

# *Sociological digital methods to explore personal educational way: internet forum*

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**Abstract** — This article presents the results of a methodological analysis of the digital sociological method of the Internet forum, that is, the study of thematic group discussions on the Internet, and compares the findings reached while studying the motives of the family choice of online schools in high school. Motives were studied in two ways - by questioning students of online schools and by analyzing the parent forum about online schools on the Internet. Sociological information was processed in specialized computer text analysis programs.

It has been established that the digital empirical technology "Internet forum" refers to the methods of document analysis and is related to the focus group. The Internet forum is relevant to the study of the educational way of a person, since the lists of arguments in favor of online education, received from questionnaires and group discussions on the Internet, almost coincided in content and frequency of occurrence of positions. The "Internet forum" method turned out to be complementary to the questionnaire and clarified some controversial collisions.

The findings speak for the need to develop digital methods of sociological research, actively use the analysis of discussions on the Internet and online questioning to study educational problems and other topics.

**Keywords** — digital sociology, sociology of education, digital methods of sociology, online questioning, internet forum, educational way, online school.

## I. INTRODUCTION. DIGITAL METHODS AS AN ALTERNATIVE TO TRADITIONAL EMPIRICAL SOCIOLOGY

The most common methods for collecting empirical data in sociology are survey, observation, and analysis of documents. Among the survey methods, questioning takes the first place in popularity, followed by interviewing in different variations - from a representative survey of the population to conversations with experts and narratives.

In the classic implementation, these events are complex and expensive, especially demographic studies. We are talking about a quantitative approach in sociology, that is, projects with large samplings and large research teams. High-quality studies are much cheaper and available for implementation to individual researchers as well as teams of several sociologists. So, the focus group, in other words, a group interviewing of 15-20 people, gives excellent results in marketing projects and for analyzing the current political situation [1].

High-quality projects are in demand among students of sociological specialties, since requires a minimum of costs. It is possible to save not only money, but also time due to virtual analogues of interviewing, questioning, observation and analysis of documents. Digital methods of data processing and analysis have been used in sociology for a long time [2]. It is time for the development of Internet methods in the first stages of empirical research, namely, at the stage of collecting sociological data.

Experience shows that today it is more convenient to hold an interview using Skype, as well as on social networks and by email [3]. The document analysis almost completely moved to the Internet, and, also, using the method you can implement large-scale projects. An example of such research is the study of the results of school all-Russian intellectual Olympiads in mathematics and the Russian language [4]. Information is available on the Internet for most schools in all Russian regions, so researchers have the opportunity to assess the development of cognitive skills of students and the success of basic school teaching subjects.

The observation method is converted to monitoring in social networks [5]. The approach requires the understanding of the limits of its application, since it may violate people's rights to privacy. The questionnaire is also convenient to post on social networks, but only if you search for targeted audiences for the survey.

The study of digital methods for collecting empirical data is necessary for different sociological directions. New technologies can increase the number of respondents, and make life spheres that were previously hidden for the analysis more accessible. Digital sociology, first mentioned in foreign scientific literature in 2009, is developing digital methods for collecting and analyzing sociological information [6]. In Russian sociology, the methods of online surveys and e-mail interviews have received the most complete justification [7].

The objective of our research is a methodological analysis of such a method of digital sociology as the Internet forum. It is about searching and studying group discussions on the Internet. The Internet forum occupies an intermediate position between the method of analyzing documents, observation and a focus group without a leader. The Internet forum provides a lot of information if it is necessary to analyze the discussion of a group of people, being a sociologist's object of interest. In

particular, when applied to educational issues and the study of the educational way of a person, such an audience will be parents of high school students discussing their children's admission to the university.

This is only one of the topics related to the family development and implementation of the educational way of children. The relevance of the Internet forum method to study the educational way is analyzed on the basis of parents' discussion materials, who suggested their children, graduated from 9th form, entering an online school with distance learning in order to complete their full secondary education.

## II. RESEARCH METHODOLOGY. COMPARISON OF THE INTERNET FORUM METHOD WITH THE QUESTIONING

For the methodological justification of the Internet forum, its results were compared with the results of the questioning. In a group discussion on the Internet, the arguments that parents brought in favor of studying at an online school in grades 10-11 were analyzed. Studying the texts made it possible to compile a list of the most frequent motives for going to digital educational technologies and refusal of traditional schooling.

The researcher formulated the motives by searching for the most popular ideas among forum participants. For example, here is the story of a mother, a participant in the Internet forum, about her son moving to an online school after graduating from 9th form: "My idler did not study well at school, and did not want to go to college. The class teacher insisted on leaving school, since my son, in her opinion, would not cope with the profile class. But we wanted him to obtain a higher education, not go to the army. I found an online school website and decided that we can afford the study in the last two grades. It is not very expensive, and my son will like lessons on Skype". This passage cited contains the following arguments for going to an online school:

- Poor performance in the previous school.
- The desire to give the son a higher education.
- The desire to avoid military service.
- Affordable cost of educating in online school.
- Like to digital learning technologies (Skype lessons).

The discussion on the Internet was analyzed until the "sense of fullness" of the list of reasons for entering the online school found in the texts. After studying 548 statements, ten family motives for turning to distance education in grades 10-11 were identified. The found parent Internet forum was referred to the topic of choosing an educational way after graduating from 9th form, so it was only about high school students. The list of family arguments received in favor of online schools was arranged hierarchically: from common to the least popular ideas. Then, we compared the list of the Internet forum with the list obtained as a result of the survey.

Questioning of students of online schools was carried out in an earlier project, also concerned with the analysis of online choice of education in grades 10-11. With the permission of the directorate, an electronic questionnaire was posted on the website of one of the well-known distance schools in St. Petersburg, as well as in the group on the social VKontakte network. The questionnaire asked questions about the reasons

for moving to the grade 10 at an online school - personal and family. For analysis, we selected 34 of the most reflex profiles. It should be noted that the questionnaire chosen for comparison with the Internet forum also refers to digital methods for collecting empirical data [8].

Most of the questions in the questionnaire were open, since a new situation for sociologists was studied. There was not enough information to formulate ready-made answers to a closed question. The question of the parental point of view on entering an online school and family motives for choosing distance learning was a separate one. Students' answers were processed using the Discant computer program (Interactive Text Analysis and Classification System). The program was developed by local scientists G.I. Saganenko and E.A. Kanevsky. The system supports high-quality sociological research and allows you to work with large volume of unstructured texts. A database was created for the questionnaires, the statements of informants about the choice of online schools were classified.

The question about family reasons for choosing online education in high school was asked in such a way that the respondent could list the arguments significant for his parents in a column, separating one motive from another. The text, thereby, turned out to be convenient for computer processing. For example, this was the answer of informant No. 14:

- Parents want me to enter a university.
- Mom is tired of waking me up in school in the morning.
- The family believes that I will better prepare for the Unified State Exam.
- Parents want me to learn also German.
- Grandma is ready to pay for online school.

Some of the answers were "mass" and contained several different ideas: "Mom wants me to earn extra money in the field of my future specialty and not to go to school every day, and then enter a university." Such texts were divided into semantic fragments:

- Mom wants me to earn extra money.
- Mom wants me not to go to school every day.
- Mom wants me to enter a university.

After processing the answers to the question about the parental reasons for choosing an online school in the Discant, we received an array of 739 statements. As a result of the classification, the respondents' answers were grouped into eight groups. There were fewer positions than in the list, compiled on the basis of the parent discussion analysis on the Internet. The classification of positions in lists by reference frequency also varies.

## III. RESULTS OF THE STUDY. CHOICE OF ONLINE SCHOOLS: INTERNET FORUM AND QUESTIONING CONCLUSIONS

Two lists of arguments for the family justification of choosing an online school duplicate each other in content, do not completely coincide in the frequency of statements in the questionnaire and in the Internet forum. Parental discussion gave more well-reflected ideas in favor of digital education.

This can be explained by the fact that in the questionnaire respondents were students of online schools. Students answered the question why their parents suggested them to move to an online school. In the Internet forum, exclusively parents answered the same question. We combined the arguments into a table for ease comparison of the texts classification results:

TABLE I. REASONS FOR FAMILY CHOICE OF ONLINE SCHOOL

№	Groups of arguments in questionnaire	Typical ideas in answers to a question about parental choice of an online school	Groups of arguments in the Internet forum
1	Poor school performance	Failure in most subjects in 9th grade certificate, low scores for exams in grade 9, negative feedback from teachers about the student and his ability to enter a university	Poor school performance
2	Desire to go to higher school institution	Obtaining a certificate of complete secondary education, the desire to go into a top-rated university, readiness to study at the university on a paid basis, the need for a diploma of higher education for a future profession, entrance to a foreign college	Desire to go to higher school institution
3	Preparation for the Unified State Exam and other exams	Desire to focus on individual subjects, choice of educational specialty, choice of profession, poor performance in subjects that are unnecessary for entering a university, preparation for creative exams	Preparation for the Unified State Exam and other exams
4	Preference for distance approach and digital education technologies	Time saving, convenient schedule for attending lessons, minimum offline lessons, specialized computer programs for online lessons, electronic home lessons, Skype consultations with teachers, passing a number of subjects accelerated, a small number of classmates	Preference for distance approach and digital education technologies
№	Groups of arguments in questionnaire	Typical ideas in answers to a question about parental choice of an online school	Groups of arguments in the Internet forum
5	Sports, dancing	Professional sports career, several sport or dance clubs	Affordable cost of education
6	Health care	The ability to get enough sleep, meal schedule compliance, walks in the fresh air	Health care
7	Development of extracurricular skills	Taking out a driving license, learning foreign languages, mastering of programming	Development of extracurricular skills
8	Affordable cost of educating	Affordable cost of online education, the ability to choose the appropriate lessons at a low price, a	Sports, dancing

		regular school in high school will cost more	
9	-	-	Freedom from army service
10	-	-	Work
	TOTAL:	739 answers	548 answers

An example for the classification of questionnaire answers and statements on the Internet forum was the methodology for the qualitative and quantitative measurement of youth values proposed by the Russian sociologist A.E. Heger [9]. As a result of the classification of the texts, we received eight groups of answers from respondents and ten groups of arguments from participants in the Internet forum. The total number of arguments is 1287 (739 semantic fragments in the questionnaire and 548 expressions in the Internet forum).

#### IV. DISCUSSING THE RESULTS. RELEVANCE OF THE "INTERNET FORUM" METHOD FOR ANALYSIS OF HUMAN EDUCATIONAL WAY

The digital sociological method "Internet forum", that is, the study of thematic group discussions on the Internet, in our opinion, tends to the analysis of documents. Despite the similarities to the focus group, the method is aimed at searching and studying the information available in society. The texts of the Internet forum are not created by a sociologist, they exist before a sociological research and have the property of high reliability. The answers to the questionnaire, on the contrary, appear with the help of sociological research and under the influence of a sociologist. Open-ended questions increase the reliability of the results, as they enable respondents to state opinion under their own criteria. It is interesting to compare the findings of the Internet forum and questioning on one topic in order to assess the relevance of both sociological approaches.

The first four places in the list of arguments in favor of online schools are taken by the groups "Poor school performance", "Desire to go to higher school institution", "Preparation for the Unified State Exam and other exams", "Preference for the distance approach and digital education technologies". Students of online schools in the questionnaire and participants in the Internet forum share one view on the main reasons for choosing distance education in high school. This indicates the stability and reliability of the data obtained through the analysis of the parent Internet forum.

The first four groups are connected exactly with the education of school students, so both methods have confirmed a high degree of relevance with respect to the analysis of the educational way of a person. The interest of parents and high school students to distance learning is significant. The findings of both empirical projects indicate the attractiveness of digital education methods in the opinion of Russian youth and older age groups [10].

Groups starting from fifth to eighth characterize the background of studying in an online school, that is, the daily life of students. On the parent Internet forum, the fifth group is "Affordable cost of education", such a consideration presents in the answers to the questionnaires too, but it took the eighth

place. It can be assumed that the reason for the different ranks of the idea is that it is the parents who pay for their studies. In the questionnaires the group "Sports, dancing" is in the eighth place, in the Internet forum - in the fifth position. Obviously, such activities are more relevant in the minds of students, not their parents.

The groups "Health care" and "Development of extracurricular skills" take the seventh and sixth positions coinciding in the frequency of arguments. There are two groups in the list of the Internet forum that are not in the questionnaire list. These are "Freedom from army service" and "Work". We are talking about the desire not to serve or postpone compulsory military service by school graduates, as well as the need to earn extra money. In the Internet forum, parents discuss different types of work of their children - from freelance on the Internet to official employment by their chosen profession. The money earned by children is important for the family, including for paying for studies at the online school. Respondents to the questionnaire did not raise the topic of work and making money.

Summarizing the results of a comparative methodological study we say that the "Internet forum" method has shown its relevance to the educational problems being studied. The lists of family arguments in favor of online school for high school students, obtained through questioning and analysis of Internet discussions, almost coincide in the list and frequency of statements. The findings of the study of the parent Internet forum complement and explain the conclusions of the questionnaire survey of online school students.

#### V. CONCLUSIONS

This methodological study comprehended the digital sociological "Internet forum" method, which is an analysis of thematic group discussions on the Internet. It has been established that the Internet forum is relevant to the study of the educational way of a person, in particular, to the identification of family motives for choosing an online school. The motives for entering an online school found in the parent Internet forum and student questionnaire almost coincided in content and frequency of occurrence. The results of the analysis of the Internet discussion supplemented the list of arguments in favor of distance learning in high school, obtained during the questioning. The recommendation of the methodological project is the development and application of the digital Internet forum method in empirical sociological research for studying education and other topics.

#### **Acknowledgments**

The reported study was funded by RFBR, project number 19-011-00947.

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