-110.
[11] Litvinyuk AA, Burov AN, Kuzub EV. Problems of youth employment in the field of science, high technologies and higher education. Labor economics; 2019; 3(14); 1105-1118.
[12] Litvinyuk AA, Loginova AV, Kuzub EV. Gender features of HR management in the field of science, higher education and high technologies. Leadership and management; 2019; 3(17); 279-290.
[13] Litvinyuk AA, Melnikov VA, Kuzub EV. On the problems of motivation of innovatively active specialists for employment in the field of science, high technologies and higher education. Creative Economics; 2019; 1(6): 1269-1278.
[14] Sheludyakova TV. Youth policy as part of state policy. Constitutionalism and state studies; 2016; 2(8); 27-34.
[15] Tay A. Managing generational diversity at the workplace: expectations and perceptions of different generations of employees. Africa Journal of Business Management; 2011; 4(12): 249-255.
[16] Mirzagitova AL. Akhmetov LG. Formation of the professional and didactic culture of the future teacher. Bulletin of Turan University; 2016; 4(13): 87-95.
[17] Zhanakov KS. New methods for training future teachers in regional universities. Problems of pedagogy; 2019; 2(19): 123-130.

[18] Tőcsik M, Szűcs K, Kehl D. How generations think: research on generation z. Acta Universitatis Sapientiae, Communicatio; 2014; 1(7); 23–45.
[19] Manushin E, Dobryakov A. Model of elite specialist training. Higher education in Russia; 2007; 2(8): 3-16.
[20] Bekbulatova I, Niyazova G, Kerimbaeva B, Abdullina G. The methodology of the formation of the communicative orientation of the english course by means of information and telecommunication technologies (ITT) in the institutions of higher education. Journal of Language and Literature; 2015; 6(4): 351–354.
[21] Baltabaeva N, Panzabek B, Kozhekeeva, B, Zhumakaeva B, Zaikenova R. Genre constituting factors and the nature of essay. Social Sciences (Pakistan); 2016; 11(22): 5445–5449.