

Development of conceptual model for digital monitoring of extremist attitudes and identification of risk groups in the youth environment

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Abstract — The relevance of the study is determined by the growth of international terrorism and extremism in recent decades. With the growing dynamics of social change, it is important to quickly respond to both positive and negative changes. In a postindustrial society, the most important issue is the speed of decision making. Monitoring of important changes in society can partially solve this problem. Monitoring of social attitudes allows to identify risk groups by identifying extremist attitudes to prevent the further spread of extremist ideology among young people in the early stages of its development.

In the course of the project implementation, the approved scientific and methodological support and tools for sociological monitoring of extremist attitudes and identification of extremist behavior risk groups among young people will be obtained. This scientific and methodological support and tools will be used for early diagnosis and prevention of extremism.

The scientific novelty of the project is to develop a new approach to the prevention of extremism among young people, which, unlike the existing approaches, emphasizes the prevention of the spread of extremism at the early stages of its development.

The study has a high scientific and practical significance, as it allows to get ready-to-use scientific and methodological support for the sociological monitoring of extremist attitudes among young people for political decision-making processes in the field of improving youth and anti-extremist policies.

The paper describes the result of developing a conceptual model of digital monitoring of extremist attitudes and identifying risk groups in the youth environment. A conceptual model can be represented in the form of a scheme that includes four interconnected modules: a theoretical and methodological module, a methodical module, an empirical module, and an analytical module. Four stages of monitoring are described, and the main activities at each stage and their main results are highlighted. The basic elements that constitute the scientific and methodological support of sociological monitoring of extremist attitudes and the identification of risk groups in the youth environment are described. Expected results of the study are

formulated and substantiation of their scientific significance in theoretical and applied terms is given.

Keywords — *digital sociological monitoring, extremism, extremist attitudes, youth*

I. INTRODUCTION

The relevance of monitoring extremist attitudes is determined by the growth of international terrorism and extremism in recent decades. In this regard, the prevention of extremism among young people is a vital task to ensure sustainable social and economic development of the state. In this context, the proposed study on the search for new methods of monitoring and early warning of extremism among young people is new and relevant. The study proposes a new approach to prevent the spread of extremism among young people. Unlike other approaches that emphasize complex statistical methods for analyzing crimes of an extremist nature, the authors propose a method for early diagnosis and prevention of manifestations of extremism among young people. Unlike statistical and sociological studies, monitoring allows to accurately track real social processes and coordinate the work of state and public institutions to combat extremism [1-3].

In the field of prevention and combating extremism, research is currently being actively conducted in various fields of scientific knowledge (sociology, psychology, linguistics, legal sciences, cybersecurity, etc.) and in this sense the topic is interdisciplinary. It can also be noted that most of the existing scientific approaches mainly offer methods of analysis of already committed crimes of an extremist nature [4, 5].

Development in the field of monitoring extremist content on social networks on the Internet is also quite active [6, 7]. In particular, the work "Predicting online extremism, content adopters, and interaction reciprocity" presents a technology for detecting extremist users, for predicting users of extremist content and interaction in social networks [8].

Prevention of extremism among young people is a vital task. In this context, the search for new methods for the early prevention of extremism among young people and new approaches to preventing the spread of extremism among young people is relevant. Today, there are various methodological developments in the diagnosis of individual forms of extremism. For example, Cattacin, S., Gerber, BC, Sardi, M., & Wegener, R. offer a tool to monitor right-wing extremism and xenophobia in Swiss [9]. A study by Pitts, J. P. discusses the concept of racial consciousness and how it can be used in empirical work on racial politicization among American blacks [10]. There are separate studies of psychologists describing the development of psychological techniques for diagnosing extremist manifestations of the personality and identifying psychological risk factors for extremism [11, 12].

The sociological analysis of extremism is also quite represented in modern science: the sociological model, structure, markers, sources, social factors of extremism, etc. are described [13, 14]. In addition, there are various empirical studies of particular aspects of extremism and [15 -17].

However, the development of comprehensive scientific and methodological support, which allows regular sociological monitoring of moods and diagnostics of the causes of extremism among young people, the results of which could be used in the practice of political decision-making, is currently lacking. In the context of digitalization of society, new trends related to the use of digital technologies and methods of scientific research are being integrated into research theory and practice. The proposed study aimed at developing and testing the scientific and methodological support of digital sociological monitoring of extremist attitudes and identifying risk groups in the youth environment is quite new and relevant.

II. RESEARCH METHODOLOGY

The study actualizes the theoretical and methodological principles of several branches of sociological science: sociology of culture, sociology of youth, political sociology, sociology of extremism, sociology of communication, sociology of conflict, sociology of management and digital sociology. The study is based on the following methodological principles:

1. The sociological theory of culture, formed around the ideas of M. Weber, T. Parsons and other sociologists, where political attitudes are considered as structural elements of the political culture of youth;
2. The theory of social action, where the category of "extremism" from a sociological point of view describes the form of consciousness and behavior of individuals (W. Pareto, W. MacDougall, M. Weber, T. Parsons, D. Homans, P. Blau, A. Turen, J. Habermas, P. Bourdieu, E. Gidings and others);
3. The theory of generations (William Strauss, Neil Howe);
4. The theory of social attitudes as a methodological basis for the empirical study of extremism (W. Thomas, F. Znanetsky, R. Likert, L. Terstone, V. Park, G. Allport, R. Lapierre, V. A. Yadov, etc.) ;

5. Quantitative sociology strategy as a methodological and methodical basis for digital monitoring of extremist attitudes in the youth environment, including digital methods for collecting, statistical processing and statistical analysis of sociological data.

III. THE RESULTS OF THE STUDY

This work demonstrates only part of a study aimed at developing and testing scientific and methodological support and tools for digital sociological monitoring of extremist attitudes and identifying risk groups of extremist behavior in the youth environment for early diagnosis and prevention of extremism. The key to this work is a number of categories, the scientific definitions of which are given below.

Monitoring is understood as one of the possible diagnostic methods and in the work is defined as "a mechanism for systematic observation, tracking various objects of interest to science and practice, a system of collecting information about the state of these objects using the same basic indicators with a certain frequency, a system for assessing changing conditions and development trends of observed objects, monitoring the progress of the observed processes in order to prevent, overcome or minimize negativity trends and consequences of the development of these processes" [18].

Sociological diagnostics in the study is understood as "based on the theoretical ideas and research methods developed by sociological science, a technology for the comprehensive analysis of the state of social objects and social aspects of other social systems, the main purpose of which is to provide information management of relevant objects" [18].

Sociological monitoring performs the function of sociological diagnostics and is a specific form of monitoring, which "uses methods specific to empirical sociology for collecting, processing, analyzing and using information (primarily a survey)" [18].

Digital sociological monitoring - monitoring that uses digital methods specific to empirical sociology for collecting, processing, and analyzing information. The implementation of digital sociological monitoring is based on general theoretical, methodological and methodical requirements for sociological monitoring. Specificity is determined by its full or partial implementation in digital reality, as well as the use of digital methods of sociological online research. Among them can be distinguished such as methods for constructing online samples and online panels of respondents, non-contact online methods of data collection (online polls, online focus groups, etc.), computer (including online) methods for processing and analyzing sociological data.

Monitoring implementation involves the construction of the necessary primary theoretical models:

1. The structural model of the object of study - the elements of the object of study, hierarchy and communication.
2. Functional model of monitoring - considers the relationship of monitoring functions with other organizational and conceptual elements: stages, procedures, results, goals, etc.

3. The conceptual model of monitoring - reflects the conceptual essence, the foundation of cause-effect relationships of the process and the result, defines the system-forming elements for other research models.

4. Structural monitoring model - establishes a list of elements and links between monitoring elements. The structural model is the basis of the organization and content of the study.

5. The system model of monitoring - allows to consider the relationship of the structure, functions, organization and use of the results of a sociological study.

6. Resource monitoring model - reflects the necessary requirements for resource support of monitoring stages and procedures.

7. Diagnostic monitoring model - establishes the relationship between procedures, objects, subjects, indicators and diagnostic results of the internal environment of the object of study.

8. Analytical monitoring model - determines the sequence, emphasis and results of the analysis and forecast based on sociological monitoring data.

9. Organizational monitoring model - establishes procedural relations between organizational forms, responsible persons, stages and monitoring procedures.

10. Monitoring results management model - considers the types of analytical information received during the implementation of the stages and procedures of monitoring, the direction of its declaration, the subjects of the information request and the results of its use.

11. A prognostic monitoring model - is developed on the basis of the dynamics of indicators of sociological monitoring and the establishment of their relationship with objective socio-economic criteria for the effectiveness of the research object.

12. The project model of sociological monitoring - shows the stages of preparation and implementation of the project for the implementation of sociological monitoring, its resource support and connection with the elements of the project management of monitoring [19].

This paper presents the results of developing a conceptual model for implementing digital sociological monitoring of extremist attitudes and identifying risk groups for extremist behavior in the youth environment.

The conceptual model of scientific and methodological support for sociological monitoring of extremist attitudes and the identification of risk groups in the youth environment can be represented in the form of a scheme (Figure 1).

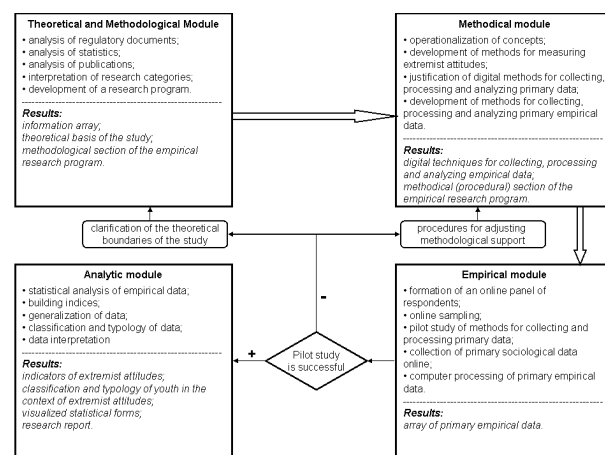


Fig. 1. A conceptual model of scientific and methodological support for sociological monitoring of extremist attitudes and the identification of risk groups in the youth environment.

The process of implementing digital sociological monitoring at a conceptual level includes the following steps:

1. Theoretical and methodological analysis;
2. Methodical analysis;
3. Empirical analysis;
4. The analytical phase.

Each of them is associated with the implementation of a number of activities and is aimed at obtaining specific results.

Stage 1. Theoretical and methodological analysis.

Activities:

1. analysis of regulatory documents - federal, regional and municipal regulations, strategies, programs, as well as documents in the field of prevention and combating extremism;
2. analysis of the information accumulated by the team as a result of previous studies on the values, attitudes, behavioral practices of young people in the region;
3. analysis of statistical data, reports, publications in scientific and methodological publications, the media and other open sources devoted to the analysis of extremism and extremist sentiments in the youth environment;
4. a comparative analysis of existing research programs and approaches to measuring the mass consciousness and behavior of youth in the context of extremism.

Stage 2. Methodical analysis.

Activities:

1. the conceptualization of the concept of "extremism" in sociological science;
2. development of a program for conducting empirical online research, including a theoretical interpretation and operationalization of the concept of "extremist attitudes of youth"; definition of a set of basic empirical sociological indicators; selection and justification of digital methods for the collection, processing and analysis of primary sociological data [20];
3. development of a methodology for measuring extremist attitudes in the youth environment, containing formalized questions addressed to respondents and including

sociological empirical indicators of extremist attitudes, designing an online questionnaire; selection of an online survey program [21];

4. development and description of a methodology for collecting primary information about extremist attitudes of youth, containing methodological requirements for creating an online sample and designing an online panel of respondents (students and working youth), organizing an empirical online questionnaire;

5. development of software and algorithmic support for processing and computer statistical analysis of primary data on extremist attitudes of youth;

6. development and description of the methodology for typing data and visualizing the results on the state of youth extremist attitudes, including the methodology for diagnosing risk groups of extremist attitudes based on basic socio-demographic characteristics;

7. creation of templates of typical analytical tables and figures, clearly reflecting the state of extremist attitudes in the youth environment.

Stage 3. Empirical analysis.

Activities:

1. testing and quality control (pilot study) of the developed scientific and methodological tools for sociological monitoring of extremist attitudes in the youth environment;

2. primary data collection.

Stage 4. Analytical stage.

Activities:

1. summarizing the results, making changes to the program and methodological tools of the study, taking into account recommendations based on the results of a pilot study;

2. participation in various conferences on the subject of the project in order to disseminate the results and receive criticism from the scientific community;

3. preparation of a progress report;

4. preparation and publication of scientific articles on the main results of the study.

In the course of the project, an approved set of tools for sociological monitoring of extremist attitudes in the youth environment will be obtained. The scientific and methodological support of sociological monitoring of extremist attitudes and the identification of risk groups in the youth environment includes the following elements:

1. the typical methodology for measuring extremist attitudes in the youth environment, containing formalized questions addressed to respondents and including sociological empirical indicators of extremist attitudes;

2. the methodology for collecting primary information about extremist attitudes of youth, containing methodological requirements for the sample and organization of empirical research;

3. the methodology of computer processing and statistical analysis of primary information about extremist attitudes of youth;

4. a methodology for typing data and visualizing results on the state of youth extremist attitudes, including a

methodology for diagnosing risk groups of extremist attitudes based on basic socio-demographic characteristics;

5. templates of typical analytical tables and figures that clearly reflect the state of extremist attitudes in the youth environment.

IV. DISCUSSION

The expected results are of theoretical significance. First, they will systematize the key points of the sociological theory of extremism; secondly, they will make it possible to formulate a sociological definition of extremism and extremist attitude, suitable for further operationalization for the purpose of empirical study; thirdly, they will provide a formal model of empirical monitoring of extremist attitudes in the youth environment and identification of risk groups that carry extremist attitudes.

The results are also of practical importance, since it is supposed to get ready-to-use scientific and methodological support, which allows regular monitoring of extremist attitudes in the youth environment using modern digital sociological methods. This is of practical importance in the field of political decision-making, for example, by federal, regional and municipal authorities in the field of improving youth and anti-extremist policies.

V. CONCLUSIONS

Digital sociological monitoring is one of the methods of operational sociological diagnosis of extremist attitudes in the youth environment. Its implementation is preceded by a series of activities related to the construction of theoretical models. One of these models is the conceptual model of digital monitoring of extremist attitudes and the identification of risk groups in the youth environment.

It involves the development of theoretical and methodological and methodical foundations of sociological monitoring, as well as the development of an algorithm for the practical application of sociological monitoring to analyze extremist attitudes and identify risk groups in the youth environment.

The conceptual model can be represented in the form of a scheme that includes four interconnected modules: a theoretical and methodological module, a methodical module, an empirical module, and an analytical module. Four stages of monitoring are described, and the main activities at each stage and their main results are highlighted. The basic elements that constitute the scientific and methodological support of sociological monitoring of extremist attitudes and the identification of risk groups in the youth environment are described. Expected results of the study are formulated and justification of their scientific significance in theoretical and applied terms is given.

References

- [1] S. Eliseev, I. Vicentiy, and V. Gluchich, "Monitoring of Political Tolerance as a Tool for Early Warning on Youth Extremism", *Indian Journal of Science and Technology*, Vol 10(2), January 2017.
- [2] S. Eliseev, I. Vicentiy, and V. Gluchich, "Youth political extremism: Methods of early warning", *Teorija in Praksa*. 2017. 6. pp. 990-1007.

- [3] S. Elishev, I. Vicentiy, and V. Gluchich, "Attitudes and values of political Tolerance in minds of Russian youth", *European Proceedings of Social and Behavioural Sciences*. Vol. 35, pp. 297-303, 2018.
- [4] M. Sageman, "Portrait of a modern terrorist group", *New Scientist*, 197 (2641), 2018, pp. 46-47.
- [5] K. Baizakova, F. Kukeyeva, K. Pelipeiko, and A. Ordabayev, "The reasons of Central Asian youth involvement in terrorist and extremist organizations", *International Relations and International Law Journal*, 83(3), 2018, pp. 10-17.
- [6] M. Hartung, R. Klinger, F. Schmidtke, and L. Vogel, "Identifying right-wing extremism in German Twitter profiles: A classification approach", In *International Conference on Applications of Natural Language to Information Systems*. Springer, Cham., 2017, pp. 320-325.
- [7] E. V. Bonventre, "Monitoring and evaluation of Department of Defense humanitarian assistance programs", *Military Review*, 88(1), 2008, p. 66.
- [8] E. Ferrara, W. Q. Wang, O. Varol, A. Flammini, and A. Galstyan, "Predicting online extremism, content adopters, and interaction reciprocity", In *International conference on social informatics*, Springer, Cham., 2016, pp. 22-39.
- [9] S. Cattacin, B. C. Gerber, M. Sardi, and R. Wegener, "Monitoring misanthropy and rightwing extremist attitudes in Switzerland", *An explorative study*, 2006.
- [10] J. P. Pitts, "The study of race consciousness: Comments on new directions", *American Journal of Sociology*, 80(3), 1974, pp. 665-687.
- [11] A. Nivette, M. Eisner, and D. Ribeaud, "Developmental predictors of violent extremist attitudes: A test of general strain theory", *Journal of research in crime and delinquency*, 54(6), 2017, p. 755-790.
- [12] J. W. Coid, K. Bhui, D. MacManus, C. Kallis, P. Bebbington, and S. Ullrich, "Extremism, religion and psychiatric morbidity in a population-based sample of young men", *The British Journal of Psychiatry*, 209(6), 2016, 491-497.
- [13] A. T. Turk, "Sociology of terrorism", *Annu. Rev. Sociol.*, 30, 2004, pp. 271-286.
- [14] Y. P. Zinchenko, "Extremism from the perspective of a system approach", *Psychology in Russia*, 7(1), 2014, p. 23.
- [15] J. A. Beckford, "Religious organization: a trend report and bibliography", (Vol. 21, No. 2). Mouton, 1975.
- [16] I. A. Zubok, and V. I. Chuprov "Self-organization in the manifestations of youth extremism", *Russian Education & Society*, 53(2), 2011, pp. 26-48.
- [17] A. Van Hiel, and Mervielde, I. "The measurement of cognitive complexity and its relationship with political extremism", *Political Psychology*, 24(4), 2013, pp. 781-801.
- [18] A.V. Milekhin, "Theoretical and methodological foundations of sociological monitoring", Moscow, 2018. p. 104.
- [19] V.A. Sapryka, I.S. Shapovalova, and L.N. Shmigirilova, "Sociological monitoring the internal environment of high school", *Modern problems of science and education*. 2012. №2.
- [20] I. V. Vicentiy, S. M. Eliseev, and A. V. Vicentiy, "Applying of the Classifications Trees Method in Forecasting of Risk Groups of Intolerant Behavior", *Proceedings of the Computational Methods in Systems and Software*. Springer, Cham, 2018. pp. 350-359.
- [21] I.V. Ustinova, and S.M. Eliseev, "The characteristics of college students' political tolerance", *Russian Education and Society*. 2011. T. 53. № 9. pp. 71-82.