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METHODS FOR MODELING THE RESULTS OF SOCIOLOGICAL RESEARCH

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Abstract
This article analyzes the theoretical foundations, practical significance and modern methods of modeling the results of sociological research. Through sociological modeling, the possibilities of identifying the internal structure of social phenomena and processes, analyzing the cause-and-effect dependencies between them and predicting social change are revealed. The study outlined the advantages of statistical, mathematical and computer models in working with sociological data. The article concludes with suggestions and recommendations on the possibilities of modeling approaches to be used in sociological research.

Keywords: Research, modeling, research results, statistical methods, applied research, scientific research.

Introduction

Modern sociological research serves not only to collect empirical data, but also to gain a deeper understanding of processes in society through their analysis, prediction, and theoretical justification. In particular, modeling the results of sociological research is becoming an integral part of today's research work. Through this process, scientists will be able to identify correlations between social phenomena, understand the dynamics of social systems, and predict their promising development. Modeling is a way to reflect complex social processes in real life in a simplified but meaningful form. It is based on various mathematical, statistical and computer technologies. With the help of sociological models, it is possible to make scientifically based decisions in many areas, such as social systems, population movement, migration, social stratification.

Each sociological study conducted is analyzed and summarized. It is convenient to process the results of the survey and make statistical calculations, but those who oppose this method say that the processed results seem correct, but when most of these answers take into account extreme superficiality, the accuracy of the results is Shubha etching[1]. In addition, the nod to responding is common, especially when questionnaires are mailed. The language used in interpreting the conditions and results of the survey is often very far from the real living individuals responding. It is difficult to imagine the person being asked when the questions are sent by mail.

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In general, the more direct and direct communication between researchers and respondents, the more informative and justified the conclusions will be. The results of the survey should be filled with materials that are as deepened as possible.

The collected material must be analyzed and coordinated to the study with the problem of four. It is not easy to process the information obtained and adapt it to the topic of research. Even, when there is an opportunity to get clear answers to all questions, Ham many studies are caught up. After analyzing the results of the study sung, the report must be prepared. Usually published in the form of a journal article or book, the report will consist of an explanation of the nature of the research and the justification of the conclusions made. This is the final stage. Many reports result from unanswered questions and require further research. Any indvudial research activity is part of the research process being carried out within the social community.

One of the most important problems that arise in the study of problems related to research in research methodology is the assumption of causes and consequences. A causal connection of two hosts or states is a connection such that one event or state induces another. For example, the release of the handbrake of a car standing on a mountain side causes an illustrated consequence. Just like the natural sciences, sociology arises from the assumption that all phenomena have their own causes. One of the main tasks of sociological research consists in anicizing causes and consequences.

The analysis of information gained during sociological research is an important stage in the research process. The purpose of this stage is to explain the meaning of the results, summarize the ideas and bring them into a single theoretical system[2]. There is a system of a number of scientific methodological solutions that correctly interpret the results of sociological research, but in each concrete case, this thing is done with the participation of a whole team of people (sociologists, respondents, administration). The reliability of research results and the viability of hypotheses serve to improve the social functioning of people as the most effective tool. Therefore, in the process of testing the hypothesis, the researcher must rely on more realistic phenomena, combine different data, strive to distinguish the necessary aspects and properties of the object being studied from empirical materials. The results of sociological analysis are manifested in a scientific report in a systematized and group-separated form. Tables, graphs, surveys, blanks, tests, etc.are cited as an application of the report.

The main goal of Applied sociological research is the solution of issues advanced by practice. Therefore, such a research report describes the composition of hypotheses, Research tasks, a system of averages, Information, research methods for collecting initial information.

The main requirements for the report are as follows:

- in the report, logically corresponding to the subject of the study, all interconnected groups of problems should be reflected as deeply and fully as possible;
- the logical sequence of the series of works to be performed must be provided;

- in each section of the report, it is necessary to ensure the mutual proportionality of the two parts of the evolutionary complementary;
- all questions of the questionnaire and their corresponding results must be analyzed according to the requirements of scientific logic;
- the report must be technically formalized at a high level and properly structured.

Modeling is one of the common forms of scientific activity. In all disciplines, the model is used in obtaining information about the phenomena being modeled, in the development of hypotheses and theories. Including historians, this style is widely used by the process of research[3]. The modeling of historical phenomena is carried out using logical formulation, that is, a thoughtful content-task plan is formed. Modeling is done in relation to simplification, idealization and abstraction[4]. It makes it possible to check the representativeness of information in sources, to check the adequacy of evidence, the validity of hypotheses and theories. For example, if we model it to study the state of a team, it is also required to take note of the factors of sociology, law, psychology, as well as the specificity of the team. This in turn also means that an interdisciplinary approach style is being applied.
Modeling methods Modeling techniques used in sociological research include:
Mathematical models-processes such as population size, demographic growth, migration rate-are modeled through mathematical equations.
With the help of statistical models – regression analysis, clustering and correlation correlations, the relationship between social factors is determined.
Computer simulations (agent-based modeling) – the behavior of subjects within social systems are modeled algorithmically to analyze their overall consequences.
Systematic modeling (systems modeling) – a complex structure of feedback within social systems is represented through diagrams and graphs.
Modeling in sociology is a social science research method. phenomena and processes based on their models, i.e. the indirect study of social objects, during which they are reproduced in an auxiliary system (model), which replaces the original in the cognitive process and allows obtaining new knowledge about the subject of research.
The modeling process can be represented as a transition from one model of one class to another. Conventionally, there are three large classes of models: cognitive, substantive, and formal models. They make up three interrelated levels of modeling that cannot be considered in isolation from each other. The mutual influence of modeling levels is related to the potentiality property of models. The creation of any model is associated with the emergence of new knowledge about the object under study, which leads to a reassessment and refinement of concepts and views on the object of modeling at different levels. This circumstance leads, in turn, to a revision of the relevant content and cognitive models, ensuring the spiral development of all levels of modeling of the object under study.
In any case, in this definition of modeling, it is valuable that it distinguishes modeling as jointly used methods of generalization and abstraction, the result of which in scientific knowledge is the construction of a mental image of the object of knowledge, and modeling as a method (or method) of cognition of the studied object, represented in the form of its mental image, material or figurative model.

The model of the object under study is a system of material or ideal elements expressed in signs or a combination of them, located in relation to similarity to the object of study and reproducing the structural, functional, cause-effect and genetic relationships between its elements. The most essential properties of models are the following: the model and the original are always in an objective correspondence known to the subject of cognition; in the process of cognition, the model replaces the object and itself becomes the object of research; the model in a certain respect reproduces the object of research in a simplified form; it serves to cognize the object of modeling, a means of obtaining new information about the object; knowledge obtained on the model, can be transferred to the original. Models are used in cases where it is impossible (for some reason) to begin a direct study of an object of interest or when it is impractical (for example, if it is associated with significant difficulties).

Replacing the object of research with a model presupposes the existence of an objective community between them, which is based on the dialectical-materialistic principle of unity and interrelation of objects and phenomena of reality (the ontological condition of modeling). The most complete cognitive possibilities of the social network. modeling manifests itself when considering it as a method of system research.

In modern scientific research, modeling has transformed from a special technique of scientific research into an important method of scientific knowledge and is used to study individual specially identified aspects of an object[5]. For the development of pedagogical science, the subject and methods of which have a social basis, and for the implementation of the results of scientific research in educational practice, the problem of modeling in the knowledge of social phenomena and processes is of particular importance.

The main requirements related to the creation of models adequate to complex phenomena and processes of social reality can be reflected in the following principles: unity of epistemological and axiological approaches in the implementation of models and interpretation of results; holistic, multidimensional representation of social objects in the system of models used; the correspondence (adequacy) of models formalized to one degree or another to meaningful models reflecting the uniqueness of the research subject.

CONCLUSION

Modeling the results of sociological research occupies an important place in the development of modern social sciences. This method allows you to analyze complex social phenomena, determine the connections between them and predict their future directions. Through modeling, sociological data is presented in a more systematic, clarified and practice-oriented state. In particular, through mathematical and statistical models, computer simulations, a deeper understanding of the dynamics of social systems is created. Therefore, sociological modeling is considered incomparable not only for scientific research, but also for the development of Social Policy and decision-making.

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