

# СОЦИОЛОГИЧЕСКИЕ НАУКИ

## ECONOMETRIC METHOD OF ASSESSMENT OF NEWLY DEVELOPED STANDARDS FOR QUALITY OF SOCIAL SERVICES FOR ADULTS

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### АННОТАЦИЯ

В Настоящем статьи содержится краткий анализ действующей системы стандартов качества социальных услуг в Республике Болгарии. В нем также представлена новая система стандартов, определяющая качество социальных услуг, которая состоит из десяти разделов, охватывающих все основные виды деятельности поставщиков соответствующих социальных услуг. Исследование проводилось с использованием комбинации метода Дельфи и дисперсионного анализа для апробирования разработанной системы стандартов путем применения многоступенчатой итерационной процедуры. Полученные результаты проанализированы и на этом основе сделаны выводы о применимости новых стандартов.

### ABSTRACT

This paper contains a short retrospective and critical analysis of the current system of standards for quality of the social services in Republic of Bulgaria. It also presents a newly developed system of standards, defining the quality of the social services, which consists of ten sections, covering all main activities of the providers of the respective social services. A research has been conducted by using a combination of the Delphi method and a dispersion analysis in order to approbate the developed system of standards by the application of a multi-step iterative procedure. The obtained results are analyzed and conclusions are drawn on the applicability of the new standards.

**Keywords:** social services for adults, standards and criteria for quality of the social services, Delphi method, experts, dispersion analysis.

**Ключевые слова:** социальные услуги для взрослых, стандарты и критерии качества социальных услуг, метод Дельфи, эксперты, дисперсионный анализ.

### 1 Introduction

The implementation of the state policy of the Republic of Bulgaria in the area of the social support to various categories of disadvantaged people started initially by adoption of the main law, regulating this area, namely: the Social Assistance Act and the Regulations for Application of the Social Assistance Act, at the end of 2002 and beginning of 2003. In this period, when our country was a candidate for EU membership, our state made complete changes in the social policy, as one of the main goals was the deinstitutionalization of the social services. This way, the social services have started to be provided in the community. The Social Assistance Act also defines the policy of promotion of the entrepreneurship in the social area for physical and juridical persons to provide social services. A requirement has been established that the social services shall be provided by the specialized institutions only if there is no opportunity for providing social services in the community.

In the Social Assistance Act the social services for adults in Bulgaria are defined as activities to citizens in need of assistance to ensure their social inclusion and independent living [6]. The social services shall be provided as State-delegated activity, or municipal activities, or by social service providers,

### 2. Standardization of the social services for adults

In 2003, for the first time in the Bulgarian legislation were defined standards and criteria for the social services. Due to the fact that there is no separate law on the social services in Bulgaria, the standards and criteria for the social services for adults are defined in art. 40e and art. 41 of the Regulations for Application of the Social Assistance Act. The Regulations do not make difference between standards and criteria and define equal requirements to the specialized institutions and to the social services, provided in the community. Six groups of standards for social services are defined, as follows:

- Location and facilities and resources;
- Nutrition;
- Health care;
- Educational services and information;
- Organizing the free time activities and the personal contacts
- Personnel.

To achieve the necessary quality of the social services, the social service providers are controlled by a specialized body – Inspectorate in accordance with a plan, ratified by the Executive Director of the Social Assistance Agency, or on the basis of calls/notifications by citizens for something wrong. In order to prevent or

stop the violations of the law in the area of standards and criteria for providing social services some administrative measures are imposed.

Similar to other Central and East European countries, standardized indicators for the quality of the social services are developed in Bulgaria, concerning mainly the services for children [1]. But the similar regulations for adults, if any, define only the general framework of such services, which is a major disadvantage of the existing system of standardization of the social services in Bulgaria. The standards and criteria are mandatory, but they do not define measurable indicators for assessment of the compliance or lack of compliance with such standards and criteria. The disadvantages of such definition lead to many interpretations and lack of quantitative indicators, showing the degree to which a certain service complies with the standard. Besides, it is not possible to compare different providers and to oppose the activity of the controlling bodies of the Social Assistance Agency.

Therefore, to overcome the disadvantages of the existing standardization system, we have developed a new model for standardization of the social services for adults in Bulgaria. The newly developed model is based on the best practices in Bulgaria, in other European countries and in other well-developed in this area countries. The said model is aimed at overcoming, fully or partially the identified weak points and defects of the existing system of standardization of social services for adults in Bulgaria. The model contains expressly defined standards and criteria, which the social service providers must comply with when providing the respective social service depending on the customer needs. Every standard is accompanied by definitions of its purpose and the expected result, which has to be identified upon its application by the respective social service provider.

The newly developed system of standards for quality of the social services for adults include 10 sections, covering all main activities performed by the providers of the respective service and aimed at satisfaction of the needs of every user of the service. Two of the sections define the activities for personnel development and management and administration of the social service. The purpose of these two standards is providing opportunities for professional development and qualification improvement of each member of the personnel, providing the respective social service (Standard VIII), on the one hand, and on the other hand, providing an effective and based on good practices management of all activities, included in the social service (Standard IX). The said standard is entitled "Accreditation of the social services" and its purpose is providing high quality of the social service by undergoing regularly a mandatory accreditation procedure.

There is a range of criteria developed to every standard, and meeting such criteria ensures the compliance with the standard. The criteria to every standard reflect the specifics of the standard, so when developing the criteria we tried to make the criteria maximally measurable and to be determined comparatively easy, not by using complicated

calculation procedures (like counting, etc.) or any measuring devices. In addition, the criteria have one very important function – giving an opportunity for comparing the quality of the respective services.

### 3 Statement of the research

Considering that this research is focused on a completely new model of standardization of a specific type of social services, it is necessary to be approved first and then to launch it. Taking into account the nature of the research we chose to combine an expert's and econometric methods. Among the expert's methods we decided to use the Delphi method.

The Delphi method is a method for making decisions based on certain amount of collected and analyzed information. The Rand Corporation (an American nonprofit global policy think tank) developed Delphi method in 1960 originally for the needs of the US Air Force but after that it started to be used as a tool for strategic analysis and forecasting in different areas. The name "Delphi" derives from the Oracle of Delphi, who was famous throughout the ancient Greece with giving accurate and true predictions [3, pp.6]. Its object is to obtain the opinion of a group of experts, who must give their own opinion on certain problem without being influenced by groupthink or external intervention [2, pp. 541].

The research methodology includes implementation of the following steps:

1. For the purpose of the research a questionnaire has been drawn up, where the experts gave their opinion on every standard, included in the standardization system.

A rating scale from 1 to 5 has been used for evaluation, consisting of five levels (two negative evaluation levels, two positive evaluation levels and one middle level – "hesitate"). At every level the experts give the respective evaluation in ascending order from 1 to 5. Similarly, the work sheets for all sections of the standardization model have been developed.

2. All experts, participating in the group, fill out work sheets №1 to №10 by giving their opinion on each component, included in the standardization model. The feedback results obtained for all work sheets are compared in groups.

3. The areas of full consensus of the experts' opinions are established. The areas of full consensus (over 80 %) are accepted as indisputable and it is stated that they must unconditionally be included in the standardization model. The said established areas of consensus are excluded and by doing this the first iteration of the research ends.

4. The next stage is to study the deviations in the experts' opinions on the different items included in the work sheets. To this end, we use a dispersion analysis.

5. The one-factor dispersion model is described analytically as follows [4, pp. 300]:

The total dispersion represents a sum of the inter-group and intra-group dispersion.

$$\sigma_e^2 \text{ is determined by}$$

$$MS_b = n_j s_x^2 = \frac{n_j \sum (\bar{x}_j - \bar{x})^2}{k-1}$$

$$\sum_{j=1}^k \sum_{i=1}^{n_j} (x_{ij} - \bar{x})^2 = \sum_{j=1}^k \sum_{i=1}^{n_j} (x_{ij} - \bar{x}_j)^2 + \sum_{j=1}^k n_j (\bar{x}_j - \bar{x})^2$$

Or that the total sum of the squares is equal to the intra-group sum of the squares plus the inter-group sum of the squares.

The intra-group dispersion is  $\sigma_e^2$ , and the inter-group dispersion is

$$\sigma_e^2 + \frac{n_j \sum \alpha_j^2}{k-1}$$

where  $k$  are the degrees of freedom.

We use  $F$  – deviation, which is determined as follows:

$$F = \frac{\sigma_e^2 + \frac{n_j \sum \alpha_j^2}{k-1}}{\sigma_e^2}$$

If  $F < F_k$  the null hypothesis is confirmed, and if  $F > F_k$  the null hypothesis is rejected, where  $F_k$  are the upper critical values of the  $F$  – distribution (Fisher-distribution) [4, pp. 554].

The null hypothesis ( $H_0$ ) that is checked in the dispersion analysis states that the average values (means) of  $k$  random samples are equal:

$$H_0: \mu_1 = \mu_2 = \mu_3 \dots \mu_k$$

The alternative hypothesis ( $H_a$ ) states that the alternative means are not equal, i.e. at least one average value is different from the other values:

$$H_a: \mu_i \neq \mu_j$$

The results from the experts' work sheets have been processed by the IBM SPSS, version 22 (a standardized software package for processing statistical information), by using the dispersion analysis. The aim was to establish the dispersion areas in the experts' evaluations of the respective component of the standards, and the presence of intra-group and inter-group dispersion of the experts' evaluations. The non-presence of a statistically significant dispersion of the evaluations means that the experts share one and the same opinion on assessing the respective component of the standard by "acceptance/rejection". So, if the concurrence of the experts' opinions on a certain component is in the positive level of the evaluation scale "I agree/I strongly agree", such component shall be included in the Standard, and wise versa, if the concurrence is in the negative level "I disagree/I strongly disagree", the said component shall not be included in the Standard.

The null hypothesis ( $H_0$ ) in our case will be  $\mu_i = \mu_j$  where  $\mu_i$  and  $\mu_j$  are the multiple average values of the experts' evaluations regarding the components of the respective standard. As stated above, the null hypothesis is confirmed by the ratio between the intra-

where  $(\bar{x}_j - \bar{x})^2$  is the total sum of all squares of the deviations of the average for the group. After summation of these results for all  $k$  groups we obtain:

group and inter-group dispersion, which is the value of the  $F$  deviation [5, pp.106].

The alternative hypothesis  $H_a$  in our case is that the average values of the experts' evaluations on the components of the respective standard are different, i.e. one multiple average value is different from the other values ( $\mu_i \neq \mu_j$ ). As stated above, if  $F < F_k$  the null hypothesis is confirmed, and if  $F > F_k$  it is rejected and the alternative hypothesis is confirmed.

When conducting the research we accept that the level of the stochastic error shall be the standard level, which in most statistical researches is accepted as =0.05, and five levels of freedom ( $\kappa=5$ ).  $F_k$  at  $\alpha=0.05$  and five levels of freedom ( $\kappa=5$ ) is 5.05 ( $F_k=5.05$ ) [4, pp.554].

The analysis of the obtained results for each standard and the comparison with the respective values  $F_k$  gives us grounds to make the following conclusions:

1) A group of standards is established, for which the level of dispersion of the opinion of the experts is minimal ( $F=0$ ), which means that it is ignorable from a statistic point of view. This trend is observed with regard to all components of the said standards. This means that there is a consensus of the experts that the said components have to be included in the Standard and the null hypotheses is confirmed for them. This conclusion is valid for group № 5 – Healthcare standards, group № 6 – Standards on educational services and information; group № 7 – Standards on free time and personal contacts; group № 9 – Management and administration standards and group № 10 – Standards on accreditation of the social services.

The group № 10 – *Standards on accreditation of the social services*, is a principally new component not only for the standardization system for social services for adults, but also for the entire system of social services, operating in our country. The evaluations of the experts on the components of this group of standards are focused on the meaning of the intra-group average value of this standard, which was the evaluation with grade 3 "I hesitate". This means that with regard to this group of standards it is not possible to draw a definite conclusion whether to include these standards in the standardization system or not, therefore, it is necessary to continue the discussion on this group of standards.

2) The processed data from the evaluations of the experts and the calculated values of  $F$  и  $F_k$  regarding the group of standards № 3 – Standards on facilities and resources, group № 4 – Standards on nutrition and Group № 8 – Standards on personnel development are close to those registered and stated above with regard to Standard 1.1. So, we may conclude that the null hypothesis is confirmed for these standards.

#### 4 Conclusion

The combination of the dispersion analysis with the Delphi method, which is demonstrated in the approbation of the newly created system of standards on the quality of the social services for adults in Bulgaria, provides an opportunity to improve the methods of application of this conventional expert method. As seen from the abovementioned, in this specific case the iteration procedures stated in Steps 3 and 4 for application of this method, are not necessary. The dispersion analysis directly allows determining the areas of satisfactory level of consent between the experts (lack of dispersion or low level of dispersion between the intra-group and the group average values). In addition, the implementation of the next iteration, when on a second level the experts should only give their opinion regarding the areas, where differences are found, is found unnecessary, too. By using the dispersion analysis the components, for which dispersion of the evaluations of the experts is established, have been evaluated, and on this basis the research team may make decision for changes of the said components. By doing this, some areas have been

found, which need additional argumentations, additional research work and continuing the discussion on the inclusion/exclusion of some components in the standard, as it was established for group № 10 – Accreditation of the social services.

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## СОЦИОЛОГИЧЕСКИЕ КРИТЕРИИ ИССЛЕДОВАНИЯ СООБЩЕСТВ В КОНЦЕПЦИИ Л. ВИРТА

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#### АННОТАЦИЯ

В статье рассматривается значимость сообществ как важной социологической категории. Автор анализирует взгляды американского социолога Л. Вирта на существующие подходы к исследованию сообществ в социальных науках. В завершении статьи приводятся основные актуальные проблемы, требующие разрешения при социологическом изучении сообществ.

#### ABSTRACT

The article deals with communities as an important sociological term. The author analyzes the views of the American sociologist L. Wirth on the existing approaches of studying communities in the social sciences. In the conclusion author notes the main topical problems of the sociological study of communities that require solution.

**Ключевые слова:** сообщества, общество, социальная группа, социальные институты, социальное пространство

**Keywords:** communities, society, social group, social institutions, social space

Американский исследователь и выдающийся представитель Чикагской школы социологии Луис Вирт в своей статье «Пределы и проблемы сообщества» анализирует феномен сообществ и рассматривает проблему неоднозначности трактовки данной категории в социальных науках и в социологии в частности. Обращаясь к истории изучения социологией сообществ, Вирт приводит два подхода к рассмотрению сообщества, которые сложились в истории социологической мысли:

1. Сообщество как органическая связь между людьми, проживающих в рамках одной территориальной единицы (аналогично связям между организмами в животном мире).

2. Сообщество как психосоциальное единство, основанное на коллективном действии.

Каждый из этих подходов он сопоставляет с классиками социологии- Огюстом Контом и Гер-

бертом Спенсером соответственно. Конт считал цементирующей основой общества социальный консенсус (общая культура, общие переживания), в то время как Спенсер подчеркивал важность разделения труда и конкуренции в социальном комплексе.

Вирт выделяет три базовых категории, вокруг которых вращаются важные теоретические дискуссии в социологии: «сообщество», «общество» и «социальная группа». «Сообщество» стало обозначать групповую жизнь, рассматриваемую с точки зрения симбиоза, а «общество» – групповую жизнь, рассматриваемую с точки зрения консенсуса. Социальная группа же, по мнению Вирта, является термином наиболее «широким, бесцветными и включительным» [1, с.49] и характеризует любую форму «агрегации или ассоциации людей».

Вирт приводит высказывание американского философа-прагматика Д. Дьюи, в котором указыва-