

EFFECTIVE PRACTICES OF THE DELPHI METHOD IN SOCIAL SPHERE

SONYA ILIEVA

PROFESSOR DSC
SHUMEN UNIVERSITY "KONSTANTIN BISHOP OF PRESLAV"
CHIEF EDITOR OF ONLINE JOURNAL SOCIOBRAINS

BULGARIA
SONYAILIEVAA@GMAIL.COM

ABSTRACT: DELPHI METHOD IS GLOBALLY USED IN VARIOUS FIELDS OF SOCIAL DEVELOPMENT, INCLUDING IN THE SOCIAL SPHERE. IN BULGARIA, THE METHOD WAS FIRST PERFORMED WITH EDUCATIONAL PURPOSE OF THE DEPARTMENT OF SOCIAL WORK IN SHUMEN UNIVERSITY IN 2011 TO PREDICT RISK GROUPS WHICH WILL PREVAIL IN THE BULGARIAN SOCIETY FOR THE FORESEEABLE FUTURE, UNTIL 2030. THE RESEARCH IS DESCRIBED IN THE SCIENTIFIC WORK.

KEY WORDS: LONG-TERM FORECASTING, FUTUROLOGY PROCEDURE, EXPERTISE, ANONYMITY, CONTROLLED FEEDBACK, STATISTICAL GROUP RESPONSE, AREAS OF APPLICATION OF THE DELPHI METHOD, APPLICATION OF THE DELPHI METHOD IN THE SOCIAL SPHERE, SUSTAINABLE DEVELOPMENT, STRATEGIC PLANNING, IDENTIFICATION OF PROBLEMS IN THE SOCIAL SPHERE, VALIDITY OF THE DELPHI METHOD IN THE SOCIAL SPHERE

CREATED by the RAND Corporation - USA Delphi method during the period 1946 - 1975, many quickly found supporters in the world in various fields of social development. Its originality lies in its unique characteristics that distinguish it from other expert methods **N. Dalkey** described as follows: "Overall, Delphi procedures have three characteristics: (1) anonymity, (2) controlled feedback, and (3) statistical group response..." [12, p.20].

DELPHI method is applicable to many situations requiring collective solutions to problems or making predictions of future events. Due to the nature of their rigorous forum for the development of scientifically sound guesswork, Delphi is best suited for problems that require evaluation, quality responses rather than accurate quantitative results.

EARLY in the justification of the method Delphi in 1968, **N. Dalkey** reported which industrial enterprises started its implementation: "Over the past three years a number of industrial enterprises have started to implement some of the techniques that were developed in the work of Delphi" [13, p.9]. He further wrote: "The meaning of this is that the application of this technique is growing rapidly. The wide interest in led in fact to the formation of a new organization, "Institute for the Future", dedicated to generating long-term forecasts in the range of technological and social development. " [13, p.10]

IN 1970, R. Ament is trying to identify areas in which has been successfully used Delphi Method. The same year they are: economy, the possibility of desalination, oral contraceptives, occurrence of ultra light materials, automated language translation, organ transplants, more reliable weather forecasts, creating a centralized database, artificial organs, X-rays, psychotropic drugs, self-replicating molecules, synthetic proteins feasibility of control

hereditary defects and others [8]. Since then passed over 60 years, during which the method has been established as a reliable futurologichna procedure applied in different geographic locations of the Earth's map and in different areas of social development.

T. Gordon writes that "Delphi method continues to be used widely. In September 2008, a review of the database, which includes articles from 15,000 peer-reviewed professional journals, published books and trade publications and 105 publications, which identifies the words "Delphi study". It was found that at the same time, the most used method in the health sciences. " [15, p. 4]

IN the context of the data presented for the wide application of the Delphi method, the question arises: Why Delphi method has applicability in the social sphere of society?

The social sphere of the society is governed by the social policy - one of the most important public policies, an integral part of its sustainable growth. In this context, the sustainable development of society and the world, solving the main problems of mankind requires a comprehensive study of the issues and factors influencing it. *That is why the futures studies and forecasting to identify the trends of development in the social sphere on the agenda for both national governments and globally.* This stems from the complexity and dynamics, which are determined by the orientation of the entire public life to sustainable development. Sustainable development implies a high social indicators (employment, unemployment, income, wages, pensions, consumer price index, average life expectancy, literacy, state of health and education and so on).

BUT the most important method Delphi has in the strategic planning in the social sphere [5].

THE world experience provides many examples of this, including the indicative are the following:

J. Landeta from the Institute of Applied Business Economics of the University of the Basque Country – Spain, examine and analyze the validity of the Delphi method in the social sciences [16]. 3 For this purpose, applies three applications in this field. The main aim of the two studies was to contribute to the implementation of economic or statistical quantitative models using solutions from expert groups. The third study is to analyze the complex social reality using the Policy Delphi, to obtain reliable information before making a political decision. Through these applications highlights how this technique can be adapted to different social realities and requirements that a positive contribution to social progress, provided that it applies the necessary methodological rigor and with good knowledge of the social environment in which it applies.

Strauss K., Zeigler J. and Harmon L., express a positive assessment of the use of Delphi in social studies [21]. They define it as a method for collecting interpretations, forecasts or recommendations on specific issues or problems in the social sphere. According to them the conventional Delphi by quantitative values or designate one or minimum range of digital estimates or forecasts research problem. Policy Delphi collect more verbal than numerical data to define a set of answers or alternatives or solving expected political problem. The method is simulation, which requires experts to develop a set of options or solutions to contemporary social problems or anticipated in the social sphere.

Burnette D., Morrow-Howell N. and Chen L.-M., from Columbia University School of Social Work – USA, conduct gerontological social studies based on a national survey by Delphi Method [9]. The purpose of this study was established to identify the knowledge of aging and focus on subjects related to gerontological social work. The work involved a panel

of experts related to a specific topic. Considered by them are 49 independent research topics of which 16 are achieved moderate and high marks forming consensus. By study presents a critical mass of knowledge about the social work profession aging necessary for inclusion in the research programs of the National Research Council and the National Institute on Aging. The results of Delphi are aimed at the development and priorities of social work and interdisciplinary research, improve practice and policies on older people and their families.

V. Klimbie apply within the UK Delphi Method towards multidisciplinary research on child protection [10]. It focuses primarily on the collection and storage of materials and oral testimony of persons related to the protection of children at risk and preserve them as web-based data. The study shows that using the Delphi method can be summarized key thematic ideas given by both the researchers and the active professionals, thus accumulates experience. In conclusion, the team categorically stated that the Delphi method is a valuable tool for multidisciplinary research welfare and safety of children; as embedded breadth of experience of specialists in the research process.

Deslandes, S.F., Figueira C.H., Mendes de Oliveira T.P. and de Souza D.C., Brazil held the Delphi method on drawing performance assessment strategies related to combat violence against children and adolescents [11]. In this case, by the Delphi method is achieved expert assessment regarding the methods used to: 1. prevention of domestic violence and sexual exploitation; 2. Protection of children and adolescents who are victims of domestic violence and sexual exploitation; 3. prosecute perpetrators of domestic violence and sexual exploitation of children and adolescents; 4. promoting family and community regarding care for victims of domestic violence and sexual exploitation; 5. improve reporting and recording of such incidents. These topics cover the full range of policies for the protection and care of victims - children in Brazil. Identified by Delphi directions seek to minimize or eradicate those forms of violence, the real value for which the country is still unknown. The results show that 113 score consensus among experts is obtained by 91 indicators of them. [150]

Mackway-Jones K., Carley S.D. and Robson J., implemented in England study planning for major incidents with children by applying the Delphi method [17]. The study was prompted by the fact that 4 to 5 serious incidents happen daily in the UK and many of them involving children. However, only 31% of hospitals make concrete plans for the care of children involved in major incidents, approximately the percentage associated with the willingness of the social institutions for inclusion in the process of recovery. By Delphi method covers all phases of impact in such cases, including the preparation of action, incident management, the provision of medical care during the incident as well as the recovery of children and helping them. Certain are the key roles of medical, educational and social teams.

Peterson N.M., Hatfield P.M. and Schirmer J.A. from University of Wisconsin - USA, to identify the need for training courses related to preventive methods for injuries and other hazards in young children 1 to 5 years [19]. Thirty four key experts, mainly from the United States are involved in at least one of the three rounds, answering the questionnaires. They identify, assess and rank risks and prevention methods associated with them. Initially, the experts are presented 330 unique hazards and preventive behavior with various devices presenting a hazard in homes in the finals koinsolidirat about 204 of them. Experts estimated firearms and pools, the most dangerous devices for children, while indicating that smoke alarms and safe water temperature in the pools are the most important prevention.

Moral M., Sobhani F. A. and Rainis R., from American International University – Bangladesh, used Delphi method for the formulation of measures related to poverty reduction [18]. There were two procedures for the diagnosis of poverty in Bangladesh, which as experts

are attracted government officials, NGO leaders, academics, people from the middle of the social and policy. To avoid insufficiently substantiated hypotheses, the study analyzed activities for poverty reduction by the United Nations Development Programme – UNDP. In connection with it is discussed and analyzed one of the largest urban projects for poverty alleviation in Bangladesh - "Local partnerships for poverty reduction in urban areas." Има много успешни дейности по този проект, като микро-кредити в общността, канализация и питейна вода.

ON a global scale were held and other Delphi aimed at social public sphere. For example:

- ⇒ **Holmes W.M.**, explore developing competence in occupational therapy practice [14];
- ⇒ **Stokes F.**, uses the Delphi technique in a research project on the role of occupational therapists that enable people to make career choices, after an illness or injury [20];
- ⇒ **Vazquez-Ramos R.A.**, explores the potential set of elements to evaluate ethics in rehabilitation counseling [22];
- ⇒ **Witkin B.R.**, assess the needs in education and social programs [23] and others.

THE examples show that the Delphi method is successfully used by various researchers in a wide range of areas in the social sphere. Logically comes the question to what extent it is applied in Bulgaria.

DELPHI method present as a description in various monographs Bulgarian authors such as **S. Dilkov** [1], **I. Kusev** [2], **Y. Yankov** [6], [7], **S. Ilieva** [3], [4], [5] and others.

FOR educational purposes Delphi method is realized with faculty and students from the Department "Social Activities" of Shumen University "Bishop Konstantin of Preslav" in the period May 27 – June 2, 2011, within the Project "Futurological forecasting about the development of social services in Bulgaria" [3]. The main task of the study probed method to predict *which risk groups will prevail in Bulgarian society in the foreseeable future, 2030*

Characteristics of the realized method:

1. **Teams for conduction** – 2
 - 1.1. *Work team* - Two lecturers with academic rank and one student.
 - 1.2. *Expert team* – five experts from different social institutions, with years of experience and contribution to the system of social activities.
2. **Type of the communication** – transmission of information by electronic way.
3. **Timing** – 7 days, 2 of which are days for preparation and sampling techniques, 3 days to conduct the rounds and two days for a final compilation and analysis of results.
4. **Working card** – *Question for discussion by experts:* What risks groups in Bulgarian society will prevail in the Bulgarian society in the next 5-10 years?

Possible answers /closed questions in the the work card/:

- ⇒ continuously unemployed;
- ⇒ unemployed youth;
- ⇒ adults / retirees;
- ⇒ separate ethnic groups;
- ⇒ families with many children;
- ⇒ incomplete families;
- ⇒ chronic poverty;
- ⇒ individuals with antisocial behavior and criminal behavior;
- ⇒ children at risk.

5. Stages of conduct – three rounds

First round – sending a work card and receive primary answer within 24 hours. The team found that the responses of the experts to consolidate around the following risk groups:

1. adults / retirees – 5
2. separate ethnic groups – 5
3. continuously unemployed – 5
4. chronic poverty – 3
5. individuals with antisocial behavior and criminal behavior – 3
6. unemployed youth – 2
7. childrens at risk– 2
8. incomplete families -1
9. families with many children – 1.

Second round – the received and responses ranged from the first round shall be sent to experts for convergence of views and request for determination of the three risk groups, which will prevail in the Bulgarian society in the future. Within 24 hours gave the following answers:

1. adults / retirees – 5
2. separate ethnic groups – 5
3. continuously unemployed – 5
4. individuals with antisocial behavior and criminal behavior – 3
5. chronic poverty – 3
6. childrens at risk – 2
7. unemployed youth – 0
8. incomplete families - 0
9. families with many children – 0.

Third round – processed by the working group and ranged responses are sent back to the experts for a convergence of views and request for determination of the three risk groups, which they will prevail in the Bulgarian society in the future. Work card dropped three risk groups - unemployed young parent families and families with many children received 0 points by the experts. Again within 24 hours receive a final closeness of their responses:

1. separate ethnic groups – 5
 2. adults / retirees – 5
 3. individuals with antisocial behavior and criminal behavior – 5
- Other risk groups referred to in the working map receive 0 points.

6. Analysis and summary of the results.

CONDUCTING experimental method allows Delphi to be made explicit the following conclusions:

⇒ The opinion of experts in the realization of the forecast focuses on three risk groups that will prevail in the next 10-15 years in Bulgarian society: separate ethnic groups, adults / retirees, individuals with antisocial behavior and criminal behavior.

⇒ For the situations mentioned at risk in the future, separate ethnic groups, including expert group formed the opinion that the basis of this stand mainly poverty and exclusion, in which they are located and which, if not overcome will increase the share of social services aimed at these groups. In the absence of adequate state policy, the Roma are the group that could cause future serious social problems in the country.

⇒ Experts consolidate the opinion that adults / retirees are among the three risk groups identified by experts, due to material and spiritual problems related to their existence - low solvency of the elderly, except that excludes them from a wide range of public services available for recreation, leisure and recreation, often deprive them of the opportunity to make adequate care for their health. In view of the sharp drop in the birth rate in Bulgaria group of older people will increasingly increases, but by following and more social services aimed at them, economic support of the state.

IN order to limit the growth in the near future the third risk group - individuals with antisocial behavior and criminal behavior, Working Group believes should immediately begin implementing effective forms of individual and group psychological work to provoke potentials for development and change of the vital position. [15]

Submissions theoretical and empirical material allows these to be made explicit
conclusions and generalizations:

1. **GLOBALLY** observed widespread application of expert methods for long-term forecasting - Delphi, including in the social sphere of society. Delphi examine are focused on identifying the important issues of social work related to sustainable development at both national and global - reducing poverty, children and adults with disabilities, clinical aspect of social work and others.
2. **IN** Bulgaria the method is reflected in the scientific literature, but first experience nationwide study to weed it makes a team of students and teachers of Shumen University Department of "Social Work" whose task probed Delphi method to predict the future risk groups in Bulgarian society in the perspective of 30 years. The results show that the method is an effective procedure that could be used uspushno social of the society.
3. **EMPIRICALLY** proven effectiveness of Delphi method in the practical application in Shumen University in 2011 suggests a national framework, he successfully be applied in the following aspects of the social sphere: the conditions for receipt of monthly benefits, employment programs, measures to tackle poverty, identifying the estimated needs of children and disadvantaged persons, provision of social services in institutions and the community, the process of decentralization of the provision of social services and others.

REFERENCES

1. **DILKOV, S. AND OTHERS, 1988:** MODERN METHODS AND TECHNIQUES OF MANAGEMENT, SVISHTOV
2. **KUSEV, I., 1997:** SOCIAL PROGNOSTIC, SOFIA
3. **ILIEVA, S., 2011:** DELPHI METHOD IN FORECASTING THE FUTURE RISK GROUPS IN BULGARIAN SOCIETY, IN: PROJECT FUTUROLOGICAL FORECASTING ABOUT THE DEVELOPMENT OF SOCIAL SERVICES IN BULGARIA, COLL., SHUMEN
4. **ILIEVA, S., 2011:** DELPHI METHOD, SOFIA
5. **ILIEVA, S., 2012:** PERSPECTIVES FOR APPLICATION OF DELPHI METHOD IN THE SOCIAL SPHERE, SOFIA
6. **YANKOV, Y., 1993:** PROGNOSTIC. THEORETICAL AND METHODOLOGICAL PROBLEMS. SOFIA
7. **YANKOV, Y., 2006:** PROGNOSTIC. THEORETICAL AND METHODOLOGICAL PROBLEMS. (SECOND, REVISED AND SUPPLEMENTED EDITION), SOFIA
8. **AMENT, R., 1970:** COMPARISON OF DELPHI FORECASTING STUDIES IN 1964' AND 1969, FUTURES 2, No. 1, MARCH
9. **BURNETTE, D., MORROW-HOWELL, N., CHEN, L.-M., 2002:** SETTING PRIORITIES FOR GERONTOLOGICAL SOCIAL WORK RESEARCH: A NATIONAL DELPHI STUDY, COLUMBIA

UNIVERSITY SCHOOL OF SOCIAL WORK

10. **CLIMBIE, V., 2005:** USING THE DELPHI METHOD IN MULTIDISCIPLINARY RESEARCH ON CHILD PROTECTION, VOLUME 36, ISSUE 4, 36, pp. 577-596, BRITISH JOURNAL OF SOCIAL WORK, APRIL 1

11. **DESLANDES, S.F., FIGUEIRA, C.H., MENDES, DE OLIVEIRA T.P., DE SOUZA, D.C., 2010:** USE OF THE NOMINAL GROUP TECHNIQUE AND THE DELPHI METHOD TO DRAW UP EVALUATION INDICATORS FOR STRATEGIES TO DEAL WITH VIOLENCE AGAINST CHILDREN AND ADOLESCENTS IN BRAZIL, REV. BRAS., SAUDE MATERN, RECIFE, 10 (SUPL. 1): S29-S37 NOV.

12. **DALKEY, N.C., 1967:** DELPHI, RAND, P-3704

13. **DALKEY, N.C., 1968:** EXPERIMENTS IN GROUP PREDICTION, RAND P-3820, MARCH

14. **HOLMES, W.M., 2005:** EMERGING PRACTICE IN OCCUPATIONAL THERAPY: AN EXPLORATORY STUDY OF ITS NATURE AND EMERGING COMPETENCIES FOR PRACTICE. DIGITAL ABSTRACTS INTERNATIONAL, 66 (1 1). (UMI No. 31955778)

15. **GORDON, T. J., 2007:** THE DELPHI METHOD, AC/UNU MILLENNIUM PROJECT, FUTURES RESEARCH METHODOLOGY, (1994)

16. **LANDETA, J., 2006:** CURRENT VALIDITY OF THE DELPHI METHOD IN SOCIAL SCIENCES, TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE, VOLUME: 73, ISSUE: 5, PUBLISHER: ELSEVIER, PAGES: 467-482

17. **MACKWAY-JONES, K., CARLEY, S.D., ROBSON, J., 1999:** PLANNING FOR MAJOR INCIDENTS INVOLVING CHILDREN BY IMPLEMENTING A DELPHI STUDY. ARCHIVES OF DISEASE IN CHILDHOOD 80, 410-413

18. **MORAL, M., SOBHANI, F. A., RAINIS, R., 2008:** DELPHI TECHNIQUE IN POVERTY ALLEVIATION: A CASE STUDY, DHAKA, BANGLADESH: AMERICAN INTERNATIONAL UNIVERSITY- BANGLADESH (AIUB), AIUB BUSINESS AND ECONOMICS WORKING PAPER SERIES, NO 24

19. **PETERSON, N.M., HATFIELD, P.M., SCHIRMER, J.A., 2006:** USE OF THE MODIFIED DELPHI TECHNIQUE TO IDENTIFY AND RATE HOME INJURY HAZARD RISKS AND PREVENTION METHODS FOR YOUNG CHILDREN. INJURY PREVENTION, 12:189-194

20. **STOKES, F., 1997:** USING THE DELPHI TECHNIQUE IN PLANNING OF A RESEARCH PROJECT ON THE OCCUPATIONAL THERAPISTS' ROLE IN ENABLING PEOPLE TO MAKE VOCATIONAL CHOICES FOLLOWING ILLNESS/INJURY. BRITISH JOURNAL OF OCCUPATIONAL THERAPY 60, 263-267

21. **STRAUSS, K., ZEIGLER, J., HARMON, L., 1975:** THE DELPHI TECHNIQUE AND ITS USES IN SOCIAL SCIENCE RESEARCH THE JOURNAL OF CREATIVE BEHAVIOR, VOL 9(4), pp 253-259

22. **VAZQUEZ-RAMOS, R.A., 2003:** A DELPHI STUDY TO ASSESS A POTENTIAL SET OF ITEMS TO EVALUATE PARTICIPATORY ETHICS IN REHABILITATION COUNSELING. DIGITAL ABSTRACTS INTERNATIONAL, 64 (04), 1231, (UMI No. 3087663)

23. **WITKIN, B.R., 1984:** ASSESSING NEEDS IN EDUCATIONAL AND SOCIAL PROGRAMS. SAN FRANCISCO, CA: JOSSEY-BASS PUBLISHERS