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## **ECONOMICS**

### **TECHNOLOGY OF PUMPKIN SAMBUK «GOLDEN STAR» WITH THE USE OF CYSTOSEIRA**

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***Annotation.*** *The article deals with the technology of pumpkin sambuk with Cystoseira, and comparative characterization of the chemical composition of traditional and prototypes. It was proved that the use of technology of pumpkin sambuk with Cystoseira increases Iodine and Selenium levels in the product and improves the nutritional value of it.*

***Keywords:*** *sambuk desserts, pumpkin, Cystoseira, microelementosis.*

**Relevance of the research topic.** The structure of the diet of the population of Ukraine has a number of shortcomings: deficiency of animal proteins, PUFA (on the background of excess of animal proteins), pronounced deficiency of most vitamins, microelements, including Ferum, iodine (important for pregnant women and children), Selenium and Zinc [1]. Therefore, providing the population of Ukraine with proper nutrition is one of the most pressing problems today.

**Formulation of the problem.** Iodine deficiency is directly related to nutrition, with insufficient iodine content and protein. At the same time, the problem of "endemic areas" over the last decades, irrational agricultural activity has led to an intense washout of iodine and other soluble microelements from the soil of most of the territory of Ukraine [2; 3].

Today, it is known that the use of artificial Iodine compounds does not provide the human body with this important micronutrient, since there is a difference in the metabolism of organic and inorganic Iodine. That is why attention should be paid to those substances that contain Iodine in a bioavailable form for the human body, in particular seaweed [4].

**Analysis of recent research and publications.** Today, scientists around the world are working on creating functional foods, with particular interest being given to products in high demand and technologically not too expensive.

Food enrichment is a serious interference in the traditionally formed structure of human nutrition, the necessity of which is dictated by objective changes in the way of life, the set and the nutritional value of the used foods. Therefore, the enrichment should be based only on clearly formulated, scientifically substantiated and practice-tested biomedical and technological principles [5].

The issue of creating new types of sweet dishes is of particular importance today.

The problem of developing new types of sweet dishes is addressed by a large number of scientists. Thus Levkun K., Poliovyk V. proposed new types of structure-forming agents for the dessert production [6], Kalakura M. and Shchirska O. – the use of apiproducs [7], Mgebryshvili I. proposed the use of concentrate cultures in the recipe of multicomponent milk dessert [8], Radionova L. and Dudyi S. – the use of plant material in the technology of desserts [9], and Belozeroва M. Suggested the technology of milk dessert with carrot fiber [10].

**Presenting main material.** The aim of scientific research is the study and development of new technologies of desserts of high biological value, in particular the sambuk “Golden Star”.

*Object of research:* technology of the pumpkin sambuk "Golden star" with Cystoseira.

**Subject of study:** Cystoseira powder according to TU U 21663408.001–2006 (manufactured by EkoMedProdukt LLC), obtained by low-temperature drying; pumpkin sambuk.

As a control sample pumpkin sambuk was used, made according to traditional technology.

*Research methods:* organoleptic, physicochemical, mathematical data processing and using computer technologies.

The mineral content was determined by the atomic absorption method on a spectrophotometer Techtron-AA-4 (Austria), and Iodine by the method of inverse voltammetry (device AVA-3, Russia) [11].

Sambuk is a dessert made from fruit or vegetable puree, whipped egg whites, sugar, gelatin, and then chilled. Sometimes small pieces of fruit and berries are added to the puree.

The main ingredient of pumpkin sambuk is pumpkin. Pumpkin is a tasty and healthy vegetable that contains a lot of carotene and vitamins. Cellulose in this vegetable is easily absorbed even by a weakened organism, so pumpkin dishes are recommended for therapeutic and preventive nutrition. Pumpkin is an excellent regulator of digestion and thanks to the high pectin level promotes the removal of cholesterol from the organism. Of organic acids, pumpkin contains mainly malic acid. [12].

A term «food water-plants» has existed over thirty years. During this time, alga products were used as fillers, thickeners, stabilizers, gelling additives. Polysaccharides that are part of the algae, stimulate the secretory-motor function of the intestine, promote the elimination of toxic substances from the body. They are used to prevent many diseases of the gastrointestinal tract, diabetes, cholelithiasis, peptic ulcer [4].

In the seas of Ukraine there are large reserves of brown algae – Cystoseira. The results of chemical analysis shows us that 1 g (dry matter) provides the daily requirement for Iodine, Manganese, Selenium, Cobalt. Its chemical content (mg per 100 g): Iodine (75–175), Selenium (65–95), Ferum (15–30), cobalt (3.3–3.5) and other microelements rank Cystoseira in these indicators in the first place among Ukrainian food products. In addition, it contains different polysaccharides - alginic acid, fucoidin, iodine-containing

amino acids and vitamins [4].

Adding algae to the recipes (незвичний для англійської мови вираз) of different dishes and products allows us to meet the demand for iodine-containing compounds and a number of other biologically active substances and compensate for their lack better, expanding the range of food products.

The mineral composition of the test products is shown in Table 1.

Table 1

**Mineral composition of Cystoseira and pumpkin, (mg per 100g of product)**

Indicators	Cystoseira	Pumpkin
Calcium	354	25,0
Potassium	1006	204,0
Magnesium	875	14,0
Iron	7,65	0,4
Iodine	25	0,001
Selenium	4	–

The content of many chemical elements of Cystoseira significantly exceeds terrestrial plants. The amount of Iodine in the Cystoseira is much greater than in the terrestrial flora. Minerals, mainly (75-85%), are represented by water-soluble salts of potassium and sodium (chlorides, sulfates).

The general technological scheme of production of the Gold Star sambuk consists of the following operations: preparation of raw materials, whipping mashed potatoes, mixing of ingredients, cooling, quality control.

In order to optimize the recipe of the sambuk and enrich it with iodine, the technology of the "Golden Star" sambuk with Cystoseira was developed (Fig. 1).

Organoleptic indicators play a decisive role in the study of the quality of prepared dishes, as they allow us to more fully evaluate the quality of the restaurant industry. When performing an organoleptic evaluation of pumpkin sambuk, five important interrelated indicators were examined: appearance, color, texture, smell and taste. For the study of organoleptic indicators, we used a five-point system, taking into account the weighting factors that were determined for each indicator.

The highest weight ratio is assigned to the "taste" indicator because it is the taste that forms the main consumer characteristics of the products. Taste is a complex impression that exerts a great, and in most cases decisive, influence on the quality of dishes.

As a result of experimental studies with the addition of Cystoseira in different quantities (experiment 1 - 0.5% of dry Cystoseira; experiment 2 - 0.7% of dry Cystoseira; experiment 3 - 0.9% of dry Cystoseira from the finished dish) by organoleptic evaluation, the rational concentration in the pumpkin sambuk "Golden Star" was found, and it is 0.7% of dry Cystoseira by weight of dessert.

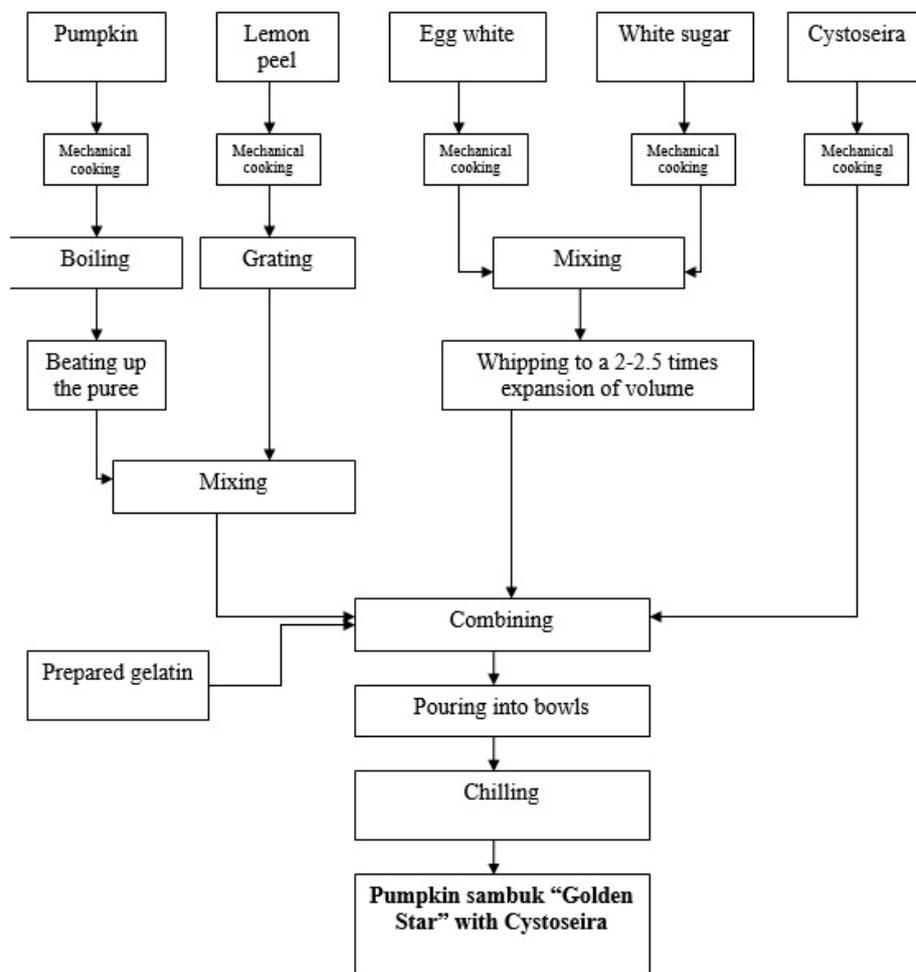


Fig. 1. Flow chart of production of the pumpkin sambuk "Golden Star" with Cystosyira

The choice of this quantity of additive is explained by the need to set a limit for its maximum and minimum use in order to preserve all organoleptic characteristics of desserts. Since the standard yield of a portion of dessert is 150 g, the amount of Cystoseira is accordingly – 1 g. The following studies were conducted to yield a standard portion of 150 g.

The chemical composition and comparative analysis of the samples are shown in table 2.

Analyzing the main indicators of chemical composition, we observe an increase of Calcium content - 3.3 times, Magnesium - 46.7 %, Iodine - 55.9 times, Selenium - 20.4 times

Table 2

**Chemical composition of the control and test samples of pumpkin sambuk  
"Golden Star" with Cystoseira, 150 g**

Indicators	Control	Test sample	Difference, %
Potassium, mg	219.0±10.0	256.0±10.0	16.9
Calcium, mg	26.0±1.0	86.0±4.0	3.3 times
Magnesium, mg	15.0±1.0	22.0±1.0	46.7
Phosphorus, mg	28.0±1.0	30.0±1.0	7.1
Zinc, mkg	263.0±10	269.0±10	2.3
Iron, mkg	415.0±20.0	612.0±20.0	47.5
Iodine, mkg	1.70±0.008	95.0±4.0	55.9 times
Selenium, mkg	2.30±0.1	47.0±2.0	20.4 times

Research was conducted to ensure the daily requirement for basic minerals developed by dessert (Table 3).

Table 3

**Provision of daily needs of minerals when consumed the pumpkin sambuk  
"Golden Star" (150g) [13]**

Indicators	Daily requirement, mg	Control, %	Test sample, %
Potassium	3000	7.3	8.5
Calcium	1000	2.6	8.6
Magnesium	400	3.4	5.5
Phosphorus	1200	2.3	2.5
Zinc	15	1.75	1.8
Iron	15	2.8	4.1
Iodine	0.15	1.13	63.3
Selenium	0.07	3.3	67.1

\*The daily requirement is specified for men.

According to certain indicators, a profile of the mineral composition of the "Golden Star" sambuk was constructed using Cystoseira using the EXCEL 97 WINDOWS package (Fig. 2).

The form of the above profile is in the form of a pentagon, the vertices of which are determined by the mineral substances of the studied dish, which are taken for 30% of meeting the daily needs of the population. The quality profiles of the developed dish have a larger surface area compared to the control sample, and in terms of Iodine and Selenium content exceed the standard because they satisfy the daily requirement for these substances by 63.3 and 67.1% respectively [14].

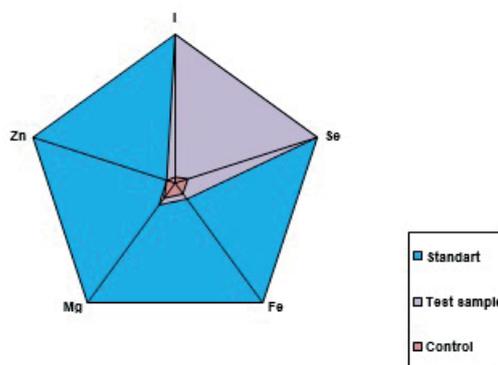


Fig. 2. The profile of the mineral composition of the pumpkin sambuk “Golden Star”

**Conclusions.** Thus, the further development of the restaurant industry is connected with the need to use and implement modern methods of processing raw materials to produce high-quality food products, with the purpose of creating on their basis products intended for consumption, which will reduce the negative environmental effects on the human body.

Therefore, having carried out the research, a comparative characteristic of the quality of a dish, it can be noted that it will to some extent contribute to overcoming the deficiency in the diet of very important minerals for our body, especially iodine and selenium.

It would be advisable to introduce the developed dessert in the menu of restaurants – this would help improve the health and well-being of consumers.

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## HR-OUTSOURCING: MODERN APPROACH TO ENTERPRISE MANAGEMENT

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**Annotation.** *The article highlights current trends in the outsourcing development, its implementation in the personnel management sphere, considers it as an external function of enterprise management, substantiates its benefits, and argues the grounds for implementing.*

**Keywords:** *enterprise, outsourcing, personnel, personnel outsourcing, external management function.*

Ukrainian enterprises are increasingly becoming hostages of the restrictions caused by the global, political, and social crises. The enterprise's self-realization in the market under such conditions requires improvement, optimization, or re-profiling of all its functional systems to maintain competitive positions in the global market or, in some cases, just to survive.

Currently, all enterprises are considered as open systems, in other words, the systems whose internal elements interact not only with each other but also with the factors of the external environment. An open system has certain specificities, namely: integrity, prospects, independence, specialization, the transformation of input elements into output, centralization, growth, cyclical development, the unpredictability of possible perturbations and their causes, etc. The open system always has an input and an output component (fig. 1).

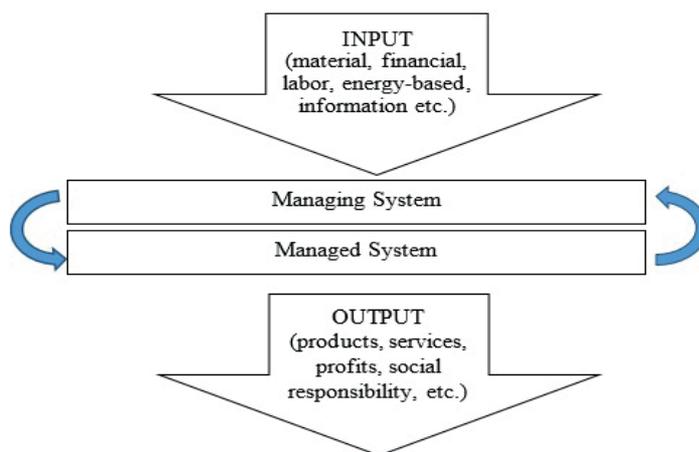


Fig. 1. The process of the enterprise functioning as an open system

There are two closely interrelated groups at the enterprise: formal and informal. The formal groups are created at the request of the company's head as a result of vertical and horizontal divisions of labor to perform the tasks set and achieve specific goals. There are three types of formal groups: groups of leaders (team groups): the president of the company and vice-presidents, the head of the shop/department and his deputies, etc.; target production (economic) groups: groups of technologists, designers, project-creators, financiers, economists, etc.; the committees, which in their turn, are divided into special (department for the elimination of the production defects, the staff reduction department, liquidation commission) and regular ones (auditing commission, scientific and technical council, board of directors, etc.).

Informal groups are formed spontaneously in terms of social interaction. Employees unite into the informal groups to satisfy their sense of belonging, mutual assistance, and close communication. The informal groups also have their specific structure and an informal leader. They keep to the unwritten rules (norms) in their activities, but they are much more difficult to manage than formal groups [2].

However, in both cases, management decisions and actions always take into account the basic management functions:

- planning – justification of the goals of the enterprise and restrictions; setting tasks that lead to achieving goals; definition of methods and ways of their application; determining the need for resources and deadlines;
- organization – the choice of enterprise structure, activities, and distribution of powers and responsibilities between individual employees and departments of the enterprise;
- motivation of the employees and their groups to perform the planned in a timely mode;
- control over the activities of employees and correlation of their actual results with the planned targets;
- coordination and regulation of the activities [3].

In the 21st century, there is a strong tendency among companies to delegate responsibility for the implementation of some functions to third parties. It allows the owners or authorized persons (managers) to implement more effectively all their management functions, which can be defined as management cycles. These third party companies are called outsourcers. They operate on the basis of an agreement (contract), which clearly spells out the functions and activities transferred to them by the customer and highlights the issues of the relationship between both parties.

Well-established business processes are the key to success in today's world. If a company wants to be a leader, it must have clear internal procedures. The most convenient way is to outsource routine processes.

The experience of international management convincingly manifests that the majority of the successful companies, striving to adapt to market conditions quickly, have involved outsourcing companies in their activities. It allowed them to implement their decisions in the production cycle, logistics, or sales with minimal costs.

Outsourcing, or transferring non-critical functions to a third party, is no longer a new phenomenon in the market. Modern managers have already realized that a company can obtain great benefits by transferring its secondary functions to a professional service provider. For example, recruitment and assessment of personnel are traditionally outsourced to recruitment agencies.

Another issue is the calculation of wages which is also neither a key nor a strategically important function, regardless of the size of the enterprise. However, HR managers, HR staff, and accountants can spend up to 60 % of their working time on this routine work. In the case of outsourcing, this work is performed by the specialists of the service provider, while the company's personnel department will be able to concentrate on more important tasks, like work with the employees. As a matter of fact, in addition to performing routine daily work, human resources departments play a significant role in the process of forming competitive advantages in any business. Innovative and effective HR strategies can significantly change the final financial output of the enterprise.

In view of the above, applying human resource outsourcing (HR-Outsourcing) at the enterprise is of paramount importance for enterprise efficiency in the context of modern human resource management technologies development. Some functions of the human resources management structure (hiring/firing, staff training and certification, career planning, motivation policy development, etc.) are transferred to a specialized unit of the enterprise. Outsourcing of these functions allows reducing significantly the maintenance cost of certain departments and units and improving the general quality of human resource management and the corporate culture level.

Every company survives in a competitive market due to its core competencies. Some know how to make quality products, some provide the needed services, and some of them successfully cooperate with government agencies. Personnel management is the core competence for recruitment agency, and, accordingly, this function can be outsourced.

The main advantages of HR outsourcing include the following items [1]:

- allows you to develop efficiently the main areas (functions) of the business and focus on meeting customer needs and technology development;
- provides a professional approach to recruitment and provision of personnel accounting services of the enterprise (including professional support in the form of consultations in the field of personnel management, personnel accounting, and labor legislation);
- reduces the cost of functions offered by the outsourcer, which the latter performs cheaper due to the scale range, e.i simultaneous performance of the same type of operations for many clients, (the advantage implies no staffing costs, adaptation, staff training, etc.);
- allows the company to use the resources, the access to which would be otherwise impossible, for example, when expanding activities via the establishing subsidiary structural units or the creating a new company (the customer has the opportunity to choose those outsourcers which have the most experience in this field, thus improving

their reputation and increasing the value of the brand as a result of better service provided for its customers by a third-party specialized company);

- allows the company to respond flexibly to changes in the market and within the company (reorganization, restructuring, mergers, acquisitions), etc.;
- the customer retains the required limit of the staff units while maintaining or increasing their workforce in the form of outsourcing;
- services are provided continuously (they do not depend on vacations, dismissals, sick leaves, the internal combination of positions, etc.) or on a flexible schedule;
- no need for certification of each job place;
- risk elimination of the employees' lawsuits against the employer.

However, along with the benefits and advantages, there are always risks associated with HR outsourcing. The main ones are:

- partial loss of control over own resources;
- removal of management from some processes of the enterprise;
- the existence of the possibility of transferring confidential information into "other people's hands";
- the risk of the outsourcer bankruptcy.

The benefits of outsourcing are obvious. Transferring non-core functions to the third party, the company gets rid of excessive problems and, de facto, optimizes or reduces costs. On the other hand, there are always disadvantages that manifest themselves differently in each case. In general, the main outsourcing shortcomings can be reduced to the low quality of services provided and insufficient competence on the part of their provider. Using a correct and balanced approach to choosing an outsourcing service provider, the company's management can avoid these problems at an early stage of the project. Thus, HR outsourcing allows converting fixed costs into variables and promotes redirecting investment flows to more important for the company activities.

The study of the issue has revealed that in Ukraine, HR outsourcing activity is at a much lower level as compared to most Western countries. Some companies perceive outsourcing as an unnatural, dangerous, and highly suspicious undertaking. Others simply do not understand what exactly can be outsourced and in which cases it should be implemented.

HR-outsourcing is the involvement of external resources (enterprises) that specialize in the field of personnel management and have the appropriate experience, knowledge, and technical means to perform all management functions of HR processes or a part of them. The customer only formulates tasks for the service provider. In this case, the right to control, the methods of performing the task, and the responsibility for the results achieved are the concern of the service provider.

Outsourcing of human resources logically supplements other areas of outsourcing implementation. Among the risks associated with the use of outsourcing, the most significant are:

- job cuts (the most important social aspect that determines the attitude to outsourcing as an element of globalization in most economically developed countries);

- "Blurring" the image of the organization;
- weakening the corporate culture.

The attention paid to the effective management of human resources by Western experts rests on the close relationship between a company's efficiency and its competitiveness with political, demographic, and socio-cultural factors of the external environment [4].

Why do companies outsource HR administration? The main reasons are:

- a company, being a newcomer at the national market, does not know properly the legislature peculiarities of the country and the basic accounting principles of local personnel;

- the company does not want to hold a separate department of officials / clerks, buy and update the necessary software and licenses for it. In other words, the enterprise cares about saving;

- a company seeks to focus its activities on priority tasks and, thus, to direct all the existing labor and financial resources to realization of these tasks;

- the growth rate of the enterprise infrastructure – the service units fall behind the growth rate of the company's main activity;

- the company has a dispersed structure (offices in other cities, or regions, etc.), and there appears a need to process the consolidated data in the central office.

The study has revealed that the most popular types of outsourcing in the field of personnel management in Ukraine are recruitment services, personnel records processing, and payroll calculations. In general, the analyzed trends in the development of outsourcing in the personnel management in Ukraine manifest that we lag behind the global ratings by 10-15 years. That is, while the world is talking today about finding a balance between outsourcing and insourcing, in our country, we just expect expanding the outsourcing scope in the field of personnel management [7].

The most characteristic trend in the development of the Ukrainian HR-outsourcing market is the regular requests/orders from Ukrainian representative offices of international businesses. Although, sometimes there are cases, when the Ukrainian companies of various capacities apply for outsourcing services. They are mostly interested in outsourcing of recruitment and organization of personnel training. On the other hand, outsourced management of benefits and compensation, career-building, and coaching are in low demand.

Another important trend in the development of the Ukrainian market of HR outsourcing is an increase in customers' demands for the quality of services that they buy. For example, not all the companies were satisfied with the cooperation with external service providers concerning personnel training. As a result, they cut their budgets, shifting the focus to their internal training programs.

Outsourcing has become a 'key to success' factor in many sectors of the economy. This has been facilitated by the noticeable critical changes in the technology of production and business organization that have taken place in the last few decades. As a result, the conditions for making management decisions have become significantly more complicated, and, currently, the principal task of managers is to ensure the competitiveness

of their enterprises. To actualize these requirements, we should constantly evaluate the applicable possibilities of technologies and seek out ways to improve their efficiency indicators. However, as the study shows, not all companies intensify such activities on their own initiative. Most often, the need to make changes arises spontaneously and is dictated by another company.

Outsourcing is one of the solutions to this problem from the standpoint of ensuring the enterprise competitiveness in modern conditions. The assessment of the outsourcing effectiveness is of prior importance. One of the most reliable means to do it is to compare outsourcing with other methods that are already used or can be used by the organization. Each of them has its advantages, although they are not always equally applicable to enterprises of different capacities and structures. Whatever the advantages or disadvantages may be, the actual state of things proves that the theoretical designs too often fail in practice [5].

When using HR outsourcing, companies often develop their own forms of it:

- total (maximum) outsourcing (this term is used to denote a contract under which employees, and possibly the assets related to the main enterprise activities, such as information technology or finance, are transferred to the service provider for the duration of the contract;

- partial (selective) outsourcing (this form of outsourcing is applicable only in the manufacture of expensive products, like household appliances; in addition, partial outsourcing may include redirection of a specific package of functions to another company);

- joint outsourcing (the term "joint outsourcing" was introduced by the British company EDS to describe one of the outsourcing options in which the parties to the agreement are partners; recently, some experts have used this term to describe subcontracts that involve several service providers);

- intermediate outsourcing (this type of outsourcing refers to cases when an enterprise outsources the management of its systems and platforms to a third party, believing that its IT professionals are capable of developing new systems. An enterprise that plans to use intermediate outsourcing, as a rule, demonstrates a high level of confidence in the abilities of its IT specialists);

- transformational outsourcing (in contrast to intermediate outsourcing, in this case, the company invites a service provider whose task is to reorganize completely the work of the unit via developing new systems and creating a reliable base of knowledge and skills, which are later transferred to the client. Transformational outsourcing differs from total only in one aspect – the transfer of employees and assets is temporal. It means that after the project is completed, the client regains full control and takes over the company's responsibilities. To many, it sounds like the usual services of a consultant. The only difference is that in transformational outsourcing, the supplier usually acts quite independently from the client's staff. Therefore, it is not surprising that we can hardly find many examples of transformational outsourcing);

- outsourcing of joint ventures (this kind of outsourcing involves the creation of a

new company for developing further business opportunities. The client's personnel and assets will then be transferred to this joint venture but not to the service provider. The aim is not only to improve the quality of the work of the transferred unit but, what is more important, to develop the products and services that can be sold to a third party. Then the customer and the service provider will share the profits received by the new company. In this way, the service provider will be able to make full use of its capabilities to create new systems, and the customer will share with the provider the cost of developing new software. The joint venture benefits from the client's specialized knowledge in its market. Some products and services of the joint venture will be developed using the opportunities that emerged due to the concluded agreements to total outsourcing) [6].

**Conclusions.** The findings of this study argue that the crisis has given a powerful stimulus to the development of HR outsourcing services in Ukraine. Today, the most popular form of personnel outsourcing is providing services that are directly related to staff – hiring/recruitment, personnel development, and training. The second in popularity is the outsourcing of calculating the payroll, while the outsourcing of personnel records processing is still in low demand in the market.

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## FEATURES OF ENERGY RESOURCES' USING AND CONDUCT OF ENERGY AUDIT AT LIGHT INDUSTRY ENTERPRISES

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**Annotation.** *The latest global trends in the economical production and consumption of all types of resources have found their supporters in Ukraine. The task for industrial enterprises is to quickly switch to less polluting energy sources than traditional ones, as well as to avoid unjustified energy losses at industrial facilities. Renewable energy sources have minimal impact on the climate and significantly increase the country's energy independence. At the same time, you need to take into account the peculiarities of technological processes and industries. What is achieved by conducting an energy audit and implementing an energy management system.*

**Keywords:** *Energy management, light industry, energy balance, alternative energy sources.*

**Introduction and setting of the problem.** The trend of the recent years has been a steady rise in energy prices, even as world oil prices fall, leading to a steady rise in utility tariffs for industrial facilities. It is characteristic that in Ukraine the most energy is spent on heating and hot water supply. Buildings built at a time when fuel resources seemed unlimited now require so much energy that their operation places a heavy burden on the fuel and energy sector, and the construction of new buildings exacerbates the problem. However, the experience of developed countries shows that at the current development level, heat consumption in buildings can be reduced by more than a third, and this determines the significant reserves of energy savings [6].

The analysis of industrial buildings of light industry enterprises showed that most of it is in unsatisfactory condition in terms of energy efficiency. Low energy consumption leads to low indicators of thermal resistance of fencing structures, obsolescence and wear of engineering systems, old windows with uninsulated slopes, workshop buildings without technical attic. Balanced development of the fuel and energy complex, as a basic branch of the economy, requires modern approaches to the energy supply of buildings for various purposes - greenhouse gas emissions and environmental impact. The competitiveness of Ukrainian enterprises in basic industries is substantially limited by significant energy dependence. The energy density of Ukraine's economy is 2-3 times higher than in developed countries. [5]. Physically worn out equipment, outdated technologies are extremely energy consuming and need to be upgraded or replaced.

**Analysis of the newest researches and publications.** The work of Denisyuk S.P.,

Borychenko O.V. is devoted to the issue of consideration of energy efficiency increase [3, 4]. Among the studies of energy consumption, energy balance and the study of the concept of Smart grid can be distinguished works of Kaplun V.V., Kozyrsky V.V. [8]. Burmistenkov O.P., Demishonkova S.A. in their works [2] considered certain aspects of energy efficiency of industrial facilities. However, the problem of energy management and energy efficiency is multi-vector and can take different forms, so it needs further study.

**Unsolved parts of the problem.** Despite the significant number of publications, the issues of industrial energy audit and research of energy flows of light industry enterprises remain insufficiently studied.

The purpose of this article is to identify the features of facilities, energy flows and the specifics of energy audits in light industry.

**Main results of the research.** Energy audit is one of the first tasks facing the company on the way to effective control of energy costs. Energy audit involves a detailed analysis of energy efficiency in an industrial facility, estimating the cost of that energy, and ultimately making recommendations for changes in the operation and replacement of equipment that can reduce energy costs. Energy auditing is sometimes called energy assessment or analysis, avoiding the negative associations associated with the word "audit". Energy audit is a positive process that can generate significant benefits for the company and its employees. It is the basis of a systematic approach to decision-making in the field of energy management and helps to balance the consumption of energy resources and the real need for them. The audit determines all energy flows at the industrial site, as well as the amount of its use to perform certain functions. [11].

Excessively large components of energy costs, which are steadily increasing with the rapid rise in prices for imported fossil fuels, will inevitably reduce value added in production and, accordingly, wage funds, depreciation, taxes. This catastrophically limits the possibility of enterprise development [10].

The main subsectors of light industry are sewing, footwear, leather and textile. According to the State Statistics Service, this is 2.2% of the total industry of Ukraine. According to the overall energy balance, the annual consumption of energy sources (Table 1) includes all traditional sources, neglecting alternatives.

*Table 1*

**Energy balance of textile and leather industry, thousand tons of oil equivalent**

Energy sources	Indicator	Percentage, %
Oil products	1	1,67
Natural gas	5	8,33
Biofuel	1	1,67
Electricity	32	53,33
Heat	20	33,33
Alternative resources	-	-
Total	60	100

*Source: Created by authors based on [6]*

Moreover, the largest consumption of electricity and heat is observed, respectively 53,33 and 33,33%. Sufficiently large areas of some enterprises in the industry allow to have solar energy sources, but this type of energy is not used.

Light industry is considered a material-intensive industry. But recently, the share of energy costs has begun to grow. The share of fuel and energy costs (Table 2) in the overall cost structure ranges from 2 to 4%, depending on the characteristics of technological processes.

Table 2

**The share of fuel and energy costs in the overall cost structure**

Sectors	Weight, %
Textile industry	3,5
Sewing industry	2,2
Footwear industry	2,8
Leather industry	4,1

Source: Created by authors

The largest share of fuel and energy costs in the overall cost structure in the leather and textile industries. Significantly less energy uses in the sewing and footwear industries. One of the reasons is the size of enterprises and the number of production facilities. Sewing and footwear industries, if they are not part of large factories, can be located even in office buildings. Textile and leather production should be located in separate buildings adapted to certain technological processes.

Energy audit of production and administrative premises of light industry enterprises includes a number of mandatory procedures and studies (Fig. 1).

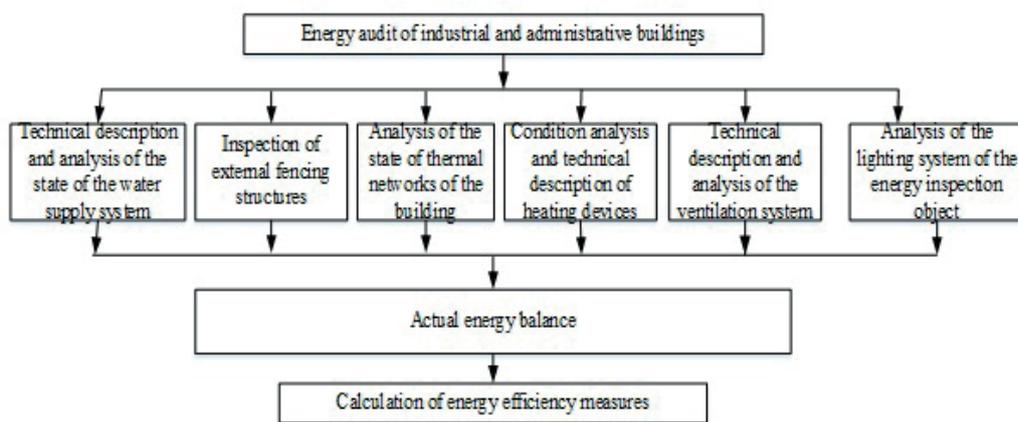


Fig. 1. Scheme of energy audit of production and administrative buildings at light industry enterprises

Source: Formed by the authors

The result of the survey is the actual energy balance of the building and production with the mandatory development of measures and recommendations for energy efficiency.

Table 3

**Limits of heat balance indicators for production workshops of light industry enterprises**

Energy sources	Indicator, %
Receipts	
Heat supply from heating system	79-85
Solar heat supply	8-12
heat input from equipment	7-10
Losses	
Heat losses due to enclosing structures	40-55
Heat consumption for infiltration	7-12
Translucent facade construction	14-19
Opaque facade structures	22-28

*Source: Formed by the authors*

The most energy consuming is leather production. Most leather factories have been modernized. But not everyone uses energy-saving technology. Almost all stages of the technological process (wet-ash - 14 m<sup>3</sup> / t, pre-tanning-tanning - 18 m<sup>3</sup> / t, painting and fixing - 11 m<sup>3</sup> / t), except for machining require the use of large amounts of water. Water consumption per 1 ton of finished leather from 55 to 79 cubic energy consumption (from 10 to 42 GJ / ton of finished product). The presence of powerful air purifiers and hoods due to the content of harmful substances in the air (ammonia, hydrogen sulfide and volatile acids).

In textile industries, the largest share in the energy balance is occupied by electricity costs. The technological process requires a large amount of equipment (700 to 1400 kWh / unit of production for 1000 m<sup>2</sup>) and units for air purification.

Knitwear, clothing, and footwear, as well as textiles, have a large share of electricity consumption, but it's volume is many times less. If the owners of the enterprise plan the range which will be modernized often enough, it is necessary to apply the universal equipment. In both the sewing and knitwear industries, universal types of machines are always more powerful than those that perform a limited number of operations. The power of each machine, depending on the type and class, is in the range from 1.6 kVA / h to 2.2 kVA / h. The second in terms of electricity consumption is workshop lighting. Incandescent lamps, while performing their lighting functions, lose up to 95% of electricity to produce thermal energy, and only 5% is converted into useful light energy. During operation, LED 40 - 50% of electrical energy is converted into light energy. Thus, the efficiency of LED lamps is 5-10 times higher than that of incandescent lamps.

LED light sources can significantly reduce the cost of providing standard lighting.

They have been applied since 2016 and are regulated by DBN B.2.5 - 28: 2016.

Improving energy resource management is an important task for light industry enterprises. Therefore, joining the Smart Grid concept is a priority. Smart Grid provides services, market formation of integrated distributed energy resources and management programs. The main components of Smart Grid are: intelligent measuring system; automated distribution of electricity, control and management of electricity consumption; automation of substations and distribution networks; enterprise asset management [9].

**Conclusions.** To reduce the energy consumption of leather production, especially large amounts of water, we propose to apply the experience of “Carlsberg Ukraine” in the reuse of water for technical purposes. Moreover, the reuse of water can be combined with the introduction of solar energy. When installing solar panels, there is a problem in installing cooling systems for panels, because during heating their efficiency decreases. To eliminate this shortcoming, under the solar panels are mounted tanks with water that absorbs excess heat and can be used for space heating or technological needs. In addition, the roofs of leather buildings have a large area, and this will accommodate a large number of solar installations.

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## TARGET COSTING AS AN APPLIED METHOD IN AGRIBUSINESS

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**Annotation.** *Target costing is already a very common, successfully used method in many industries, enabling employing organizations to make their operational, cost planning, and cost allocation processes more efficient. In the field of agribusiness, the application of this cost accounting method has not been used or can only be observed in very rare cases. By mapping these rare cases, the efficiency of target cost calculation in this field can be excellently demonstrated and illustrated, as the application of the method can reveal target costs lower than the standard costs, and can also contribute to cost reduction. The target cost calculation is based on the definition of the needs of the final consumer and the mapping of consumer values. All actors in the supply chain need to adapt to these needs, developing their processes, cost structures and cost accounting methods with this in mind. In my research, I carried out a literature review on the possibility of applying target cost calculation in the field of agribusiness. In my study, I present the scarce case studies that illustrate the possibilities of applying target cost calculation in the field of agribusiness.*

**Keywords:** *target costing, management accounting, agribusiness, supply chain, value engineering.*

The transformation of the cost structure in the change of controlling systems and the advanced information systems and the development of digitization together enable the spread of activity-based and target cost-based costing systems [30]. Target costing first became used in the automotive industry and in the analysis of automotive suppliers [41]. It then became more widespread as it began to be used in industries such as energy, pharmaceuticals and machinery [15]. However, it is still rarely used in the food, processing and agricultural industries today. It can be said that the use of target cost calculations for certain actors in agribusiness has not been possible in recent years because food and agricultural products are generally of low complexity and the role of product development activities in agriculture is small. Furthermore, changes in consumer demand did not have as much of an impact on supply chains as in other industries [49]. Nowadays, however, changes in consumer demand in agribusiness are taking many forms, especially in developed countries. Such as GMOs (Genetically Modified Organisms), which has become a very prominent factor in food consumption as many consumers condemn the consumption of these products. There is also a great demand for Bio products and products of animal origin from ethical animal husbandry. These changes are impacting entire agribusiness supply chains, and organizations are being forced to maximize consumer value, in the design and efficient operation of which

target costing can serve as an excellent method [31].

The recent flow of information between actors in the food supply chain on consumer needs and the resulting availability of relevant information for controllers and marketers have only become available over a long lead time. Nowadays, however, the measurability of consumer needs at the end of the food industry supply chain has become dynamically monitorable due to the development of digitalisation and the impact of information technology[28]. This dynamic monitoring allows the applicability of target cost calculation in the field of agribusiness [36]. The application of target cost calculation enables more efficient cost planning and cost allocation of the actors within the given supply chain, as well as the construction of a more transparent and rational cost structure [19].

Target cost calculation is an effective method for creating synergies between both modern controlling systems and cost accounting as well as functional accounting areas. From the aspect of cost accounting, the implementation of the methods applied in different industries is appreciated in the case of sub-areas belonging to agrobusiness. As a result of digitization, a number of data are available, the processing of which makes it possible to implement a pull-pulling system in this field as well [56]. This in turn implies that costing methods also need to adapt to these changed structures, both at the organizational and entire supply chain level. Target costing can be a kind of transition between different controlling methods and different costing tools, both in terms of cost structuring, cost allocation, cost planning processes for a given period, and the introduction of new products.

**Analysis of recent research and publications.** Unlike total costs, direct costs or activity-based costs (ABC), target costing cannot be considered a traditional costing system in many respects. Its primary application focuses on product development, during which, by pre-determining the cost of a new product, taking it into account throughout the value chain, the product is introduced at the planned cost [20]. Cooper and Slagmulder (1999) evaluated target cost accounting more extensively than the former definition. In their study, they believed that it was primarily for the strategic management of a company's future profits, a technique for doing so. It achieves this goal by predetermining the life cycle costs at which an organization must produce a product with a specified functionality and quality in order to make a profit based on the expected selling price of the product. It is important to emphasize, however, that the wording of Cooper and Slagmulder (1999) does not imply that target cost calculation alone cannot be called a technical process. It serves as a source of managerial information from which management can make better, more accurate, more determined decisions. Its supportive role in managerial decision-making should be emphasized. Ansari et al. (1997) saw target costing as a combined system of profit planning and cost management that was price-driven, consumer-oriented, design-centric, and cross-functional. In their study, the authors highlight that cost management should begin at the earliest stage of product development and be applied throughout its life cycle with the active involvement of the entire value chain. In conclusion, the most important features of target costing are that it

serves as a cost management and profit planning system that includes cost control based on consumer preferences and market prices, integrating the various functional areas of the organization [20].

Another outstanding feature is that its application makes it possible to identify and prevent avoidable, reducible costs, which is a much more effective procedure than reducing the actual costs of a product already on the market [13]. Cost management is transferred from production to the design and development stages, which makes it easier and cheaper to manage costs compared to products already introduced on the market. It also contributes to ensuring a continuous level of profitability by filtering out products with low margins or which appear to be unprofitable at the stage of development of new products [11].

The first comprehensive finding of the target cost calculation was made by CAM-I (The Consortium for Advanced Manufacturing - International) [4]. In their definition, he defined target costing along six principles:

- Price-driven cost calculation, which means that the cost is calculated as a function of the price determined by the market.

- Consumer orientation, product design is driven by consumer needs. It focuses on meeting consumer requirements and monitoring consumer willingness to pay.

- Design focus, design is the key to cost management, not the pursuit of economies of scale in production, focus on learning curves, waste reduction and focus on improving yield to reduce costs.

- Cross-functional teams, which aim to develop a functional team for cost management, whose functions range from design through production, sales and marketing to material procurement, ancillary and support services. The involvement of so-called downstream functions in the planning process is especially important because it helps to avoid possible problems and uncalculated costs that arise later.

- Life cycle orientation, target costing models the costs incurred over the entire life of a product. To minimize life cycle costs, it takes into account purchase price, operating costs, maintenance and repair costs.

- Value chain analysis. The key members of the value chain are involved in the target costing process. Together, the members of the value chain create value according to consumer needs and minimize costs [3].

In addition to the six principles, the CAM-I model characterizes value planning as an important tool for target cost calculation. However, this is not a generally accepted approach, there are several studies whose authors consider value planning and target costing as two separate tools [10], [13]. Value planning is about analyzing the different functions of a product in order to achieve the best possible quality of the product at the lowest possible total cost. It analyzes the design of both the product and the manufacturing process to explore the points at which costs can be reduced [46]. It can be stated that value planning is a central element of target cost calculation.

In the target cost approach, prices are determined by the consumer's willingness to pay, and profit is determined by the return that financial markets calculate within a

given sector. The dependent variable is cost, which means that the organization must manage the costs incurred to reach a specified level of profit, while influencing external constraints [3]. The target cost calculation is based on a price-based cost calculation, in which the target price is formed on the basis of the consumer's willingness to pay. Target cost is a pre-estimated long-term cost level of a product that allows you to achieve a predefined profit. The value of a given target cost is calculated by subtracting from the target price the profit pre-targeted by the organization. This type of approach is completely different from the usual costing. A noteworthy difference is that in the target cost calculation approach, after assessing consumer needs, the price of the product is determined taking into account the willingness of consumers to pay. Thus, unlike cost-based pricing, the cost analysis is reversed, i.e., the total cost of the product is designed to provide a pre-estimated profit. Target costs serve as a goal for all actors in the value chain at different stages of product production, during its production [46]. Based on these and also because of the joint approach, it can be said that the target cost calculation uses a strategic approach in profit planning and does not function as a simple cost reduction method [3].

Target costing, which is still known today and used in many areas, was first used in the Japanese automotive industry (Toyota) [2], [25]. The various elements of target cost calculation were already known. Reports on the application of certain minds of the method appeared as early as the 1930s at Volkswagen and Mark-Spencer. However, its systematic application was first carried out at Toyota in the mid-1960s and 1990s [41], [47], [50], [51], which, by integrating various elements, evolved from a simple cost-cutting practice to a strategic profit planning model [10]. Its application from the Japanese automotive industry initially spread only to other Japanese assembly industries and then to some manufacturing industries. Practical application has become so widespread that 80% of organizations [33] mainly in the assembly industry have been observed in 100% of car manufacturing organizations [6]. In Japan, its prevalence was driven by the increase in personal income observed since the 1960s. Changes in consumer demand have also diversified the properties and functions of products produced by organizations. The development and design stages of the product have become extremely important from the point of view of cost management. Focusing on these aspects, target costing has emerged as a management tool that, in addition to consumer needs and willingness to pay, designs the required features or functions of a product at a cost that ensures a predefined profit [46]. Nowadays, target costing is used worldwide, including by organizations such as Mercedes, Caterpillar, Panasonic, Apple and Toshiba [38].

In recent decades, the area has attracted the attention of both Japanese and Western researchers. Just as in the case of managerial accounting, studies and further research and developments were made based on the application observed in practical life. In both areas, it started as an innovative corporate practice and later became the focus of research. Similar to the terminology related to the sub-areas of managerial accounting, budget planning and performance measurement of independent organizational units operating within the organization, the extensive literature processing of target cost

calculation developed later in time [3]. Even today, there are areas where the target cost calculation method would be a suitable tool, but its practical application is still low. Agribusiness, which has undergone significant changes in an uncertain and intense competitive environment in recent years, is also an area.

The practical implementation of target costing faces a number of challenges. The main challenging factors are: lack of understanding, cross-functional barriers, fear of applying the method, details and complexity of the production process. Another challenge may be the shortcomings of information systems, thus the limited work of accounting and the ability of supply chain actors to work together to share cost reductions. In most of the challenges, the human adaptation factor is a key factor [24].

*Lack of understanding.* Studies in the literature on the concept of target costing agree that it is of Japanese origin, with the Japanese name Genka Kikaku. Under this name, a comprehensive strategic approach to cost reduction is expressed. According to Choe (2002), the shortening of the life cycle of products has greatly contributed to the prevalence of target cost calculation, and thus the development, design and production stages of the product have become more valuable in order to identify costs. However, the implementation of the practical application of target costing depends to a large extent on the costing methods already used in the organization. Target cost calculation differs significantly from different cost calculation methods, so the members of the organization must also flexibly adapt to the specifics of target cost calculation. It requires a different way of thinking in approaching the costs of products, in the design phase driven by consumer needs, pre-defining costs becomes a critical aspect [24].

*Cross-functional barriers.* One of the obstacles to the spread of target costing is that the communication between certain independent functional areas within the organization and the actors within the supply chain is inadequate, so it becomes difficult to determine and reduce costs. By better communication between the organization and the members of the supply chain, a more efficient flow of information and an increase in the relevant meaning of the information can be achieved. This, in turn, has an indirect effect on the understanding of costs and the acceptance of the target cost calculation method within the organization and the supply chain [5]. A key element of effective cooperation is mutual trust and information sharing. If this is achieved both within the organization and between supply chain actors, effective collaboration can be achieved to achieve the target cost calculation method, which will ultimately lead to better understanding and, where appropriate, reduction of costs while ensuring the expected product quality [24].

*Fear evoked by the implementation of the method.* One of the most important features of the target cost calculation method, similar to one of the principles of lean philosophy, is the elimination of non-value-creating activities. By contributing to the discovery of non-value-creating activities, the target cost calculation method reduces the cost of production of the product. Quality assurance and waste reduction are important elements of the continuous development life cycle, of which target cost calculation is also an important element. The method is suitable for use together with the system of activity-based planning, value chain analysis and internal business processes, either

combined into a single system or integrated into the management framework [54]. Other authors highlight the internal cost-benefit implications of the method, which is created by determining transfer prices between organizations across divisions [7]. These aspirations evoke fears both within the organization between different divisions and among actors within the supply chain that can be traced back to excessive pressure to bear cost cuts. In order to prevent and manage this, training on the process and its significance must be provided, and changes must be properly communicated, thus avoiding a negative assessment of the application of the method.

*Details of the production process.* During the production, the whole production process must be examined down to the lowest functional levels, in order to be able to explore the areas to be developed during the production. By improving the areas to be developed and eliminating non-value-creating activities, the costs of the production process can be reduced, the turnaround time of product production can be reduced, and thus organizational productivity can be increased. The conceptual definition of target cost calculation seems intuitive and simple, but serious challenges need to be overcome in practice. It is important to emphasize that when applying the method, the goal is to implement minor changes, not to introduce significant innovations [24].

In the case where the customer is part of a longer food supply chain, consumer needs play a key role in setting target costs. Cooperation and sharing of information with food processors and retailers can increase the determination of the optimal operating costs of organizations in the primary sector, help to transform operational processes in innovative ways and make operations more efficient. The effectiveness of target cost management within a given supply chain depends on the nature of the relationships within it. The closeness of the cooperation between the actors in the supply chain will determine the degree of efficiency of the supply chain. Open market negotiations and simpler cooperative agreements may be suitable for a price-based approach. In the case of supply chains in which the participants work more closely together, a value-based approach can come to the fore, with which the fullest possible satisfaction of consumer needs can be achieved [37].

*Building the right supplier base.* Target costing also includes value analysis and value planning as part of a comprehensive strategic profit management system. Applying within the supply chain requires more attention and effort than applying standard costing, as all actors within the supply chain need to identify cost reduction points that arise during the design, manufacture, and distribution of a product [14]. Once the selling price has been determined, the producer and the members of the entire supply chain must deduct their profit margin and determine the cost of the final product. Achieving the target cost within the supply chain is a common interest, therefore the interests and pressures of the partners within the supply chain must be understood and communicated to all organizations within the chain. Coordination within the supply chain is a significant and time-consuming task that requires information sharing and teamwork [5]. The cost reduction mechanism that is being put into practice today is to prefer processes for long-term sharing rather than immediate cost savings.

*Possibility of outsourcing.* The application of target costing also requires a kind of internal analysis of the organizations, which focuses on, among other things, the applied technology, the structure of the organization and the strategy. In this way, the organizational identity can be explored and formulated within the organization, the basic competencies can be identified, and the degree of added value can be determined. Once these basic factors have been identified, a decision can be made to discontinue, outsource or transfer non-core activities within the supply chain [43].

*Modifications existing at the design stage.* When applying target cost calculation, the primary goal is to explore all possible cost reduction possibilities in the planning phase [1], [34]. A comprehensive information system and cross-functional involvement are of paramount importance in the costing process, as a significant part of the product's costs are realized at the design stage [45], [13].

*Continuous development.* In target costing, the entire supply chain must be managed in an integrated way. As a result of each participant development, the own cost can be reduced, but this can also reduce the total cost of the product. Because of supply chain integration, in-chain partners help each other reduce costs, keeping the total cost of the product below a predefined target cost level. A high degree of cooperation results in successful operation and market launch of the product, resulting in adequate profits for all actors in the supply chain. One possible way to operate the supply chain efficiently is to use a variety of supply chain software to perform analyzes to examine the operational efficiency of the supply chain [55]. However, it can be stated that in the absence of commitment to consensually articulated goals and proper communication, the feasibility of cooperation and target cost calculation within the supply chain becomes questionable.

Figure 1 illustrates the process of target cost calculation based on the work of Ellram, (1999). The figure clearly shows the main processes and additional factors to be taken into account when applying the method.

The efficient operation of supply chains in the field of agribusiness requires a high degree of coordination between the participating organizations. The importance of this coordination is mainly due to the complexity and intensity of the flow of information between organizations. It is also important to highlight today's rapidly changing consumer needs, with an increasing emphasis on health-conscious lifestyles, food safety, ethical issues in animal husbandry, and environmental and social impacts. All these factors have a serious impact on the development of the product range, on-time delivery, as well as on the production process, components and quality of the products. At the same time, these changes in consumer demand and increasing expectations also provide an opportunity to increase added value [26].

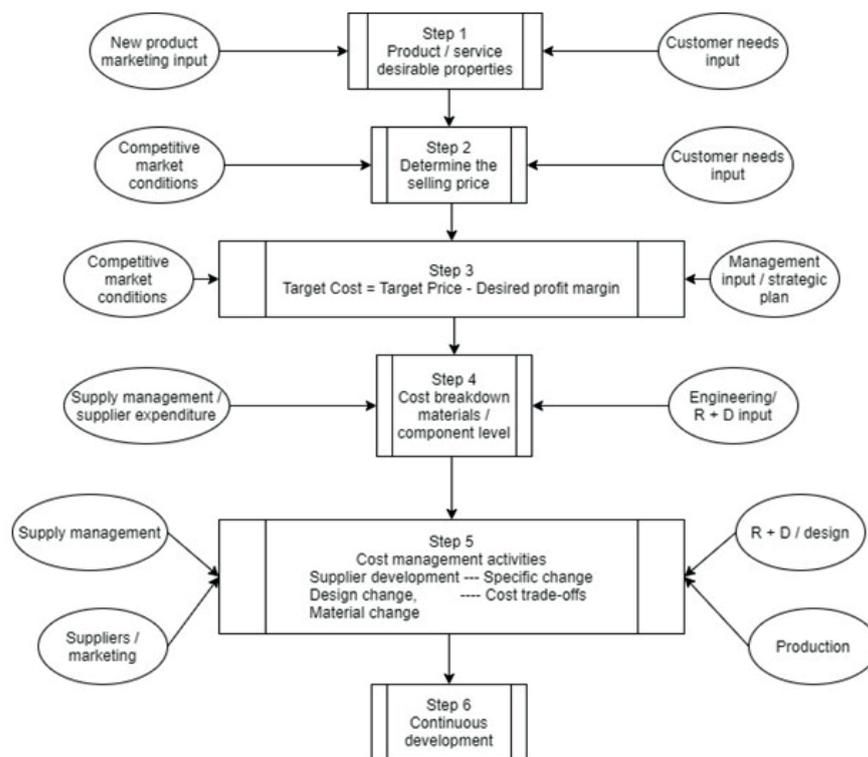


Fig. 1. Target cost calculation flowchart  
 Source: Based on [18], own editing

In recent years, there have been major changes in the global food market. As a result, supply chains of different sizes have also undergone significant changes. The intensity of interaction between organizations increases, and the turnaround time of interactions decreases due to various influencing factors. The importance of information provision is increasing, the importance of related information is also increasing válik [49]. The use of the resources needed to produce your product is becoming more diversified and complex. Consequently, it can be said that the range of factors inducing change cannot be limited to a single determining factor. In most cases, four factors influencing change can be highlighted:

- Retail concentration and strength: The concentration and market share of retail organizations in food supply chains has increased. Some companies dominate the markets, power relations have shifted from production to retail [40].

- Increasing concentration at several points in the food value chains: The development of concentration can be observed not only in the retail sector, but also in many different areas of the supply chain. Due to supplier concentration, the market power and technological advantage of some organizations has increased. An excellent

example of this is the impact of McDonald's sourcing policy on the concentration of the beef industry in the US significantly [48].

- Standardization: It is of paramount importance for consumer food safety. Nowadays, as a result of changes in different consumer needs, this standardization process has become diverse. Both state certification bodies are present in the market and the presence of market-based certification bodies can be observed in parallel [23].

- In the case of product differentiation, it should be emphasized that intense competition in the food industry forces the differentiation of products, ie the creation of individual products and unique brands. In most cases, this is provided by retail organizations, but in many cases they create products - brands with different product features - with external partners [35].

The application of managerial accounting in the field of agriculture dates back to 1989, when farmers in Nebraska (USA) began to organize meetings to solve new challenges in agricultural production and to share their suggestions. On March 8, 1993, they finally formally formed a non-profit association called the Farm Financial Standards Task Force, which was changed to the Financial Standards Council in 1994. The central goal of the association was to develop an operational and management organization guide for agricultural companies [16]. The most significant parts of the developed guide are the need to create result-oriented, cost-based accounting records. Among other things, it has been formulated that a responsibility center-based approach should be applied in the collection of information on which the preparation of reports is based [56].

As can be seen, the whole theory is based on the development of an appropriate accounting system and supporting information gathering practices. In creating this, comprehensive strategies and long-term plans need to be formulated, including the development of new products. Attention must also be paid to new production methods involving significant changes and to investing in tangible and intangible assets. The way resource allocation decisions and related pricing need to be defined. It is based on the cost planning and cost control of operations and activities, including reports on revenues, expenses, assets, and the responsibilities of departments, plants, and other responsibilities [21]. Also part of this is measuring and evaluating people's performance, including comparing actual results with planned results. It may be based on financial or non-financial measures. Finally, attention should be paid to meeting external regulatory and legal reporting requirements, as laws and regulations typically specify the accounting methods to be followed [16].

The main obstacle to the development of an effective management accounting system in agriculture remains the human factor, ie the lack of understanding of farmers due to non-understanding. The use of formalized management accounting tools is not widespread among farmers. This finding contradicts most of the management accounting literature, which states that management accounting provides relevant information for decision-making and control in agriculture. However, the research also reveals that despite their responses, farmers use many informal managerial accounting methods in practice. Farmers' close links with day-to-day activities allow them to make quick

production decisions and base their decision-making and control practices on operational non-financial performance indicators and informal calculations [29].

Using a management accounting information system on a daily basis would allow businesses and farmers to more accurately estimate the cost of agricultural production, make it easier to measure productivity, and solve problems encountered in the agricultural production process. Management accounting theories are basically based on cost and cost calculation. However, in general, their application is challenging due to the special and specific nature of agricultural companies. The special characteristics of agricultural enterprises distinguish it from other enterprises. These characteristics are also reflected in the accounting system and cost accounting methods of agricultural enterprises [52].

The use of different costing methods is very important because through this, managers can get accurate information about what are the costs of a product that are unavoidable, and therefore at what cost. One of the most significant cost calculation methods used in agriculture is the cost calculation, but the application of different cost analysis methods has also become observable within the sector. Of the various cost calculations, the target cost calculation can be considered as a special cost analysis method in agriculture and is rarely used in practice, but it can provide solutions to many challenges [27]. The spread of target costing within the sector can also be helped by its intuitive nature, as managers in agriculture, as active participants in day-to-day processes, use intuitive tools instead of formalized tools [44]. In this case, they gather information based on their own experience, on the basis of which planning can also take place. The method of target cost calculation can be properly adapted to this practice and its application method can be adapted to the organization.

The international scientific literature does not have a target cost calculation model that can be applied in a complex comprehensive agrobusiness. Some case studies, on the other hand, provide excellent pointers with qualitative methods on how, in what structure and in what structure, and for which problems the methodology of target cost calculation can be effectively applied in the field of agrobusiness.

**Presentation of the main research material.** In the following, I present some case studies on the practical applicability of target cost calculation in the field of agrobusiness, which provide an excellent illustration of the advantages, disadvantages, opportunities and challenges of using the method.

Jack and Jones (2008) They explain that in field farming, planning and organizational processes can be considered as complex activities, the proper application of which can increase the efficiency and profitability of farms. Based on the work of Markham and Chapman (1998), their study explains that different advisory services that aim to make field crop production processes more cost-effective, or all the ways to reduce energy consumption of different processes (e.g., reduce machine routes to save fuel by thinking at the same time) the thinking similar to the target cost calculation methodology is realized. But as an example, the pursuit of precision farming in field crop production can be mentioned, which is also realized for a similar purpose as the application of the target cost calculation method, the focus is on reducing production costs. Given that the selling

price of arable crops is unlikely to increase significantly in the near future, processes need to be redesigned to make it more cost-effective. In this case, in the classical sense, the target cost calculation is not applied, but it can be seen that in order to operate profitably, organizations in the sector have to plan production costs in advance as a function of sales price.

Another study by Foltínová - Špička (2014) examines milk production. In their study, they carried out a comparative study of the cost structure of the Slovak and Czech dairy sectors. The focus is on the possibilities of controlling the costs of agricultural production. During the IP, the cost-benefit ratio of agricultural goods is analyzed. In their analysis, the target cost calculation is used to analyze the cost structure. The selling price of milk typically does not cover all the costs incurred in production, so it is important that farmers set a ceiling on variable and fixed costs so that it reaches a break-even point, so that various agricultural financial subsidies can make production profitable. Depending on this, the numerical examination of how much cost must be reduced in order to reach the break-even point is particularly important for farmers. Farmers have a more detailed view of the cost structure of production and its composition through cost control, thus making their farming more profitable

In their study, Theuvsen et al. (2005) attempted to use target costing to address ethics and economics, namely animal welfare and profit maximization, and the associated dilemma. Target costs can effectively reflect the dilemma of ethics and economics that results from increasing animal welfare and consumers' limited willingness to pay. The study points out that the target cost approach can create a more economical turkey breeding and processing business or organization that can meet both ethical and organizational goals (profit maximization) by avoiding economy and losses. The authors emphasize that marketing research, as one of the most important parts of the calculation of target costs, is also of particular importance in animal husbandry, as the ethical characteristics of modern animal husbandry systems must be taken into account and animal welfare systems must be generalized and acceptable. costs from consumers' willingness to pay, which is based on accurate and effective marketing, market research.

Morturá's (2017) study examined the evening of an organization producing dairy products. During the processing of the case study, he highlighted that target cost calculation serves as a useful tool for organizations in the food industry when introducing a new product. In his study, he examines the costs of launching a yogurt product on the market, using a target cost calculation to determine the cost of the product to achieve the best results while maintaining the selling price and product quality. During the examination of the cost factors of the product, the maximum value of the given sub-costs was determined, with which the value of the profit per predefined product can be achieved. During the cost analysis, the organization identified several points in the product manufacturing processes that it could modernize, thus further reducing the pre-defined cost per product. This allows them to generate more profit per product or make the selling price of the product more competitive without reducing the value of the predetermined profit. This study highlights that the target cost calculation method

not only functions as a cost calculation tool, but can also help to optimize processes and increase organizational efficiency.

The study by Chen et al. (2008) focuses on the development of marketable and environmentally friendly products from pig waste, and their research seeks to implement a target cost calculation methodology. Their study focuses on biomethanol, which can be produced from manure as a by-product of pig farming, and its preliminary cost estimation. In their analysis, they also describe the application of value planning in order for the product to be able to achieve its defined goal at a reasonable cost with predefined quality and compliance parameters. The results of their study show that the difference identified between the target cost of the biomethanol produced by the described processes and the available cost structure is significant. Based on the cost gap, it can be identified as a profitability problem that requires, among other things, a continuous cost reduction effort that must be initiated already during the planning phase. The authors identified as an additional area of research in the process of integration of target costing, value planning and innovative technologies, the improvement of engineering design and system design. Within the supply chain, cost or price reduction proposals are made for suppliers of input materials (e.g., volume purchases, long-term contracts). One such further suggestion is the search for economies of scale by building larger capacity biomethanol facilities. As suggested by the authors, horizontal integration can be used to reduce the average cost of biomass / methane capture and transport to secure methane or biomass sources. Target cost calculation in this case proves to be a useful method not only as a cost accounting method, but also in the cost planning process of the supply chain and its exploration.

In his research, El-Dalahmeh (2018) examined the prevalence of target costing and value planning methodologies in Jordanian food companies. Its research results confirmed that the food companies under study apply different elements of target cost calculation in their operations. Furthermore, the concepts and principles of target cost calculation are applied in the management of their costs in order to improve their profits. These organizations also use value planning to achieve target costs, however, the successful application of the method is influenced by some limiting factors:

- Insufficient theoretical knowledge is available for the successful practical implementation of target cost calculation and value planning.
- Research and publications on the benefits and effectiveness of using target costing and value planning are limited.
- In the absence of existing theoretical knowledge and practical experience, the costs of applying target costing outweigh its expected benefits.

Despite these shortcomings, the researcher believes that organizations that do not or will not use target costing and value planning methods in the near future will not be able to recognize and meet the consumer needs and expectations of them, thus being at a disadvantage compared to their competitors, who successfully apply these methods.

In their publication, Kocakülâh and Austill (2006) examined the activities of an organization manufacturing so-called home meal replacement (HMR) products. As for HMR products, it is not a product family based on a new concept, but it still has a

very significant market share. Multinational fast food chains invest serious capital year after year and generate significant profits in this market. Retail grocery stores have also significantly increased their share of the HMR product market in recent years. There is very strong competition in the market, as evidenced by the fact that most organizations entering the market fail within 12 months. The organization under study is a food industry whose activities are fully diversified poultry processing. The organization was encouraged by the invitation of retail grocery stores in the supply chain and the very strong consumer demand to develop its own brand HMR product line. In line with the application of target costing, as a first step, it conducted a serious consumer needs assessment and mapping the expectations of retail partners for HMR products. After surveying consumer prices, it also examined the gross margins acceptable to retail grocery stores. Depending on these, the value of the profit acceptable to the organization was determined, and then the next step was to examine and develop all the expenses of the product family. Taking these factors into account and considering it, the organization has decided to produce frozen HMR products instead of fresh HMR products. The decision was made because the target cost calculation carried out during the design process highlighted that the production of products can only become profitable in frozen form. This case study highlights the important role of collaboration between actors in the supply chain. Active collaboration and information sharing within the supply chain in manufacturing, value planning, marketing and logistics activities can mean long-term profitable operations for supply chain participants.

**Conclusions.** Target costing can be an effective method for some of the challenges in agribusiness. Intense changes in consumer needs and the concentration of supply chains require each actor in the supply chain to be agile and maximize value creation. In my study, I describe the applied methodology of target cost calculation for organizations operating in the field of agribusiness through a number of case studies found in the literature. It can be stated that the method of target cost calculation was not significantly widespread in the examined area and in several cases it can be observed that only certain elements of the methodology are applied, instead of applying the complex methodology. Another research opportunity is the general and complex modeling of the target cost calculation method used in a special form by the organizations in the agribusiness supply chain.

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## EVENT-TOURISM DEVELOPMENT AS A WAY OF TOURISTIC ATTRACTION OF UKRAINE

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**Annotation.** *The article highlights the issues of event tourism development, analyzes and summarizes the main goals and directions. It is investigated that the basis of tourism policy should be the priority development of inbound, domestic and social tourism, based on sustainable development, which provides for the preservation, reproduction and renewal of tourism potential. It is substantiated that the implementation of the tourism development strategy will contribute to the capitalization of natural, ecological, landscape, historical, cultural and other achievements of the regions through the development of the tourism industry. Enterprises from almost all regions of Ukraine have a potential opportunity to develop event tourism. For most of them, event tourism could be a significant source of economic growth. However, the high level of provision of the regions of Ukraine with tourist potential is constrained by the low level of their usage.*

**Keywords:** *event tourism, tourism industry, tourist attraction, tourist product, management.*

**Formulation of the problem.** The realities of the modern world convincingly show that most countries are building their powerful economic potential through the development of tourist attractiveness. For Ukraine, which actively stimulates the tourism industry, it is extremely important to effectively form and implement new tools in order to increase its attractiveness, to find effective vectors of development, to commercialize new tourism products. Given this, an innovative direction for the national tourism industry is event tourism. According to its etymology, an event is an occasion or activity that has a high degree of social resonance and generates a high social effect.

Such event or their synchronized set can have the form of a single unique phenomenon or periodic one, which is observed annually or in certain periods of time. The tourism business always actively uses events to form a tourism product and attract tourists to the event. If there is no historical event in the life of the tourist object, it is developed and implemented artificially.

The importance of event tourism for increasing the tourist attractiveness of Ukraine is difficult to deny, because its main purpose is dedicated to the event in which the tourist will take a passive and active part and accordingly maximize money flows from the commercialization of this tourist product. In addition, event tourism is a mediator for the development of related tourism products and related sectors of the economy. However, as in any other country, this type of tourism needs support and effective regulation at the macroeconomic level, which led to the vector of our study.

**Analysis of recent research and publications.** The problematic plane of development of event tourism and tourist attractiveness of Ukraine as a whole in the works is covered by a wide range of scientists and practitioners, in particular N. Bogdan, A. Ryabev, I. Segeda [1], V. Sidelnik [2], P. Haman, L. Deshevenko [3], V. Kiptenko [4], A. Litovka, V.

Semenov [5], V. Polishchuk [7], V. Tsybukh, B. Vikhristenko, S. Popovych [9] and others. Scientists continue scientific controversy on the tools for forming a strategy for tourism development in Ukraine, tourism image, management of the tourist and recreational complex and the tourism market of the regions, the directions of regional policy for the development of event tourism.

Despite the rather wide range of scientific developments in this field, at the present stage not all aspects of this multifaceted and complex topic are clarified and substantiated. The analysis of the scientific literature showed that despite the sufficient attention of scientists to the problem of effective management of event tourism development, some aspects of it are still insufficiently covered. First of all, the vectors of state support and regulation of this direction of the tourism industry in the context of intensification of public-private partnership need more detailed research and clarification.

**The purpose of the article** is to substantiate the ways of management of the development of event tourism for the sake of increasing tourism attractiveness in the context of public-private partnership.

**The presentation of the main material.** The concept of "event-tourism" comes from the scientific category of event (event - anything that happens, especially something important or unusual), which involves a threat to social division or an event that manifests itself in a long time and with a certain connection, and has a certain resonance for society [10]. The phenomenon of "event tourism" first appeared in the 80s of last century in Europe, when dividing tourism was not created by highly cremated in tourism, belonging to the suitable, ecological, gastronomic development of tourism. This type of tourism has been a separate field of tourism for only 20 years in a row, with the exception of historical events, holidays and traditions that have led to the appearance of divided tourism, which has deep roots in the study of this phenomenon as a science.

In Ukraine, the development of event tourism began in the 90s of last century, which was caused by a number of historical events, changes in consumer behavior, the emergence of demand for new experiences and involvement, the ability to influence events and assert themselves in society as outstanding individuals.

Dynamic factors in the formation of tourist flows are event resources that prompt a person to travel, providing motivational prerequisites for his journey to places where an event or phenomenon (sports competitions, concerts of famous artists, shows and musicals, festivals and fairs, political events, unique natural phenomena, etc.). Event resources cover the most significant manifestations of modern social life with its fashion for globalization, ecology, active and healthy lifestyle, beliefs and ideas about the style and stereotype of human behaviour in society, including its promotion and implementation mechanisms [2].

According to S. Melnychenko, inventive measures are exceptional measures aimed at promoting the company, services, goods and brands through bright events that are remembered [6, p. 224]. The "event" in tourism significantly depends on public preferences, on fashion and people's perception of the prestige of the event, on the consistency and frequency of it. Event tourism is also of significant economic importance

in the country (region) of its development, as any active activities intensify the action of all actors in the tourism industry, promotes the development of productive forces of the city (region or country) and increase their resource potential.

For a deeper understanding of the differences and advantages of inventory tourism from traditional types of tourism, we offer its comparative characteristics with other types of tourism by key essential features (Table 1).

Table 1

**Comparative characteristics of event tourism with traditional types of tourism**

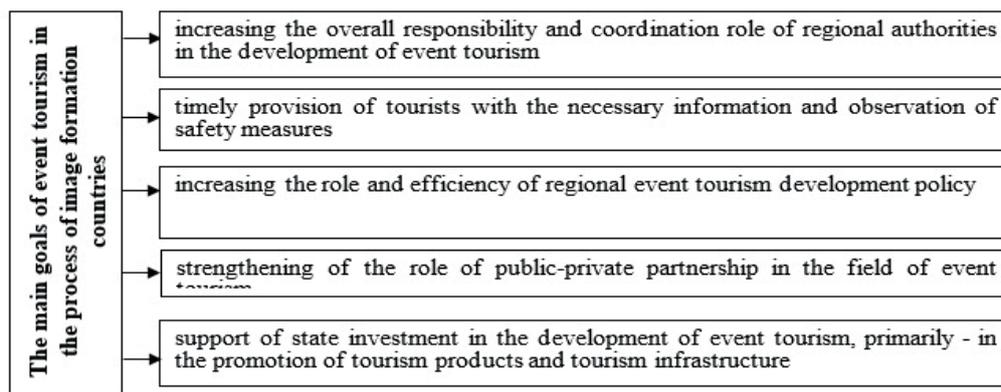
<b>№ comp.</b>	<b>Features of comparison</b>	<b>Traditional kinds of tourism</b>	<b>Event tourism</b>
1	Frequency of holding	Not installed	Clearly regulated
2	The nature of the event	Permanent or seasonal	Dedicated to a specific event
3	Organizational support	On the basis of operational management	On the basis of project management
4	Purpose	Mostly commercial	Commercial or social
5	Sources of funding	Mostly at the expense of travel agencies	At the expense of travel agencies, budget funds, investors, sponsors
6	Impact on the leisure industry	Is its basis	Complements and stimulates development
7	Coverage of evaluators	Mostly small groups of people	It is characterized by mass
8	By method of placement	Stationary and mobile	Mostly stationary
9	Conditions for achieving efficiency	Depends on the level of competitiveness of travel services	It depends on the awareness of the population, advertising of the event and PR-campaigns around it
10	Motivation	Physiological and spiritual needs of the person	Public preferences, cognitive value, status, fashion, prestige, significance of the event
11	Additional benefits	Formation of tourist flows, growth of the number of jobs, filling of budgets, etc.	"Synergetic" effect of the impact on the development of different sectors of the economy and tourism industry of the territory - venues
12	Dependence on public preferences	Partially	Fully
13	Information effect	Temporary	Long lasting

Source: compiled for [6, p. 224-232].

The participation of state institutions plays a significant role in the development of domestic event tourism. It should be noted that the main goal of public and local government policy in the field of tourism should be to provide preconditions for public-private cooperation in tourism, strengthen partnerships, usage of various resources (economic, business, scientific, humanitarian and social). The organizational and

economic basis of event tourism should be the priority development of inbound, domestic and social tourism, based on its sustainable development, guaranteeing the preservation, reproduction and renewal of domestic tourism potential.

We agree with V. Polishchuk that in order to increase international tourist visits to event tourism in Ukraine, its main goals in the process of forming the image of the country as an event tourist destination are as follows (Pic. 1).



Pic. 1. The main goals of event tourism in the process of country image formation

Source: [8]

These tasks determine the implementation of measures to intensify the development of event tourism in Ukraine and increase the number of visits to the state.

According to N. Bogdan, A. Ryabev and I. Szeged, the strategic objectives of tourism development in Ukraine are [1]:

- creation of legislative, normative-legal, social-economic, organizational administrative conditions for the transformation of tourism into socially and ecologically oriented, economically effective sphere of activity, and also the maintenance of sustainable development of tourism;
- increasing the effectiveness of state policy in the field of tourism, the formation and implementation of an effective model of public administration to coordinate, regulation and protection the interests of participants in tourism;
- strengthening the role of local communities and public organizations in implementing the principles of sustainable tourism development, improving existing and introducing new effective mechanisms of interaction between central and local executive bodies, local governments, public organizations, enterprises, scientific and educational institutions in the field of tourism;
- formation of tourist space for the rational and efficient usage of tourist resources by creating and ensuring the functioning of zones of sustainable tourism development, development and implementation of a competitive regional tourist product;
- promotion of social stability and security, territorial unity, providing conditions for

the development of socially responsible tourism;

- providing the safety of tourists and travellers, protection of their rights and legitimate interests;

- promoting the preservation and development of national culture and the revival of folk crafts;

- creation of the conditions for the formation of national identity, patriotic upbringing of children and youth, preservation and restoration of unique natural and historical and cultural resources, as well as historical places of Ukraine;

- promoting the improvement of the investment climate in the field of tourism, attracting investment in the development of engineering, transport and communal infrastructure;

- rationalization of the usage of financial and material resources in the field of tourism, filling the budgets of all levels due to tourism, increasing the inflow of foreign currency from tourism;

- job creation, development of small and medium enterprises in the field of tourism, expansion of significance in rural areas from the development of tourism;

- creation of equal opportunities for subjects of tourist activity, formation of preconditions for development of the effective and transparent tourist market;

- creation of tourist infrastructure facilities within the territories with a high concentration of valuable natural and historical-cultural tourist resources in the directions of the national network of tourist routes;

- formation of informational space of tourism, creation of favourable conditions for ensuring equal access to information in the field of tourism;

- formation of a modern mechanism of state accounting and control of tourism activities;

- development and implementation of modern methods for determining the contribution of tourism in the formation of macroeconomic indicators of the country, regions;

- development of impactful state and local programs for the development of tourism and resorts, economically well-grounded plans for their implementation, particular, within the programs of socio-economic development of the regions;

- development of international cooperation in the field of tourism and resort activities, improvement of the tourist image of the state, fruitful using opportunities.

The development and implementation of a strategy for the development of domestic tourism should contribute to the growth and strengthening of the capitalization of natural, ecological, landscape, historical, cultural and other achievements of the regions through the development of the tourism industry. In particular, in the direction of activating the tourist potential, it will be expedient to take the following measures [2]: development of the transport and communication sphere; construction of hotels (small format), and development of social infrastructure of regions, including retail trade, restaurant business, health care, leisure organization; encouragement and support of small business, first of all, in the above-mentioned spheres; information support from specialists in

local lore, geography, geology, history, etc.; integration of science and business through cooperation between business and scientists; development of information infrastructure due to interregional Internet communications, organization of exhibitions and fairs, etc. ; popularization of the historical and cultural heritage of regions, ecological resources, rare landscapes, museums by mass media, organization of national competitions, ratings, etc.

If the developmental goals of regional event-tourism are achieved, the influence of socio-economic factors will improve, in particular, tax revenues will increase to budgets of all levels, living standards will grow due to going up employment and wages in tourism, and quality of life will improve due to increasing level of culture and patriotic education of citizens.

The successful development of domestic event tourism will be accompanied by the adoption of economic entities in the field of effective and strategically important decisions for the region. In essence, the effectiveness of management is the result of optimal interaction of the control and managed subsystems, which demonstrates the degree of achievement of the planned results by the subject of management. According to V. Kiptenko, the efficiency of management in tourism is such a quality of this process that ensures the successful operation and development of each organizational and economic link [4]. Accordingly, the success of tourism in Ukraine will depend on the efficiency of the management and coordination of all components of tourist attractiveness: from tourism potential and infrastructure - to attract investment in their development and quality services.

An important role belongs to the management system of the processes of providing services of tourist and recreational complex, which regulates the functions and methods of this system, the subject-object relations of the complex, the relationship between service and information technology. These technologies allow to effectively coordinate the dynamic situations inherent in the field of recreational services because within a single tourist and recreational complex it is possible to build an effective scheme of redistribution of financial flows from profitable sectors (eg entertainment industry) to less profitable (eg accommodation) development of the whole complex, using the principles of planned budgeting [3]. The basis of the management system of tourism development in the country are natural conditions, the development of the transport industry, social factors (living conditions, culture, employment), economic factors associated with creating a basis for tourism development (stable monetary, financial, foreign economic relations), legal factors associated with the creation and operation of tourism legislation, environmental factors that may limit or, conversely, create priorities for tourism development [5].

All this demand finding ways not only to improve the state of individual components of tourist attractiveness, but also determines the need for a comprehensive search for measures to improve it and maximum coordination of all tourism market participants. Tourist attractiveness as an important component of tourism development, depends on the tourist potential of territories, the ability of tourist enterprises, consumer preferences of tourists, participants in economic relations in the tourist market to influence the

consumer expectations of potential tourists and their perception of tourism products [3].

Enterprises from almost all regions of Ukraine have a potential opportunity to develop event-tourism. For most of them, event-tourism could be a significant source of economic improvement. However, the high level of tourism potential of the regions of Ukraine is restrained by the low level of their use, the low level of development of tourist infrastructure and low participation of enterprises in events that can attract the attention of people around the world. The reasons for the low use of the potential of tourism enterprises, their improper infrastructure are related to inefficient regional policy for the development of event tourism. Improving the socio-economic development of the region, its investment attractiveness based on event-tourism should be based on the principle of consistency with the goals and directions of individual enterprises in the tourism sector.

It is necessary to develop and implement appropriate regional policy for businesses, which is a subsystem of regional tourism development policy, to obtain the most desired effect from the evolution of event tourism in the region, [10]. The separation of the sub-strategy of its development is due to the important economic, social and cultural context, which provides for the development of regional event tourism. The higher the level of socio-economic development of the region, the better will be its investment and optimal use of event resources.

It is advisable to focus on the aspect of the interaction between the state and business, based on the goals of event-tourism development. It should be noted that the development of public-private partnership in this area will stimulate the growth of additional demand for goods, and services provided by various businesses in the region, which in turn will lead to the development of other economic activities and benefit all businesses, in particular [9]:

- organizers of events and activities, travel agencies and tour operators will be able to increase the efficiency of activities through additional income, stabilize the functioning and long-term relations with other businesses in the region;

- employees of travel agencies and tour operators in the region can receive a stable salary;

- population of the region - additional jobs and incomes in various types of economic activities related to the service and satisfaction of tourists;

- enterprises of hotel and restaurant economy, establishments of rest and leisure, transport and communication of the region as elements of tourist infrastructure - constant incomes;

- consumers (tourists) - the desired inventive tourist product according to their needs.

We propose to consider a public-private partnerships in the development of event tourism in the following main areas (Fig. 2).

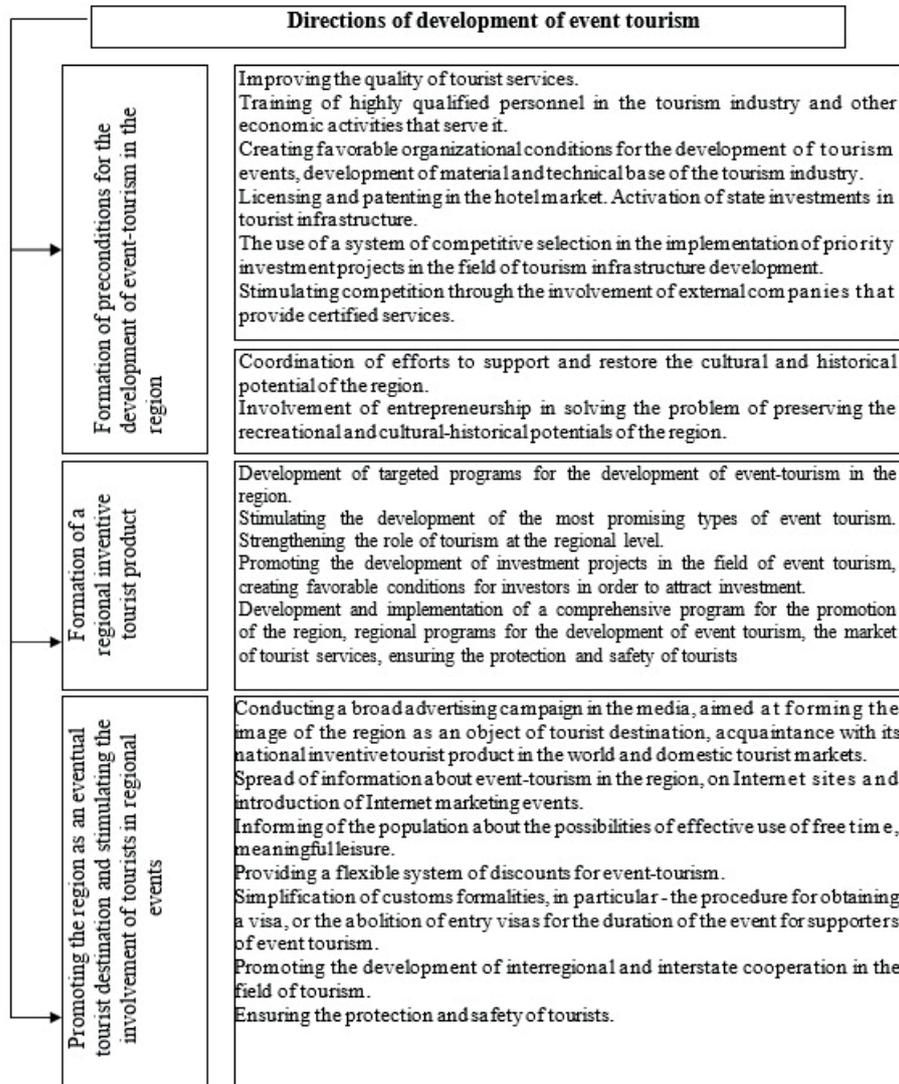


Fig. 2. The main directions of event tourism development at the level of public-private partnership  
 Source: [8]

In addition, the region and the state as a whole will fill the revenue parts of the local and state budgets, respectively, through tax revenues, including corporate income tax, value-added tax, personal income tax, etc., as well as other non-tax revenues (customs fees, royalties). At the same time, there will be an inflow of foreign currency into the region both as a result of payment for tourist services and based on currency exchange to meet the daily needs of foreign tourists, who decided to join the event. Therefore, the

formation of a regional policy for the development of event-tourism - the need of today, due to the significant multiplicative socio-economic effect of its implementation.

The development of certain tourism companies and organizations should be accompanied by the coordination of their work by public or non-governmental bodies (for example, associations). Therefore, it is necessary to develop and use in practice new technologies for the management of local and economic complexes in the field of tourism, which will organize event-tourism. The feature of these technologies is the providing of the needed degree of liberalism and centralization, in other words, the level of the correlation of market and planning factors in approaches to management.

The basic element of event-tourism is a single approach to the development of tourism or planning of this type of work in general, in the complex and interrelation of the main background and conditions (including the environment) that affect its efficiency. Innovative management technologies in the field of tourism require special requirements for the statistical information system of tourism. Now there is a need of information that most fully characterizes the environment of travel companies, tourism potential, the tourism industry in general.

**Conclusions.** Analyzing the above research, it is determined that ensuring the development of event-tourism requires significant financial resources. Its financial support can be carried out based on self-sufficiency (costs of owners of enterprises of recreational and tourist facilities, organizers of event-tourism), investment (foreign and domestic), lending (credit resources), budgeting (government allocations; local budgets, received for payments from recreational resources, tax revenues), etc. At the present stage of development, there is a need to accumulate financial resources from all possible channels, in addition their optimal and purposeful distribution in accordance with the priority areas of event-tourism and effective use.

As a whole for the gradual development of the tourism industry, the implementation of the following actions will be appropriate in modern conditions: the creation of a regional fund for the development of event tourism; selection of state subsidies for the targeted development of tourist infrastructure, which is widely used in the practice of highly developed countries such as France, Great Britain, Italy, Austria, Greece; development of mixed investment with the participation of public and private investments, and also through the development of public-private partnerships; guarantees from regional authorities in the provision of loans by commercial banks to business entities for the implementation of event-tourism development projects in the region; providing soft loans for initiators and organizers of event-tourism in the region; tax benefits for investors (reduction of income tax rate, tax holidays, tax credit, etc.); attracting additional sources of investment in the form of using fees for licensing and certification; application of accelerated depreciation.

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## **PUBLIC ADMINISTRATION**

### **PERSONNEL RESERVE AS AN IMPORTANT ELEMENT OF THE CIVIL SERVICE**

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**Annotation.** *The article characterizes all aspects of the phenomenon of personnel reserve as an actual element of public service. Exactly its essence, list of possible types, stages of deployment, tasks of organising and approaches to this process, and also requirements for candidates for directing to the reserve are analysed here. All relevant features are systematically and coherently established based on materials from Ukrainian and foreign authors.*

**Keywords:** *personnel reserve, personnel selection (selection of personnel), candidates (applicants) to the reserve, assessment, certification, internship.*

**Introduction.** The analysis of the work of public administration authorities makes it clear that they do not work in reality due to the influence of some abstract principles and concepts that can only serve as theoretical examples, standards of this. First of all, the key force that leads to the movement and functioning of these structures is the actual selection of personnel within public administration institutions, which leads to the placement of the actual people who ensure the functioning of these institutions. When considering ways to reform staffing to the appropriate extent, it is worth considering the possibility of creating a base on which to build and implement it. Since employees are the object of all recruitment operations, such a base should be a collection of employees. The personnel reserve is suitable for selection for positions in any organization, including the public administration system.

**Analysis of recent research and publications.** Of course, the very important for such reasons for the field of scientific analysis of public administration, the issue of personnel reserve for positions within the latter has certainly been the subject of many scientific works. Among the most significant relevant are the works of foreign scientists N. Ivanova [1], Y. Maslov [2], A. Turchinov [5] and O. Vasiliev [1]. In this issue among Ukrainian scientists we can mention such as Y. Kovbasiuk [4], H. Mostovyi [3] and V. Zolotarev [6].

The purpose of this study is to reveal the understanding of the personnel reserve as an important element of the civil service.

**Main results of the study.** Starting the analysis of this phenomenon, we should focus on the analysis of the personnel reserve as a clearly defined concept. Foreign scientist O. Turchinov formulates the corresponding term: "necessary training and are designed to replace certain positions in the organization" [5, p. 211]. Meanwhile, a other researcher Y. Maslov enshrines the relevant definition in this form "under the reserve

of management means a group of employees selected for promotion to management positions based on the assessment of their professional knowledge, skills, business and personal qualities" [3, p.241-242]. It is natural to trace a significant similarity in the content of these terms, only by expanding the list of professional and personal qualities at the request of candidates for the reserve in O.Turchinov. In another vector, our Ukrainian researcher H. Mostovyi moves, proclaiming the priority of emphasizing the functional-targeted focus of the personnel reserve for positions in the public administration in its definition: talented youth [3, p. 245]. However, it is only possible to fully clarify the essence of the reserve of civil servants-candidates for civil service positions through the analysis of all its constituent components and the variety of existing variations.

In order to find out the functional content of all the constituent elements of the personnel reserve, it is necessary to establish the final direction, which is the focus of all of them when implemented. O.Turchinov notes that the purpose of the phenomenon is to create a corps of qualitatively prepared for the productive performance of all functions and to maintain and surpass the achievements of predecessors in civil service positions, employees and thus consolidate the sequence of appointments within these limits. According to H. Mostovyi, the development of the institute of personnel reserve for positions in the public administration system is implemented in order to "build effective and consistent training of employees for appointment to positions of civil servants" [3, p. 244]. Y. Maslov's position on this issue is to postulate the orientation of any organization and government agencies in the formation of a reserve of personnel for the ability to quickly select and redirect specialists from within it to the right positions without time and material resources of personnel selection. He, in addition, develops the following list of tasks for the formation of the relevant personnel reserve, which are to implement:

- "timely filling of vacancies with new employees;
- continuity and stability of management of the enterprise and its divisions;
- appointment of competent, capable employees;
- business training of applicants for the position, the gradual accumulation of the necessary experience in a new position for them" [2, p. 132].

It is necessary to note the importance of the moment of the information base for the creation of a personnel reserve for public administration positions and the selection of persons for it. O. Turchinov gives accurate theses on this issue, formulating a list of necessary data for the integration of such a database:

- "calculation of staffing needs;
- analysis of human resources;
- analysis of the personnel situation in the region;
- plan for revision of organizational structure (organizational design);
- evaluation of candidates for employment, staff diagnostics;
- certification and evaluation of work" [5, p. 211].

Y. Maslov, meanwhile, unfolds a list of sources where you can and should look for this information:

- "materials of the last certification;

- the results of the production activities of the team led by the nominee;
- personal file materials;
- data characterizing the qualifications of employees, employment;
- results of interviews with the reserve candidate;
- reviews of candidates for their immediate superiors and subordinates, managers and subordinates of related units, heads of public organizations" [2, p. 133].

In the analysis of this area should also explore the components of reliable ensuring the effectiveness of the formation and use of the reserve of personnel in any organization and in government institutions. The list of the first works of O. Turchinov can be presented as follows: operational guarantee of unscheduled needs of all levels of the organization in directing employees from the reserve to certain positions, reducing the period of adaptation of employees through their preliminary preparation for positions, quality selection of candidates for the reserve increasing the degree of their professionalism. The scientists also noted that in this vein it is necessary to control the factors of the defined time frame, both the creation of the reserve and the appointment of employees from it. As basic principles of formation of a personnel reserve at selection for positions in public administration institutes based on Turchinov's developments it is possible to note: urgency (real necessity of existence of structure of additional applicants for replacement of positions), correlation of professional and personal qualities of the candidate from a reserve to necessary requirements functions in a certain position, the prospects of the reservist and the existence of significant potential for his career development in a certain position.

Here it is important to note that scientists N. Ivanova and O. Vasiliev proclaim quite similar theses from this: "the formation of the reserve of management personnel should be carried out on the basis of a preliminary assessment of the need for personnel reserve, taking into account the actual or projected staff turnover, planned organizational and staffing activities, the real and long-term needs of state and municipal authorities in management" [1, p. 174-175]. Important for such a study is formed by O.Turchinov list of requirements for candidates for the personnel reserve at any organization, including government agencies:

1. "high level of professionalism;
2. progressive personal characteristics (positive motivation to implement state policy, active attitude to conscientious performance of official duties, responsibility, high self-control, high level of intelligence, ability to make decisions in difficult situations, emotional maturity);
3. clear signs of socio-psychological maturity;
4. general erudition and outlook;
5. organizational skills;
6. efficiency of decision-making and implementation;
7. professional entrepreneurship taking into account market requirements;
8. sense of duty and responsibility;
9. ability to adapt to a new situation and apply new approaches to solving emerging

problems;

10. principledness, honesty;
11. ability to conduct business negotiations;
12. ability to establish normal relationships in the team (psychological microclimate);
13. the ability to see, maintain and apply in the work of new, advanced;
14. susceptibility to criticism;
15. ability to take into account the opinion of the team;
16. ability to unite the team and focus it on the quality of the tasks;
17. ability to effectively and consistently organize work on the relationship with

other departmental and industry organizations" [5, p. 213-214].

At the same time, according to N. Ivanova and O. Vasiliev, when creating a reserve of personnel for civil service positions, it is necessary to pay attention to their corporate, instrumental, professional-communication and managerial competence. According to the comparative analysis of this set of principles with the above list of Turchinov, it can be established that the corporate subtype of competence includes items 5, 12, 15 and from this classification, instrumental – 6, 13, professional-communication – 1, 2, 7, 8, 9, 14, 17, and management – 5, 16.

It is indisputable that at any degree of achievement of all these criteria for the formation of a reserve of personnel for positions in the public administration is implemented in a sequence of certain structural stages. Scientists N. Ivanova and O. Vasiliev expand their list:

1. "assessment of the real need for human resources.
2. goal setting in the formation of the personnel reserve.
3. personnel reserve planning.
4. selection to the personnel reserve.
5. preparation of personnel reserve.
6. use of personnel reserve.
7. exclusion from the personnel reserve.
8. evaluation of the effectiveness of the organization of work with the personnel

reserve" [1, p. 174].

Concluding on this issue, the researchers first of all emphasize that it is especially important that the creation of a reserve of staff for civil service positions, all these stages were passed in a clear sequential chain.

However, Y. Maslov cites another variation of this list, regarding the passage of the relevant procedure within any organization and, of course, in the apparatus of public administration:

1. "determining the need for managers (numerical and personnel of the reserve);
2. preliminary recruitment of applicants for the personnel reserve;
3. study, evaluation, selection of candidates for the reserve;
4. consideration, approval, approval of the reserve;
5. work with a reserve;
6. control over the preparation of the reserve;

7. determining the readiness of persons from the reserve to be appointed to the position" [2, p. 132].

A comparative analysis of the lists of stages of formation of the personnel reserve for positions in public administration structures will provide an opportunity to determine both the common constructiveness in the dimension of science, but also the pluralism of the positions of their creators. The measurement of the first criterion reveals a partial coincidence in the content of the stages according to the versions of the lists of N. Ivanova, O. Vasiliev and Y. Maslov, namely the first and the first, the fourth and the third, the sixth and the fifth, respectively. The differences between these sequences of stages are in the greater concentration of the focus of the scientist Y. Maslov's research on additional assessment processes and the corresponding stages in relation to the representatives of the personnel reserve in this matter. However, N. Ivanova and O. Vasiliev focus on establishing only a clearly functional goal of each stage to create a reserve of personnel in the selection for positions in public administration systems, and the corresponding list includes the post stage, while Y. Maslov establishes its end immediately on the achievement of the immediate goal of this procedure.

If we consider different classifications of types of personnel reserve for civil service positions, we should first turn to the concepts of O. Turchinov. He approves their main division into three types: potential, preliminary and final reserves. According to Turchinov, the potential form of the reserve appears as a set of promising employees who, according to all standard requirements, are suitable for replacement of public administration positions in the future. The previous reserve is a narrowed variation of the potential for and selection of the best of the best people from the latter.

From the standpoint of O. Turchinov, the practical training of the personnel reserve for positions in public administration bodies should consist of:

- "internship in the position to which the "reservist" is enrolled;
  - temporary replacement of absent managers for the period of their business trips, vacations;
  - trips to other organizations to study positive experiences;
  - participation in teaching in the system of advanced training;
  - participation in inspections of other subdivisions of the governing body;
  - participation in the preparation and holding of conferences, seminars, meetings"
- [5, p. 213].

Meanwhile, Eugene Maslov provides a list in the following format:

- "training at courses, faculties and in institutes of advanced training, in reserve schools;
- organization of internships in management positions and temporary performance of duties of heads of departments;
- granting the right to resolve certain issues at the level of the manager for whose replacement the employee is preparing;
- business trips to other companies to get acquainted with advanced methods and work experience" [2, p. 133].

Doctor of Economics H. Mostovyi postulates the following author's approach to outlining the components of the following list:

- "study and analysis of the regulatory framework;
- mastering the theoretical foundations and getting acquainted with best practices in this field;
- periodic training and advanced training in relevant educational institutions (including foreign ones);
- participation in seminars, meetings, conferences on problems and issues of state authority and structural subdivisions, other communicative events;
- internship with the performance of official duties in full in the state body, the personnel reserve of which includes the employee;
- involvement in the consideration of relevant issues, inspections, official investigations;
- participation in the preparation of draft regulations and other documents" [3, p. 244].

**Conclusions.** As a result, after comparing all three of these lists on the mandatory elements of training reserve for positions in the public administration system, you can clearly identify their similarities and differences, for example, immediately stop looking at their similarities in highlighting the importance of internships as one of the relevant components.

It is also possible to determine the list of factors for the effective creation of a personnel reserve to replace civil service positions, namely the annual adjustment of the reserve of managers, staffing, planning appointments, determining the feasibility of further stay in the reserve of appointees, calendar approval on the formation of the state order for retraining and advanced training of specialists, increasing the prestige of the organization, as well as moral and material incentives to improve the professionalism and career growth of employees included in the personnel reserve.

In order to intensify work with the personnel reserve, it is necessary to create regional centers on the basis of higher educational institutions for training the reserve of professional managers and maintaining their qualifications at a competitive level, as well as forming a personnel reserve for relevant positions, including staffing and recruitment agencies.

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## PERSONALITY'S REACTION TO THE STATE'S ECONOMIC CRISIS PHENOMENA

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**Annotation.** *On the basis of the State Institution "Scientific and Practical Medical Rehabilitation Center of the Ministry of Health of Ukraine" a questionnaire of the region residents was conducted to determine personal economic security in society during the COVID-19 pandemic, which became one of the threats to economic stability.*

**Keywords:** *economic security, economic crisis, information environment, quality of life, national welfare.*

**Introduction and setting of the problem.** A person's life at any time is full of difficulties, whether they are diseases, life changes or losses. The number of difficulties that modern man has to face has increased significantly due to the increase in the number of potential dangers because of the technological progress, increase of socio-political tensions, expanding the list of activity areas that place great demands on the individual, covid pandemic, forced isolation and others. In this regard, the modern economy of Ukraine is experiencing significant challenges and obstacles to its development. And the indicators of the economic system are sometimes inferior to world standards, because the presented phenomena entail significant economic losses and socio-psychological discomfort, both for an individual and for the whole country. This multiplies crises, increases the level of mental pathology, incapacitation, disability, thereby reducing the standard of living and health of the nation.

Turbulent social transformations, economic and political crises, information and emotional overload, as existing threats to human health, will continue for a long time. Under these conditions, it is especially important to understand the personal response of a person during the period of global upheaval, understanding the mechanism of formation and flow of this process to plan appropriate social measures to prevent social conflicts and build a sustainable economy.

**Analysis of recent research and publications.** The analysis of literature sources shows that a significant influence on a person's personal development is caused by crisis situations in which he/she is at certain stages of his life. Among modern Ukrainian authors, the problem of personal transformations during crisis periods is raised by V.Y.

Bocheliuk [1], S.B. Kasianova [3], P.V. Kukhta [4], A. Laznia [5], A.O. Melnyk [6], V.M. Zaika, V.F. Morhun [9], L.S. Zaitseva [10], Ya.A. Zhalilo, O.S. Babanin, Ya.V. Belinska [11]. However, the dynamism and immensity of social crises bring new challenges for researchers. The behavior of the individual in crisis situations is of particular scientific interest

Currently, there is a lack of common understanding of the full range of consequences because of economic instability influence on personal reactions, as well as issues of counteracting the destructive manifestations of the crisis in the economy. Researches should be aimed at in-depth study of a person's inner potential, which helps him to counteract under conditions of economic crisis, preserving his personal essence, integrity, identity and prediction of personal reactions.

The purpose of the study is to investigate the reactions of the individual to the economic crisis of the state and to develop a model of synchronization of economic and personal interactions.

**Main results of the study.** The State Institution "Scientific and Practical Medical Rehabilitation Center of the Ministry of Health of Ukraine" conducted a study of personal reactions of the Donetsk region residents in order to determine personal economic security in society (during the COVID-19 pandemic). The study involved 200 people aged from 18 to 76 years, including 143 women (71.5%) and 57 men (28.5%).

Among the respondents, 53 (26.5%) respondents had higher education; secondary special education had 61 (30.5%); secondary technical one had 37 (18.5%) and secondary one – 53 (26.5%). At the time of the study, 106 people (53%) had a permanent job; 57 (28.5%) were unemployed; 32 (16%) were pensioners, 5 (2.5%) were students.

During the research, respondents were asked to assess the economic stability of Ukraine with a 5-point scale, where 5 points was the most stable economy, and 0 – no stability at all. Thus, the distribution of preferences among the population was as follows: 0 points were chosen by 48 people, which constituted 24% of the sample, 1 point – 40 people (20%), 2 points – 48 people (24%), 3 points – 46 people (23%), 4 points – 14 people (7%), 5 points – 4 people (2%). Thus, a certain majority, or rather 68% of respondents, assessed the state's economy as unsatisfactory. The situation of social production, distribution, exchange and consumption of the country's goods, as well as production relations that arise between people in these processes is perceived as almost absent or with significant fluctuations in the direction of volatility and corruption.

When asked whether you believe that changes in the economic plan in our country will take place, only 3 respondents, which accounted for 1.5% of respondents, answered – yes, positive changes are already happening; 13 respondents (6.5%) said that positive changes will take place in the nearest future. It will take at least 5 years to improve the economic situation, and 15% of examined participants (30 people) agreed. Social pessimism was found in 61 people (30.5%). That is, these people do not believe in a change in the economic situation for the better (there are no changes and are unlikely to be). Among 22.5% of respondents (45 people) there is hope for change, but it will come no earlier than in 10 years. It was difficult to answer this question for 48 people (24%).

The reasons for the latter were a lack of understanding of the current socio-economic situation, which caused difficulties in formulating their own opinions, and making a special forecast.

Along with economic instability, the information environment acquires a certain significance which affects the mental state and psychological well-being of the population, because a person is affected not only by constant information contact with the social environment (or lack thereof), but also the amount, volume, content and structure of information received and processed, because information can cause physiological disadaptation, leading to mental disorders. The use of information technology in almost all spheres of public life leads to the fact that society and each individual are becoming increasingly dependent on information [7]. Today, the human psyche has a large amount of perception, processing and display of information, accompanied by a high emotional load. The reason for the exacerbation of mass destructive influence is the lack of mechanisms of socio-psychological regulation in a digital society. The immensity and strength of the information environment influence shows that the information space within the country has a shaky content structure, which creates additional reasons for the emergence of an excitement wave and panic among people. In this regard, one of the tasks of the study was to identify the attitude of the subjects to the information space in which they are, as well as to assess the quality of information and the need to obtain it.

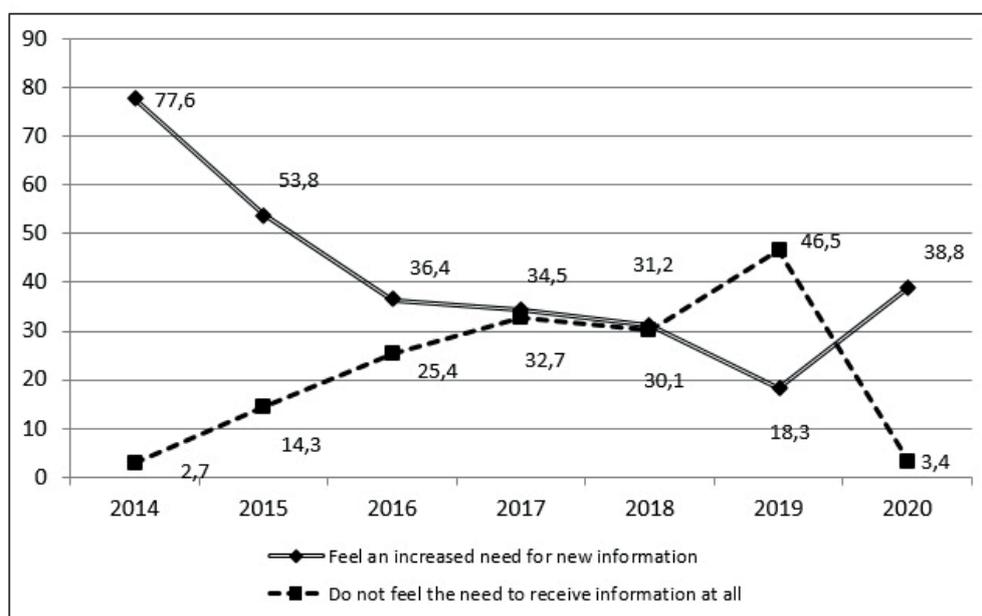


Fig. 1. The results of the study of the population's perception of relevant economic, social and political information (%).

The analysis of the survey results showed that the need for information about dispensing of the pandemic and its economic consequences at the beginning of the COVID-19 pandemic increased rapidly (Fig. 1). The number of people who are not interested in information at all has also increased significantly up to 3.4% per year (Fig. 1). There is a question of the state level in the creation of the state information policy, concerning providing the population with timely, truthful, objective and positive information.

It should be noted that the maximum efficiency of a person is achieved under the condition of his/her favorable emotional. The latter is ensured by the positive mobilized participation of the individual in the socially - useful production of the national product, which in turn reduces the risk of morbidity and prevents disability and incapacity, which burden lies as the aggravating encumbrance of social assignment on the economy.

It was found that the greatest trust among the sources of satisfying the information needs requirements are Internet news sites, and this choice was preferred by 36% of respondents. The second and third positions were taken by analytical programs "News" (19% of respondents) and social networks (13%). A number of latest positions were occupied with talk shows of various television channels (9.5%) and others (6.5%). A quarter of respondents (25.5%) do not trust any of the types of information sources.

Today, the human psyche can withstand significant information and emotional loads. The reason for the exacerbation of mass destructive effects on the psyche is the lack of mechanisms of socio-psychological regulation in a digital society [8]. The immensity and power of the information environment influence on the people's psyche, their personality in modern conditions shows that the information space within the country has an unstable content structure, which creates additional reasons for an excitement wave and panic among people. If the state does not produce its own information product, does not control the quality of content of both in state and non-state origin, then the internationalization of space for the progression of various threats is formed, including information wars, provoking the economic and humanitarian crisis, which in turn gain significant immensity. Along with the economic hardships that everyone experiences, negative feelings and emotions are greatly multiplied by the media. That is, it is possible to build a certain situational chain of economic danger experienced by the individual in society [2].

Economic security is inextricably linked with the national welfare of the population. The most important components of the quality of life are such indicators of economic well-being as income and savings, the level of social security and consumption of material goods and services. As part of the study, only 6 respondents (3%) rated their earnings in terms of income and expenses as high (income much higher than basic social expenditures); as sufficient one (profit is enough to cover social costs and a certain amount still remains) – 13 people (6.5%); as an average (profit equals expenses) – 106 people (53%); as low (costs more than profit, there are debts, loans, credits to meet the most necessary (food, household items, etc.) – 75 people (37.5%).

In addition, reliable, long-term earnings were determined for only 18 people, which

constituted 9% of respondents; 79 people (39.5%) had a permanent income, but are not sure of its duration relatively to the future; 35 people (17.5%) rated their earnings as temporary. More than a quarter of the sample (28%) had material provision only at the expense of social benefits of the state (unemployment benefits, per child; old-age, disability pension, etc.) and 12 people (6%) said that their own earnings are missing, satisfaction of own needs is due to the income of other people (husband or wife, parents, roommates). Only 21.5% of the sample had full social protection (coverage of sick leave, leave, bonuses, material assistance, pensions, health savings), a partial social package for 50 people (25%). In 20% (40 people) the social package is almost absent and 33.5% of respondents stated that the social package is completely absent. Thus, the above data indicate a catastrophic state of security of the citizens of Ukraine, which requires the fastest response from the state.

The COVID-19 pandemic has become one of the threats to the country's economic stability. According to the results of research, we found that as a result of quarantine measures and restrictions (91) (45.5%) persons suffered from material and moral damage. Only 56 people (28%) suffered morally, 18 people suffered materially (9%), 18 people (9%) did not feel any changes. So, most people have experienced financial turmoil, the presence of negative thoughts, feelings and emotions.

Recently, emotions are increasingly being analyzed not only as manifestations of mental activity of the individual, but also as a socio-cultural phenomenon that deserves sociological examination, namely the consideration of emotions in terms of their contribution to the reproduction and change of certain aspects of social structure, identifying their importance in various spheres of human life.

Emotions are subjective experiences that signal about successful or unfavorable state of the body and psyche. Emotional tension activates a cascade of negative emotions: anxiety, fear, aggression and others. Taking this into account, during the research the emphasis was placed on the actual emotional color of the respondents, the assessment of the prevailing emotions, which had their own distribution, was assessed. In view of this, respondents were asked to assess their emotional attitude towards the economic situation in the country and the economic situation in their own families. For a clearer perception and better understanding, the results of assessing the emotions of respondents regarding the current economic situation in the state and in the family are presented in Tables 1 and 2.

Thus, Table 1 shows that the predominant emotions (average, above average and high levels) in relation to the economic condition of the state was anxiety (62.5%), irritation (61%), fear (60.5%), and despair 53%). In a situation of danger, the individual responds with a sense of uncertainty, anticipation of negative events and distraction from their conscious thinking. Due to the existing obstacles to the realization of the goal or the satisfaction of personal needs, these manifestations turn into frustration and anger. To some extent, the critical thinking of the individual is lost, because the latter falls into the whirlwind of information, accompanied by socio-economic chaos.

Table 1

**Assessment of emotions of respondents regarding the current economic situation in the country (n = 200)**

Kind of emotion	The level of expression of emotions*					
	0 scores	1 scores	2 scores	3 scores	4 scores	5 scores
Fear	35 (17,5%)	18 (9%)	26 (13%)	64 (32%)	31 (15,5%)	26 (13%)
Anxiety	28 (14%)	18 (9%)	29 (14,5%)	64 (32%)	34 (17%)	27 (13,5%)
Despair	55 (27,5%)	20 (10%)	19 (9,5%)	49 (24,5%)	38 (19%)	19 (9,5%)
Helplessness	56 (28%)	23 (11,5%)	24 (12%)	47 (23,5%)	32 (16%)	18 (9%)
Irritation	46 (23%)	12 (6%)	20 (10%)	53 (26,5%)	37 (18,5%)	32 (16%)
Hopelessness	56 (28%)	12 (6%)	27 (13,5%)	65 (32,5%)	22 (11%)	18 (9%)
Insult	63 (31,5%)	17 (8,5%)	26 (13%)	50 (25%)	28 (14%)	16 (8%)
Indifference	82 (41%)	12 (6%)	26 (13%)	50 (25%)	23 (11,5%)	7 (3,5%)
Rest	70 (35%)	19 (9,5%)	33 (16,5)	52 (28%)	20 (10%)	6 (3%)

\*, where 0 points - this emotion is completely absent, 5 points - the maximum manifestation.

The data in Table 2 show that emotional predominance in relation to personal economic well-being had – anxiety (58%), fear (52%), irritation (47%), despair (41.5%).

The results of the tables show that emotional phenomena are largely due to processes occurring in society, as well as prevailing values. For a more complete and clear understanding of the actual response of the individual to economic events in the state and the family, a comparative analysis has been made, which is presented in Figure 1.

Figure 1 shows that the personal response to economic instability is anxiety, fear, and irritation both in the country and the family. Dissatisfaction with needs provokes the growth of irritation to other events, situations, or anything else. It becomes unfocused on something specific, and spreads to all areas of life, which eventually transforms into somatic ailments (psychosomatic illnesses). Thus, economic danger is a personal threat to man. In turn, a stable economy forms a strong economic potential with reliable staffing. In order to implement the latter, there must be a system of ensuring the economic security of the state and counteracting the negative impact of threats that may harm it, by improving and implementing the latest integrated measures.

Table 2

**Assessment of respondents' emotions regarding the economic condition of the family (n = 200)**

Kind of emotion	The level of expression of emotions*					
	0 scores	1 scores	2 scores	3 scores	4 scores	5 scores
Fear	43 (21,5%)	20 (10%)	33 (16,5%)	62 (31%)	26 (13%)	16 (8%)
Anxiety	28 (14%)	21 (10,5%)	35 (17,5%)	61 (30,5%)	29 (14,5%)	26 (13%)
Despair	64 (32%)	19 (9,5%)	34 (17%)	44 (22%)	29 (14,5%)	10 (5%)
Helplessness	68 (34%)	23 (11,5%)	28 (14%)	46 (23%)	25 (12,5%)	10 (5%)
Irritation	55 (27,5%)	18 (9%)	33 (16,5%)	44 (22%)	29 (14,5%)	21 (10,5%)
Hopelessness	71 (35,5%)	21 (10,5%)	31 (15,5%)	44 (22%)	23 (11,5%)	10 (5%)
Insult	75 (37,5%)	27 (13,5%)	20 (10%)	46 (23%)	18 (9%)	14 (7%)
Indifference	88 (44%)	18 (9%)	28 (14%)	43 (21,5%)	16 (8%)	7 (3,5%)
Rest	56 (28%)	24 (12%)	30 (15%)	54 (27%)	21 (10,5%)	15 (7,5%)

\*, where 0 points - this emotion is completely absent, 5 points - the maximum manifestation.

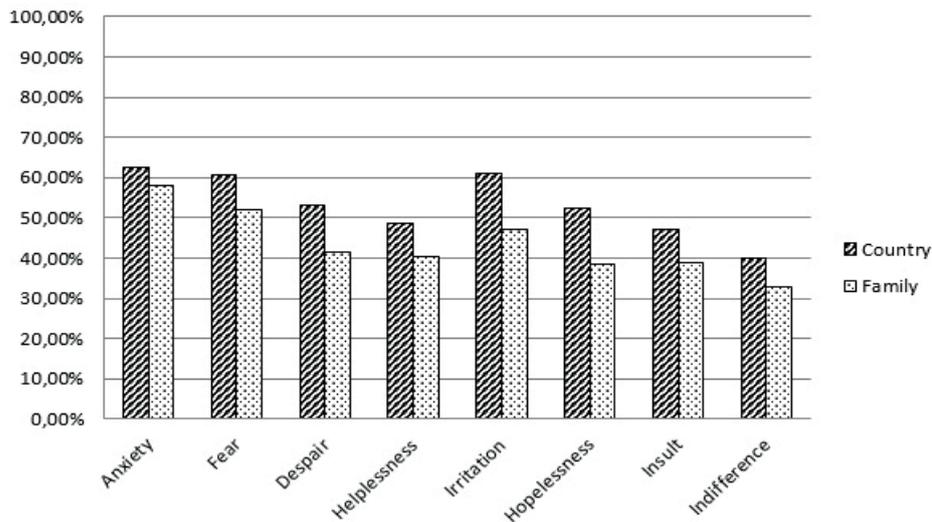


Fig. 1. Comparison of emotional preferences in relation to the economic condition of the country and your own family

Emotions of society, being a basic, integrative category for all emotional phenomena of society, on the one hand, reflect the importance of socio-economic transformations and on the other - affect the course of transformation processes. Taking into account the latter, a model of the integrity of the individual and the general economy of the state has been developed and presented (Fig. 2).

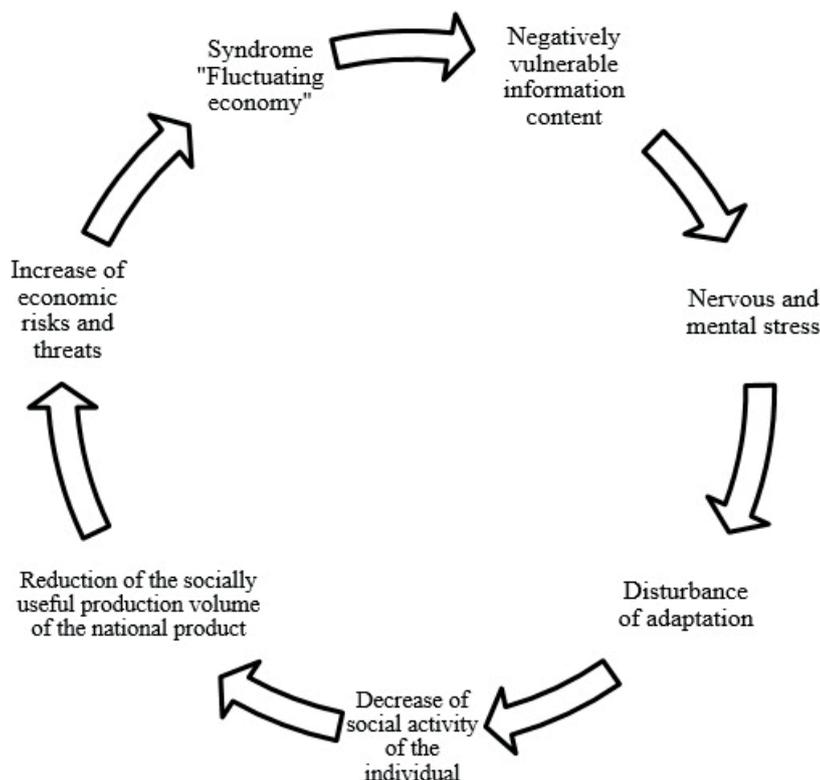


Fig. 2. Model of economic and personal interaction synchronization

The model of synchronization of economic-personal interaction lies in the connection of the structural components of the system "individual-economy-state", determination of their impact on each other, taking into account the main, additional external and internal factors. Information content is the main external factor of influence, which in turn can have both positive and negative content. The perception of this information and the intensity of its consequences depend on the individual human reaction, which is formed from the existing type of nervous system, individual psychological qualities, life experience and traumatic events.

These factors will be directly correlated with the development of mental stress. That is, the more internal trigger factors for the development of mental stress, the higher its level. In turn, constant (long-term), high-level, mental stress provokes maladaptation

(the presence of emotional disorders, low mood, lack of motivation, loss of vital energy, suppression of cognitive processes, the appearance of hopelessness of behavioral disorders, etc.). In relation to this, the decrease in social activity of the individual increases (overall performance of working ability, quality and volume of performed work decreases, non-compliance with the established production plan takes place, increased intrapersonal, interpersonal conflicts, deteriorating of psychological climate within the team), thereby reducing the volume of social -useful production of the national product, which provokes the prevalence of economic threats and risks, and as a consequence of fluctuations and imbalances in the economy, the increase of wrong decisions and erroneous actions in the economic sector at the state level. Such a logical chain ends with the intensification of the “Fluctuating economy” syndrome. This syndrome is characterized by a triad of signs: vulnerable information background, maladaptation, industrial collapse.

The prevalence of vulnerable information in all spheres of life provokes maladaptation manifestations, which is accompanied by damage to human health, and from this an industrial collapse develops (falling intensity of the main structures and suppression of the entire system of national production).

Thus, behavior in complex crisis situations is determined by the personal characteristics of the subject and the specific situation, which are decisive in choosing the strategies that are optimal in each case. Modern society needs a person who is able to withstand the pressure of adverse factors: social, economic, political and others.

**Conclusions.** 1. General economic, political and social crises have a significant impact on public health. Such processes especially strongly determine the emotional and stress response of a person, which is the basis for the formation of pathological processes and especially painful consequences that affect the economic activity of the subject, the economic well-being of the state. Therefore, it is mandatory to implement specific government programs aimed at maintaining the health of citizens during economic crises.

2. The vivid pandemic COVID-19, forced isolation, military conflict, difficult economic and political situation have become a significant challenge for the country and its citizens, because economic instability has a destructive role in social welfare, national health and human capital. The existing system of rehabilitation services faces new challenges in providing medical, psychological and social assistance aimed at strengthening of stress resistance and improvement of the life quality.

3. The state of the country's economy, which is experiencing not the best times of its formation, is deteriorating even more due to excessively information support, and which is not always reliable. This unfolds chaos of political, economic and socio-psychological nature in society and in the country. Economic and information shocks contribute to the formation of a negative socio-psychological atmosphere among the population, thereby provoking the development of mental pathology among the latter and causing economic damages. The mechanism of this process development is clearly represented in the model of synchronization of economic and personal interaction. It sustains that vulnerable information content leads to economic catastrophe due to the

formation of the "Fluctuating economy" syndrome.

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## IMPROVING THE BUSINESS SUPPORT SYSTEM AS ONE OF THE AREAS OF STATE EMPLOYMENT POLICY

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**Annotation.** *The article examines the areas of entrepreneurship support in the context of employment policy. It is established that the activation of entrepreneurial potential is the support of the state, which should be implemented primarily through such measures as temporary tax exemption for small and medium-sized businesses; providing loans to stimulate exports; creating an effective competitive environment; stimulating innovative development, etc. It was substantiated that in Ukraine there is an urgent need to guarantee state support and business growth. State measures in this aspect should combine both the system-wide organization of the market environment and special measures of state regulation and state support and the formation of entrepreneurship, including at the regional level.*

**Keywords:** *business, employment policy, entrepreneurship, state, measures, regulation, support.*

**Articulation of issue.** The practice of national entrepreneurship shows that the problems of its formation precede the existing regulations, theoretical, methodological and experimental developments on issues of entrepreneurial functioning. For example, small businesses were biased in their origins, compared to powerful companies. That is why small businesses need to create a favorable special space for its successful growth. In its economic content, state assistance to national entrepreneurship should become a tool that would equalize the circumstances of large and small businesses, but at the same time would not destroy the process of market procedures in competition between them. However, the significant use of foreign systems in practice is quite problematic for the Ukrainian economic reality. Factors that affect the growth of entrepreneurship in one country cannot guarantee the same consequences in another. Their influence was caused not only by economic circumstances, but also by the historical formation of entrepreneurship in each state, including the established norms of behavior of a person in society, and, in addition, moral and spiritual heritage.

**Analysis of recent research and publications.** This topic has Kravchenko M.S., Slobodyanyk S.S., Trunina I.M., Umanets T.V., Olvinska Y.O. and others. However, in the context of continuing reforms in Ukraine and ensuring the implementation of employment policy in the direction of supporting and creating appropriate conditions for business development remains an urgent issue, which was the reason for choosing the topic of this article.

The purpose of the article is to analyze the business support system as one of the directions of the state employment policy.

**Presenting the research findings.** «Doing Business» – this is a rating that has existed since 2003. From 2018, data on the Doing Business rating for next year are

prepared as of April 30, and will be published at the end of October this year. The study collects and analyzes complex quantitative data in 10 areas (indicators) to compare the conditions of business regulation between countries and in the dynamics, thus the project "Doing Business" encourages countries to more effective regulation and provides measurable benchmarks for reform [1]. The main changes that affected Ukraine's place in the ranking were giving in the table 1.

Table 1

**Changes that have affected Ukraine's place in the ranking DoingBusiness**

Rating component	Year of change	What has changed	Balls iMoPe, from -5 до +5	Change of position in the Doing Business rating
Starting a business	2015	Ukraine has facilitated the procedure of starting a business: reduced time for mandatory registration of VAT payers, abolished fees for business registration.	+2 Balls	+46 (from 76th place to 30th place)
Protection of the rights of minority shareholders	2016	Ukraine has strengthened the protection of minority shareholders: it has introduced requirements to exclude an interested director or shareholder from voting. Also introduced remedies in case of adverse effects of transactions with related parties on the company, clarified ownership structure and control.	+3 Balls	+18 (88 → 70)
	2017	Ukraine has strengthened the level of protection of minority shareholders by introducing requirements for detailed and immediate disclosure of related party transactions. This became possible due to changes in the regulations on disclosure of information by issuers of securities	Not evaluated	11** (70 → 81)
	2018	Ukraine has strengthened the protection of minority investors by increasing the disclosure requirements for related party transactions in the annual reports of joint stock companies. The related law "On simplification of doing business and attracting investments by issuers of securities" was evaluate.	+3 Balls	+9 (81 → 72)
Payment of taxes	2014	Ukraine has made it easier for companies to pay taxes by introducing an electronic system for paying personal income tax. On the other hand, the environmental tax was raise.	Not evaluated	+56 (164 → 108)
	2017	Ukraine has simplified the payment of taxes by reducing the size of the Single Social Contribution.	+2 Balls	+41 (84 → 43)

Execution of contracts	2016	Ukraine has simplified the implementation of contracts by introducing an electronic court payment system.	Not evaluated	+17 (98 → 81)
	2018	Ukraine has simplified the implementation of contracts by introducing a simplified procedure for minor complaints and pre-trial investigations in commercial courts.	+2 Balls	+25 (82 → 57)

Source: [2]

From 2012 to 2019, Ukraine rose from 152nd place to 71st place in the overall ranking. However, its general position in the Rating was also influenced by significant positive changes in other countries, as many of them also focus on the Doing Business rating when carrying out reforms. If we talk about the place among neighboring countries and post-Soviet countries, the country's position is almost the lowest. Things are worse than in Ukraine, only in Uzbekistan and Tajikistan. Georgia (6th place in the overall ranking), the Baltic countries Lithuania (14th position), Estonia (16th place), and Latvia (19th position in the overall ranking) were among the top five countries in the post-Soviet space.

Thus, it is too early to talk in this case about a qualitatively new level of business opportunities in Ukraine; in addition, no less important is the subjective assessment of the attitude of the population to entrepreneurship in the country under study.

The state policy of business support becomes substantiated only if it is based on a functioning system of economic legislation, taking into account modern conditions, interests of society and business entities. It should be based on the historical, economic and social characteristics of society, which will form the appropriate basis for entrepreneurship to be able to become the equivalent of the public sector of the economy.

Despite a number of regulations recently adopted by higher authorities and management, the growth of entrepreneurship in Ukraine takes place in an unfavorable macro- and micro-environment: there are a large number of problems that need to be addressed at different levels. Studies of statistical information and sociological research show that the sphere of entrepreneurship in Ukraine does not keep up with the capabilities and demands of the Ukrainian economy.

Modern scientists are trying to develop ways to improve the development environment of domestic enterprises. For example, M. Kravchenko suggests “some directions for accelerating the development of entrepreneurship in Ukraine, namely:

- further improvement of the legislative and regulatory framework to create favorable conditions for the development of domestic entrepreneurship;
- improvement of credit policy, organization of state credit institutions for the purpose of preferential lending to business entities;
- strengthening state support for small and medium enterprises;
- improvement of tax policy regarding the functioning of the simplified taxation system;

- stimulating the development of entrepreneurship in industries that ensure the highest efficiency of social production and its competitiveness through the use of scientific and technological progress, resource-saving technologies, the production of fundamentally new types of products;

- formation of strong domestic aggregate demand for domestic products;

- export orientation, which requires the creation of knowledge-intensive jobs in order to use the intellectual potential in the manufacture of high quality products” [3].

According to the scientist S. Slobodyanyk, “the efficiency of entrepreneurs in Ukraine largely depends on the implementation of such measures as:

- increase in foreign investment flows in domestic innovation processes;

- creating an appropriate legal environment for development of innovative and scientific and technical activities, increasing the motivation of entrepreneurs to high-performance and high-quality activities through improving the system of economic incentives by amending tax, customs legislation, the adoption of the Law on Corporations;

- development and implementation of a government program that will provide additional funding from the state budget for the costs of authors for patenting scientific and technical developments;

- promoting the development of a highly developed stock market, venture business, in general, the investment and financial sector of the economy;

- providing state support for innovative entrepreneurship through the creation of venture funds, the capital of which will be formed by 30-40% with the participation of the state;

- improvement of the system of protection of intellectual property rights through the harmonization of the domestic legal framework in the field of innovation with international standards;

- promoting the development of small and medium-sized domestic innovative enterprises, which will ensure the spread of innovative entrepreneurship, the development of economic competition in its environment;

- ensuring the development of innovation infrastructure, creation of regional innovation centers;

- development of a system of examination of imported technologies according to clear criteria; imposing sanctions on companies that use imported technologies that degrade the environment, especially if there are domestic counterparts with a lower level of danger to the environment;

- formation of innovative culture of society: support of scientific publishing houses, scientific and popular science publications, expansion of educational programs, raising the level of educational and scientific process, etc.” [4].

- At the same time, according to I. Trunina, the main directions of accelerating the development of entrepreneurship in modern conditions of transformation, the transition to an innovative model of economic development of Ukraine should be recognized as follows:

- further improvement of the legislative and regulatory framework to create favorable

conditions for the development of small and medium enterprises;

- improvement of credit policy (organization of state credit institutions for the purpose of preferential lending to business entities, especially beginners of small business);

- improvement of tax policy (ensuring the functioning of the simplified taxation system with preference to the single tax and the right of those working in the business sector to social and pension provision);

- further strengthening of state support for small and medium enterprises (financial and credit, property, information and personnel), creation and operation of a network of business centers, business incubators, etc.;

- stimulating the development of entrepreneurship in industries that ensure the efficiency of social production and its competitiveness through the use of scientific and technological progress, resource-saving technologies, the production of fundamentally new products;

- ensuring the implementation of measures to create a single automated system of state registration of business entities;

- implementation of measures for the gradual creation of a network of training centers for training entrepreneurs among the unemployed at employment centers;

- strengthening the responsibility of executive bodies, civil servants for the implementation of relevant laws on business development [5].

Analysis of the activities of business entities shows that a significant number of start-ups can not start their work due to lack of sufficient share capital, raw materials, own space and equipment, practical skills and entrepreneurship of employees in doing business. They experience problems of a production nature, difficulties in selling products, forming the appropriate clientele. Due to the small volume of economic activity, some companies are unable to attract skilled professionals, hire capable workers and provide them with a high level of wages. Constraining factors such as the general decline in domestic commodity production, rising prices, inflation, low solvency of the population, corruption, etc. also have a negative impact on the development of entrepreneurship [6] This necessitates the development of an effective system of growth and state support for entrepreneurship in accordance with various components.

Steady dynamics of development of the domestic (and regional) economy of Ukraine is a guarantee of mandatory sustainable growth of small business, because a significant intensification of small business is observed during its accession to production and infrastructure links with large (and medium) production; as well as in response to increased incomes and growing effective demand of citizens for goods and services (including in regional markets).

In Ukraine, there is an urgent need to guarantee state support and business growth. State measures in this aspect should combine both the system-wide organization of the market environment (competitive, tax, foreign economic, customs and other trends) and special measures of state regulation and state support and entrepreneurship, including at the regional level. The issue of providing enterprises with resource, educational and informational support is still omitted. In addition, in Ukraine there are no clearly defined

areas (main tasks) of state support and growth of entrepreneurship at the regional level (taking into account the characteristics of each region).

The most important role at the state level should be given to the encouragement of business entities to increase innovation (including in the field of energy saving, mastering alternative energy, manufacturing competitive products and services, import substitution), which requires:

1. Develop procedures for financial and credit assistance to national businesses that perform innovative actions:

- set the amount of budget funding that can be used to finance innovative actions;
- encourage the involvement of assets of financial institutions and business entities in venture funds;
- plan reimbursement of interest from the budget for the use of bank loans for the implementation of innovative projects.

2. To support the formation of appropriate leasing institutions, the main direction of which should be to promote entrepreneurship through:

- emphasis on supporting the modernization of fixed assets of innovative enterprises;
- support for the improvement of experimental principles for the implementation of applied research.

3. Introduce a mechanism of orders by the state authorities for the implementation of significant for the state innovative scientific and technological developments that can be implemented by national businesses.

4. In order to encourage cooperation between the spheres of large and small business in the implementation of innovations to involve relevant analytical units, which will allow:

- to study the market demand for scientific, technical and innovative products, to enter the results of research in the relevant information databases;
- to determine the requests of large enterprises to take action to develop and implement innovations, to report them to small enterprises;
- to support the organization of cooperation relations of large, medium and small businesses in the innovation sector.

5. Create an electronic innovation exchange and within it:

- to form an information base about innovation-oriented enterprises of interest to investors;
- to develop electronic information resources, which are focused on the dissemination and advertising of innovative business projects;
- to provide support in the development of business plans and investment projects of enterprises in the innovation sector.

**Conclusions.** It is also possible to offer such advice on urgent measures of effective assistance and outlining the main prospects for the promotion and development of entrepreneurship at the regional and local levels.

1. To support the creation of a comfortable business environment:

- to harmonize the current regulations of local state administrations and local

governments with the norms of state regulatory policy;

- develop a procedure for partial compensation from local budgets of interest rates on loans used by small and medium enterprises in order to implement investment projects;
- create regional information databases on investment proposals of small businesses (especially focus on disseminating information among international investors).

2. In order to create new jobs and reduce unemployment, as well as to encourage the growth of entrepreneurship, the local authorities need to:

- support the self-employment of the unemployed by providing them with one-time financial support for organizing their own business. To receive such support, the unemployed must present a business plan to address pressing issues at the regional level;
- during retraining and advanced training of the unemployed, special importance should be given to professions that are not only relevant in the labor market, but also provide an opportunity to start their own business;

- organize seminars and refresher courses for all those who want to do business.

3. Take measures to increase entrepreneurship in rural areas: develop procedures for providing financial assistance to small enterprises that produce environmentally friendly agricultural products, carry out their processing and export;

- to support the retraining of laid-off workers for new forms of work in agriculture and in the growth sector of the so-called green tourism;

- to support the involvement of the unemployed, who are registered in cities, to work in rural areas.

4. Encourage the organization at the regional level of tenders (tenders) for the purchase of goods and services by small businesses through funding from local and state budgets, as well as the involvement of entrepreneurs in the implementation of regional orders.

5. Initiate public-private partnership procedures in the sector of entrepreneurship promotion at the regional level:

- in order to join business entities to participate in the development of regional policy, the formation of Regional Councils of Entrepreneurs on the basis of regional state administrations;

- to encourage the introduction of innovative and energy-saving technologies in the regions through the general provision of funds for projects in scientific, technical and innovative fields implemented by small enterprises;

- to organize every quarter of monitoring the existence of areas of premises that have production and non-production functions, which are in communal ownership and can be leased to business entities.

6. In order to provide information to small enterprises and facilitate their access to the necessary data, to form on-site information databases, where information on the norms of current laws will be concentrated (and classified); information and analytical materials on the growth of entrepreneurship in a particular area, the price situation, regulatory policy, existing banking institutions and credit unions with a list of their services in the field of lending to small businesses.

To improve the situation and support the development of enterprises in the future,

it is necessary to improve entrepreneurship support programs at the state and regional levels. When developing support programs, it is necessary to take into account the economic specifics of a particular area, the degree of its production potential, the number of citizens of working age, the existence of raw materials and more. The duration of regional support programs should be no less than 10-15 years.

However, the implementation of any business support program is fully possible only in the case of its sustainable provision of funds. In view of this, the most important component of the business support infrastructure is financial institutions, which were design to provide businesses with access to monetary funds. However, their underdevelopment and extremely limited opportunities are perhaps the most significant obstacle to the intensive growth of entrepreneurship. Public support is needed to address this issue.

Thus, for the productive activity of entrepreneurship there is a need for a systematic increase in the level of knowledge between representatives of entrepreneurship. The need for regular retraining of labor potential has to do with the progress of technology and science. The latest equipment, and especially high-tech equipment, provides an increasing amount of accumulated and new data. As a result, there is a growing demand for information and analytical skills of the main factor of production - human potential. The least probable level of education required for hiring increases, and the need for the worker's latest experience emerges: the ability to be focused on a very large amount of information, to identify the most significant data and not focus on trivial facts, to be effortlessly aware of the new and to be capable of internal changes, to the regular acquisition of knowledge, self-renewal.

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## **PHILOSOPHY AND POLITOLOGY**

### **THE INFLUENCE OF CULTURAL RELATIONS OF THE CRIMEAN KHANTA ON THE FORMATION OF UKRAINIAN DIPLOMACY AND LABEL (FIRST HALF OF XIII-XVIII CENTURIES)**

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**Annotation.** *The article revealed the peculiarities of the impact of cultural relations Crimean khanate on the formation of Ukrainian diplomatic etiquette and social events and receptions the first half of the XIII-XVIII centuries. In the formation of features and prerequisites for the development of individual ceremonies and protocols in the reinterpretation of the nobility in the territories of modern Ukraine. It is investigated that in the chronological period a rather multifaceted system of secular etiquette culture connected with the circles of the establishment was developed. It is established that the etiquette of secular events and receptions in the Ukrainian lands was formed under the influence of folk culture, Cossack customs and constant transformation of Eastern borrowed diplomatic rituals and traditions (Turkey and the Crimean Khanate, Russia).*

**Keywords:** *folk culture, Cossack customs, etiquette, diplomacy, nobility, cultural relations, establishment circle, Crimean Khanate.*

The issue of the Crimean Khanate and its cultural policy of the Middle Ages - an early modern period to this day, is only partially discovered. As for diplomatic relations and elements of Crimean etiquette, especially in the era of Suleiman the Magnificent - Roxolana, this issue requires special research.

The most important in this context is the publication by the Institute of History of Ukraine of a fundamental historiographical guide (collective monograph) on the history of diplomacy "Essays on the history of Ukrainian diplomacy" (Smoliy, 2001). According to the data presented in the book, it became possible to reconstruct the mental and value vectors of the Crimean Khanate's retractions with neighboring countries, to reveal the specifics of the formation of etiquette culture in this historical and cultural enclave. And this, in turn, became the basis for highlighting the specifics of diplomatic relations of the Crimean Khanate of the first half of the XIII-XVIII centuries in terms of etiquette, diplomatic and cultural cooperation with neighboring countries.

The problem of forming a mutual etiquette culture between countries (Ukraine, Turkey and the Crimean Khanate, Russia) has repeatedly been raised in historiography. In modern historical science almost every scientist, which explores cultural trends in the history of Ukraine of the first half of XIII-XVIII centuries, touches upon those or other aspects of the matter. In particular, Akchurina- Muftiyeva N. (2008), Akhunov A.

(2017), Guanini O. (2009), Ogloblin O. (2001), Galenko O., Kaminsky E. and Kirsenko M. (2001), Krupnytsky B. (2003), Terlyuk I. (2006), Yavornytsky D. (1990), Yakovenko N. (1990) and others. At that time, the Hetmanate periodically acted as a mediator in the negotiation processes between the above-mentioned states, because in one way or another it was in close relations with all of them. Traditions, unwritten life rules, the customary law of the Cossacks from subcultural gradually grew into state-building, where their understanding of culture extended to the entire population of the subordinate territories, forming people's ideas of "worthy" and "unworthy", "acceptable" and "unacceptable", refined, unruly, aesthetic and not, respectful of tradition and shameless, etc. This whole way of life also took care of etiquette (relationships, communication, holding certain ceremonies, initiations, etc.), including the environment of the social elite, where a special "etiquette tone" prevailed.

However, the peculiarities of the influence of the Crimean Khanate's cultural relations on the formation of Ukrainian diplomacy and etiquette, which increased its importance in the international arena, in today's conditions are insufficiently revealed in science. It was more or less revealed in the research papers of R. Radyshovsky, V. Sverbyhuz and B. Krupnytsky, but even today the problem remains unsolved.

The purpose of the article is to reveal the features of the influence of cultural relations of the Crimean Khanate on the formation of Ukrainian diplomacy and etiquette of secular events and methods of the first half of the XIII-XVIII centuries.

Before the capture of the Crimean Khanate in 1475 by the Turks, Greek, Kipchak, and Crimean Tatar languages were spoken here, and negotiations were held with the Genoese fortresses, as well as with Mamluk Egypt. After all, slaves from the peninsula were supplied to the latter [ 7]. Constant retractions united the Islamized in 1311 peninsula with Muscovy, the Lithuanian principality, that from the fourteenth century was in an agreement on the recognition of existing borders.

From 1568, when the Ottoman province (sandzak) was formed, the ulus was inhabited by both the Semitized population, Turks, and people from European lands (primarily Franks, Spaniards, Germans). At this time, trade relations were developing in the Mediterranean and relations were being established with the surrounding countries. The desire to sell merchandise, including vodka, seafood, butter, salt and overseas spices, fabrics, leather and fur, and yasyr slaves formed specific relations with neighboring countries, taking into account the state system of the Crimean Khanate [15].

For example, since the fifteenth century had established relations with Poland, when the Turkish ambassador stayed "in the prince's buildings at the corner of Krakow and his camels, in a number of sixteen, were placed near the town hall " [8]. Given the mental specificity of the notion of shameful violation of this word among Poles, Tatar-Turkish envoys, in addition to the elegant Eastern exchange of gifts, tried to bind the agreements by oath. And in order for this word to be better remembered, they tried to create a certain action from such celebrations, in order to attract as much attention to this event as possible. The whole caravan was placed right on the market square of Krakow, so that the Turkish ambassadors would be noticed, and the very fact of their arrival and

acceptance became public.

At the same time, the Tatar-Turkish agreements were often violated by the initiators of their conclusion unilaterally, which made the fact of negotiations with the representatives of these peoples ambiguous. For the sake of booty, they regularly attacked the Ukrainian settlements of Podillya, the cities of Halych, Zhydachiv, Drohobych, Sambir, and the Polish cities of Lancut , Radymno , Perevorsk , and so on.

From the 16th century, when Roksolana's son Bayazid ruled in Crimea, who had the title of "khan", that is, a sovereign, great tsar, treaty ( shert ) charters were concluded with neighboring countries , which became part of the etiquette and diplomatic culture of the peninsula's embassies in Muscovy (Ivan III) and Lithuania and Poland (Casimir IV) [14]. In the practice of etiquette culture of re-treatments with the Crimean introduced mandatory "toasts", speeches that preceded the beginning of the main presentation of issues in the Eastern tradition. It was necessary to first ask about the health of the ruler, then in accordance with the tradition of " khutba " - religious speeches of Muslims, wait for the proclamation of a religious service in the name of the governor of Allah, and only then proceed to the case.

From the middle of the seventeenth century. From the time of the Giray dynasty, the Adyghe-Kabardians (Circassians) were engaged in the education of future soldiers and "worthy men" in the Crimean Khanate. Among the Tatars, a man who did not acquire the skills of customary law and "good manners" in a military school, in his nomadic society was considered a " tentek ", an uneducated man, not only unworthy of respect, but also contempt. Therefore, the Adyghe educators (Ataliks ) instilled in their descendants the representatives of the Crimean nobility of the virtues of the mountaineers.

In particular, respect for elders, emotional balance and restraint in people, devotion to Islam, understanding the essence of the purpose of a man as a warrior and the essence of his dignity, the specifics of the attitude to the opposite sex. The desire for good upbringing and education in the codes of the elite for several generations led to the emergence of knowledge of European and Slavic languages in this environment and the establishment of stable bilateral relations.

From the second third of the eighteenth century. Entire "conciliation commissions" were already being sent to the Zaporozhian Army from the Crimea, that is, missions were underway. After the end of the Austro- Ottoman- Russian war of 1735–1739, the Russian consulate was permanently located in Crimea. From the early 1750's. In Bahchisarai also held French consulate, which existed until 1783, when Crimean Khanate ceased to exist after annexation troops of Catherine the Second [14]. At the same time, the indigenous local population, in addition to the Turkish-Crimean Tatar language, assimilated the etiquette of the culture of other ethnic groups of the peninsula. Namely, the Greeks, Alans, Tauroscyphians, Italians, Byzantines ( Romans ), Nogai, Karaites, Crimean Tatars, Armenians [1].

It is known that during the seventeenth and eighteenth centuries, the Crimean people established stable relations with the European countries of Scandinavia - Denmark and Sweden, as well as, in addition to Poland and Russia, with Hungary and Austria. As a

part of the etiquette culture of the time, they were instilled with the rules of gift-giving, as well as the desire of missions to live at someone else's expense (apparently due to the oriental specifics of receiving guests at a certain ceremony) [2].

In the etiquette culture of bilateral relations since then, the notions of respectful address to elders "effendi" (translated as "master" or "lord"), the female equivalent of "khanim" ("lady"), and borrowed from the Turkish address "bey" (in the sense of "master") (Tatar world. Crimean Tatars: etiquette - the will of the ancestors, 2006), and the vocative "aha" ("brother"). Among the peculiarities of Turkish-Tatar etiquette, the tradition of putting an older person at the table in the best place, specific gender relations inherent in harem culture, was adopted. At the end of the XVIII century. at the feasts of Turkish-Tatar society it was customary to sit on a lap with a napkin. At the same time, jugs with basins and bowls were used for washing hands, which gradually came into use among European peoples [4].

So, during the XV -XVIII centuries the etiquette culture of the Terek -Crimean Tatar environment was formed, and its effects on the development of the etiquette culture of the surrounding countries were felt, where the ideas of Sarmatism, based on the fascination with Eastern traditions, became especially important.

In 1681, the Russo-Turkish war ended with the signing of the Peace of Bakhchisarai, which led to a new division of Ukrainian lands between Russia, the Ottoman Porte and the Crimean Khanate. Five years after Russia's accession to the European "Holy Anti-Turkish League", created against the Ottomans, the former became closer to the Polish-Lithuanian Commonwealth. The result was the conclusion of the "Eternal Peace" and the fourth division of Ukraine [4].

The Sarmatian-Roxolanian dimension of the seventeenth and eighteenth centuries for the whole of Ukraine [13] caused the then surge in the development of spiritual life and the corresponding etiquette culture.

It is known that in 1689 the monk of the Don monastery Solomon carried in the autumn a secret message to King Jan III Sobieski with an offer to start a war against the Muscovites in alliance with the Crimean people. Considering that at the end of the 17th century Hetman Ivan Mazepa was educated at the court of King Jan III Sobieski (where he studied Latin and other foreign languages), and later as an officer of the latter's guard, the all-Ukrainian specificity of etiquette culture in the specified day becomes clear [13].

That is, the king and hetman, who had friendly relations, tried to pursue in the circles of his elite the same virtues and "decency", aimed at establishing education, dignity, and protection of Christian lands from infidels.

From 1692, the Turks and their vassals were negotiated for permission to continue to grant access to the Greeks to oversee the Temple of the Holy Sepulcher in Jerusalem according to custom. In the Tatar language, short charters were written on this occasion, which allowed to "keep the liberties of the ancients and crafts" on a parity basis [11]. Gradually, the former nomadic Crimean Steppe became part of the cultural society associated with the Ukrainian lands. This contributed to some extent to the convergence of cultures, the presence of a more "transparent" assimilation of them, including in terms

of etiquette traditions and customary law.

According to the custom of that time, in Bakhchisarai there was already a certain etiquette with the appropriate protocol for receptions in the Khan's palace (barn), which was allowed to enter only after the invitation, as well as in the queue and sequence, according to the status of visitors. It was not customary to start a conversation in the "mansions" without gifts (memorial services), then, as usual, they greeted each other and asked questions about health, only in the future it was possible to start a conversation and arrange government meetings. Some of these traditions were inherited from the Turks, who after the capture of the Genoese Kafa (modern Feodosia) in 1475, controlled the Crimea.

According to documents of the 15th century, the "Khan's Majesty" personally received the embassy from the Polish king, as well as the Kumyts. At the same time at the end of the seventeenth century for diplomatic missions "people honest and strong" were chosen and meetings with the Crimean Yurt led kaymakan -hubernator - that is, the governor Pasha (Prime Minister in modern terminology) Ottoman Empire.

When the 400-year Polish-Turkish war ended in 1676, the Treaty of Constantinople was signed between Turkey and Poland for two years, confirmed by the Sultan of Constantinople in 1682. According to this document, Ukraine was given to the Cossacks, who recognized the supremacy of the High Port, but its part remained under the rule of the Turkish sultan [14]. These historical political and administrative changes have led to significant transformations of the socio-cultural sphere, and, in particular, etiquette culture.

Thus, in the late seventeenth - early eighteenth century, trade and economic relations between the two-state formations in the lands of modern Ukraine (Hetmanate and Khanate) became closer, which was reflected in the way and way of life of these territories. Thus, fabrics with Persian and Turkish ornaments, which were part of the costume of the rulers, as well as spices and oriental sweets, which became familiar on the table and served at joint meals according to a certain tradition of etiquette culture, including oriental ones, came into circulation. At the same time, decorated leather goods such as Kurdybans, weapons and jewelry related to Asian flavors, cradles, Istanbul, kuntas belts, which were especially popular not only in the Cossack part of the country but also in the western lands of Ukraine, became fashionable. Silk, brocade and velvet, sapyan (skins of modern husky style), and sometimes the banners [11] for the Cossack regiments were ordered in Bakhchisarai, where among the artisans there were ethnic Ukrainian masters who were trusted to make symbols of statehood and insignia of individual statesmen.

At the same time, some manifestations of Eastern temperament, habits and customs from the time of cooperation began to unify to some extent. In particular, in the campaigns, the Crimean army began to use insignia similar to those in the Polish-Lithuanian Commonwealth - in particular, bunchuks with gilded apples. Gradually, a bilateral etiquette of gift-giving was formed. In particular, these were horses with armor, carriages and ridvans, weapons and expensive clothes with furs, separate sets of furs

such as "forty sables on a mantle" and kuntus on sables, etc., jewelry and utensils made of precious metals and precious stones, Hamburg cloth, French, Turkish ribbon on belts, various boxes. Since then, the hotels in such trays have received their name - bullet.

From the beginning of the XVIII century in receptions, there is a concept of "confidentiality", particularly peace. There is assimilation in the etiquette culture. In camp conditions, separate table yurts with furs, intended for receptions and meals with embassies, became frequent. At the same time, some representatives of the former Cossack-nomadic officers of the lands that joined the Polish-Lithuanian Commonwealth, with its inherent stratum of the nobility, became a new pro-stratum of the local "social" elite, along with free burghers, clergy and bureaucrats.

Asian vectors at this time were also prominent in the etiquette culture of Russia, where ambassadors at that time were received by two tailors from the princely nobility and table-keepers, who performed all the tasks associated with the embassy tables. After the ceremonies canceled by Peter I, when to celebrate important events, high dignitaries were temporarily given brocade clothes, lined with fur, from the treasury. To replace this tradition, the country introduced an informal officer-army etiquette (order) of celebrations. Thus, the chancellor, the vice-chancellor of the empire, the closest adviser, the grand admiral and the field marshal were to be present at receptions and ceremonial visits. Over time, Russian etiquette as a neighboring state began to influence the "uniform etiquette" of Poland and Western Ukraine [11].

As a whole cultural tradition of individual nations of Eastern genesis and Ukrainian in tonnes and times became richer. In particular, this is clearly evident in the analysis of the clothing of Turkish janissaries and representatives of the Ukrainian Cossacks and the military nobility in general, both in the eastern part of the country and in the western part. An example of the narrative is the similarity of the cut of trousers, which is an integral part of the national tradition in the costumes of Ukrainians. Instead, the fairer sex Crimean Tatars and Turks had taken over the custom to wear hustku- peremitka which covered the hair and the face. Traditional coral jewelry, which has become an integral part of the image of Ukrainian youth, as well as silk came to Ukrainian markets from the Turkish-Tatar borders and through sea connections. From there and stocked weapons kylymamy- kobertsyamy, hlekiv- vessels such as Eid , Kumans (kumanets), expensive matter for kontusz, kuntushevyh belts and so on.

Due to the long-term interaction of Ukrainians and Crimean Tatars, over time, in the habitats of each of the people, there were separate settlements of neighboring peoples. In particular, artisans and merchants. For example, mixed families of representatives of these peoples lived near Dubna Castle in Volyn. Over time, colonies of Ukrainians marrying local girls were strengthened in Crimea. Moreover, taking into account the ancient traditions of harem culture of the Crimean people, where Ukrainian women were the most coveted women for married life, it gradually enriched the domestic cultural space with samples of ornaments of Tatar embroidery, goldsmithing, textiles [1].

From the 16th to the 17th centuries, almost a third of Ukrainian words came from Turkish and its variant, the Crimean Tatar languages. This introduced certain habits of the

Muslim Ecumenical into Slavic society, and, conversely, led to the emergence of famous Ukrainians in the history of the High Porte and its suzerains (an eloquent example - the importance of Roxolana in the Islamized world and a significant change in norms and rules of life and life of Ottomans in culture and education). Mutual enrichment of cultures, including in terms of etiquette, a culture of communication, meetings, and formal receptions, over time, have become interrelated.

The Khan Hetmanate remains a little-studied phenomenon in the lands of Crimea and the steppes of Ukraine, where the so-called Khan Ukraine was ruled by hetmans elected with the support of the Crimean Hetmanate. The very existence of this historical and cultural phenomenon requires separate research on the customs, traditions and norms of the etiquette of these lands of Ukraine. After all, the mutual intersection of Turkish-Crimean Tatar mental vectors of development and Ukrainian during the seventeenth and eighteenth centuries. gave rise to a number of features of etiquette culture among these peoples [10].

Attempts to create the Khan's Hetmanate date back to 1668-1669, when after the Andrusiv Armistice, which reshaped the lands of Ukraine between neighboring states. Since then, Petro Sukhoviiv ( Sukhovienko ), a Kosh clerk of the Zaporozhian Sich, was fluent in several languages - including Latin, as well as Polish and Moscow, and in addition Tatar, became the head of the Zaporozhian embassy in the Crimea. Then, according to Taras Chukhlib, he concluded a military-political agreement with the Crimean khan Adil- Girey in Bakhchisarai. On the contrary, Ukrainians were required not to destroy the Tatar fortifications, for which the khan promised to provide military assistance to the Sich. Eventually, Sukhovienko was offered the position of Hetman of Ukraine under the protectorate of the Crimean Khanate, for which the latter was issued a duplicate of the Khan's seal-tamga with a bow and two arrows [16].

Given that the Khan's hetman not only had administrative functions, but also acted as a representative on behalf of the Ukrainian side to the Tatar-Turkish authorities, and sometimes in relations with other neighboring states, including specific Ukrainian territories, this determined the specifics of the union. in cultural creation in the then historical and political arena [10].

Thus, during the seventeenth century, the Khan's hetmans came exclusively from Ukrainian Cossacks, who also defended their own customary norms of life in the territories under their control. Thus, some of them, for example, Stetsyk, as well as Petryk and Bo (a) gaty, significantly influenced the course of Ukrainian-Crimean Tatar relations, and sometimes the communication and etiquette culture on an all-Ukrainian scale. It is known that the main residence of the Khan's hetmans, according to Alexander Ogloblin, was located initially in Yahorlyk , and later - Dubossary on the Dniester, where it existed until the 1760s.

It is known that Petryk lived in Kazykermen (modern Beryslav) from April 1692. at the end of May of the same year he concluded an "eternal peace" with the Crimean khan Safa- Girey. Under the treaty, the Ukrainian Cossack state was to own the territory of the Left Bank, part of the Right Bank and Sloboda Ukraine. This agreement also regulated

the procedure and essence of diplomatic relations with the relevant etiquette culture, as well as introduced duty-free trade and freedom for crafts of Ukrainians in the lands of the Dnieper basin. At the same time, the Crimean Khanate undertook to provide assistance to the Ukrainian Cossack state for liberation from the Russian protectorate. The Crimean Tatars were promised the right to raid Russia by the Muravsky Way [12].

According to the diplomatic embassy in the Crimea, the grateful Vasyl Aitemirov is known to have lived in Perekop with Petryk (Petrushka) and his brothers during 1692–1695. About a third of his 80 comrades did not want to be with the khan's army in the Belogorodsky Gaur settlements. Therefore, about 30 people ran to Hetman Stetsko, who lived in Yaharlyk . At the same time, Petryk already had his symbols of power - a mace and a bunchuk (sandzak). In addition, he ordered banners, and was with the khan on salary. Petryk was also provided with clothes and a sword, and his comrades with money for shoes. In addition, he had the right to " create davan " (sofa), that is, to convene a council of Armenians, where he managed provisions and supplies. As an Orthodox, he was often in the Church of the Blessed Virgin on Bakhchisaray Mountain. We also know that he was regularly visiting the Turkish kaymakana [11].

Complex re-interpretations influenced the course of diplomatic relations and etiquette culture between these ethnic groups in Ukraine. The loss of archival materials of the central and regimental authorities of the state in the second half of the seventeenth-early eighteenth century, makes it difficult to understand the essence of certain processes of bilateral and multilateral methods and their corresponding etiquette. It is only known that during 1668–1674 the ritual of receiving Turkish ambassadors was arranged as magnificently as possible by neighboring state formations and communities [14].

In accordance with the mutual enrichment of mutual etiquette culture, on this day it was customary to invite a distinguished guest to a banquet given on the occasion of his arrival. At this event, it was obligatory to proclaim toasts in honor of the heads of state and representatives of the hetmanate, for the sake of attraction at the same time arranged cannon volleys and whole salutes. During the audience, the letter was read and gifts were given. Then sometimes, in special cases, musicians could be invited, and on the way back and forth the missions provided decent support and protection. Distinguished ambassadors from the nobility were sometimes accompanied by flags and an orchestra.

The process of negotiations between such parties was usually short, so that the "guests" do not get tired. And respect during hostilities could be disgraced. For example, in 1668, during the reception of ambassadors in September, Doroshenko struck several times "on the lips" of the ambassadors of Kalga- Sultan. That is, uncultured reception could take place even in the environment of the nobility until about the end of the seventeenth century. But in general, in accordance with the general culture of the time, the national protocol corresponded to the then existing norms of European etiquette [14].

The Cossacks, as a powerful subculture of Ukraine on both banks of the Dnieper, began to gain strength at the end of the late Renaissance. The way of life, customs, initiations, elements of the etiquette of this people were not as traditions rooted in the era of Kievan Rus (primarily, a military post - family organization like the Polovtsian),

European chivalry and the Crusaders, samurai culture of the East, and Tatar janissary. One of the first memories of the Cossack system and the character of the Cossacks was left in his wandering notes by the Austrian and Polish ambassadors Erich Lyasota. So he testified that in the sixteenth century. The Cossacks wore common Tatar clothing - kobenyaky, ie mantles, which formed the main part of the costume of various strata of the Sich. At that time gifts Cossacks foreign ambassadors made up of marten fur coat and fur hat with black foxes [18]. Later, in addition to martens, ermines, sables, foxes, foxes, which were used to hem men's clothing, there was also a mention of squirrel fur, which was also in use.

In the early '60s of the seventeenth century. Ukraine, under pressure from the interests of neighboring states trying to assert their political interests, was divided into two hetmanates - the Right Bank and the Left Bank. However, until the 1670s and 1680's, these artificially divided parts of the country mentally formed a single whole. Until 1699, there were constant redistributions of borders related to Turkey's claims to its rights to possession of the Right Bank and the southern lands of Kyiv and Podillya. Poland and Russia were active participants in multilateral relations, and they also considered their right to the eternal Ukrainian ethnic territories unconditional.

In the times of P. Doroshenko and P. Orlykov, the permanent diplomatic representatives of Ukraine were in the capitals of the Ottoman Empire (Constantinople-Istanbul), the Crimean Khanate (Bakhchisarai) and Russia (Moscow, the Little Russia Court, built-in 1667). Forging formal relations in these times should be careful, generosity, courtesy, morality, diligence. By the end of the seventeenth century. in Europe, a number of treatises on the etiquette of secular meetings and receptions at the highest level, ceremonies and minutes of diplomats were published [14].

Among others, educated rulers and their subordinates should have known the treatise of the Italian Alberico Gentili "On Embassies" in 1585, and the almost contemporary work of the Polish Diplomat K. Warsaw "On the Ambassador and Embassies". The first of these authors wrote about the responsibilities and rights of the parties at the meetings.

The second outlined the principles of conformity of tasks and techniques of conducting certain treatises and audiences in order to maximize the benefits of the results. His advice was correct that brave and generous people should be sent to Turkey, who was difficult to intimidate, and that they would not spare money to bribe the sultan's Turkish entourage. With elements of ethnopsychology were the author's recommendations on sending to Moscow hardy people, able to conduct long and difficult negotiations for many months, as well as prudent and careful. As for the Vatican, K. Varshevsky advised to choose pious people who would represent the interests of the state, but secular.

In Ukraine in the second half of the seventeenth - in the eighteenth century. the etiquette of secular methods and protocol was largely formed under the influence, on the one hand, of folk culture and Cossack customs, and on the other - constantly transformed under the influence of Eastern (Turkey and the Crimean Khanate, partly Russia) and Western diplomatic rituals (Italy and Vatican, Holland, Sweden, Poland).

During the period of Ivan Mazepa's youth, the character among the Cossack

community was characterized by Haydamat habits. In addition to court etiquette with notes of mentality derived from folk culture, there was an "anti-etiquette" of relations between ideological, political and ideological opponents. After the case when Mazepa sent several dozen Orthodox prisoners as a gift to the Turkish sultan in the 1670s, and the Cossacks intercepted them, the text of the address without notes was far from all ceremonies.

Ataman Ivan Sirko wrote the so-called "censorship" the then insults: «Свиняча ти морда, кобьяча срака, кусача собака, нехрещений лоб, мать твою... не будешь ты и свиней христианских пасти. Теперь кончаемо, ибо числа не знаемо, календаря не маемо, а день такой, как и у вас, за что поцелуй в сраку нас!» (Galenko, Kaminsky & Kirsenko, 2001). Thus, etiquette relations were opposed to "anti-etiquette" if the recipient did not adhere to certain norms of social morality and did not respect traditions.

Terrible according to the etiquette traditions of the time were the accusations of uncleanness, "promiscuous" birth, which was an extremely obscene punishment, worse than death. Thus, in 1686, the punishment of Ivan Samoilovich by V. Golitsyn was shameful, who demanded that the hetman be publicly called a 'скурвенним сином' (Eng.: son of a bitch, the son of a prostitute) instead of a "nobleman." Because of this disgrace, even the servants refused to show any signs of respect for the former commander-in-chief. That is, the morals of that time were quite strict in terms of moral and ethical norms (Military campaigns of the era of Hetman Ivan Mazepa in the documents, 2009).

Ordinary soldiers of the Ukrainian army then had only the clothes they got in battle. No wonder they were called paupers and shavers, because the vast majority of these people were satisfied with shirts that did not take off all year until they were worn out. Often the Sich Cossacks did not have boots or even trousers, which prompted them to undress the "tongue" (captives), yasir (prey) and killed opponents. Therefore, most of the clothes of the Cossacks consisted of silk and Chinese fabrics, which tore on the grandchildren, turning the legs, as well as - shirts, trousers, captains, fur coats, checked (men's outerwear, which resembled something between a robe and a kaftan, which existed in the Turkic peoples), boots.

Such clothes were often called "scoundrels" because they were acquired by defeating Turks and Tatars, Lyakhs (Poles) or Jews. According to eyewitnesses, B. Khmelnytsky's army on the battlefield near Zhovti Vody resembled "fields that bloomed with Dutch or Wallachian sown and blossoming poppies" because of such variegated fabrics. Many clothes got to Zaporizhzhia portions of Polish kings and kings Moscow [19].

Part of the re-treatises between Muscovy, Ukraine, and Poland were the so-called vows (oaths), which were issued by the Turkish sultan, taking into account the interests of the Crimean Tatars. That is, interstate, governmental, and secular relations were actively developing.

In 1683–1684, under the patronage of the Pope, a sacred European alliance was established against Muslim Turkey, aimed at limiting the expansion of the Ottoman Porte into Christendom. In connection with the formation of new geopolitics at this time, interstate relations in many countries have revived. Austria and Poland united in

1683, and the following year they were joined by Venice, which had its interests in the vassal Turkey of Crimea. The embassies of these states held constant negotiations with Muscovy, but the eternal peace was concluded last in the reign of Peter I's sister Sophia and her favorite Prince V. Golitsyn only with Poland in 1686. [9].

**Conclusions.** Thus, the Hetmanate at this time periodically acted as a mediator in the negotiation processes between the above states, because in one way or another was in close relations with all of them. On the one hand, historical ties with the ancient Russian principalities continued, on the other - with the Crimea and Turkey (former Byzantine lands - the heart of Orthodoxy - the Greek faith), on the third - with Europe: the Polish-Lithuanian elite, the Polish-French-Italian establishment, Dutch, German, Swedish, Polish-Austrian, Hungarian and Czech nobility, some English subjects. All of Europe at this time, as a result of the unification of the capital of wealthy families through marriage law, went through a period of assimilation, especially in Catholic and Protestant circles. Ukraine was divided politically and economically in half by the agreements between Muscovy and Poland of 1667 and 1678, but the processes of cultural consolidation of the population continued.

Prospects for further research are educational in discovering a cultural trend mentality of the Ukrainian people the day of the first half XIII-XVIII centuries.

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## POPE FRANCIS'S SOCIAL TEACHING ABOUT THE HUMAN DIGNITY

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**Annotation.** *The social teaching about human dignity, proposed in the Pope Francis's encyclical 2020 "All Brothers", is analyzed. The encyclical was found to provide the ideas for common resisting the challenges surrounding the Covid-19 epidemic. It criticizes the specific for the consumerist society transformation of the human, the unification and depersonalization dynamic associated with the global market triumph and the transformation of the person into a subject of sale which can be benefited or not. As the basis for the Christian worldview and universal ethics Pope Francis proposes the resolute adoption of the human dignity ideas as the foundation for social and legal order. Pope Francis creates a new theory of social harmony, taking into account the realities of communicative society. In spite of populism and globalization, Pope Francis defends the public dignity as unique collective performers with their own rights and responsibilities.*

**Keywords:** *social church teaching, criticism of the capitalist system, social fairness, social solidarity, ethical romanticism.*

**Urgency of the research.** Now the Catholic Church social teaching transforms radically. As a counter to worldview relativism, the Pope rediscovers fundamental truths concerning the value, dignity and inviolability of the human life. Pope Benedict XVI has already acknowledged that the bare appeals to the nature law and human dignity are not enough to maintain and develop social relations in a spirit of humanistic ideals and the norms of social teaching. Love is necessary for persons and communities as a supernatural social motive to preserve the moral standards value for the economy, politics, and social life. Pope Francis emphasizes the crucial importance of faith and love for the social development after the 2008 global crisis. At the same time there are growing ethical demands which the social church teaching in the days of Pope Francis puts forward as the political and economic basis. The encyclical "Fratelli tutti" ("All brothers" or rather "All brothers and sisters"), published on October 4, 2020, is a particularly great innovation. Among other things, this encyclical teaching about brotherhood and social friendship was to be the church's response to the challenges posed by the Covid-19 epidemic. The extraordinary situation requires the mentioning of Christian teaching about the human dignity, and then even the enhancing of this teaching through the ethical requirements radicalization.

The purpose of the article is to analyze the main features of the Pope Francis's encyclical "Fratelli tutti" social teaching about the human dignity and rights.

**The problem development state.** The Pope Francis's new encyclical social teaching received mostly critical assessments. Conservative Catholic theologians and

publicists criticize this encyclical's provisions, which appeal to the radical acceptance of all migrants to the former "Christian world" countries. Liberal critics focus on the Pope's alleged underestimation of the scientific and technological progress possibilities, flirting with political populism, the critic utopianism concerning today's capitalism, and so on. The originality of the encyclical teaching about the absolute human dignity is a little described in the critical literature.

**The main material.** The principle of the human dignity absolute value becomes central to the Pope Francis's encyclical «Fratelli tutti» social teaching. This principle is fully substantiated and supplemented by the community dignity principle. The Pope admits that for today's social discourse the absolute dignity of the human is not obvious, the personality is increasingly reduced to an individual who can be manipulated, destroying the natural life context, which for the individual have always been communities. The Pope provides arguments for the human dignity, which unclose through faith, love, reflection and social dialogue. The dignity of communities and their inviolable rights existence become even more unclear. From the Pope's point of view the main protecting tools for the human and communities' rights should be radical rights universality consolidation and strengthening the role of international institutions which could represent the world power, at least the court and law enforcement systems. The development of particular human rights understanding, individual and national self-interest expansion, interpreting proper rights and desires as absolute, denying the other people rights are considered by the Pope as the threat to the human rights and freedoms and to the rights of nations and other communities. The lack of solidarity and brotherhood is the biggest nowadays shortcoming, which causes the emerging and flourishing of many social problems.

Individual and collective self-interest is identified as the cause of the 2008 crisis. Namely, because of this self-interest the financial and banking system did not focus on moral values, allowed hazardous speculations and unsecured transactions, and after the financial collapse, the main severity of consequences was borne by the middle class and the poor. The social church doctrine appeals not only to offer Christian values and to actualize universal properties. The social doctrine points the ways to achieve these values in the specific today circumstances. The social fairness restoration after the crisis of 2008 is possible only by addressing the moral economical standards. The most important prerequisite for the moral economical standards is solidarity with others, without which growing economic crises threaten all countries. In Pope Francis's opinion, the source of such solidarity can be "political love", in other words it is maximum solidarity and friendship in interpersonal and social relations. The concept of "political love" (or "social" love) is borrowed by Pope Francis from the speeches and encyclicals of Pope Pius IX of 1920s-1930s. The latter used this concept to create a national society model as a community of communities, as a single team which interacts organically through communities as its structures to achieve the common good. Such a doctrine made the individual dependent on the collective and social structures, and this teaching reflected the collectivist social attitude which prevailed between the two world wars. The social Catholicism doctrine got rid of these mentalities in the 1960s, when the personal

value was recognized as the main and more important than collective one. Today Pope Francis makes a point that political love (or social love) is self-evident only when it manifests itself in relation to all people without exception and it may become the basis for social ethics and social doctrine. In general, according to Pope Francis's opinion, all the social teaching responsibilities come from political love. It provides for a vision of humanity as a large family, and each individual as a close relative with whom there should be the relationship of family love, which dictates respect and ethical attitude in all circumstances. The spread of family love to the national level was a feature of the social doctrine of 1920s and 1930s. Now humanity itself is seen as a single family. The Pope proves the humanity needs "fundamental priorities of mankind globalization", that is, the confirmation of the human rights universality, the avoidance of all kinds of exceptions and limitations. Today firstly the rights of migrants are being violated. Namely, irresponsible immoral policy towards migrants is growing due to populist agitation. In fact, a lot of governments deny migrants' rights and their dignity as a reviling of God, their dignity as human beings. The Pope protests against such dynamics, especially in the United States, and he reminds that almost everybody was a migrant in the past in a greater or lesser degree. It is important to the Pope that Jesus himself was a migrant in his life. The Pope also emphasizes that numerous "optimizations" of national health care systems, health insurance, and the cutbacks to funding reduction of social funding lead to law violations of the poor in many countries. During the pandemic, the lack of preparedness of the national health systems, their underfunding and reductions led to numerous deaths, especially among the elderly. Such processes are the manifestation of the inhumane treatment; they do not meet the basic ethical values, moral and legal norms.

Respect for the individual cannot be limited to dialogic interaction and social assistance at the individual level. It is necessary to provide solidarity efforts within the nation and at the level of international cooperation. Actually, our society without solidarity is virtually impossible today. And solidarity is the minimum of social (political) love. Also, the international solidarity is important, the solidarity of all humanity facing the global challenges. Pope Francis emphasizes the necessity of living with love in everyday interpersonal communication, living with love in political activity at the national and international levels. According to Pope Francis, the political leaders who take responsibility and oppose populists are the greatest moral force of our time. The social solidarity background depends on the political leaders' activities. The fact is that solidarity is not an individual act of charity, but it is a struggle against the structural causes of poverty, the causes of human rights violations, the hostility causes towards different ethnic and religious groups. And the politicians exactly, as the members of the public or communities, can show such solidarity. Pope Francis emphasizes that the role of leaders in socio-political life has increased today; their moral example and their moral and political leadership cannot be overestimated. Because the peoples are easily become tempted by populism, by illusory desire to solve all problems through self-isolation, by transition from the cultural authenticity protection to national or religious discrimination. Pope Francis notes that the individuals and communities which are considered to be

useless for the whole society could be really discriminated. For example, unborn children (embryos) could be considered as "not yet useful" and the aged could be regarded as "no longer useful." The dependency guideline of the personal value on the benefits to society is vicious, but it is accepted either openly or from behind. Pope Francis finds the causes of such personal valuation from the perspective of benefits of the capitalist consumer culture influence, or free market ideas as the power which determines itself the true value of all goods, and finally the value of the individuals and communities. The Pope appeals to resist the dynamics of the personal devaluation, to stand against the individual reduction of the work and consumption functions.

Pope Francis is sure that the ideologists of modern economic liberalism groundlessly monopolize the topics of person, frankness, and dialogue protection. In fact, economic liberalism often justifies inhumane personal treatment, replaces true openness by imposing a variety of restrictions. In his brown study, Pope Francis systematically criticizes the ideas and policies of President Trump. And he did it not only to protect the rights of potential US citizens, who would strengthen the Catholic presence in this country. Pope Francis is trying to prove that the neglect of the migrants' rights and freedoms leads to the global restriction of liberty, to the total dehumanization, to the sellout of the initial ideals of liberalism. But the Pope does not fully support the Democratic Party as an alternative to Trumpism, because this party actually proposes to limit the certain rights, for example, within the framework of positive discrimination in order to overcome the elements of injustice that prevailed in the past. Pope Francis' position is that the human dignity, rights and freedoms must be absolute, and society and the political elite in the country and around the world should be eager to ensure the highest possible level of social rights and freedoms. The only thing that can be limited for the common good is the right to private property. Thus, Pope Francis tries to protect human rights even from those social forces that act on behalf of the secular protection of these rights, but in fact they allow numerous exceptions for various reasons, when more protection of certain rights actually violates the rights of others. The right of private property restriction, its inclusion to the natural rights of the second order, which can be violated for the common good, is important not only in itself but also as a step to deprive the "free market" of its absolute value, restoring the absoluteness of the individual, who has the essential native rights of the first order and his absolute dignity. Indeed, either the market or the persons and interpersonal communication are life world with certain sets of evidence and values. When choosing one of the alternatives, the other is necessarily limited. Moreover, the "free market" with its absolute private property is not so free, but it is the subject of different manipulations by political and economic elites who try to increase the exploitation of not only the natural resources but also the human capital. What is more, some politicians try to protect the "Christian world", in fact acting in the interests of certain socio-economic and political elites, rather than ordinary citizens. Pope Francis recalls that the founder of Christianity in the Roman Empire was a member of a marginal group, and his followers were systematically discriminated against. For Christians, speaking out against migrants or marginal groups means actually contradicting their own

identity. Christians should be an example of frankness, often sacrificial, towards migrants and outcasts, towards all those in need. Christians must also initiate the development of international institutions which protect the human rights not only in the case of migration to developed countries, but also in their homeland. The national sovereignty limitation is in favor of international corporations and world centers of power. Pope Francis proposes to accept the diminishing role of nation-states, the worldwide political space era coming and the development of a global civil society. In the current conditions, the global unity of the world requires a single legal power, and ensuring the human rights and freedoms through the mechanisms of this single power.

Pope Francis emphasizes that the rights are not granted by the state, they are not the result of agreements and they are not the imputed value. Fundamental human rights are inalienable, they attach to a person who is intelligent and free in nature or identity. From a theological perspective, this intelligence and freedom reside in man because he is the image of God, also an intelligent and free being. Also, the fact that man is a person also points to him as an image of God and it is also the basis for the recognition of his absolute rights and freedoms. The abilities to communicate, love, sacrifice, give, create are also the features of God in man. An expanded understanding of human identity not only as a reality of the subject, but also as an intersubjective reality, creates a new basis for ethics. If the individual is significantly dependent on interpersonal communication, if he cannot be realized without it, the ethical attitude towards others becomes a natural position, the abnormality from which are unnatural. In order to fully communicate with another person, it is necessary to allow him to be himself. This simple truth is often forgotten, the person is reduced to an economic, social, moral or religious function, and he is not accepted in its entirety. Besides, intersubjective dialogic relations are such that the whole person participates in them. Ethical attitude to each individual, regardless of its value to society, creates a general ethical atmosphere of brotherhood, hospitality, frankness, humanity. And thanks to this atmosphere, the conditions for a moral and legal order are created and it will be truly humane. Pope Francis emphasizes that Christianity, with its vision of the individual and interpersonal communication absolute value, lays the foundations for holistic humanism. The humanism and personal respect renewal are appealed to resist the transformation of man into a subject of sale or an object of manipulation. Pope Francis draws our attention to such phenomena as human trafficking, slavery, sexual exploitation, and forced organ trafficking. These are all new forms of slavery, based on the attitude to the individual as an object, not an individual. Pope Francis is also sure that most of the wars and conflicts in the world nowadays are linked to the selfish economic interests of certain groups of people. Even such phenomena as terror or religious fundamentalism exist mainly for economic reasons and to treat others as objects. Pope Francis emphasizes that there is so much violence that we can talk about a permanent third world war. People seek protection from all these global challenges in the development of solidarity of communities which oppose other collectives, in mafia connections, in populist illusory solutions which activate the closure of nations or communities within themselves. Also nowadays, a digital communication space has been

formed, in which the other person is often devaluated, dishonored and even demonized. From digital networks, the abhorrence is transmitted to the media, even Catholic ones. It is important that digital media create the conditions for domination over individuals and communities through the destruction of dignity. The hopes about the digital space contribution to the realization of the intersubjective nature of today's society, the network connections development, and the formation of a universal communication culture were illusory. Manifestations of brotherly love and the communication culture must spread again and again from church communities, interreligious dialogues, and ethical attitudes to others in various dialogical situations and joint social activities. Pope Francis emphasizes that helping others brings people together, makes communities, allows them to develop a culture of communication without which individuals and nationalities cannot fully develop and be historically fertilized. Of course, we can criticize these Pope Francis's theories, because history presented us some creative persons and nationalities which were prolific even in isolation. The absolute priority given to the communication importance for the personal and national creative expression has the character of a certain overstatement, which is aimed to legitimize the efforts of migrants' acceptance in any event. We can say that Pope Francis idealizes the dialogue and the figure of the other person in the dialogue, he is too optimistic about the potential of the other. This is because the salvation is not individual but collective process. Also Pope Francis emphasizes the ethical nature of accepting the other, because the native law and the Gospel stimulate you to treat others the way you want them to treat you. The very essence of evangelical morality is that everyone is a neighbor; everyone should be treated as a relative. Pope Francis emphasizes that nowadays the rich live as if the poor and the beggars do not exist at all. This is the case of not only the persons but also the entire nations. Such "displacement" should be overcome through the new moral and legal culture, through the declaration and law definition that everyone matters.

Pope Francis points out that the beggars should be allowed to communicate not only in general at all levels: local, national, global. But they have the right to remain themselves, not to be "melted down" in the crucible of political multiculturalism. Respect for everyone's identity must be the basis for a new global culture of mutual respect. Christians should become the volunteer for a new dialogue culture and collective inclusion in social life. Someone's removal from society can result in genocide, and such developments must be avoided by all means. Pope Francis recognizes that a positive way of building the communication culture and the regardless of the identity collective inclusion in social life require a lot of daily work. Social world and solidarity are the result of the great efforts. Pope Francis makes a point that the ability to recognize the right of the person to be his own self is hallowed. The work of politicians and society as a whole to integrate all without losing their identity is difficult and slow, but a successful outcome guarantees the real lasting peace. The Pope emphasizes that peace and social harmony cannot be achieved through humanization. The social openness to others should be combined with justice, especially when it comes to reconciliation after civil and international conflicts.

Also Pope Francis points out the necessity to recognize the dignity and rights of each nation and each community with a separate identity. The dignity of religious communities, in particular religious minorities, is particularly important. Moreover, Pope Francis calls upon refusing the term "minority" in relation to religious or ethnic groups; as such name may dishonor people. Pope Francis also underlines that all humanity has the rights, including environmental well-being. And nature must be protected as a self-sufficient reality, not just as a place of human life.

**Conclusions.** The protection of native human rights is an ethical duty which is of absolute importance. We could not diminish the human dignity, it is absolute. The individual should be the subject, among others, the subject of communication. The person should not become an object, a subject of sale, an item for manipulation. The dignity of communities, peoples and all mankind depends on the personal human dignity.

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## “ERANOS” IN THE CONTEXT OF THE TRANSITION AGE: THE INTELLECTUAL COMMUNITY AS A PRODUCT OF THE CRISIS

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**Annotation.** *The aim of the paper is to reveal the specifics of the culture-based studies development process in the space of non-academic intellectual and discussion communities. Culture-based studies, at the very beginning of its formation, are associated with philosophical thought, since the figure of a philosopher in France is conceived wider than in the Ukrainian tradition. The results of the study can be used in the construction of educational programs in the field of cultural studies.*

**Keywords:** *culture-based studies, intellectual communities, discussion communities, multidisciplinary, “Eranos”, public space, philosophical cafes.*

**The relevance of work.** New intellectual trends and tendencies are formed not only by academic institutions and scientists. Discussion and intellectual communities, philosophical clubs as examples of a space that unfolds suddenly, abruptly, also act as centres for the emergence of new knowledge. Public space as a real sphere of direct human interaction gives impetus to the development of cultural research. Salons, literary cafes and various indoor clubs contributed to the spread of philosophical ideas, the popularization of theoretical constructions in the field of cultural history. Eranos, in particular, is one of the most famous non-academic centres. The study of public space, the culture of philosophical discussion, “sociability” and alternatives to official institutions has not lost its relevance today. There is growing attention to the figure of the so-called public intellectual, to the influence of philosophers and authorities on the development of socio-cultural space. This leads to the recognition of the need to study the problem of openness, and especially its manifestation as the activity of intellectual circles.

**Analysis of recent research and publications.** In the course of writing the article, the works of J. Habermas was used, who, in particular, turned to the study of such phenomena as public space and the so-called “sphere of openness”. H. Arendt touches on similar issues in his works. The researcher considers public space as an area where people interact directly. This distinguishes her point of view from the position of other researchers, whose achievements were used in writing this text. The subject of the article requires the disclosure of the logic of the emergence of new forms of knowledge. This aspect was revealed through an appeal to G. Simmel’s concept, which concerns the concept of culture and its defining feature as a tragedy. The work of

the thinker makes it possible to understand the process of formation of new cultural forms and, accordingly, the obsolescence of old ones. D. Brock emphasizes that today philosophy and culturology have paid attention to the sphere of publicity. According to the researcher, this is a new turn in the humanities. The analysis of the peculiarities of the “sphere of openness”, initiated by J. Habermas, aroused interest among domestic philosophers and culturologists. In particular, a round table on philosophy was held in public. Meanwhile, the issue of academicity and popularity of knowledge was also considered here. One of the main problems is the role of the intellectual in the context of modernity. The same question interests the French thinker M. Honfre. He reflects on the greatness of philosophy and its misfortune. E. Rudinesco is also studying this issue. She tries to determine the specifics of the intellectual communities, referring to the biographies of such figures as J. Kangiemi, L. Alyutusser, J.-P. Sartre and others. For this article, we have chosen “Eranos” – a philosophical club, an intellectual discussion community. The activities of “Eranos”, in particular, are considered in the works of I. Progoff. M. Kolesnik also writes about this in the article of the same name. Eranos is not the only non-academic circle where cultural research has developed. Another form of public space that interests us is “philosophical cafes”. Among the researchers of the features of “philosophical cafes”, we can mention: S. Kale, S.-A. Coffin, K. Kuruva. M. Simons and J. Glenn, among others, address this issue, addressing this phenomenon as a whole, trying to highlight some common features of “philosophical cafes”. Thus, the forms of intellectual life are variable. R. Collins and S. Hazarizing, in particular, pay attention to this distinctive feature. M. Rubin’s work helped to identify the logic of differences between cultural and cultural research.

**The purpose of the article** is to disclosure of the specifics of the process of the deployment of cultural research in non-academic intellectual and discussion communities. Particular attention is paid to the activities of the Eranos circle and philosophical and literary cafes.

**Research methodology.** One of the main methods of this study is the historical reconstruction on the basis of written heritage. Intellectual communities are represented from the standpoint of ideographic and diachronic methods. Cultural research also requires the application of a multidisciplinary methodology related to the very origin of the subject. Representing the development of cultural research in the framework of the formation of public space also requires reference to the systematic method.

Culture is characterized by deep dualism. According to the German philosopher G. Simmel, the tragedy of culture comes from the above dualism as its defining feature. The researcher does not give a clear definition of culture, meanwhile mentions many of its features. G. Simmel, describing the culture, is undoubtedly in the context of “philosophy of life”. In particular, he writes the following: “...culture is the path from closed unity through open plurality to open unity” [2, 447]. What is the (historical) cultural process according to G. Simmel? First of all, the philosopher notes that life moves from death to being and vice versa - from being to death. The thinker is in the same logic when he writes that life tends to constantly generate new forms. When new forms are born,

the old forms are automatically destroyed, i. e. the old way of “design” of culture. On the one hand, culture is the result of the “labour” of the elements of life. Culture itself creates and destroys forms, which is an integral part of its endless desire for growth, as well as its variability as an essential feature of culture. This process emphasizes the importance of the role of “will, reason, individuality and character, strength and mood of individual souls (as well as communities)” [2, 452]. All these forces affect the “design” of culture. We make a natural assumption that the intellectual communities we study are a manifestation of the forces of will, reason and individuality, about which G. Simmel writes.

But before proceeding directly to outlining the specifics and role of intellectual communities in the process of generating new cultural forms, it is necessary to find out what makes such communities possible. Therefore, we must turn to the analysis of such a phenomenon as public space. This object can be considered in the logic of the “end of nature”, which, however, does not mean a planned or smooth development, where there is no place for spontaneity and cataclysms. Such an “end of nature”, which we analyze here, based on the concept of “philosophy of life”, does not provide, meanwhile, the smooth development of statics. This, in particular, allows preserving the integrity of the cultural universe.

J. Habermas expands this issue and writes about the field of openness. The latter requires an audience. When analyzing the public, it is necessary to turn to the formula, which is actually given by J. Habermas. The researcher explains the essence of the public (le public) through the interaction of readers (les lecteurs), viewers (les spectateurs) and, accordingly, listeners (les auditeurs) within a certain space-temporal period [1, 75]. In this case, listeners are united through the synchronicity of the listening process, readers – through the object on which visual attention is focused, and viewers, who also act as listeners, acquire integrity through the unity of location (but this statement is valid only for the period that preceded the advent of mass television).

Sociologists usually distinguish between the public and the audience. The public is a community of people, which is achieved by the community of space. For the audience, the decisive factor is rather a time. J. Habermas believes that the public is formed in the socio-cultural space of France in the XVII century. In this case, the public is those who are the recipients (consumers) of a particular cultural product, as well as experts and critics (people with the right to evaluate a cultural product). When we study intellectual communities in the context of public space, we pay attention to the situation when both consumers and producers of a certain cultural product are considered as the public. This situation is a hallmark of intellectual as well as discussion communities, literary clubs and philosophical cafes. These communities originally existed as enclaves, salons and, accordingly, cafes (political, literary, philosophical, etc.). Such associations have been popular in France since the Enlightenment (XVIII century). Coffee shops, where people with common interests used to gather, were visited by private individuals. Most of the visitors are a layer of burghers with academic education. At the same time, cafes allowed not to pay attention to the status, social hierarchy or socio-cultural stigmatization of

visitors. We can speak of such attempts to unite and expand the public space as the first attempts to implement the principle of equal, democratic exchange of knowledge and ideas. 1848, the time of the French bourgeois-democratic revolution, greatly accelerated this process. So what, the audience? This is a formally unorganized group of people who differ in the common interests they are aware of through direct communication.

It is appropriate to assume that the structures of openness, about which J. Habermas writes, served as an incentive to deploy the so-called “public turn” in philosophy (public turn). In general, the “public turn” characterizes the situation in the field of socio-humanitarian sciences, when after 1968 there was an increase in demand for this knowledge, which developed outside the institutional academic environment. The philosopher in this case does not mean a narrow specialist, but an intellectual who problematizes a wide range of issues in his works or public statements. Cultural studies bring elements of multidisciplinary to the field of theoretical culturology, but, in the meantime, they come from the field of philosophy. The issue of cultural research is revealed in the works of members of the international discussion club “Eranos” [7], and also proclaimed during the meetings of intellectuals-visitors of philosophical cafes (“philocafes”), whose modern tradition is reduced to “Cafe Lighthouses” by Marco Sote. There is usually an atmosphere of openness, tolerance, pluralism and democracy in general. On the democratic basis of the philosophical cafes, S.-A. Coffin, when characterizing the popular issues of discussion in this space, namely:

- Is love an illusion?
- Does society need morality?
- How to reconcile the need for doubt with confidence in beliefs?
- Should democracy be rethought?
- What is happiness?
- What is the Other to me?
- Is individualism a real practice or a social trap?
- Why hurry?
- How far can an individual’s freedom go?

As we can see, although some issues are important for public life in general, most issues are still existential [9, 40]. The constant motive was theoretical discussions on the problem of democracy and anarchy [11]. The originality of cultural research is manifested here in the same diffusion that accompanies the emergence of “literalized”, “poeticized philosophy”, as well as “philosophized literature”. “Public turn” means that the sphere of influence of the intellectual extends to those areas that are not his narrow specialization [8]. A good metaphor for this process was chosen, in particular, by J. Glenn, calling such a common space a place to practice “thinking-together” [12].

This topic cannot be fully revealed without reference to the style/way of life of an intellectual. E. Rudinesco in the cult book “Philosophers in the arms of the storm” describes one of the most fruitful stages in the development of French intellectual thought. This is a period-inspired by the Second World War, the Holocaust, the Resistance, as well as the “student revolution” (“irrevolution”) of 1968. In particular, “May 1968”,

according to the researcher, was filled with significant “social and existential experience” [6, 7]. Disappointment with past “cultural forms” and ideals has led to the introduction of the idea that “philosophizing” should take place beyond institutional boundaries. Intellectuals united around J.-P. Sartre and S. de Beauvoir gathered at 172 Boulevard Saint-Germain in the famous Café de Flore. Thinkers not only worked in cafes to write their works but also interacted with public figures, politicians, artists, writers, actors and their own students [16].

After all, in the spaces of such cafes, intellectual communities are formed into integrity. The second most popular cafe, where you could meet, for example, R. Aron, was located in Place Saint-Germain-des-Prés 6. This is Les Deux Magots. There were also indoor coffee shops, which did not welcome unwanted guests. The atmosphere here was less democratic than in the two previous cafes. In the rather bourgeois Lipp on Boulevard Saint-Germain 151, you could meet M. Mastroianni or F. Mitterrand. In fact, the gap between researchers who pay attention to the subject of their own explorations “8 hours a day” and intellectuals who create new reasons for reflection is significant. This abyss is rooted in the way of life of an intellectual, about whom M. Honfre aptly writes the following: Retirement taking care of his weekend with a Nazi party membership card in his pocket, reported to his colleagues [4].

S. Hazarizing rightly believes that one of the most remarkable inventions of modern French culture is the “intellectual”. Intellectuals in France are not just experts in their fields, such as literature, art, religion, philosophy, culture and history. The language of the intellectual is universal. The community of intellectuals is the hearth from which sparks of the newest and – as a result – the most influential tendencies come. It is expected that the intellectual will answer all questions (similar expectations are placed on domestic public philosophers or culturologists). “This French intellectualism has also manifested itself in many theories of knowledge, freedom and the position of man. Successive generations of modern intellectuals, most of whom studied at the École Normale Supérieure in Paris, discussed the meaning of life in books, newspaper articles, petitions, reviews and magazines, in the process of building philosophical systems such as rationalism, eclecticism, spiritualism, republicanism. and existentialism”, – the author notes [13]. On the other hand, M. Simmons writes that the tradition of philosophical cafes with complex discussions about “high matters” is dying, because people now do not conduct philosophical dialogues here, but rather only meet to meet communicative needs [18].

In fact, it is appropriate to mention the opinion of R. Collins, who owns the “global theory of intellectual change”. The researcher wrote that the history of intellectual thought appears as the history of groups. Moreover, R. Collins emphasizes that he does not mean anything abstract, only literally talking about circles of close friends, colleagues, partners for discussion, communities, which often have all the characteristics of social movements [10, 27]. Culture generates itself. The scientist emphasizes that it is impossible to prove the autonomy of culture and the hypothesis of explainability of forms and changes of culture from the point of view of itself. But such improbability

is not a reason for reductionism. The researcher writes about culture as a meta-social formation that makes possible social in general [10, 32]. Returning to the specifics of intellectual discussions in the space of a philosophical cafe, it is appropriate to mention the position of S. Proleyev, who emphasized that the topic of the presence of philosophy in public space is quite common and relevant at any time. However, the space of the cafe allows us to talk about the departure of intellectual thought outside the institutions, the possibility of extra-academic existence of the intellectual community. The mental inquiry, the need to gain some experience pushes intellectuals to participate in non-academic communities, discussion clubs and spending time in philosophical cafes [3, 8]. The 1960s and 1970s turned the very understanding of history, giving rise to the concept of “new cultural history” [17], the logic of which lies in the process of intellectual revolution in the field of non-institutional publicity of knowledge.

Meanwhile, perhaps the most famous not only French but also international intellectual discussion club was Eranos. The founder of this community is considered to be Olga Froebe-Kaptein, who in 1933 organized meetings of the world’s leading intellectuals in her house near Ascona in Switzerland. The thinkers who gathered here belonged to the most diverse branches of knowledge: history, biology, culturology, mathematics, philosophy, religious studies, theology, and so on. There was even room for exploration in the field of esotericism. I. Progoff mentions the founding of “Eranos” as a result of a random idea, the implementation of which changed the perception of the development of socio-humanitarian knowledge: “A report in exchange for Ms Froebe’s hospitality during the conference. She sent out invitations for the summer of 1933 <...> her invitations were accepted by such well-known figures as C. G. Jung, G. Zimmer, F. Hailer and E. Buonauti. The following year, M. Buber joined the list of speakers, and the joint presence of K. Jung and M. Buber made the second meeting a very significant event” [5]. It can be assumed that the development of research in this form was caused by the need for an intellectual challenge, the specificity of which was diffuse multidisciplinary, which formed the basis of the actual cultural research. Among the participants of “Eranos” we can mention L. Beck, M. Buber, J. Durand, T. von Ikskul, A. Korben, H. Plesner, D. T. Suzuki, E. Schrödinger, M. Eliade, K. G. Jung, R. Otto, I. Prigogine and others. At a large number of meetings, the tone was set by K. G. Jung, which is why “Eranos” is often mistakenly defined as a purely Jungian community. According to M. Kolesnik, the dominant in the discussions of the club “Eranos” were still socio-humanitarian sciences [15, 85].

**The scientific novelty of the research.** Cultural studies in France are abstract-theoretical formations because in this case there is a lack of reliance on empirical material (as in the Anglo-Saxon version of cultural research). Thus, the development of cultural research of a purely theoretical orientation took place differently than that of the Anglo-Saxon colleagues of the French. One of the forms of deployment of such research is the emergence of new ideas not within the academic space, but in the course of discussions in the “walls” of the so-called intellectual communities. One such community is the famous Eranos Club. Meanwhile, public space allowed intellectuals to

gather in “philosophical cafes”. This tradition persists to this day, continuing in journals published by such intellectual communities.

**Conclusions.** Knowledge exists not only within the walls of academic institutions. In the period of breaking old and creating new forms, informal associations of intellectuals come to the fore, which appear in the form of intellectual discussion communities, meetings in philosophical, literary, etc. cafes. Cultural studies in the early stages of its formation are necessarily connected with philosophical thought because the figure of the philosopher in France is thought more broadly than in the national tradition. Here the philosopher is an intellectual who deals with a wide range of issues. The methodology and the main issues of cultural research are formalized within the framework of intellectual discussion communities. Of these, Eranos deserves special attention, which has been operating since 1933. A feature of Eranos is, in particular, its international character.

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## POLITICAL TOLERANCE AND DEMOCRACY: SPECIFICITY OF THE RELATIONSHIP

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**Annotation.** *The article analyzes the specifics of the functioning of political tolerance in the contest of democratic processes. It is proved that in modern political science literature, there is a tendency to consider political tolerance as a moral norm and attitude for participants in a conflict situation associated with the practice of conducting a democratic process. However, the question of the limits of the application of political tolerance in a conflict situation in democracy remains open. It is revealed that if political tolerance is considered as the main feature of democracy, then it should not be violated, compromised. In this regard, political tolerance can and has been seen as one of the many most important values. The question arises about the limits of political tolerance in a democratic society, as well as the question of which of the theories of democracy to justify and consolidate in the modern political process.*

**Keywords:** *democracy, political tolerance, party tolerance, political parties.*

**Introduction.** The activities of politics are aimed at resolving group socio-political conflicts that affect the entire society. In resolving conflicts, the general construction of social life and its institutions is of great importance, the extent to which they reflect the needs and interests of an individual and his ability to really reveal his independence, autonomy in interactions with other members of society and its institutions, which, in turn, should to be effective, able to respond flexibly to the constantly changing needs of society, individual social associations and individuals, groups, parties in the implementation of their social roles.

All social and political institutions are potentially factors of political tolerance. It is institutions that play a special (decisive) role in the development and formation of political tolerance. Factors in the development of political tolerance are also historically established relations between political institutions, social groups and parties, the formation of individuals, communities, states one to another in different spheres of interaction.

**Analysis of recent research and publications.** It will be important to note that political tolerance has become the subject of many scientific studies. In particular, we can say that such outstanding minds of the past as D. Locke, D.S. Mille, D. Schumpeter, M. Weber and others paid attention to the concept under study. At the same time, in our time, the phenomenon of political tolerance has been studied by such scientists as S.Denisyuk, A.Gritsenko, M.Ignatieff, A.Ivanova, S.Lipset and others.

The purpose of this study is to to reveal the peculiarities of the relationship between political tolerance and democratic processes.

**Main results of the study.** In modern conditions, the key milestones of modernization in Ukraine cannot be achieved without the development of the creative potential of the

individual, the individual, which provides for the humanization and democratization of all spheres of life, ensuring civil harmony, trust, understanding between political forces. An important prerequisite and at the same time a means of achieving them in conditions of conflict confrontation is precisely tolerance, which the Oxford Political Dictionary explains as “the willingness not to interfere with views, moods and actions, despite the lack of sympathy for them or dislike for them” [1, p. 692].

In political terms, tolerance is interpreted as the willingness of the authorities to allow dissent in society and even in their ranks, to allow opposition activities within the framework of the constitution, the ability to adequately admit defeat in the political struggle, to recognize political pluralism as a manifestation of diversity in the state.

New aspects of the study of political tolerance are found in publications devoted to the problems of the formation of political rationality, a specific human community, which, according to the author of the article, is political tolerance. In politics, there are very strict laws and rules, there is a continuous struggle for power. Unlike politics and other spheres, political tolerance has no material forms, does not materialize in the administrative apparatus, institutions of power, and is completely free from any centers of control. Political tolerance is embodied mainly in language, exists in feelings, in the consciousness of a person, in relationships, in forms of reflection, in political ideologies. It can be described, pondered, felt, but impossible to see. However, it should be stated that political tolerance is present everywhere, encompassing all human life, takes place in all forms of politics. Political tolerance is the subject's perception of that part of reality that is associated with politics, with issues of political power, the state and its institutions [5; p.115].

Tolerant aspiration acquires real features and the ability to influence the motivation of behavior precisely when a person realizes his inextricable relationship with others, his dependence on another person and his interests - and not from someone specific and familiar, but from any potentially "recognizable" person. As a result, tolerant striving leads to an understanding of the diversity of individuals, but at the same time - the inseparability of their relationship. We can conditionally call this form of adequacy political tolerance, or a form of rationality specific to a particular community. Since the rupture of private agreements between people threatens their safety, there is a need to establish something universal, which has the quality of a universal argument for resolving conflicts of interest, in order to make the solutions found thanks to these “universal arguments” binding on everyone and always.

Thus, in modern political science literature, there has been a tendency to consider political tolerance as a moral norm and attitude for participants in a conflict situation associated with the practice of conducting a democratic process. However, the question of the limits of the application of political tolerance in a conflict situation remains open.

In the scientific literature, as the opposite of tolerance, researchers identify intolerance, which means a refusal to take into account other opinions, customs, beliefs and rights, the lack of ability to reckon with the external environment (M. Ignatiev) [3; p.234].

The public transition to the problem of the relationship between political tolerance

and intolerance (intolerance) should be based on real actions and behavior of people in difficult situations and in the spheres of their interaction. In this approach, tolerance and intolerance are viewed as a consequence or result of a socio-political fact. A state operating on the principles of a democratic political culture is the main component that determines the nature and properties of such a socio-political system, that is, whether it is a system where the principle of human dignity is respected and where the political and legal culture of tolerance is reproduced as an institutional way of approaching to the indicated ideal.

In the context of the modern process of globalization of society, political tolerance has found an independent force, has become decisive and decisive in the political process. The liberal view of political tolerance is examined, refined, and the axiom is derived that tolerance is possible as long as it does not harm others. Anything that does not harm others should be tolerated. Tolerance is a central concept in modern liberal-democratic theory, and although it may be limited (have its limits), it must be widely protected in order to preserve the liberal nature of society.

At the end of the twentieth century, it became obvious that democracy, as a form of organizing socio-political life, has established itself as a certain path of development for many countries, however, on the one hand, the widespread distribution of democratic reforms in many countries of the world, and on the other hand, it is weakening in the leading Western European countries.

It is recognized by many theorists that there is no single democratic theory. There are a large number of versions of theories of democracy, as well as the importance and role of political tolerance for different theorists. In this analysis, the author identifies three differences in the understanding of democratic theory, without analyzing them in detail in the historical context:

- 1) Liberal democratic theory and political tolerance.
- 2) Conservative-democratic theory and political tolerance.
- 3) Federalist democracy "or" constitutional democratic theory and political tolerance.

The author includes a third version, federalist democracy, mainly because it has many requirements for understanding tolerance, which differ significantly from most other liberal-democratic theories [6, p. 10-11].

The difference between tolerance as a principle and as a moral and behavioral value should be clarified in its relation to other values. Other important values set limits on political tolerance in order to strike a balance between tolerance and other values. If political tolerance is considered as the main feature of democracy, then it should not be violated, compromised. In this regard, political tolerance can and has been seen as one of the many most important values. The question arises about the boundaries of political tolerance in a democratic society, as well as the question of which of the theories of democracy to justify and consolidate in the modern political process.

Modern scholars distinguish about half a dozen different types and types of democracy - collectivist, majority, civic, elite, participatory, pluralistic, consensus, etc. Meanwhile, these types are a creation, rather, of a scientific and academic discourse; none of them

in real political life can claim to be exclusive and universal (D. Schumpeter). But, as has already been emphasized, in developed European countries, an important trend is the transition from ordinary pluralistic democracy to an ever greater embodiment of its consensus forms.

Modern political realities show that the traditional model of democracy no longer satisfies humanity. The dictatorship of the majority is yesterday, pluralism only partially solves the problems of society. Scientific publications are increasingly talking about the need for consensus democracy as a special type of political culture that forces politicians to negotiate, look for effective compromises, ways of constructive cooperation with all political forces, creating a “decisive minority” and ensuring its active participation in the governance of society. The institutions of power in countries with consensus democracies do not serve as a mechanical embodiment of the will of the majority, but rather for the real involvement of all social groups and political forces in government and the establishment of a constructive dialogue between them. The consensus nature of democracy is ensured by the coalitionality of the authorities, the proportional representation of groups and minorities in society, the high level of political culture, the organization of the population and the structure of its group interests (B. Crick) [6; p.240].

Consensus democracy is formed gradually, based on the history of the people, their political culture and traditions. If consensus democracy opens up prospects for socio-political stability and effective development of any country, then for our country its role becomes much more important. Indeed, in modern Ukrainian society there are heterogeneous communities, groups, parties, etc.

The specificity of the modern Ukrainian socio-political situation is manifested in the fact that the created political organizations, parties are poorly structured, do not have serious political and socio-economic programs that would allow them to be characterized in the European categories of liberalism, social democracy, Christian democracy, conservatism, etc.

Democracy is a state form and a social system. It is a state form in its institutional part. At its disposal is the parliament, the state, parties, public administration. However, the institutional part is not viable if it is not filled by people. People who are politically active and live in a democratic system must behave in accordance with the democratic order. Their ideas about values, ways of acting and behavior themselves must be determined by the basic rules of democracy. They need a culture of democracy in order for the institutional part to be complemented by a living part of people's democratic behavior (Davis James) [1; p.24].

The main institutional (those whose activities are regulated by legal institutions) subjects of politics are the state as a whole, the highest bodies of state power (head of state, parliament, government, high courts), local government bodies, political parties and public organizations.

There is no clear definition of the concept of "party" as a political institution. The fact that in this context we are talking about elective associations, unions, movements, political associations, partnerships, actions or blocs explains the problematic of the

definition of the concept. One can speak of a political party itself only if we are talking about organizations that have set themselves the goal of having a constant influence on the formation of political will and therefore need stable organizational structures and programmatic statements. A characteristic feature of a political party is participation in elections in order to retain direct power and influence in its hands. An indicative sign of political activity and the existence of a political party is participation in the formation of political will, which is carried out through people and structures through ideological influence and the exercise of power in various spheres. The party's goal cannot be independently realized within its own organization. Party members must hold leadership positions in the political system in order for the influence the party longs to have real. The party (in its institutional aspect) is a constitutional political institution, one of the priority forms of representative democracy, the essence of which is the adoption by the citizens of Ukraine of the Constitution and laws of Ukraine and those who have the right to vote, by voting, defend their interests, influence public power, to solve the most important problems of national or local importance [4; p.13].

The concept of party tolerance as the correspondence of party actions to the needs and wishes of the electorate is not identical with the concept of party tolerance, as the relationship between parties and their members. Tolerance does not always coincide with the intentions, hopes, wishes and ideas expressed in the party's program. It characterizes the part of the program that has been implemented, carried out by the party during its tenure in power, in parliament, in local and regional bodies, in committees and ministries. The level of tolerance determines how much the party has fulfilled its program and election promises. No party ever expects to deliver on all of its promises. It's impossible. But there are often parties whose tolerance is at zero. All the time after the elections, the party leadership spends mainly on solving their own problems, and before the new elections, political games begin again, designed to confuse the voter and force him to vote for the party again.

Party tolerance is a constituent part of political culture, an indicator of political experience, the level of political knowledge and feelings, a model of behavior of political subjects. The manifestation of the party tolerance when is making group political decisions and in group discussions, and especially in joint political activities, the absence or weakening of the response to any conflict and factor. Party tolerance is a somewhat different cultural phenomenon than individual tolerance: it belongs to a different sphere, has different criteria and norms. If the members of a society or a party are tolerant, then so will society. Moral pluralism does not require tolerance for the morally wrong, reconciliation of good and evil. In a democratic society, party tolerance is one of the most important dimensions of political life, it serves as an integral component of the stability of the political system, is an essential indicator of the development of society and its political consciousness [2; p.28].

Party tolerance is one of the forms of political tolerance. Party tolerance is one of the ways in which political relations exist, in which political forces are trying to exert influence on power, up to its final conquest. The party forces of the party have specific

political goals, political programs, and differentiated interests. They use political methods and methods to achieve a political goal, through mass political events and speeches. At the heart of the emergence of party tolerance is the development of contradictions between public policy and the party sphere in society, the awareness by individuals, groups, parties, classes of their objective opportunities to participate in the political life of society.

Tolerance foresees a certain “ingrowth” of a person into culture and the normative-value system of society, adherence to rules of behavior that do not contradict the tradition of domination of human rights and freedoms, but only ensure the functioning of tolerance in a democratic society and form a collective identity.

**Conclusions.** Thus, having analyzed the phenomenon of political tolerance in the context of democratic processes, we can draw the following conclusions:

1. In modern political science literature, there is a tendency to consider political tolerance as a moral norm and attitude for participants in a conflict situation associated with the practice of conducting a democratic process. However, the question of the limits of the application of political tolerance in a conflict situation in a democracy remains open.

2. If political tolerance is considered as the main feature of democracy, then it should not be violated, compromised. In this regard, political tolerance can and has been seen as one of the many most important values. The question arises about the limits of political tolerance in a democratic society, as well as the question of which of the theories of democracy to justify and consolidate in the modern political process.

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## THEOLOGICAL EDUCATION IN THE POST-CHRISTIAN ERA

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**Annotation.** *The post-Christian era needs a new theological foundation, new attitude to the role of the church and theological education, new approaches in the formation of the Christian church ministers who are able to meet the nowadays challenges. The peculiarities of the missionary orientation of the Euro-Asian Accreditation Association are clarified, as church communities understand themselves as participating in the activities (missions) of God, and seminaries serve the churches. In the current post-Christian era, due to the fact that the church has officially lost its influential status and significance and it has become not a central figure in society, but a place on the periphery, there is a situation of its more apparent independence as a subject of history. However, there is an opportunity for God to act through many institutions and individuals, including those involved in education and theology. The theological basis of the XXI century includes theological studies of freedom, compassion, creativity, the theology of each person's individual relationship with God, and a renewed focus on the eschatological vision of hope to be taken into account by Euro-Asian Accreditation Association's theological schools in the training of future church and society ministers.*

**Keywords:** *theology of education, theological school in the post-Christian era, Protestantism, secularization, theology after Christendom.*

Ukrainian education generally and evangelical theological education in particular are in the process of reform, which is caused by socio-historical changes related to the situation of post-Christianity and the challenges facing society, education and the Church nowadays. It is becoming increasingly clear that over the last decades theological education is no longer able to respond effectively to the challenges of the times and to meet the current needs of society and the Church. The modern post-Soviet theological education discourse requires a comprehensive and detailed analysis of its foundations, especially the study of the principles and theological education functioning in the Euro-Asian Accreditation Association (EAAA) [3]; it is a leading religious and educational organization that unites evangelical theological institutions, provides them with international educational quality standards and monitors their compliance. The relevance of the study is due to the fact that there are not enough scientific works in the outlined field, and regarding the basic theological training and modern Ukrainian schools education of the EAAA, they are practically absent. In the theological and religious analysis of the Ukrainian evangelical educational institutions of the EAAA educational components, on the one hand, it is necessary to understand how they correspond to biblical values, and on the other hand, how they are currently important and proposed formally by the Church and modern society. The EAAA's theological education must be inevitably changed to train efficient churchmen of the post-Christian era. To carry out the

God's mission on earth theological schools should have a strong biblical and academic theological foundation, they must be professionals in training new type church ministers who will not only meet the needs of local churches of their religious denomination, but also become proposed and effective in serving to the post-Christian society.

Theological understanding of the problems of modern theology education in the Eurasian Accreditation Association system will assess the entire system development of Protestant theological education in Ukraine and the whole post-Soviet reality.

The study purpose is to identify and critically analyze the teaching and education theological foundations in modern Ukrainian educational institutions of the Eurasian Accreditation Association, to reveal the factors of the post-Christian era church ministers' formation.

The modern world is going through difficult times. Everyone understands that humanity has entered a new era under the influence of globalization: worldview, the way of life, values have changed. Theologians discuss a lot how to understand the present, how to understand an era that is just beginning. There are more and more questions about what the modern church is and should be. It is important to catch on to the challenges the Church faces and how to deal with them in order to fulfill God's mission on earth.

It can be stated that everyone feels the world is on the verge of previously unknown towering upheavals and irreversible changes. The question becomes, whether the time of the post-Christian era has really come, as many thinkers say, or it is just an imaginary chimera? [2] S. Ryahovskiy asks the question; perhaps those who define our epoch not only as the epoch of postmodernism, post industrialism, but also as the epoch of post-Christianity are right? [4]

Recently many theologians are sure that “the Western world has passed from the Christian world to the post-Christian period” and there are a lot of evidences in theological works [1, p. 1]. The Eastern Europe thinkers (Ukraine, Russia) are in discussion about it. The Eastern European discourse of theologians and philosophers around this issue is interesting. One group holds the same position as Western theologians, acknowledging that we live in the post-Christian world. Another group questions the validity of calling the modern era post-Christian. There are fewer and fewer supporters of this view.

There is a parallel discourse on the same topic, but in different terms. Nowadays there is a position that the era of secularization (betrayal of religion) is in prime. This opinion is shared by I. Fediuchek, T. Parsons, H. Cox, R. Bellah, A. Schmemann, V. Garadzha, L. Andrieieva, and others. O. Zhuravskiy, A. Toffler, etc. are in opposition; they consider the modern era to be a period of desecularization (return of religions).

On the one hand, nowadays the world's attitude to religion can be traced, as its dispossession from society, its displacement into the private sphere of life, in other words secularization. I. Fediuchek, P. Berger, T. Parsons, H. Cox, R. Bellah, A. Schmemann, V. Garadzha, and L. Andrieieva wrote about it in their investigations. On the other hand, recently a considerable amount of new religious movements have appeared; it indicates an outbreak in religious interest, which suggests that the desecularization time has come [7, p. 205]. O. Zhuravskiy and A. Toffler support the view.

Modern Ukrainian scientific secularization discourse has two main concepts. The first one considers secularization as a natural process of aging, and even the religion extinction, which is associated with the social development and the displacement of the religion by science and secular ethics (A. Comte, K. Marx, B. Russell, etc.). The second concept (T. Parsons, P. Berger, R. Bellah, etc.) holds the view that secularization should not be understood as the religion extinction, but its transformation, its transition from the public sphere to the private life sector, its autonomy from society, various ideas about veracity (in other words the absence of a single vision), the presence of culture pluralism [7, p. 207].

P. Berger considers the liberation of all social spheres from the power of the church and organized religion to be secularization. That is, there is a separation of church from the state, education, art, science, it becomes independent towards theology. Religion gives over uniting society into a single whole with a single ideal and single shrine. Secularization leads to the fact that absolute values become relative, even conditional. The result is the loss of the life meaning and the appearing of human disorientation. Because of this, P. Berger characterizes the consequences of secularization as negative.

T. Parsons has a special opinion, according to which secularization makes itself evident in the fact that religion, as a social institution, has less impact on various social spheres (state, education, jurisprudence, economy), and therefore it allows each person to consciously and voluntarily choose a religion which he prefers and which could give him its ideals and moral norms.

The American sociologist R. Bellah supports the position of T. Parsons and points out that secularization makes religion an art for each individual, in other words, religion becomes private, and it leads to religious pluralism. In that case, religion does not lose its value and influence; simply, it is not the single common one for all, but individual for each according to his preferences.

According to Protestant theologian H. Cox, secularization is a cultural departure from the obligatory religious conditioning of symbols and brings the individual closer to a state of spiritual maturity and freedom. That is, he considers the secularization consequences to be positive.

According to I. Fediuchek, the modern conception of the secularization phenomenon is accepting it as Christianity's loss of sociality and institutionalization [7, p. 210].

Modern Western theologians assert that the Western world is in the post-Christian era. In theological works its transition from the Christian world era to the post-Christian world period is discussed from a historical, systematic-theological and practical-theological point of view. Theologians agree that the Western Church history has three epochs: pre-Christian, Christian and post-Christian.

EAAA schools provided theological education, both in the past and in the modern days in which the world entered, the post Christianity era. Each period has its special characteristics and the demands of times. It poses new challenges before education, makes new competencies formation requirements of students, new teaching approaches, new methods and even a new educational model. What the EAAA schools were like

in the late 1990s XX and in the early XXI century, they cannot be in the 20s of the XXI century. They ask for changes, rethinking what should be left, and what should be abandoned, and, on the contrary, what should be acquired, implemented, developed? What should be the education offered by EAAA educational institutions in order to become much-in-demand and relevant? Why EAAA educational institutions and not any other should become a priority for potential applicants? Just what can the schools and churches being the subject to the Euro-Asian Association standards offer? All these questions are faced by educational institutions to find the answers. We will try to highlight these questions; find out the characteristics modern theological education should have, examine its orientation, and understand what factors influence the modern church ministers' formation and what modern theological education of the EAAA should be in order to meet the call of the times.

What characteristics should modern theological education have in order to be currently important and high-demand today? What are its particularities? What should be left and what should be changed, and perhaps, what should be completely abandoned?

According to Hirsch, Frost, and Soloviy, in the Middle Ages, when the church had a dominant status, it began thinking in such a way (which still remains) that it began to set itself up as Christian's meeting place (in other words, a worship house) but not as the point for people or their progression. And it is clear that it led to the fact such "institutional thinking" required "professional clergy" [6, p. 125]. However, nowadays such necessity still remains (because churches exist, there the worship takes place, there are various types of church services (such as small home Bible study groups, Sunday school, Bible school, children's clubs and camps, pastoral care, nursing, etc.) and it needs qualified church ministers. That is, the doxological characteristics should remain. But it should be realized that the ministers must be trained for public and social work, so the missionary outreach should be the characteristic of theological education.

Yu. Chornomorets fairly remarked: "It's most likely that it is necessary to have a common study under Christ, a common the Gospel Book culture, a common discovery of evangelical values in ever newer cultural contexts" [8, p. 208]. Solidarity, unity, cooperation should also be the characteristic features of theological education.

We agree with J. Searle that for the ministering and mission in our post-Christian world there is a need to prepare a new generation of Christians, and for this we need to carry out educational reform in the field of theological education so the education stopped changing the students' worldviews, and became a complete change in the character of students (in other words, the heart essence) [5, p. 213]. If until now theological education has placed big emphasis on the formation of the Christian worldview and the acquisition by scholars of a certain set of knowledge, skills and abilities for service, now the greatest emphasis should be placed on transforming the heart and integrity of students, their spiritual formation. They should meet with "a complete transformation of their character in imitation of Christ. Here the emphasis is on spiritual formation, not on intellectual comprehension or professional training, which implies a "new way of life" [5, p. 216-217]. The new theological education should carry out not only a moral

formation, but also a “spiritual change of the whole person to the” new “in Christ”. And, as J. Searle emphasizes, “such transformation does not provide the transfer of facts or information in accordance with the curriculum, but the long and difficult work of the entire educational circle, which works together to form students in the spiritual values of humanity, integrity, tolerance, respectfulness, and above all compassion” [5, p. 217]. That is, modern theological education must be transformative.

Thus, modern theological education should be characterized by such features as doxology, missionary work, solidarity, unity, cooperation and transformative nature.

What is the orientation of modern theological education in order to be relevant and much-in-demand nowadays, and not to become a relic of the past, “dead” and useless?

We believe, J. Searle’s remark (which was singled out by R. Soloviy in the preface to his book “Theology After Christendom”) is correct, that before the theological education of the post-Christian era, education that should prepare prophets, there are a number of the major challenges, among which is the necessity of formation in the theological faculties students such competencies as the ability to resist the blind imitation of traditions, without their critical understanding; the ability to focus on acute social problems rather than on unnecessary disputes over doctrinal issues; skills of active introduction into the public environment of such virtues as freedom, compassion and creative power [5, p. 12]. “We have to create a new image and develop new ways to become the true followers of Jesus, new roads of theology and biblical life doing, new understandings of mission work, new directions of expressing compassion and seeking justice, new types of communities of faith, new approaches to worship and ministry, new integrations and conversations, convergence and dreams” [5, p. 127]. Analyzing the Emerging Church, R. Soloviy notes that along with how Protestant churches try to maintain their status in society, this movement in the new conditions of post-Christian culture finds an opportunity to radically renew the Christian life [5, p. 126].

We agree with the R. Soloviy’s opinion, who is convinced that the church (in order to survive and develop) has to change not only the theological research’s hermeneutics and methodology or the direction of theological searching, but first of all to bring up a completely “new kind of Christians” [5, p. 127].

We completely agree with the view of Yu. Chornomorets, who believes that the victory over the anti-Christian tendencies of the post-Christian world is possible only if every Christian becomes a conductor of God’s grace and acts in accordance with God’s plan for humanity. The role of each person strengthens. His responsibility increases. “As a priest and a king, every believing is responsible for everything created, which only he can cover with his care. As a prophet, he must set a personal example and personal testimony to society. As a teacher, he must awaken this person in the scholars, who must be a priest, a king, and a prophet. Nowadays the sainthood opening is possible only in personal communion with God and the saints, and these processes will take place in the aggressive secular environment, which today is permeated with idol as its hidden essence” [8, p. 214]. We agree with J. Searle and James McCledon, who insist that belief formation should be the starting point for theological education. As the beliefs are the

essences of personality. Theology shapes beliefs [5, p. 219]. The spiritual formation of a person is also his beliefs formation. Because they are the human character basis and the motivation of his behavior.

Current modern theological education, as well as today's academic theology, should be able to make the renewal of the society in modern cultural conflicts [5, p. 221].

Theological education should promote the formation of true theologians-researchers, who would have the true beliefs of Christ, the ability to acquire true knowledge, and not to do “academic working under the guise of “research” [5, p. 222], the ability to learn, interpret and communicate to the modern community the absolute truths of Christ, who would be able to renew this very community, to bring the Kingdom of God closer to it.

Like J. Searle and Dallas Willard, we believe that in the post-Christian world, the academic community should press forward to “find a solid foundation for action in knowledge” [5, p. 223].

Thus, the focus is not on the church, but on society, the biblical and scientific basis, the development of new competencies in students; in our opinion, it should be the focus of modern theological education.

The formation of church ministers, as well as the personality formation is not easy and not quick. Besides, those who contribute to the formation, first, must meet recognized standards themselves; secondly, to know how to form; thirdly, to clearly understand what they are supposed to shape. There are a number of factors that influence the formation of theological schools students in the post-Christian period. And all these factors should be taken into account in the educational process.

An important factor is a holistic approach to theological education, which forms theologians-prophets who are able to influence society and change it [5, p. 12].

We support J. Searle, who is convinced that in the post-Christian era, theology should shift its focus from the church to the God's Kingdom. And it is its content and meaning should become one of the principles of modern church ministers' theological formation. Agreeing with his opinion, we also believe that the Christian news meaning is not the personal sins forgiveness and the social transformation, but “the revival as a result of a new birth in spirit” [5, p. 157]. J. Searle underlines that the Gospel emphasizes the approach of the God's Kingdom, and exactly it is good news [5, p. 158].

We share J. Searle's view that nowadays it is important to change the paradigm of that theology is a church servant to that theology is a servant of the God's Kingdom. Therefore, theology should not care about teaching people the act of worship, but it should teach them to live in the Kingdom of God [5, p. 167]. That is, it is necessary to prepare not just ministers for local churches, but ministers of the God's Kingdom. It is necessary to emphasize the process of spiritual formation of future ministers not on the church, but on the Kingdom of God. And this is significantly different from the traditional orthodox approach to spiritual formation.

J. Searle repeatedly emphasizes (and we share his views) that theology and educational institutions, in which the spiritual formation of future ministers takes place, should shift their focus from the churches and their ministers training to the God's

Kingdom and training of its ministers. As particularly the Kingdom of God itself was the center of Jesus' teaching and is the center of the Gospel Book. Because of this, the church is not the goal of the mission work, it is a means to achieve the mission and fulfill the *missio Dei*. Therefore, the mission is to serve the God's Kingdom, not the church [5, p. 157-172].

Both Ch. Wright's in his work "The Mission of God" and J. Searle in his book "Theology After Christendom" emphasize that the church has to fulfill the God's mission, but not to be the focus of the mission. In other words, it is the means of fulfilling God's mission, but it is not its center.

Therefore, the spiritual formation should not be ecclesiocentric, but theocentric.

As we think, J. Searle is right stating that in the theological formation of God's people, education plays a very important role because it helps the Christian community to prepare effective and dedicated workers who will work for the Kingdom of God, its approach and expansion [5, p. 174].

**Conclusions.** The post-Christian era needs a new theological foundation, new attitude to the role of the church and theological education, new approaches in the formation of the Christian church ministers who are able to meet the nowadays challenges. The peculiarities of the missionary orientation of the Euro-Asian Accreditation Association are clarified, as church communities understand themselves as participating in the activities (missions) of God, and seminaries serve the churches. In the current post-Christian era, due to the fact that the church has officially lost its influential status and significance and it has become not a central figure in society, but a place on the periphery, there is a situation of its more apparent independence as a subject of history. However, there is an opportunity for God to act through many institutions and individuals, including those involved in education and theology. The theological basis of the XXI century includes theological studies of freedom, compassion, creativity, the theology of each person's individual relationship with God, and a renewed focus on the eschatological vision of hope to be taken into account by EAAA theological schools in the training of future church and society ministers.

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## **PEDAGOGY AND PSYCHOLOGY**

### **THE SOUND RESONANCE THEORY IN THE PRACTICE OF REALISING THE HUMAN ESSENCE**

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**Annotation.** *The article reveals the symmetry idea of human relations with the world on the basis of the principles of musical reflection and resonance; the influential specifics of sound medium energy on the person's mental and physical state and life in general were considered. It was clarified that the personality is a complex «vibratory» system with many freedom degrees closely connected with space, time, nature, social environs. Moreover, sound medium being a rhythmically organised phenomenon, influences the human organism and body rhythms.*

**Keywords:** *resonance theory; music sound; world harmony; human essence.*

Music is one of the most mysterious phenomena of the human existence. The impact of music and the physical nature of sound on the personality's psychic state attracted the scholars' attention for a number of centuries. The sound has especially significant effect on a child, in the time period when emotions influence their behaviour. In music, a person intuitively feels the connection with the supernatural, when this relation is consciously established, and this activates the human soul «movement», which leads to the personality's harmony with the world.

Shaping the world picture perception within the post-neoclassical period enables mentioning the fact that, in comparison with classical and neoclassical world pictures, the ideas of global evolutionism prevail, in accordance with which development and consciousness are interpreted as attributes, immanent to all the objective reality forms; transference from anthropocentrism to biosphere-centrism, i. e. the elements of «personality – biosphere – space» relations are considered within their interrelation and unity.

Contemporary cosmological conceptions treating sound-consciousness combination as a universal cosmic phenomenon reveal its significance in shaping the medium. According to contemporary science ideas, the birth of the Universe started with a powerful explosion of a gigantic energetic bunch followed by the emergence of the sound characterised by huge vibration amplitude. It served as an impulse to the space extension of the Universe. It is remarkable that various cosmic bodies, such as the planets, the stars, the nebulae were formed in the places of the huge sound wave accumulations [2].

The issue of sound genesis, its physical and metaphysical components interaction, as well as the evolution of ideas of the music sound development was studied by Hannes Alfven, Dionysius the Areopagite, B. Astafiev, Ia. Beme, Georg Hegel, Dante Alighieri, Robert Dicke, V. Diomin, Plato, Plutarch, A. Rodoskyi, Diodorus Siculus, Emanuel

Swedenborg, Hermes Trismegistus; the number and measure ontology treating the space as music was characteristic of considerations belonging to Augustinus, Alkūnīn, Boethius, Pythagoras.

Music as cultural phenomenon is the subject of studying various spheres of knowledge. For centuries, there has been constant interchange of philosophic ideas, artistic experience, attainments in the sphere of music art and pedagogy. Music became the subject of considerations of such prominent philosophers as Confucius, Cai Yuen Ding, Shen Yuan.

For Western philosophers, music was one of the most significant means of world perception and the personality's moral and mental genesis. In the research of genesis issues referring to the notion of harmony and idea of global music, as a universal basis of the person's world perception, a remarkable contribution was made by V. Vernadskyi, Immanuel Kant, Johannes Kepler, Pythagoras, Plato, Friedrich Schelling and some others.

Revealing the acoustic music opportunities in comparison with mathematical and physical sound principles, the sound power actions, as well as new focuses of creating computer music compositions are to be found in L. Berher's and Pierre Boulez's theses. A considerable impact on researching the current issue is accomplished by the studies of the following contemporary physicists and cyberneticists: A. Akimov, B. Biriukov, B. Kadomtsev, M. Mers, V. Rydrik, Joseph Sauveur and some others.

Contemporary scholars are getting more and more convinced in the Universe being the only mechanism working in accordance with rhythm laws. From the physical viewpoint, any melody is a unity of harmonious vibrations within the pitch frequency range. In ancient times, all the human organs were considered to possess characteristic vibration frequencies; moreover, accurately selected frequencies of external impact are even able of organism restoring [2].

The personality is naturally a «vibratory» system being closely related to the environs, seasons and space. This system is in constant information interchange with the outside world. All the human organs have their own rhythm and vibrations frequency. Like fingerprints, this rhythm is different for different personalities. Since birthday, the nature establishes a certain code for each person. This code is «embedded» in the DNA, RNA structure and chromosomal range, and is reflected in the vibrations frequency of certain biologically active spots, and is unchangeable through the lifetime. The vibrations frequency in these spots does not change during an illness, operation or even clinical death. The fluctuations alter their frequency or totally vanish for women when giving birth to a child. It is possible to assume that this is a somewhat protective process taking place in a woman's organism and being implemented by her to try to defend her offspring from the undesired information accumulated in her body. After the new-born starts living his/her own life, these spots' activity renews in the mode presupposed by the nature. If a certain correlation of biologically active spots corresponding to one or another human organ is composed, it will be possible to obtain the so-called «recommendations» established by the nature itself to save human health. It is no coincidence that in ancient dogmas,

music appeared one of the key ways of treatment, creating harmony and balance within the human body and soul, and it activated natural healing power. Meanwhile, the more precisely a melody was selected, the more effective its impact on an organism was [5].

Contemporary Japanese researchers obtained the human vibrational emanation data processed on the computer. The rhythms of brain and heart, respiratory and nervous system create specific music being non-perceptible by human hearing. The body experiencing an illness necessary to be treated via beauty and harmony sounds both non-harmonious and chaotic. The human body «sings» in a cosmic chorus where the resonance law is in effect, and this adjusts the system humbly, like an invisible conductor, and assembles it into a harmonious unity, thus subordinating it to the general life rhythm [9].

A person transforms music macrocosm via creating music balance, harmony, synchronism of both external and internal life rhythms, and, as an integral multilevel system experiencing constant development, embodies «sound world» being very similar to music.

In accordance with V. Diomin's considerations, the space truly sounds; moreover, it even performs a certain universal hymn. Here is the evidence. The splendid metaphor «spheres music» related to Pythagoras' name has sought and unusual embodiment nowadays. It appears possible to hear «the music» of the Earth's magnetosphere reflecting not only planet-related, but also other cosmic effects in its oscillations. To hear «the music», it is necessary to record the magnetic radiator's signals on the magnet tape, then to «compress» it to a certain sound range and to process it on the computer. Such records already exist and the sound one is able hear on them may be identified as music, rather noteworthy though a bit unusual. It seems to combine various music timbres, styles and traditions. The «organ concertos» reflection correlates with Indian music intonations, «Arabic maku-mami» and jazz improvisations. Such technical record patterns do not enable talking about the existence of harmony laws in «aerial music» to the full extent so far; nevertheless, we hope for the technical innovations assisting in revealing the mysteries of the universal sound beauty [5, p. 190-191].

Music is the system of universal wave vibrations, their time and rhythm characteristics; it is able of influencing the material structuring of music instruments, selecting sound-producing techniques, singing modes and sound system modelling and thus arranging the natural soundings chaos and referring to the natural acoustic «tectonics». Only musical specific material, i.e. the sound being different in terms of the proportional permanence of acoustic oscillations and intervals, is a universal wave vibration.

In the most ideal, «clear» and «abstract» representation the symmetry and proportion laws are implemented in music, while the time movement phenomenon itself is performed via sound vibrations, their interaction, connection and differences, i. e. fundamental «cosmic» specifics of harmonious oscillations within the basic parameters having precise and corresponding numeric value [10].

In recognising the micro-world wave characteristics, the French physician Louis de Broglie was guided by acoustic analogy, i.e. the string vibration law, the string being coiled up (the standing sound wave image). He confirmed the acoustic natural sound

series, i.e. energy microstructure of «harmonious sound reveals permanence, precise stability of its symmetrical and proportional composition». The music symmetry has deep philosophic content: it reflects harmonious interrelation of oppositional powers or tendencies. The symmetry character defines the level and specifics of similar interactions of the opposed phases, while the asymmetry degree presupposes the focuses and level of deviations from similar harmony [2, p. 195].

The symmetry principle grasped special interest of the Gothic counterpoint masters of the medieval epoch and served as the complex polyphonic forms model. Meanwhile, a great number of the aforementioned personalities were also mathematicians and astronomers trying to correlate polyphonic canons with cosmic bodies, as well as with God's creation. There exists a thought of this method having enabled Johannes Kepler to conduct research related to creating harmonious proportions characteristic of consonant music intervals, in the forms of both regular and irregular geometric polyhedrons, and to transfer the abovementioned relations to the aerial bodies movement [10, p. 187].

When studying music and its relation to Universal rhythms, philosophers of different epochs (Pythagoras, Plato, J. Kepler, and F. Schelling) revealed a remarkable phenomenon: to obtain an opportunity of communicating with mental world, it is necessary to be aware of a certain rhythm, to adjust and to bestir yourself to this rhythm.

Psychological affirmations of human conduct and outlook are comprised on the basis of genetic potential and appear both reflection and resonance of artistic and human images in the individual's consciousness, art nurturing the personality. We are psychologically stimulated by emotional resonances as well, on condition of biological rhythms and fields coincidence being presupposed by their proportions and phases harmony [11].

The sound medium being a rhythmically organised phenomenon influences the human organism and body rhythms at various levels. It makes our body muscles contract in accordance with a certain mode. Specific heart muscles contractions, arterial blood pressure changes, etc., in their turn, stand for the emotional reactions symptoms. The emergence of emotional symptoms within the human body presupposes its emotional state and provokes certain emotional reactions. It is within the basis of harmonious sound correlation in music compositions that such a physical phenomenon as resonance is to be found. Resonance also subordinates various human organism biorhythms, its selected organs' activity, e.g. heart beating.

It is harmonious music that presents a powerful healing device, while disharmonious one has a huge devastating effect. The sound being disorganised in terms of harmony and rhythm laws creates chaos. The current circumstance is to be taken into account as the sound, thus being a more exquisite domain, represents the world of the most sophisticated (astral) human psychic life; human health being presupposed by other human existence factors in many ways.

Harmonious music is built in accordance with the symmetry principle, i.e. proportionality, the one of the correct correspondence of arranging parts toward the unity centre. The energy structure of harmonious sound reveals and secures permanence, precise stability of its symmetry and composition proportionality.

It is necessary to reckon with, on the one hand, difficult, and, on the other hand, turbulent state of social life. Our civilisation stands at the level of technical opportunities leading to the mass «music creations» replication. However, what is the straightforward effect of the oscillation system on the contemporary individual?

What is genuine art? In our opinion, this is a composition filled with the author's energy. In fact, in the process of its creation an artist contributes a part of his vital energy in it.

Contemporary science has obtained the possibilities of technical fixation and studying energy fields, one of the vehicles of which is a person. A. Akimov, one of the contemporary scholars and physicists, expresses the following thought in his thesis: «The energy of some human individuals is extremely powerful; metaphorically speaking, they appear torsional generators being intensively and vividly expressed» [1, p. 332].

The human organism is both the receiver and generator of various information flows of the outside world. Moreover, the personality is an information carrier. To confirm this idea, it is worthwhile mentioning the words belonging to V. Kaznacheiev, Mathematical Science Doctor: «In living material's cells, there exists one more living form, and this form is field-type in itself! The field-type living form is the arrangement of material and energy flows, when informational preservation and accumulation takes place at micro-particulate, micro-field level. Such a field bunch is able of restoring, preserving and multiplying information; it is connected with other material bodies as an active formation able to adjust to other compositions and influence them alongside with the outer space» [6, p. 36].

The fact of sound oscillations influencing both an individual and his organism system leaves no doubt. If someone disputes about it, it is worthwhile offering to listen to a 7.5 Hz infrasound for a while. After a similar experiment the scepticism is sure to vanish alongside with the fear characteristic of those having experienced such sound oscillations approaching. There is a risk of human heart stopping beating on condition of proceeding listening to such sounds. It is vital to mention that «all melodies emerge being born in human heart, while human heart existence is generated from external objects of the outside world. The heart occupied by the outer world starts moving, and this is reflected via sounds. The sounds, in their turn, respond to one another causing different variations and these variations being properly organised are defined as melodies» [9].

The human ear requires constant information flow from the outside world. The sound analyser of the brain needs the corresponding sound irrigators. The definite «background noise» is a compulsory element of the human and animal brain's ordinary functioning. The hearing organ is a specific organism information provider that constantly informs the brain of everything happening around.

Hearing organs' overpressure or passivity leads to increasing the slowdown within the brain cortex, thus altering conditioned-reflex activity. This is revealed via human psychic and physical state disturbance. If a sound has influenced the hearing organ «creation», it is possible to admit that, metaphorically speaking, the brain «has created» music from these sounds in response. Human brain requires permanent information flow

from the hearing organs, while their absence disturbs its activity.

Acoustics as a science field selected the sound and acoustic specifics research as the objective. This discipline comprising all the sound revelations known nowadays, including relatable sciences, i.e. physics and mechanics of oscillation processes, emerged and originally developed as music study. Ancient Greek period of its development presented physics and mathematical analysis of elastic bodies' sound vibrations within the unity of philosophic ideas. It is worth emphasising that the Pythagoreans were focused on correspondence and proportionality manifestations. The string stretched over the board produced the sound of a certain pitch. The string distribution was accomplished via touching it in definite fixed spots, e.g. in the middle, or at the distance of one-third, a quarter, one-fifth from the end, and that resulted in altering the sound pitch by an octave, quint, fourth, third. This sound ear-perceptible correspondence was amazing for people. It is worth saying that acoustics being based on elementary physical nature went beyond its boundaries as the awareness of the string length proportion referred to the structure of modal sound range, i.e. not the sound arrangement itself, but the intonation one. This is obvious; ancient acoustics, as many other Hellenic culture fields, was syncretic. The material, physical and object phenomena were interrelated for philosophers, with the manifestations of general proportionality and numerical relations laws. The correspondence and coordination of sound pitches was one of the world's and aerial bodies' harmony demonstrations.

The acoustics department of one of the universities conducted research on the most aggressive rock and pop music patterns. The computer split the sound into frequencies, overtones, noises, and then modelled the human body tissue characteristics and calculated the music effect on the organism. For instance, the basic rhythm frequency of Deep Purple, Smoke the Water is between 2 and 4 Hz. Noise side-tones and non-harmonious overtones within the music and sound spectrum, with the volume of 40-50 dB, provoke uncontrolled disturbance, up to losing self-control, aggressiveness to associates or, on the contrary, negative emotions to oneself [7].

Science focuses its efforts on seeking the sound range able to cure various human diseases. Having obtained the latest research results, scholars start recognising the resonance sense of prayers and the bell ringing as powerful energy sources, «incurable» diseases treatment, the means of Soul purification, for refining from negative matters.

The bell ringing releases a huge resonance «radiation» ultrasound wave «purifying» the space both mentally and physically. The broadest resonators, not only in physical sense, are bell-tower resonators. Villages, valleys, fields, woods, civic awareness, religious outlook, pantheistic observations are all realistic and ideal domains responding to ringing differently. But the issue refers not to domains only. Various senses and values also «engage» in interaction with the sounds. They combine into strong miscellaneous associations further to «revive» in piano chords, in orchestra imitations, where the resonator's role is implemented by the music instrument body frame, or even by the concert hall.

The piano, the sound of which may be resonant in terms of its acoustic characteristics

and dynamics, secures vivid resonance sound effects. The instrument reproduces articulatory and language organics via hammer-action mechanism; the strings are perceived as the voices of apparent and concealed dialogues between the artistic Self-concept and its Universe; the piano being compelling in its nature, seems to compress a deep and spacious silence range within its powerful polished «body», then sounding as a definite poetic composition in music plays.

The composer Ludwig van Beethoven also expressed the ideas of the healthful impact of music on people and animals. He claimed that the world is similar to a vibrating sound, the people being the strings. When interacting with the outer world, the person perceives a certain frequencies range, i. e. a frequency and impulse code, one of the most effective means of influencing the person's psychic state.

In the state of music self-concentration an individual refers to the mysteries of his own soul, heart and mind. Realising the imperfect character of the world's emotional perception, the person submerges into his thoughts, reflects, and aspires after going beyond the world's boundaries via mystical observation under the impact of music. Feeling resonance within himself, the individual recollects his divine identity [8].

Music pervades the individual with «a current» focusing him on actions. The «hints» within the person reveal a deeper emotional layer hidden behind a more apparent one. We are convinced that sounds and words referring to music indicate a great number of deep feelings and notions. The only necessary thing is to respond to them.

**Conclusions.** The accomplished sound resonance theory analysis in the practice of realising the human essence enables to understand that the Universe is an integral mechanism «functioning» in accordance with the rhythm laws. From the scientific viewpoint, any melody presents a complex of harmonious oscillations within the corresponding frequencies sound range.

The resonance phenomenon subordinates various biorhythms of human organism; the work of its selected organs presents the person's aesthetic sensitivity. Every human organism cell, as well as every human organ is included in this resonant, colossal symphony and directed towards the sound harmony with the outside world in accordance with the resonance law.

The world is similar to a vibrating sound, while the people are «the strings». When interacting with the outside world, the person perceives a definite frequencies range, i.e. a resonance and impulse code being one of the most effective means of influencing the individual's psychic state. Nevertheless, far not every music pattern has positive effect on the human temper, psyche and health.

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## APPLICATION OF ONLINE TOOLS BY THE TEACHERS OF HIGHER EDUCATIONAL ESTABLISHMENTS IN “BEFORE” AND “DURING” QUARANTINE RESTRICTIONS

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**Annotation.** *In February 2020 I conducted an anonymous questionnaire among teachers of Vinnitsia M. Kotsiubynskyi State Pedagogical University study, aimed to find out, whether they implement the elements of distance learning into the educational process, to name the online tools teachers use in everyday life and how often they use various online services. In December 2020, a re-survey was conducted in order to compare the obtained results with the results of the previous survey and to identify issues faced by teachers in the transition from the classic classroom form of teaching to distance learning.*

**Keywords:** *distance education, social networks, online services, educational process, international educational services.*

**Problem statement.** The introduction of quarantine in the country and the transition of all educational institutions during this period to distance learning raised a number of questions, namely: how ready teachers and students were for distance educational communication, what skills of using modern online services they have, what digital devices for networking are used, how the perception and attitude of university teachers to the implementation of the educational process using online tools of distance education changed over the past year during the pandemic COVID -19 .

**Analysis of previous research** indicates that the use of social networks in education, various Internet platforms and applications is given much attention. The possibility of introducing online education in the educational space has attracted the attention of a number of scientists, in particular R. Gurevich in his works explores information and telecommunication technologies, GIS systems and their use in the educational process [1]; G. Kuchakovska explores the role of social networks in intensifying the learning process of future primary school teachers [2]; A. Yatsyshyn considers the use of virtual social networks for the needs of general secondary education [3]; O. Tyshkova investigates the use of social networks in the educational environment [4]; G. Nesterenko considers modern social networks as a tool of non-formal education [5]

The purpose of the article is to analyze the use of the online - tools by teachers of higher educational establishments in terms of "before" and "after" quarantine restrictions. The study was conducted in Vinnitsia M. Kotsiubynskyi State Pedagogical University in the traditional educational oho process of learning and online. The teaching process was realized anomalies through classical classroom presentation ting and using online services under conditions of quarantine restrictions.

**Presenting main material.** At Vinnitsia M. Kotsiubynskyi State Pedagogical

University, we researched an anonymous questionnaire. The first study was conducted in February 2020, in which 200 university teachers took part.

The second study was conducted through an anonymous survey in December 2020 in which 149 teachers participated. Intermediate surveys were conducted to obtain additional information on some issues.

The survey in February 2020 included ten questions.

In the first question, survey participants were asked to indicate the experience of professional educational activities.

5% of respondents indicated up to 5 years;

From 5 to 15 years - 16% of respondents;

From 15 to 25 years - 35% of respondents;

From 25 to 35 years - 29% of respondents;

Over 35 years - 15% of respondents;

As we can see from the result, the largest group - 35% - are teachers with professional experience from 15 to 25 years. The lowest rate of 5% are teachers with experience in educational institutions up to 5 years. In conclusion, most of the tutors, who took part in the questionnaire, have extensive practical experience in educational establishments.

The second question that the respondents were asked to answer whether they were registered on social networks and named in which ones.

49% of respondents are registered on Facebook;

31% of respondents - on Instagram;

16% of respondents - on Telegram;

4% of respondents - on Twitter.

All teachers noted that they are registered and have profiles on social networks. Among the respondents, 16% of respondents identified the Telegram messenger as a social network.

Next, the question was asked which search tools they most often use to work on the Internet.

89% of respondents use Google;

Yandex is used by 9% of surveyed teachers;

Yahoo is used by 2% of respondents;

Analysis of the answers to the questions, which devices are most often used by teachers on the Internet, showed the following results:

A computer/laptop is most often used by 14% of the surveyed teachers;

The tablet is most often used by 15% of teachers;

Smartphones are most often used by 71% of teachers;

These results once again confirmed the increase in the use of smartphones, both in everyday life and their use in professional activities. Witnessed the trend of miniaturization of computer devices and combined in one device of various functions.

On the question of whether teachers use their profiles in social networks (private profiles) in professional activities, the following results were obtained.

'Yes' was stated by 71% of respondents;

29% of respondents choose no;

However, a different result was obtained on the question of whether teachers are engaged in the creation of thematic educational online content on a systematic basis.

21% of respondents answered 'yes';

79% of respondents - no;

The following answers were received to the question of whether you run your own blog, website, channel:

This was stated by 15% of the surveyed teachers;

85% of respondents did not mention it;

This indicator can only mean that the results of the answers about the use of their own profile in professional activities are not entirely correct, and can only indicate the involvement of their pages of interviewed teachers in social networks in professional educational activities not on a systematic basis. As a confirmation of this conclusion, answers are given about the devices that teachers use to work on the Internet. According to the results, 71% of respondents use a smartphone. Blogging, information channels, just thematic pages on social networks require systematic typing and editing of large amounts of text, editing photos and various images, which is difficult and inconvenient to implement using only a smartphone.

On the question of the use of social networks in general, without reference to its own pages, the social network as a phenomenon that provides certain educational opportunities received the following results.

55% of respondents answered 'yes';

45% of respondents did not answer;

To the question of whether teachers use elements of distance education in professional teaching:

71% of respondents confirmed this fact;

29% of the surveyed teachers did not mention it;

The result is indicated in 29 % of those who do not use the elements of distance education, which coincides with the result of the first question, regarding the length of professional educational activity. Among the surveyed teachers, 29 % said that they have been engaged in professional educational activities for 25-35 years.

The following information was received on the use of international educational platforms.

"Yes, use " said 71% of respondents;

"No, do not use" said 29% of respondents;

The results show that the percentage of teachers who report non-use of international educational platforms, namely 29%, coincides with the percentage of those teachers who do not use elements of distance education in their teaching activities (29%), do not use their own page / profile in teaching (29%).

In December 2020, a second survey was conducted among teachers in which 149 teachers from Vinnytsia M. Kotsiubynskyi State Pedagogical University took part. The first issue of was asked to identify the duration of professional education activities.

Up to 5 years - 2% of respondents;  
From 5 to 15 years - 14.3% of respondents;  
From 15 to 25 years - 59.2% of respondents;  
From 25 to 35 years - 14.3% of respondents;  
10.2% of respondents - over 35 years old;

The majority of teachers who have more than 15 years of professional experience took part in this testing.

When asked whether they use social networks for educational purposes 87.8% of respondents said that Yes; while 12.2% indicated - No.

In the previous survey there were other results, namely " Yes, I use social networks for educational purposes" said 55% of respondents, " No " 45% of respondents. The implementation of the educational process during the quarantine period forced teachers to look for other forms of opportunities to convey information and get out of the zone of professional comfort, which was formed during a certain period of professional teaching.

When asked which online tools teachers use during distance learning (the survey could choose several answer options), the following result was obtained.

Facebook - 20.4%  
Instagram - 10.2%  
Telegram - 20.4%  
Zoom - 61.2%  
Viber - 85.7%  
WhatsApp - 2%  
Skype - 16.3%  
Google meet - 89.8%

The following answers were received to the question about the availability of sufficient technical support for the implementation of distance learning:

Yes, I have - said 81.6% of surveyed teachers.  
 No, I don't have it - 18.4% of respondents answered.

The answer of 18.4% of surveyed teachers about the lack of sufficient technical support for the implementation of distance learning without which it is impossible to fully prepare and implement professional tasks of the teacher shows clear signs of information inequality.

The teachers were asked whether they run a faculty own blog, website, channel for the realization of educational objectives:

51% of the surveyed teachers said yes;  
49% - no.

In a previous survey at the beginning of quarantine the results were radically different. This was stated by 15% or 85% of respondents.

The following answers were received to the question about the use of foreign educational platforms by teachers:

Yes answered 59.2% of respondents;

No - 40.8%.

In the previous survey, the opposite results were obtained. Yes noted 71% of respondents. 29% of respondents – said ‘no’. Which may mean the incorrectness of the first result.

On the question concerning the use of educational space and platforms of Ukrainian origin for distance learning 67.3% of respondents indicated yes, 32.7% of respondents - no.

When asked which distance learning tools are more convenient to use, foreign or domestic:

61.2% of surveyed teachers said that foreign ones are more convenient;

38.8% noted the convenience of Ukrainian ones.

Asked about the convenience of educational platform for teachers we received the following answers:

‘Convenient’ was noted by 77.6% of respondents;

16.3% of respondents noted that it was not convenient enough;

Difficult to use was noted by 6.1% of respondents;

When asked who the origin of this educational platform is - 79.6% of respondents indicated that it is foreign.

20.4 % use the domestic educational platform.

To the previous question, asking about the convenience of foreign and domestic distance learning tools, other results were obtained, namely 38.8% said that domestic is better. However, in response to which educational platform by origin you currently use, 20.4% of the surveyed teachers have already indicated that they use the Ukrainian one. We do not think that 18.4 percent of respondents would refuse to use user-friendly software in favor of user-friendly software.

When asked to indicate the name of this educational platform, the following results were obtained: Google Classroom, Google meet, Google Suit, Collaborator. The above-mentioned Collaborator is perceived by teachers as a national online educational product. However, it is built on the use of various services of Google, and it is difficult for us to attribute it to the national educational platform.

As we can see, when it came to name the online education platform, which is now used in education, established in Ukraine none of them was named. Although the use of national educational products is currently indicated 20.4% of the surveyed teachers.

To the question “Do you feel difficulty and discomfort during the implementation of distance learning? If you choose the option "Yes", I feel difficulty and discomfort during the implementation of distance learning, choose from the proposed list of one or more options for the cause of complexity or discomfort that best suits your feelings. "

26.5% of respondents did not feel any complexity and discomfort;

73.5 % of respondents chose this way, indicating the following reasons for complexity or discomfort:

- 26.5% of survey participants noted psychologically difficulties;

- 28.6% of respondents noted technically difficult;

- Lack of feedback was noted by 55.1% of respondents;

Among the teachers who took part in the survey, 73.5% said that they feel difficulty and discomfort during the implementation of distance learning.

The following answers were received to the question of whether the technical condition and operational capabilities of your digital equipment satisfy the implementation of distance learning:

26.3% of respondents are fully satisfied with the technical and operational condition of their digital equipment;

35.8% are almost completely satisfied with the state of digital technology;

35.8% are partially satisfied with the state of digital technology;

2.2% are not satisfied with the technical and operational condition of their digital equipment;

In a preliminary survey in February 2020, 18.4% of respondents provided information on the insufficient state of their own digital technology. The survey was conducted in December 2020 showed, that 35.8% of respondents only partially satisfied with the digital technology that is used, and 2.2% are not satisfied with its technical condition. This may mean that, in practice, the technical condition of digital technology, which is in use or owned by teachers in comparison with their views on the results of a survey conducted in February, appeared in mv but worse shape.

According to the results obtained, it can be concluded that 38% of teachers participating in the survey cannot fully implement the educational process remotely, which is again evidence of information inequality.

Additionally, university teachers were asked to assess the quality of educational and methodological support for distance learning during the spring quarantine period of 2020 and the autumn quarantine period of 2020 on a five-point scale. 137 teachers from Vinnytsia State Pedagogical University took part in the evaluation.

During the spring quarantine, the quality of educational and methodological support was assessed by:

9 teachers rated 1 point, which is 6.6% of respondents;

18 teachers rated 2 points, which is 13.1% of respondents;

49 teachers rated 3 points, which is 35.8% of respondents;

45 teachers rated 4 points, which is 32.8% of respondents;

16 teachers rated 5 points, which is 11.7% of respondents;

The period of autumn quarantine was assessed by the quality of educational and methodological support:

3 teachers indicated 1 point, which is 2.2% of respondents;

5 teachers - 5 points, which is 3.6% of respondents;

41 teachers - 3 points, which is 29.9% of respondents;

62 teachers - 4 points, which is 45.3% of respondents;

26 teachers - 5 points, which is 19% of respondents;

These results indicate that most of the teachers who took part in this survey during the spring quarantine period were not ready for a rapid transition to distance learning.

However, evaluations of the autumn period show positive dynamics of growth in the quality of educational and methodological support.

**Conclusions.** After the introduction of quarantine the Ministry of Education and Science of Ukraine proposed in its guidelines to use its own web resources of educational institutions, web resources of teachers to maintain and ensure the educational process. In the process of distance learning we are supposed to use social networks, blogs, and international educational platforms, such as Google – Classroom, various messengers and video chats.

The survey showed a significant percentage of teachers who did not use the opportunities of social networks, did not have their own profiles, did not use international educational services and did not have their own blogs. But today's challenges have forced the majority of teachers, who prior to the pandemic COVID -19 did not use distance learning elements in their careers, learn and use the possibilities offered by network Internet and digital technologies to ensure the implementation of distance education.

The results of the survey indicate the need for:

1. Organization of courses for teachers in programs of increasing professional qualification in the direction of applying elements of distance learning in education. Introduce and provide basic skills and proven techniques for using a variety of online services.

2. Creating educational online platforms on the principle "the easier it is to set up and manage, the better". There are many differentiated elements in various international educational platforms, which complicate the perception of the platform and make it difficult to set up and manage. Many senior teachers, with extensive professional and life experience, would like to create their own thematic blog. However, it is difficult to understand to set, for example, this online service for creating and maintaining blogs, like Google blogger.

The need to create and develop national education networks and services contribute to encouraging young people to use and improve, fill interesting and relevant professional content from various professional disciplines and areas of training, ma is to become one of the priorities of the national education system at present.

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## MARKETING TECHNOLOGIES IN ACTIVITY OF THE SOCIO-CULTURAL SPHERE MANAGER

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**Annotation.** *The article formulates results of research marketing features, concepts of marketing activity, essence of marketing technologies in the organizations of socio-cultural sphere and basic directions of their effective functioning are defined. Topical issues related to concept of "marketing technology" as a system that ensures achievement goals of organization and orients manager to a detailed study market of goods, services and their consumers. The importance of use marketing technologies in the process managerial activity in the socio-cultural sphere is substantiated.*

**Keywords:** *technology, marketing technologies, socio-cultural activity, activity of manager, management of socio-cultural sphere.*

**The problem formulation.** Formation and successful development of organizations various forms of ownership and activities are measured by their ability to optimally respond to changes made by adapting existing programs or developing and implementing strategic measures and tactical operations taking into account modern socioeconomic realities. Creating a strategy of operation is a decision on the direction of activity, a comparative assessment of competitive advantages, the study of external factors, taking into account economic interests and pragmatic desires of all stakeholders. Additionally, it is an inspection of the entire organization and identify features staff, the implementation of phased processes production or sales services that allow you to achieve competitive advantage and maintain customer loyalty. In accordance with requirements of time, the main activities of socio-cultural organizations, cultural and artistic institutions, commercial structures, which should be reflected in the relevant strategic plan, are development of social activity, system and creativity, which helps meet cultural needs, interests, aesthetic tastes and public inquiries. To implement conceptual program of action, special methods such as surveys, expert assessments, testing should be used; statistical analysis demand for a particular cultural and artistic event, as well as factors that determine behavior of consumers themselves to relevant cultural event. One of the ways to solve above tasks should be active management of marketing activities in socio-cultural organizations. In this way introduction of marketing technologies in the management of socio-cultural sphere contributes to a fuller review needs of market relations, peculiarities of competitors, improving quality products and services provided by subjects of the organization to a specific target audience.

**Analysis of recent research and publications.** Theoretical and practical principles of marketing technologies have become the subject of research by scientists and practitioners. The main provisions on the practical aspects of the development of

modern marketing have been studied by scientists: E. Hirschman (1983), K. Diggles (1986), P.D. Bennett (1995), S Zavyalov, V. Demidov (2003), P. Drucker (2004), F. Colber, J. Nantel, S. Bilodo, and J. Rich (2004), N. Karpenko (2010), O .Shaleva (2014), V. Sviatenko (2014), Kotler, P. (2015), O. Kovinko, T. Pasichnyk (2017), V. Lagodiyenko, O. Golodonyuk and V. Milcheva (2018). Despite significant amount of information, issues related to determining role of marketing technologies in ensuring effective functioning and implementation of socio-cultural organizations are not fully addressed. This area of research requires study of specific features of market, demand for projects of culture and arts, as well as active promotion of creative activities and the implementation of innovative services. This problem requires introduction of systematic analysis, socio-cultural forecasting, strategy development and tactics of organization through a marketing program.

The aim of the article is to study the role of marketing technologies in ensuring effective development of socio-cultural organizations in modern conditions. The main objectives of article are analysis and generalization theoretical aspects of defining essence concept of "marketing technologies" and review of their most important characteristics in activities manager of the socio-cultural sphere.

**The methodological basis** of study is the dialectical basis of relationship between theory and practice in study of socio-cultural phenomena and processes. The fundamental provisions of this work are based on an innovative approach, which involves awareness need to introduce modern marketing technologies in socio-cultural organizations; about a systematic approach that determines use of marketing technologies by combining theory and practice of management in process of managerial activity in the socio-cultural sphere.

**Research methods.** Study uses methods of analysis and synthesis, comparison, specific scientific and empirical methods, according to which structure of marketing technologies that are important for work managers of the socio-cultural sphere. The method of analysis gave us opportunity to determine place of marketing tools in practical work manager of the socio-cultural sphere. Thanks to the synthesis, we were able to find a relationship between use of marketing techniques for implementation in the socio-cultural sphere. Method of comparison – to identify general and different terminological concepts in the context of study; empirical methods: conversations, dialogues, conferences (online in the ZOOM system) focused the author's attention on organizational, scientific, methodological, theoretical issues of this research topic. The information base on study consists results of analysis publications leading scientists and researchers in the socio-cultural sphere, on design of process implementation various activities by managers of socio-cultural activities. Study also used data of personal observations of the author, made during teaching of professionally-oriented disciplines in the specialty 028 "Management of socio-cultural activities" at the Department of Show Business, Kyiv National University of Culture and Arts (Kyiv, Ukraine).

**Presenting main material.** Socio-cultural managers, entrepreneurs, producers rightly believe that creative and commercial success of projects in the field of culture

and arts depends largely on effective management, optimal strategic and tactical decisions, market analysis and study, activities of organization's staff. The socio-cultural sphere needs preliminary social and marketing research, which in turn will provide an opportunity to get content of this activity, taking into account real demand for cultural, artistic and leisure needs of different target audiences.

Marketing research in the socio-cultural sphere pursues the main goal, as determining degree attractiveness and relevance of products and services, forecasting and ways to improve network of socio-cultural organizations, creating competitive socioeconomic advantages in implementation of spectacles, concerts, creative actions, performances, cultural events show business. Solution of these issues incorporated with analysis of demand for products and services of socio-cultural projects, with development of innovative and creative directions activity, with satisfaction of spiritual and aesthetic needs of society.

Such an organization is impossible without presence of coordinating functions. Solution to this problem is entrusted to field of marketing. In particular, according to F. Kotler (2015), "marketing is a type of human activity aimed at meeting needs through exchange" [1, p. 21]. P.D. Bennett (1995) in the Dictionary of Marketing Terms defines marketing as "the process of planning and implementing the design, pricing, promotion and dissemination of ideas, goods and services through exchange that meets the goals of individuals and organizations" [2]. P. Zavyalov and V. Demidov (2003), believe that marketing is a type of market activity in which manufacturer uses a systematic approach and program-targeted method of solving economic problems, and market, its requirements and nature of the reaction are criteria for effectiveness activities [3, p. 9–11]. According to P. Drucker (2004), "marketing is a concept of company management, at the center of which is customer, customer with his needs and requests, and whole company, its branches, units and areas are aimed at best meeting these needs" [4].

If at the initial stages of development of the science of marketing, it was understood as the management movement of goods from producer to consumer, then later marketing was considered as a scientific basis for decision making. The functions of marketing have subsequently expanded and at this stage include study of consumer demands and needs, development and application of marketing concepts, and doctrine of marketing is already seen as a function and tools of organization. According to the currently accepted concept management of socio-cultural organizations, success is possible only with synchronous integrated activities of all departments and creative groups, which should be aimed at achieving goals based on market knowledge and real consumer demand for certain socio-cultural products.

Marketing as one of functions activity management in socioeconomic conditions occupies a special place in the management system, in which it plays role of consumer and producer, supply and demand. N. Karpenko (2010) considers concept of "marketing activity": as a kind of activity in field of market entrepreneurship, as an integrating function theoretical provisions of the marketing concept with the practical implementation of selected marketing strategies and plans [5, p. 144]. The introduction of marketing

contributes to a more systematic consideration of market requirements, improving the quality of services.

Marketing functions can be grouped into four groups: 1) analytical function; 2) production function; 3) sales function or sales function; 4) the function of management and control.

Additionally, based on a variety of sound scientific approaches, we propose to consider marketing activities as a set of actions aimed at implementing a particular product, service, which includes the following set of measures: consumer research; study of the motives of his behavior in the market; own market analysis; product research; analysis of forms and sales channels; study of competitors, determination of forms and level of competition; research of advertising activity; determining the most effective ways to promote goods on market; studying niche of market and creating favorable conditions for long-term success based on profitability of organization in today's conditions.

Marketing research is basis modern management of the socio-cultural sphere, focuses activities of manager, production company, cultural institution on design and production of goods (services), their sale, meeting consumer demand for a particular service.

K. Diggles (1986) states that "the main purpose of art marketing is to attract a certain number of people to the appropriate form of contact with the artist, while achieving the best financial result, adequate to achieve this goal" [6]. E. Hirschman (1983) notes that the traditional concept of marketing, which considers the satisfaction of market needs by the product, can not be directly applied to the sale of artistic products given the nature of art [7]. Colber, F., Nantel, J., Bilodo, S. and Rich, JD, (2004) conclude that cultural marketing is "the art of reaching those market segments that are likely to be most interested in products by adapting to its commercial components – prices, places of sale and promotion – to present this product to a sufficient number of consumers and achieve goals compatible with mission of the cultural enterprise» [8, 20].

Additionally, marketing in the socio-cultural sphere – universal tool in a market economy, designed to address key issues, including: implementation part of total product (spectacle, concert, art event, performance, cultural and artistic event, show business projects), goods or services to final consumer; satisfaction of spiritual and aesthetic needs; economic support of material incentives in creative activity.

However, spontaneous development of market relations, create problems both in activities of organizations and cause a state of uncertainty for consumer.

This is expressed in uncertainty number of consumers for whom specific cultural products are produced; how often consumers will use offered service; where and how the consumer uses similar products, competing organizations; how it is possible to influence potential visitors of offered concert, entertaining form, to make the decision on attendance of this or that action; what pricing policy is relevant for visitors, how much money he is willing to pay for offered product or service.

The first step in the activities of a marketing manager, which will help in this problem – market segmentation, in one hand, is a method of finding market shares and identifying

objects that are focused on the manager, in other, a unique management approach to decision-making process and basis for selecting and combining elements of marketing that can be used in a particular event.

There are following strategies for consumer segmentation in terms of market coverage:

1) mass marketing is a program in which any standard product is offered to all consumers;

2) concentrated marketing is a program focused on a specific market segment, on one homogeneous group;

3) differentiated marketing is designed to develop a program focused on several market segments, for each of which a set of marketing activities is developed;

4) consumer marketing is a marketing strategy in which each consumer is considered as a separate segment.

In this case, the segment we mean a group of consumers characterized by the same type of response to the proposed product and a set of proposed incentives. Market segmentation uses such criteria as: geographical segmentation, demographic segmentation, socioeconomic segmentation, psychological segmentation, behavioral segmentation. For market segments to be useful in the activities of the manager, they must meet the following characteristics: size and purchasing power of the market; accessibility; reality. A very important point in the segmentation of consumers is passage criteria of efficiency: difference between groups of consumers in motivation; segments should not intersect; sufficient similarity in each group; sufficient segments to ensure sales and cost recovery; availability of segments; your marketing complex.

Marketing activities manager of the socio-cultural sphere to study the viewer-consumer is aimed at determining the structure of consumer preferences in market of services offered by institutions and organizations of culture and arts. The purpose of such research should be to determine real and potential audience, public, its lifestyles, values, interests, level of cultural development. Marketing of socio-cultural organizations is more than just the promotion of goods and services on market. Based on marketing research, institutions of socio-cultural organizations or its individual representatives (managers, producers) produce (produce) such a service (product), which is necessary at this stage for the consumer, ie is relevant. Application of marketing concept in management implies an understanding of difference between services in the socio-cultural sphere from material goods and arises in this connection the peculiarities of marketing activities of individuals, organizations and enterprises. Marketing research cannot be conducted without a general marketing concept (definition of content, goals and advertising campaign).

Additionally, according to the modern concept of marketing, all activities of the organization, including the socio-cultural sphere, or a particular producer, manager must be based on the analysis of consumer demand and its changes in the future. Identifying unsatisfied consumer demands and focusing their activities on meeting these demands becomes one of the main goals of marketing.

An important task of marketing is to develop a strategic plan, which defines a set of measures to achieve goals, which represents the management process of creating and maintaining compliance between the purpose of activities and potential capabilities of the organization.

The strategic marketing plan includes the following stages:

- analysis of problems and tasks related to market development and increasing sales of cultural products or services;
- strategy, which includes relevant areas of socio-cultural activities in the target markets;
- tactical planning, development of an operational plan with a list of specific executors and deadlines);
- marketing budget, formation and determination of the required funds and sources of funding;
- control procedure, which includes the collection of data on the results of activities, their analysis and evaluation.

Note that the marketing plan should be a flexible program of action that allows you to quickly respond to all changes in the environment, minimize errors and find a quick and adequate way out of difficult situations.

Thus, strategic planning is a process of creating and practical implementation general program actions of socio-cultural organizations based on use resources, which would ensure coordination of all controlled factors of their work and would create a basis for effective management decisions.

The introduction of marketing technologies in the management of the socio-cultural sphere will make it possible to more fully meet consumer demand for certain activities and services on the basis of the creation of material, technical and financial base. Analysis of publications on marketing technologies has shown that there is no unambiguous set of technologies and algorithms for their implementation in practice. I. Illichova (2012) marketing technologies are based on a set of interconnected marketing entities, management procedures, certain processes and their stages, clear in their sequence of operations, techniques and actions aimed at achieving marketing goals [9]. O. Kovinko, T. Pasichnyk (2017) marketing technologies is a system of scientific knowledge on the formation of relevant stages, a list of specific operations, techniques and actions implemented by marketing professionals to improve the efficiency of the enterprise through, primarily, information support of production competitive products, timely introduction to the market and ensuring long-term relationships with consumers [10]. O.Shaleva (2014) Internet marketing technologies are a set of social and managerial processes that are aimed at meeting the needs of consumers on the Internet in the formation of supply and exchange of goods and services using information and communication technologies complex of social and management processes [11] . Based on the classical interpretation of the concepts technology and the peculiarities of their presentation in marketing, we can reasonably define the essence of the concept of «marketing technology» as: planning and development of innovative products using a

set of scientific approaches used in solving practical problems. goods (services) and market needs.

Additionally, marketing technology is a systemically organized action, which based on the program (plan) of a set of operations, structures and procedures that ensure the achievement goals on social entity of organization through the management of communication processes and their operating conditions.

Consider the content and specifics of technologies that can be adapted in the activities of socio-cultural organizations (Figure 1), namely:

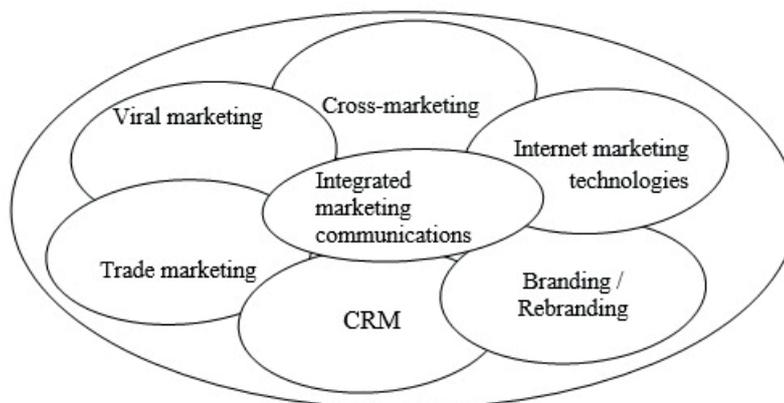


Fig. 1. Marketing technologies in activities of manager of the socio-cultural sphere  
*Source: compared by author on basis [12].*

1) viral marketing – interest of target audience in transmitting marketing messages to others to raise awareness of the brand/product/service; 2) Internet marketing technologies – set of social and managerial processes that are aimed at meeting the needs of consumers on Internet in the formation of supply and exchange of goods and services through information and communication technologies; 3) CRM (Customer relationship management) – customer relationship management. CRM-technologies determine first of all the possibilities of collecting, processing and effective use of information, first of all, about consumers; 4) trade marketing – is the activity of all participants in trade, aimed at organizing the promotion of goods from producer to end consumers. As a marketing technology, trade marketing is aimed at increasing demand at level of wholesale and retail trade, use of marketing communication and other activities in distribution channels, rather than at the level of the end consumer; 5) integrated marketing communications – is a marketing technology that allows you to communicate with certain market segments, using a range of different methods: organizational, technical, economic, informational to perform the tasks set before the company; 6) marketing technology branding involves the use of a set of knowledge about the ways and means of managing the processes of formation and development of the brand, as well as achieving a competitive advantage for the company. Marketing technology rebranding involves the implementation of

restyling – a visual change of brand elements, change in market positioning, change of name, logo and visual design; 7) cross-marketing provides cross-promotion of the enterprise (product) by two or more enterprises, implementing joint marketing programs aimed at stimulating sales or raising awareness [12].

Besides, use of marketing technologies will increase the effectiveness management of both marketing activities and activities of the organization as a whole through development and application of modern scientific methods and tools for planning, organization, accounting, analysis and control.

**Conclusions and discussions.** The article formulates the results of research on identification and generalization of current trends in the use of marketing technologies as a special form of organization in the management of socio-cultural sphere and identifies the main directions of its effective functioning. In modern conditions, socio-cultural organizations must rely on a detailed study the market of goods and services and their consumers. The marketing manager as a professional achieves significant success in the case when the organization of the socio-cultural sphere in which he works, adequately reflects the expectations of real and potential consumers of cultural products. Generalization of modern trends in management of socio-cultural sphere allow us to draw the following conclusions:

1. Marketing activities in the modern system of socio-cultural sphere is considered as a means of professional activity, as a set of actions aimed at selling a particular product, product, service, which includes the following set of measures: consumer research; study of the motives of his behavior in the market; own market analysis; product research; analysis of forms and sales channels; study of competitors, determination of forms and level of competition; research of advertising activity; determining the most effective ways to promote goods on the market; studying the niche of the market and creating favorable conditions for long-term success based on profitability of the organization in today's conditions.

2. Marketing technology is a systemically organized action, which is based on the program (plan) a set of operations, structures and procedures that ensure achievement on goals of the social entity of the organization through the management of communication processes and conditions of their operation.

3. The role of innovative marketing technologies in the management of socio-cultural sphere, which are used in the implementation of projects in the socio-cultural sphere, to identify cultural needs, expand the target audience, strengthen feedback with cultural policy actors, formation of information and communication cultural space, increase efficiency socio-cultural activities.

**Scientific novelty of the obtained results.** The scientific novelty is as follows: marketing activities are considered in the context of the growing complexity of cultural processes, which necessitates the development of various, including technologies aimed at solving important problems for society and culture, improving tools for solving them. Highlighting marketing activities as a special type of organizational and managerial activities of cultural policy actors, the author concludes that marketing activities affect

the development of cultural diversity; promotes the integration of cultural actors; in general, intensifies the interaction of various subjects of cultural policy.

**The practical significance of the results.** The practical significance of the obtained results is revealed in the possibility of their use to solve a number of theoretical problems and develop recommendations for the application of modern marketing activities in the socio-cultural sphere and develop practical recommendations in the process of programming, development of methodological materials, practical measures

**Prospects for further scientific exploration in this direction.** Prospects for further scientific research are a thorough study of the specifics of the implementation of marketing technologies in the management of socio-cultural organizations.

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## **MEDICINE AND PHISIOLOGY**

### **STRESS STRAIN STATE OF THE “DENTITION - SPLINT – BONE” BIOMECHANICAL SYSTEM IN TEETH INJURY**

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**Annotation.** *In recent years, finite element analysis has been commonly used to analyse occlusal pressure on teeth and surrounding bone. To study the distribution of pressure on compression and bending in the «dentition-splint-bone» biomechanical system (BS) and on the basis of the obtained data to improve the conditions for restoring the anatomical and functional capacity of injured teeth in children.*

*The study has identified that bending pressure leads to greater displacement of all components of the BS than compression on the average 5.7 times. A comparative analysis of the results of calculations of three models of “dentition-splint-bone” BS has shown that the first model of BS has got the lowest indices of displacement and stress. Thus, it can be argued that the most optimal for the immobilization of injured structures is the presence of four teeth with more than 2/3 of the roots formed, which are in contact with each other. The pressure on the cortical and spongy substance of the alveolar process is evenly distributed.*

**Keywords:** *dental injuries, stress strain state, biomechanical system, maxilla, finite elements method, teeth, splinting construction.*

**Relevance.** Immobilization of injured teeth is accompanied by some stress on the surrounding bone, which is a risk factor to restore their functional state [3, 4, 5, 20]. In recent years, finite element analysis has been commonly used to analyse occlusal pressure on teeth and surrounding bone [8, 11, 14, 15, 17, 18, 21]. This is an effective method of studying stresses in tissues, because it allows to «model» a biological system consisting of different tissue structures: a tooth, a bone, a splint system, that determine the response to the pressure of its components [9, 12, 16, 19, 22].

The objective of the work. To study the distribution of pressure on compression and bending in the «dentition-splint-bone” biomechanical system (BS) and on the basis of the obtained data to improve the conditions for restoring the anatomical and functional capacity of injured teeth in children.

Materials and methods. The study included 768 case reports and CT scans of children with dental injuries. The technique and algorithm of simulation mathematical modelling

of the stress-strain state (SSS) of the BS were used on the models of the BS of the upper jaw with the splinting structure of the dentition [1, 2, 6, 7, 10, 13].

**Results.** Based on the analysis of 768 case reports of children with injuries of the teeth of the upper jaw in mixed occlusion, three clinical groups were formed depending on the number of teeth surrounding the injured permanent incisors, the degree of formation of their roots. The first group included – 219 children (28.5 %), whose injured and adjacent incisors had roots with incomplete apex genesis (95 % of the formed length), in the absence of canines. The second group consisted of 169 patients (22 % of cases), whose roots of the incisors were in the growth stage, their length was 70 %, and the roots of adjacent temporary canines were fully formed. The third group involved 161 patients (21 %) with occlusion at the stage of the temporary lateral incisors change. The central two permanent incisors had roots at the stage of growth with 70 % of the formed length, while temporary canines had a root without any signs of resorption. One or two central incisors were injured in each group of children.

The first and third biomechanical models consisted of 19 structural elements, and the second model – of 27 correspondingly. For all models in the ANSYS Workbench software package, semi-automatic conditions for rigid contact for adjacent bodies were formed. Finite element sampling was performed in the semi-automatic mode using the contact ten nodal pyramidal 3D SOLID187 finite elements. The stress-strain state (VAT) modeling was performed for 6 variants of simulation models of three upper jaw BSs with a splint structure of the dentition. The obtained results of the maximum values of displacements and stresses of biomechanical systems "dentition-splint-bone" indicate the heterogeneity of their distribution in different sections of the models (Table 1, 2).

Table 1

**Maximal values of models' displacements of «dental row-splint-bone» biomechanical system**

Maximal displacement values (m)				
Model		1	2	3
Compression	Cortical	4,40E-09	5,03E-09	5,55E-09
	Cancellous	4,07E-09	4,54E-09	5,03E-09
	Teeth	9,85E-09	10,5E-09	12,5E-09
Bending	Cortical	23,9E-09	28,1E-09	29,6E-09
	Cancellous	19,8E-09	20,7E-09	21,6E-09
	Teeth	77,8E-09	92,1E-09	104E-09

Table 2

**Maximal values of Von Mises stress models of the «dental row-splint-bone» biomechanical system**

Maximal pressure values (Pa)				
Model		1	2	3
Compression $P_{zi}$	Cortical	5102,5	6765,3	7554,8
	cancellous	783,4	1043,6	1177,3
	Teeth	5959,9	8147,9	10303
Bending $P_{yi}$	Cortical	31989	39967	45181
	cancellous	1553	1894,3	2137,2
		20195	23716	28986

The teeth under the action of compressive ( $P_{zi}$ ) and bending ( $P_{yi}$ ) force vectors undergo the greatest deformation among all the studied structures included in the BS (Fig. 1). The displacement fields during bending are on average 8.33 times larger than under compression. The largest total deformation is found: in the first model - in the lower third of the crowns of the central incisors –  $77,758E-09m$ ; in the second model BS – in the mesial-proximal part of the crowns of the injured central incisors -  $10,546E-09m$ ; in the third model – in the lower third of crowns of the central canines –  $104E-09m$ . The stress recorded in the teeth under bending pressure ( $P_{yi}$ ) are 3.03 times greater than under the action of the compressive ( $P_{zi}$ ) force vector (Table 2). The greatest total stress is experienced in the first model – pre-cervical areas of the central incisors –  $9763.5Pa$ ; in the second and third – pre-cervical areas of the canines –  $44529Pa$  and  $28986Pa$ , respectively (Fig. 2).

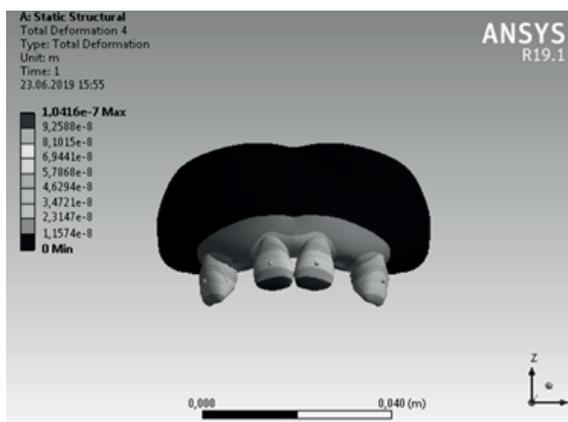


Fig.1. The fields of displacement distribution of the third model of the «dental row -splint-bone» biomechanical system.

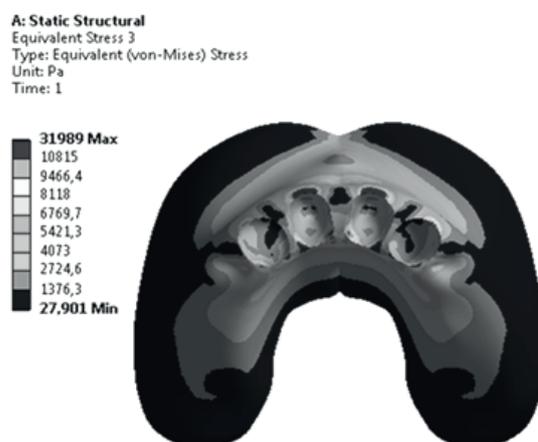


Fig. 2. The fields of distribution of equivalent pressures by Mises in the cortical layer of the bone of the first model of the «dental row-splint-bone» biomechanical system.

The deformation of the bone in the BS occupies the second position among all studied structures and under the action of the compressive ( $P_{zi}$ ) force vector the indicators of the cortical layer turned out to be 5.45 times higher than under the action of the bending ( $P_{yi}$ ). The least displacement occurred in the spongy substance of the jaw bone, while under the action of the bending vector, the deformation was on the average 4.55 times greater than the compressive one ( $P_{zi}$ ).

Indices of equivalent Mises stresses in the cortical layer of bone under the action of the bending vector ( $P_{yi}$ ) were subjected to an average of 5.44 times greater pressure than under the action of the compressive ( $P_{zi}$ ) force vector. The highest concentrations of equivalent Mises stresses are determined in the first model - on the vestibular and approximal-palatal surfaces of the central incisors pits – 31989 Pa; in the second – on the vestibular surfaces of the central incisors pits – 3339.6Pa; in the third - on the vestibular surfaces of the pits of the central incisors and canines – 45181Pa.

The cancellous bone of the upper jaw in case of injuries of the incisors is the least stressed in comparison with all simulated structures of the BS (Fig. 3).

Under the action of the bending vector ( $P_{yi}$ ), the indices of the maximum values of stresses equivalent by Mises are on average 1.84 times higher than under the action of the compressive ( $P_{zi}$ ) vector. The highest concentrations of Mises-equivalent stresses are determined: in the first model – on the mesial-vestibular and mesial-palatal surfaces of the central incisors pits – 1553Pa, in the second and third – on the vestibular surfaces of the central incisors pits – 1894.3Pa.

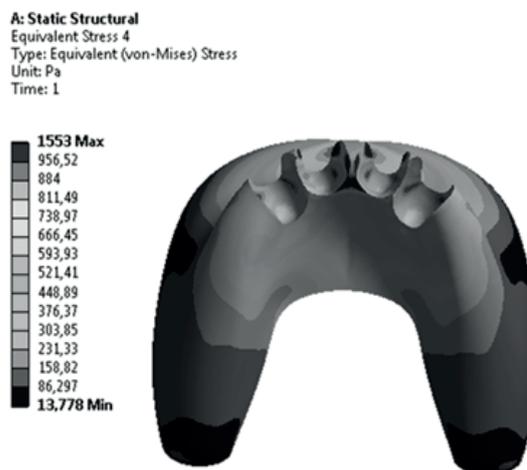


Fig. 3. The fields of distribution of equivalent pressure by Mises in the cancellous layer of the first model bone of the «dental row-splint-bone» biomechanical system.

**Discussion.** Considering the components of the BS, it should be noted that teeth undergo the greatest deformation and stress in all BS. Thus, the indices of the displacement distribution fields under the action of the compressive ( $P_{zi}$ ) force vector lead to deformation of the teeth of the third BS model, which is 1.2 times larger than the value in the second BS model and 1.26 times larger than in the first one. Under the action of the bending ( $P_{yi}$ ) vector, the teeth of the third model of the BS are subjected to the greatest pressure and the least – the first – to 1.3 times. Under the action of bending stress ( $P_{yi}$ ) teeth are subjected to an average of 8.32 times greater stress than under the action of the compressive ( $P_{zi}$ ) force vector, and in the first model, the pressure is the least. The fields of distribution of equivalent Mises stresses in the first BS model turned out to be the least. The action of the compressive ( $P_{zi}$ ) force vector leads to the highest stress of the teeth of the third model of BS: 1.26 times greater than the stress of the teeth of the second model of BS and 1.72 times more than the first. Under the action of the bending ( $P_{yi}$ ) vector, the teeth of the third BS model experience the greatest stress, and in the second and first these stresses decrease 1.22 and 1.43 times, respectively. The stress in the teeth under bending pressure ( $P_{yi}$ ) is 3.03 times greater than under the action of the compressive ( $P_{zi}$ ) force vector.

The cortical layer of bone in the third model of the BS under the action of the compressive force vector ( $P_{zi}$ ) undergoes displacements and stresses on average 1.3 times more than in the first model. Under the action of the bending ( $P_{yi}$ ) vector, this tendency is kept – the cortical layer of the third model of the BS undergoes the greatest deformation, and the least – 1.23 times over the first. The distribution of equivalent Mises stresses in the cortical layer of bone under the action of the compressive ( $P_{zi}$ ) force vector in the third model of BS is 1.5 times greater than in the first. Under the action of the bending ( $P_{yi}$ ) force vector in the cortical layer of the third model of the BS, stresses

occur 1.13 times less than in the second and 1.41 times less in the first. This indicates that in the third model of BS due to the lack of adjacent teeth (no approximal contacts) and insufficient root length (70 % formation) there is an increase in the pressure on the cortical part of the bone, which is concentrated from the vestibular surface of existing teeth – central incisors (injured) and canines. It should be noted that in all models of BS the highest concentrations of equivalent Mises stresses are determined on the vestibular surfaces of the central incisors pits (injured teeth).

In the spongy part of the bone under the action of the compressive (Pzi) force vector and under bending load (Pyi), the largest values of the displacement distribution fields were found in the third model of BS – compared with the first and second models of BS. The pressure results in indices' increase from the first to the third model of the BS. The stress in the spongy part of the bone of the third model of the BS under the action of the compressive (Pzi) force vector and bending (Pyi) is greater than in the first and second models of the BS, on the average 1.2 times.

The study results of the displacements and stresses' indices depending on the force (Pzi and Pyi) of the cortical layer and the spongy part of the bone showed that the bending forces (Pyi) cause the greatest changes in the bone structures of the alveolar process around the injured central incisors. The equivalent vectors Pzi and Pyi are directed from the bottom up and from the middle outwards. Under such conditions, the teeth of the upper jaw move forwards, which contributes to their dislocation. This fact gives grounds to consider the necessity of the injured teeth to be dropped out of occlusion to reduce the pressure on the damaged area and more rapid tissue restoration.

The study has identified that bending pressure leads to greater displacement of all components of the BS than compression on the average 5.7 times.

Thus, the least displacement of all BS structures is experienced by the cancellous bone under the action of the compression vector (Pzi), and the largest – by the teeth under the action of the bending pressure (Pyi). In general, the values of the maximum displacements of the first model of BS, compared to the second system are lower by 11 % under the action of compressive stress (Pzi), and 13 % under the action of bending pressure (Pyi). Compared to the third system, the maximum displacement for the first system were lower by an average of 25 % under compressive stress (Pzi) and 22 % under bending pressure (Pyi). The resistance ability of the BS "dentition-splint-bone", the pressure on the bend Pyi, is less than the ability to resist the compressive stress Pzi, the vector of action of which almost coincides with the axes of the teeth. At the same values of forces, the maximum displacements of the system at bending pressures Pyi are 6.1 times greater than at compressive stresses Pzi.

The minimum indices of the distribution of equivalent Mises stresses were obtained in the cancellous bone under the action of a compression vector (Pzi), and the maximum – in the cortical layer of the alveoli under the action of bending pressure (Pyi). On the average, the stresses of the first system compared to the second system were lower by 35 % under the action of compressive stress (Pzi) and by 21 % under the action of bending pressure (Pyi). Compared with the third system, the values were lower by 57 %

at compression ( $P_{zi}$ ) and by 40 % at bending ( $P_{yi}$ ) pressure. At the same values of forces, the maximum values of the Mises-equivalent stresses of the BS at bending pressure  $P_{yi}$  are 3.63 times greater than at compressive stress  $P_{zi}$ .

A comparative analysis of the results of calculations of three models of «dentition-splint-bone» BS has shown that the first model of BS has got the lowest indices of displacement and stress. Such data indicate that the fixation of the immobilization system on four teeth, which are in contact with each other and almost formed roots, is more rigid and can effectively counteract the external pressure with an even distribution on the bone structures of the alveolar process.

In the second model of BS the obtained values of displacements and stresses are greater than in the first one. Since the second model consists of teeth whose roots are not fully formed (70 % of the length), the obtained data confirm the results of previous studies that the immobilization of such teeth is less stable. The bone structures of the alveolar process have turned to be more stressed than in the first model of BS.

The indicators of the third model of BS were the largest when the immobilization system included two central incisors with unformed roots that did not have adjacent teeth, i.e. the absence of approximal contacts, so its stability was the lowest.

Thus, it can be argued that the most optimal for the immobilization of injured structures is the presence of four teeth with more than 2/3 of the roots formed, which are in contact with each other. The pressure on the cortical and spongy substance of the alveolar process is evenly distributed.

**Conclusions.** 1. It has been found out that the injured central incisors are overloaded in three BS «dentition-splint-bone», their lower third of the crowns has been undergone by the largest total deformation, which leads to the necessity to reduce the masticatory pressure on them. To achieve effective immobilization of the injured teeth, a compulsory condition is to limit the immobilization system with teeth whose roots are formed by at least 2/3 of their length.

2. In case of injured teeth immobilization, the cortical plate was subjected to a greater stress than the spongy substance in all BS. Under the action of the bending vector ( $P_{yi}$ ) in the cortical layer of the bone there is an average of 6.04 times more stress than under the action of the compressive ( $P_{zi}$ ) force vector. In the presence of injured and adjacent teeth with formed roots in the cortical layer and the spongy substance of the alveolar process, there is minimal pressure on compression and bending.

3. The determination of the stress-strain state of the «dentition-splint-bone» biomechanical system has revealed that for optimal immobilization it is necessary to take into account: the degree of root formation, the presence of contacts between the teeth, physiological pressure distribution on the injured teeth and bone.

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## EFFECT OF MELATONIN DRUGS ON THE DYNAMICS OF LIPID PROFILE INDICATORS IN PATIENTS WITH ARTERIAL HYPERTENSION AND OSTEOARTHRITIS

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**Annotation.** Hypertension (AH) and osteoarthritis (OA) are among the most common diseases in the world, which not only negatively affect the quality of life of patients, but also cause an increase in economic costs for health care.

Group I patients who received melatonin during the month on the background of the main treatment have better dynamics of lipid profile compared with the corresponding indicators in group II patients. Thus, the level of cholesterol decreased in group I by 13,5%, and in group II – by 12,0%; LDL indicators decreased in group I by 29,2%, and in group II – by 21,4%. At the same time, the indicators of HDL and CA in patients of two groups (I and II) with hypertension combined with OA, were practically unchanged.

The addition of melatonin (3 mg once daily at bedtime for 1 month) to the main therapy has a positive effect on the normalization of lipid metabolism in patients with hypertension associated with osteoarthritis, and facilitates their severe course. Further research will help to optimize the treatment tactics of such patients.

**Keywords:** melatonin, hypertension, osteoarthritis, lipid profile.

**Introduction.** Hypertension (AH) and osteoarthritis (OA) are among the most common diseases in the world, which not only negatively affect the quality of life of patients, but also increase the economic costs of health care. The triggers of hypertension and OA have not been definitively studied, but their risk factors, occurrence and deterioration are known, among them the leading place is occupied by disorders of lipid metabolism.

According to researchers, the development of dystrophic changes in the vascular wall and articular cartilage, the progression of hypertension and OA may contribute to disorders of lipid metabolism, which become a common pathogenetic mechanism of these diseases [1, 2].

We believe that one of the possible variants of the pathogenetic approach to the treatment of this combined pathology may be melatonin, which is known to act as a biological clock and a cardioprotector, as well as has anti-ischemic and antihypertensive

effects. Additional opportunities and prospects for its use are opened by another, no less important, function – the effect on lipid metabolism [3]. In addition, it has been experimentally demonstrated that melatonin has a chondroprotective potential and may be involved in the pathogenesis of OA due to its effect on circadian rhythms of chondrocytes [4].

The aim is to determine the effectiveness of the course of melatonin therapy in combination with the main treatment on the dynamics of the lipid profile of patients with hypertension combined with OA.

**Materials and methods.** In accordance with the purpose and objectives of our dissertation research, a total of 130 people of different ages and sexes with hypertension and OA were examined. Of these, hypertension combined with OA had 60 patients, who were divided into two groups. Thus, group I consisted of 30 patients with hypertension combined with OA, who received for a month, in addition to the main treatment, melatonin. Group II included 30 patients who had comorbid conditions of hypertension and OA and who were not given melatonin in their usual treatment. AH without concomitant OA was observed in 30 patients who made up group III. Group IV included 30 people with OA without concomitant hypertension. The control group consisted of 10 healthy people.

Criteria for inclusion of patients in the study were: verified diagnosis of stage – II hypertension in combination with a verified diagnosis of OA Ro-stage II, SFK I – II.

The study did not include patients with concomitant autoimmune diseases, stage III hypertension, heart failure (FC III – IV), OA Ro-stage III – IV, as well as those who took corticosteroids or cyclosporine before the study or planned to take them during its holding. There were no smokers among the subjects. The use of nonsteroidal anti-inflammatory drugs (NSAIDs) was not a criterion for exclusion from the study groups.

According to the study program, all patients underwent serum analysis for lipid metabolism disorders. Lipid profile was re-determined in patients of groups I and II. All patients voluntarily agreed to participate in the study. The study was approved by the Medical Ethics Committee of the Bukovinian State Medical University.

In the case of stage II hypertension, patients were prescribed a comprehensive standard treatment in accordance with the recommendations of the International Society of Hypertension (ISH) (2020) [5], the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC) (2018) [6], Ukrainian Association of Cardiologists (2017), in particular: angiotensin-converting enzyme (ACE) inhibitors (lisinopril – 10 – 20 mg/day), combining them with thiazide diuretics (hydrochlorothiazide – 12.5 – 25 mg/day). In the case of hyperlipidemia, statins (rosuvastatin – 10 – 20 mg / day) were added until the target levels of blood pressure (BP) and total cholesterol were reached. Patients with OA were prescribed NSAIDs (ibuprofen, diclofenac sodium in appropriate doses), chondroitin sulfate drugs in accordance with the clinical guidelines of the Association of Rheumatologists of Ukraine and the Association of Orthopedic Traumatologists of Ukraine (2017). At the same time, patients of group I were added to the complex treatment melatonin (“Vita-melatonin», JSC «Kyiv Vitamin Plant”, Kyiv, Ukraine) 1 tablet (3 mg per day) for 1 month.

The lipid profile study package included the determination of cholesterol (cholesterol) (N = up to 5.2 mmol/l) by colorimetric, enzymatic methods using esterase and cholesterol oxidase; low-density lipoprotein (LDL) (N = up to 2.59 mmol/l), high-density lipoprotein (HDL) (N = 1.04–1.55 mmol/l) by the direct method of elimination of chylomicrons. All laboratory tests were performed on an automatic biochemical analyzer Accent 200. The coefficient of atherogenicity (CA) was calculated by the following formula:  $CA = (\text{cholesterol} - \text{HDL cholesterol}) / \text{HDL cholesterol}$  (N = female to 3.5; male to 3.2)

The obtained data were processed by methods of variation statistics using the program Statistica 10.

**Results of the research.** According to the study plan, lipid profile parameters were first determined for all patients. Patients in groups 1 and 2 were advised not to drink alcohol, coffee and drugs (corticosteroids, cyclosporine), which affect the melatonin-forming function of the pineal gland. Then patients in group 1, in addition to the main treatment, were prescribed a monthly course of melatonin at a dose of 3 mg / day. All patients in this group after re-treatment with the addition of melatonin re-performed serum tests to determine the parameters of the lipid profile of the blood. Patients in group 1 also re-determined the following indicators. Laboratory results at the beginning of the study are given in table 1.

Table 1

**Indicators of lipid profile in patients at the beginning of the study (M±m)**

Indicator	Group 1 AH+OA	Group 2 AH+OA	Group 3 AH	Group 4 OA	Control
Cholesterol, mmol/l	5.90±1.41	5.87±1.28	5.61±1.28	5.52±1.11	3.76±0.83
HDL, mmol/l	1.43±0.38	1.40±0.30	1.37±0.38	1.37±0.27	1.26±1.12
LDL, mmol/l	4.45±1.48	4.19±1.17	4.13± 1.24	4.19±1.17	2.12±0.22
CA	3.27±1.39	3.38±1.38	3.35±1.22	3.14±1.18	2.0±0.67

Note: \* – the difference is significant compared to the figure in almost healthy individuals ( $p < 0.05$ ).

Table 1 show that disorders of lipid metabolism are present in all four groups. It should be noted that in patients of groups 1 and 2, who have a comorbidity of hypertension and OA, these indicators are worse than in patients of groups 3 and 4, who do not have a combination of these pathologies. This confirms our hypothesis about the mutually burdened course of hypertension and OA.

Figure 1 shows the dynamics of lipid profile after treatment of patients with comorbid hypertension and OA, who for a month, in addition to the main treatment, received additional melatonin (group 1), and who, in addition to the main treatment, did not receive melatonin (group 2).

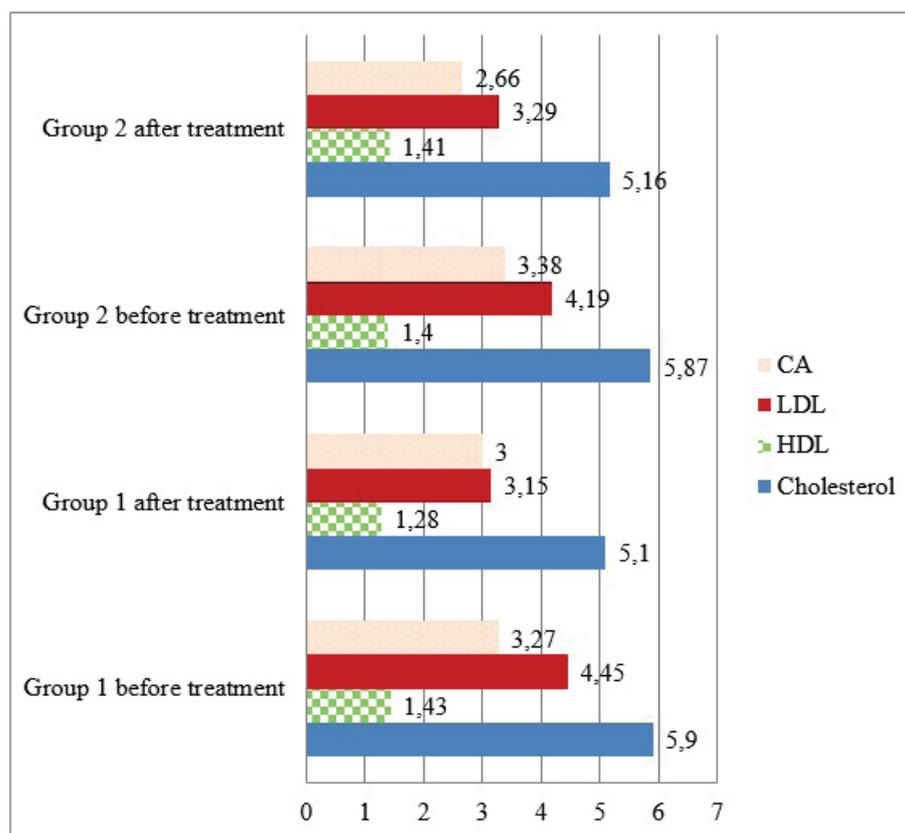


Fig. 1. Dynamics of lipid profile after treatment.

Note: \* – the difference is significant compared to almost healthy individuals ( $p < 0.05$ ).

\*\* – the difference is significant compared to the rate in persons before treatment ( $p < 0.05$ ).

The image in Fig. 1 demonstrates a positive effect of treatment of patients with combined pathology of the two study groups. However, patients in group 1 who received melatonin during the month on the background of the main treatment have better results compared with the corresponding indicators in patients of group 2. Thus, the level of cholesterol decreased in group I by 13.5%, and in group 2 – by 12.0%; LDL indicators decreased in group I by 29.2%, and in group II – by 21.4%. At the same time, the indicators of HDL and CA in patients of two groups (1 and 2) with hypertension combined with OA, did not change. It should be noted that the use of melatonin did not affect the changes in the lipid profile of the blood of patients in whom the lipid profile was within normal limits.

The obtained results give grounds to speak about the effectiveness and expediency of adding melatonin to the main treatment to combat hypercholesterolemia, which is one of the key factors in the development of atherosclerosis and the progression of

hypertension.

**Discussion.** The importance of finding and choosing the optimal treatment regimens for the above-mentioned comorbid diseases is due to their prevalence and socio-economic consequences. After all, during these diseases, even against the background of treatment, hormonal and metabolic changes deepen, atherogenic hyperlipidemia and insulin resistance increase, which are known to contribute to obesity (or its progression). Then such patients need more intensive antihypertensive therapy to obtain target blood pressure levels. It should be noted that these diseases have a number of common mechanisms of progression. These include chronic systemic generalized immunological inflammation (in particular, adipose tissue), insulin resistance, dyslipidemia, endothelial dysfunction [7]. That is why it is promising to study the effect of melatonin as one of the components of complex treatment on the course of hypertension with OA.

If we take into account all the effects of melatonin both as a hormone and as a drug, it is most consistent with the principles of physiological regulation and normalization of blood pressure in the human body. Direct antihypertensive action opens additional opportunities and prospects for the use of melatonin as monotherapy and its treatment in combination with antihypertensive drugs. In addition, melatonin affects lipid metabolism. There is evidence in the literature that the accumulation of lipid peroxidation products, including hydroperoxides, oxidized low-density lipoproteins (LDL) and anti-LDL, can lead to the progression of OA [8]. These compounds are able to modify and damage the lipid components of LDL, as well as cause depletion of low molecular weight oxidants [9]. It is believed that oxidized lipids can become autoantigens, resulting in the formation of anti-LDL, which adversely affects the articular cartilage.

**Conclusions.** The addition of melatonin (3 mg once daily at bedtime for 1 month) to the main therapy has a positive effect on the normalization of lipid metabolism in patients with hypertension associated with osteoarthritis, and facilitates their severe course. Further research will help to optimize the tactics of treatment of such patients.

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