ISSN (Print): 0974-6846 ISSN (Online): 0974-5645

Peculiarities of Psychological Readiness of Choosing a Profession for High School Students from Arctic Uluses

A. D. Nikolaeva*, L. V. Nikolaeva, T. P. Egorova, G. A. Ivanova, G. N. Sleptsova, E. M. Davydova and S. S. Alexeeva

Ammosov Pedagogical Institute of the North-Eastern Federal University, Yakutsk, Russian Federation; ad.nikolaeva@s-vfu, pimdo@mail.ru, talbaana@mail.ru, ivangalena@yandex.ru, Slegal 61@mail.ru, dem_68@mail.ru, wellso@mail.ru

Abstract

Background/Objectives: The purpose of the article is to reveal the psychological readiness problems of senior pupils in the Arctic region for the choice of profession and to identify the system of psycho-pedagogical support for occupational guidance of senior pupils at Arctic schools in close relationship of educational establishments and social institutions. **Methods:** The study used the methods for psychological readiness detection in school leavers for the choice of profession in the three northern uluses of the republic, the results of sociological research among NEFU freshmen aimed at studying awareness of the occupational training selection. The data acquisition method included questionnaire survey using remote survey system under the "Freshman-2014" Program, which is held annually by the department of development and examination of valuation funds of the NEFU Department of Education Quality Assurance to study students' satisfaction with the quality of education and the "Graduate-2015" sociological research at the end of a professional training. Findings: The article reveals the peculiarities of psychological problems and readiness of the Arctic school leavers for the choice of profession and justifies the system of psycho-pedagogical support for career guidance in the Arctic regions. Based on the obtained results, a system of occupational guidance was developed which provides assistance in the choice of profession, choice of Unified State Examination subjects for high school admission, the formation of the self-assessment of students' opportunities for future occupation, new forms of work, such as Remote Fair of occupations, teaching classes, Junior Pedagogical Academy, Junior Medical Academy, academic competitions, training courses, etc. The occupational training of high school students requires consolidating the efforts of school, parents and the public. School leavers should know what specialists are necessary for their native village and learn to see the prospects for further development of the North. The education system of the North indigenous minorities with teaching in their native language allows saving the culture, national traditions and language of the people. The priority lines of NEFU educational activities to train specialists for the North have been identified; they include sustainable environmental management, environmental safety, education in the North, the development of the culture of peoples of the North. The graduates will receive the degree of Bachelor of Circumpolar Regional Studies of the Arctic University in addition to their major field of study. The training according to the Bachelors' program "Primary Education and Tutoring in the North Basic Ungraded (Nomadic) School" and Masters' program "Pedagogical Support of Childhood in the North" has been established. Application/Improvements: Psychopedagogical support for occupational guidance in the Arctic uluses will improve the graduates' psychological preparedness to the choice of profession. The model of psychological and pedagogical support can be used in the practice of schools, training courses, colleges and universities of the republic.

Keywords: Arctic, Choice of Profession, Occupational Guidance, Psychological Readiness, Psycho-pedagogical Support

^{*}Author for correspondence

1. Introduction

Today the career guidance is an integral part of the educational process. The fate of a young people depends on the level of readiness to take a decision as to choosing their profession. The choice of profession is a kind of psychological readiness for the choice of one's future employment and future career, according to their aptitudes, abilities and interests.

Finishing the school graduates encounter a new stage of social and personal development. All roads are open, and they should choose one way in life as their future profession. Interest to the profession, motivation of training in professional institutions, and self-assessment of their capabilities should be formed for the psychological readiness. According to G. Hakket and

N.E. Betz¹, the most profound impact on people's lives is the choice of profession and further career.

The urgency of the problem stems from the need to provide effective assistance to high school students in the choice of future profession to meet the new requirements of the political, social, economic and personnel situation, so the policy of our state is aimed at the postulating the problem of professional choice, especially in the remote regions of the Arctic.

2. Literature Review

The professional readiness means the inner conviction and the awareness factor of the profession choice, knowledge of the type of work, physical and psychological requirements of the profession; focus interests and aptitudes of a person. It is necessary to help a person to carry out their duties properly, to use their knowledge, experience and personal qualities; to reveal the capacity for rational choice of profession². This problem is especially important in the remote Arctic regions.

Indigenous peoples of the Russian Federation inhabit a vast territory from the Arctic to the southern regions of the Pacific Ocean. As a cultural-historical type of civilization, "North" serves as a certain state of society and a result of the successful development of the ethnic group of the North and its sociocultural heritage, transmitted from generation to generation in the historic interaction of humans with the environment and social surroundings.

Famous scientists of Yakutia L.A. Afanasyev-Teris, G.P. Basharin, R.I. Bravina, A.I. Gogolev, A.E. Mordinov, A.G. Novikov, B.N. Popov, I.S. Portnyagin, K.D. Utkin

and others have repeatedly stressed the value of the original development of the northern culture.

The specific features of the culture, traditions, way of life, people's attitude towards the natural environment and towards each other, possess considerable stability in its functioning and related to regional and traditional features remain relevant when considering the North as a cultural-historical type of civilization³.

The Arctic zone plays an important role in modern life. Unfortunately, within the whole range of living conditions the northern territories and their population lag seriously behind the central and southern regions in economy and education, although the republic government does its best to support graduates and students of the Arctic regions.

Annually increasing pace, globalization rapidly erases national, ethnic and religious differences between the peoples. This problem is acute for the small peoples of the North, who due to objective reasons are more susceptible to globalization due to objective reasons.

It was the First President of the Republic of Sakha (Yakutia) M.E. Nikolayev who drew serious attention to the problems of the native peoples. Nikolayev strongly advocated the new state arrangement of the North, the entire area of the Arctic. He strongly argued that the role of Arctic and its contribution to the economy of the region should be reclaimed the company for "power inclusion" of the new Russia, the well-being of all its peoples with the help of specific facts and constructive judgments. And he reasonably proposed: Russia without the North or Arctic is incapacitated. He often repeats the prophetic words of M.V. Lomonosov "Russian power will grow with Siberia and the Northern Ocean." Moreover, in recent years, the Arctic has become the focus of acute global problems political, economic, social, ecological and spiritual. That is why Mikhail Yefimovich Nikolayev4 supports the early development of fundamentally new northern policy of the Russian leadership, the foundation of which will be taking care of the person, people and nations, the establishment of decent living conditions for them.

M. Ye. Nikolayev highlights the issues of education of the small peoples of the North. That is why the problem of graduate vocational guidance is of current interest and urgency⁴.

The analysis of the practice of educational institutions shows that the seniors of the Arctic uluses experience considerable difficulty in choosing a future profession as a result of ignorance of technology professional self-determination, inability to design their life and professional way in the modern market conditions.

Aborted psychological readiness leads to an inadequate choice. Recently a worrying trend can be seen: The highly qualified specialists in culture, health, education, communications and trade leave the Arctic uluses and this negatively affects the social and economic development of the Arctic region and the welfare of the indigenous population. And, as practice shows, the northern school graduates are poorly prepared to the trade choice. In this respect the research of psychological readiness to the choice of future profession was conducted in the Arctic high schools.

3. Methods

The research covered high school graduates of Verkhnekolymsky, Ust-Yansky, Bulunsky Districts. To identify the graduates' readiness for the choice of profession the following methods were used:

- "System of values" Procedure by M. Rokich⁵;
- "Ready for the choice of profession" Questionnaire as adapted by A.P. Chernyavskaya²;
- "Readiness of students to choose a profession"
 Questionnaire by V.B. Uspensky⁶;
- Profile of professional students' self-study.

M. Rokich⁵ developed a technique based on the direct ranking list of values. M. Rokich distinguishes between

two classes of values: Terminal and instrumental. The terminal values represent the belief that the ultimate goal of individual existence is to strive for it. Stimulus material is represented by a set of 18 values. The instrumental values are based on the belief that a certain course of action or property of the person is preferred in any situation. Stimulus material is also represented by a set of 18 values. In analyzing the rankings of values attention is drawn to the group of subjects in the content blocks on different grounds. For example, you can select "concrete" and "abstract" values, the values of professional fulfillment and personal life, etc. Instrumental values can be grouped into ethical values, values of communication, the value of the case; individualist and conformist values, altruistic values; the value of self - affirmation and acceptance of other values, etc. The advantage of the technique is flexibility, convenience and efficiency in conducting the survey and processing the results, flexibility implies the ability to vary both the stimulus material (lists of values) and instructions. A significant disadvantage of the technique is the impact of social desirability, the possibility of insincerity. Therefore, a special role in this case belongs to the motivation of diagnosis, voluntary testing and the availability of contact between the psychologist and subjects.

4. Results

The following diagram shows the results of the survey.

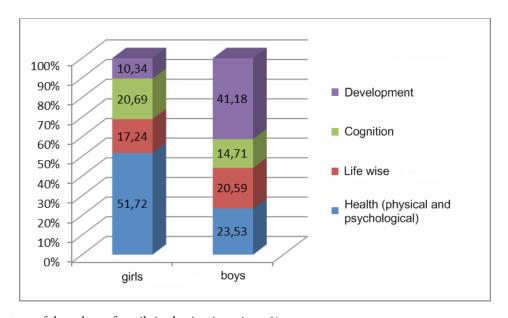


Figure 1. Structure of the values of pupils in the Arctic regions, %.

The most expressed value orientation is health. This figure shows that the majority of high school students are oriented to those options that are valued in society in choosing their profession. This testifies their desire for personal development (41.18%), health (51.72%), which are the most attractive in relation to themselves.

The analysis of the 2nd part of the questionnaire showed the following results relating to the structure of popular responses about instrumental values. 50% of girls and 61.29% of boys of Arctic uluses preferred values of "education", the "independence" ranked the second (29.41% of girls and 19.35% boys). The young men's values named the "independence" and "irreconcilability of defects" were chosen almost alike.

The relationship between the values and career choices were suggested in the works of Stephanie Johnes-Berry⁷.

The results of the "Teenagers' Readiness for the Choice of Profession" Questionnaire (as described by V. B. Uspensky⁶) are given in Table 1.

The results showed a low and medium level of readiness of senior pupils for the choice of profession.

At the end of the study the following problems were revealed relating to the readiness for a trade choice:

 The predominance of social themes ("certificate of no triples", preparing for the exam, lack of initiative, parental care), as well as the motive of prestige (to go

- to college (any) and not to go to vocational schools, the army, etc.);
- High school students are not active in self determination, many of them hope somebody will make them interested in the occupation, learn because of financial reasons, or other social benefits, they are not able to self-motivate themselves due to lack of clear goals;
- · Lack of information about occupations.

The next diagnostics concerned the determination of readiness for the professional choice in high school students. For this purpose, we developed a questionnaire study of students' professional self-determination, consisting of 12 missions. It surveyed 60 high school students from three schools in Arctic uluses. The results relating to the identification of interest in future trade are given in Table 2.

As the table shows, the interest in future trade is higher among the boys. At the same time 36% of boys are not

Table 1. The results of the survey of the Arctic uluses school children

Unreadiness level		Low level		Medium level		High level	
girls	boys	girls	boys	girls	boys	girls	boys
0%	7%	36%	31%	57%	58%	7%	4%

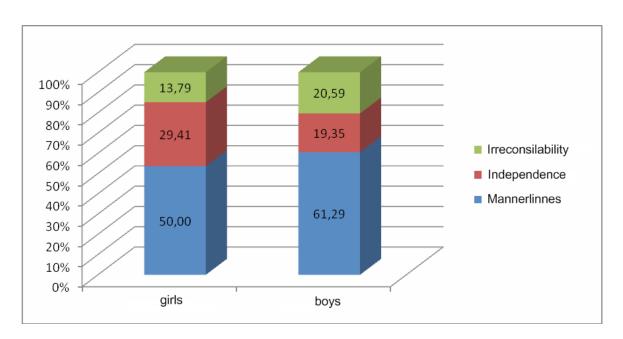


Figure 2. Structure of the questionnaire values - instrumental values of the Arctic uluses pupils.

interested in the question of the future profession; 44% of girls are not interested in answering information about future profession. The answers to the question "Have you finalized your career decision?" are presented in Table 3.

The survey demonstrated that 43% of girls and 58% of young men decided on the choice of profession, 57% of girls and 42% of boys said no.

The analysis of the responses to the question "Have you discussed the problems of future profession with the members of your family?" is provided in Table 4.

As can be seen from these data in most cases parents discuss career choices with their children. The parents of three girls and seven boys advised to choose another profession. For a more detailed study of the readiness for high school, we used the questionnaire for choosing the profession by A.P. Cherniavskaya comprising 99 questions and it is designed for students of 11th form.

The questionnaire is aimed at determining the level of readiness for an adequate professional choice.

Table 2. The identification of interest in future trade

	Girls	Boys
Yes	56 %	64 %
No	44 %	36 %

Table 3. The results of finalizing the career decision

	Girls	Boys
Yes	43 %	58 %
No	57 %	42 %

Table 4. The results of discussing the problems of future profession with the students' family members

Did you discuss the problems of future profession with the members of your family?"		Answers	
	girls	boys	
no, we did not	4	5	
yes, we did	76	75	
the parents advise to choose another profession	3	7	
the parents agree with me	77	73	

Table 5. The analysis of the results of a questionnaire by A.P. Chernyavskaya.

scales	cho	choice		
	girls	boys		
autonomy	9	17		
awareness	48	33		
orientation in time	7	13		
decision-making	9	34		
emotional attitude	7	3		

The format is both individual and group.

The questionnaire consists of five scales: "Autonomy" - 20 questions; "Awareness" - 17 questions; "Orientation in time" (plan) - 20 questions; "Decision" - 20 questions; "Emotional attitude" - 22 questions. The questions of individual scales are distributed in the procedure in the random order.

Thus, we can say that the majority of students have the necessary personal qualities for making a professional choice; however, the insufficient level of their expression may hinder making an adequate and effective choice of their future profession.

5. Discussion

The majority of high school students living in the Arctic encampments need professional help in choosing a future profession. To study the awareness of vocational training choice the NEFU Department of Quality Assurance conducts annual case study of newly admitted students. The aim of this study is to determine the degree of satisfaction of the first-year students of NEFU named after M. K. Ammosov with the learning process in the early days of adaptation, their social mood, and attitude to learning.

Data collection method is used for a distance questionnaire survey. Here are the research data of "Freshman-2014" held in October 2014.

The questionnaires covered 66% of the total number of students (1,705 of 2,584). From 66% to 6% of students are representatives of the small peoples of the North. To the question "Do you like to study in NEFU?" - 24% of the students said yes, 42% - "very much", 4% - undecided. To the question "How did the beginning of the study influence the choice of your profession? - 44% responded "Yes, I realized that this is my calling", 42% - "Nothing has

changed in my attitude to the profession, 11% doubted in the choice of profession, 3% realized that there was a mistake in choosing a profession.

From May 12 to June 17, 2015 a sociological study "The Graduate - 2015" was conducted. It covered 63% of the total number of graduates in NEFU. 276 students from the number of respondents are representatives of the indigenous peoples of Yakutia, which is 10.9% of all students. To the question "Are you satisfied with the quality of teaching in NEFU" 80% answered "yes", 4% are not satisfied, 16% of students answered "hard to answer". To the question "Will you recommend entering NEFU to your friends?" 97% answered "yes". Thus, most students enrolled confirm the correctness of their choice and would recommend to their friends to enter NEFU.

Taking into account the results of the research, we believe in working with alumni of the Arctic regions. It is necessary to organize psychological support of professional self-determination for senior pupils, to raise awareness, help to plan professional life motivation. In addition, the records of the results of psycho-diagnostics allow students to clarify the choice of majors in the school, attend clubs and electives to develop their personal qualities for their future profession. We believe that in the course of training it is necessary to consolidate the efforts of schools, parents and the public. The head of the ulus, HR specialists should work in close cooperation with the high school graduates and their parents. Graduates should know what experts their native villages want, they should learn to see the perspective of development of the North, the village, the family.

Great attention is paid in our country to the problems of the Arctic uluses. The year 2014 was declared the Year of the Arctic in the country and the year of culture in the Republic of Sakha (Yakutia). During the year, large-scale activities concerning the Arctic and the culture were carried out.

Vice-president of the international organization "The Northern Forum" M.Y. Nikolaev has written much about the problems of the Arctic and its place and role in Russia. These works attracted the attention of many scientists and policy makers, practitioners and all those who are interested in the problems of the North and the Arctic. His work is especially topical today as it reveals the importance of the Arctic in the development of Russia and the actual socio-economic situation in the Arctic. He wrote: "The Arctic, which has become home to different peoples, the object of national interests in many countries and

regions, requires a unified policy, reconciling these interests, goals and ways to resolve problems"⁴.

Creating a system of affordable and high-quality education of the indigenous peoples with differentiated instruction in their native language, which allows preserving the culture, national traditions, language, people and forming a person with a high creative potential is undoubtedly one of the conditions for preservation of the peoples of the North. The problem of the revival of minority languages stressed in the works of S. Romeyn8. The right to use their own language is one of the fundamental rights of each people; each person has the right to express themselves in their mother tongue without any restriction. These minority rights were postulated in the Resolution of the European Parliament⁹. B. Richer¹⁰ emphasizes that the specific feature of Canada is a bilingual teacher training. The training is focused on the linguistic and cultural diversity in schools. This experience can be used in the Arctic, where teachers speak several languages - the mother tongue, Yakut and Russian. At the same time, as the Yakut and Russian languages are spoken by the majority of peoples, the language of the Indigenous Peoples is spoken only among the native speakers. Therefore the training of specialists with knowledge of the Even, Yukagir, Evenki, and other languages is very important for nomadic schools and kindergartens.

The Pedagogical Institute of NEFU has trained teachers for small rural and nomadic schools in the country, which make up 63% of the total number of rural schools. Priority directions of educational activities in NEFU include environmental management, environmental safety and technology, the quality of life in the North, the preservation and development of culture of the northeastern Siberia peoples. NEFU trains specialists for the North. The graduates in their major field of study still get the title of Bachelor of Regional Circumpolar University of the Arctic. In 2012 the University opened a new profile combined Bachelor "Primary Education and Tutoring in the Basic Nomadic School of the North". At present 35 students are studying there. Since 2013 Masters' program "Pedagogical Support of Childhood in the North" was provided for teachers of preschool and primary educational establishments. Arctic Region needs teachers of native languages, Russian, foreign languages, mathematics and all other general subjects. NEFU trains specialists in all specialties that are in demand in the northern regions. Arctic State Institute of Culture and Arts, established in 2000, trains specialists in the preservation of the languages and cultures of the peoples of Yakutia, it contracts with the University of the Arctic, carrying out student exchange program "North-North".

High school students and graduates of the Arctic schools should have information about the specialties of the leading University in the Republic. It is necessary to assist them in choosing a profession and educational institution, making a timely choice of subject exam for admission to the university, building self - esteem of the potential and real possibilities for the future profession.

6. Conclusion

Based on the analysis of studying psychological readiness for a trade choice in the senior students we can highlight the most important components of this process: the cognitive - evaluative and regulatory-behavioral.

Cognitive-evaluative component includes the availability of sustainable professional interest, awareness of the criteria for the profession of a person, an adequate self-esteem, and skills matching the requirements of the profession.

Regulatory and behavioral component includes availability of the basic vocational plan;

- Understanding of the social significance of chosen profession, responsibility for the selection of future profession;
- The desire to realize their educational and career choices, the presence of life orientations;
- The presence of emotional and volitional self-regulation of behavior.

In the practice of career guidance there are different forms of students' orientation: teaching classes, Junior Pedagogical Academy, Junior Medical Academy, the Olympic Games, the conference "Step into the Future", various competitions, training courses. Every year the psycho - pedagogical Olympiad "Educational asterisk" takes place in the Republic of Sakha (Yakutia). "Pedagogical leader" courses "Me and the world's professions", "Me and my professional career" and other interesting events are conducted. Unfortunately, they are held in Yakutsk, where Arctic students cannot come. Therefore, such activities should be carried out also in the field in the Arctic regions. It should be noted that in the framework of the Year of the Arctic the Remote Fair of occupations and

educational opportunities for secondary school graduates was held for 13 Arctic and Northern districts. The event was organized by the employment services in the form of a video conference, which was attended by a large number of secondary school graduates from the Arctic uluses. This is the most realistic and effective way to solve the problem. It is advisable to carry out distance learning courses, academies, competitions, counseling, and advice in relation to those professions that are relevant for the northern regions, so that having acquired a profession the graduates would return to their villages and work for the good of their native land.

Thus, the psychological readiness of senior pupils in the Arctic regions is a complex process of socialization and formation of self - determination in the modern world in accordance with the labor market in the region and personal preference. As Western scholars believe, the government should ensure that young people, adolescents in all secondary schools were provided vocational guidance in deciding their careers¹¹. Psycho - pedagogical support of career guidance in the encampments of the Arctic is ensured by comprehensive work of psychologists, teachers, HR professionals in the region and scientists dealing with the North.

7. References

- 1. Hackett G, Betz NE. Self-efficacy and career choice and development. In: JE Maddux (Ed.), Self-efficacy, adaption, and adjustment: Theory, research, and application. New York: Plenum. 1995. p. 249-80.
- 2. Chernyavskaya AP. Psychological counseling on occupational guidance. Moscow: Vlados-Press; 2004.
- 3. Nikolayeva LV. The formation of ethno pedagogical competence among primary educational teachers in high school. Study. Yakutsk, 2009; 141:37.
- 4. Nikolayev MY. The Arctic Challenges. Moscow; 2009.
- 5. Rokich M. "System of Values" Procedure. In: Karelin AA. (Ed.) Psychological tests. Moscow. 2000; 1:25-9.
- Uspensky VD. Introduction into psychological and pedagogical activity. Moscow: Vlados-Press. Tutorial for high school; 2003.
- 7. Jones-Berry S. Serving up good care. Nursing Management. 2014; 21(3):39-39.
- 8. Romaine S. Language in Society: An Introduction to Sociolinguistics (2nd ed.). Oxford, New York: Oxford University Press; 2000.
- 9. Resolution on the languages and cultures of regional and ethnic minorities in the European Community "The

- Kuijpers Resolution". Official Journal of the European Communities, 30.11.1987. C 318:160-164. Available from: https://ospcom.files.wordpress.com/2011/10/lc4.pdf.
- 10. Richter B. A brief history of Ontario's public elementary teachers and their federations. Part 2: early 1800s to 1944. Erfo voice; 2006. Available from: http://www.
- etfo.ca/SiteCollectionDocuments/About%20ETFO%20 ETFO%20History%20Documents/history-Documents/ pt3.pdf; p. 5-6.
- 11. Alika HI. Career Choice in engineering: The influence of Peers and Parents Implication for Counselling. College Student Journal. 2012; 46(3):537-42.