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Content

Biological sciences

Ibragimova Sevinj Sh. THE EFFECT OF LIGHT CONDITIONS ON THE BLOOD COAGULATION SYSTEM	4
--	---

Economic sciences

Afonin Alexey N., Kiseleva Natalia N. THE ROLE OF DIGITAL STRATEGIES IN SUSTAINABLE PRODUCTION	6
Mehriban Imanova THE ROLE OF INDUSTRIAL POLICY IN THE DEVELOPMENT OF AZERBAIJAN INDUSTRY	8

Jurisprudence

Simeana Beshi, Driola Susuri BUILDING A STRONGER SINGLE MARKET: CHALLENGES AND OPPORTUNITIES FOR EU INTEGRATION	12
---	----

Medical sciences

Guliko Kiliptari, Ia Rukhadze SIZE OF PATENT FORAMEN OVALE AND CRYPTOGENIC STROKE	15
---	----

Pedagogical sciences

Aitpaeva Almagul Karekbaevna, Madina Omarova, Margarita Chizhikova USING NON-TRADITIONAL DRAWING TECHNIQUES AS A WAY OF DEVELOPMENT HAND MOTOR SKILLS IN PRESCHOOL CHILDREN	19
Alimsheyeva Bereke Nurzatkyzy, Tausogarova Ayauzhan Kayratkyzy PECULIARITIES OF LEARNING ENGLISH PHONETIC SYSTEM IN COMPARISON WITH KAZAKH LANGUAGE	24
Zhantaeva M.K., Zhantaev S.A. DEVELOPMENT OF MUSICAL TASTE OF STUDENTS IN MUSIC LESSONS	28
Zhanuzak Araitan Talaskyzy, Tausogarova Ayauzhan Kayratkyzy BENEFITS OF USING THE MIND MAP IN TEACHING AND LEARNING ENGLISH VOCABULARY	34

Philological sciences

Hasan Alisoy Huseyn oglu "ANALYZING THE DISCOURSE STRATEGIES IN UKRAINIAN PRESIDENT ZELENSKY'S SPEECH TO THE SAUDI ARABIAN SHURA COUNCIL: A STUDY OF PERSUASIVE TECHNIQUES AND SOCIOPOLITICAL CONTEXT"	38
Shintemirova Almagul Malkazharovna BOTHO STRAUSS: ANCIENT MYTH AND CONTEMPORARY REALITY	43
Vezirova Leyla NON-VERBAL COMMUNICATION IN BUSINESS COMMUNICATION	47

Philosophical sciences

Jamila Matkarimova

TYPES OF FORECASTING AND ITS SIGNIFICANCE IN PLANNING TRANSPORTATION SYSTEMS

50

Technical sciences

Mamadaliev Rustambek

INNOVATIVE APPLICATIONS AND OBSTACLES OF ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS AND TREATMENT OF HIGH MYOPIA AND PATHOLOGIC MYOPIA IN THE FIELD OF OPHTHALMOLOGY

54

Veterinary sciences

Neamt Radu, Săplăcan Gheorghe, Mihali Ciprian, Mizeranschi Alexandru, Marinescu Florin, Săplăcan Silviu

THE DYNAMICS OF CALVES' VIABILITY AND GROWTH RELATED TRAITS UNDER THE EFFECTS OF UNIDIRECTIONAL BREEDING PROGRAM

58

Biological sciences

THE EFFECT OF LIGHT CONDITIONS ON THE BLOOD COAGULATION SYSTEM

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ВЛИЯНИЕ УСЛОВИЙ ОСВЕЩЕННОСТИ НА СИСТЕМУ СВЕРТЫВАНИЯ КРОВИ

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Abstract

The importance of the epiphysis in the neurohormonal regulation of the physiological function of the body and the factors of hemocoagulation are comprehensively studied in the Laboratory of Human and Animal Physiology of Baku State University.

It was found that with prolonged activation and inhibition of the function of the epiphysis, the anticoagulation potential of the blood increases and decreases. In response to this, there is a reflex increase and decrease in clotting factors - the activity of clotting factors - factors of the prothrombin complex, free heparin, resulting in hyper- and hypocoagulation.

Аннотация

Значение эпифиза в нейрогормональной регуляции физиологической функции организма и факторы гемокоагуляции всесторонне изучаются в лаборатории физиологии человека и животных Бакинского государственного университета.

Установлено, что при длительном активировании и ингибировании функции эпифиза противосвертывающий потенциал крови изменяется. В ответ на это наступает рефлекторное усиление и замедление активности факторов свертывания.

Keywords: *epiphysis, activation, inhibition, free heparin.*

Ключевые слова: *эпифиз, активирование, ингибирование, свободный гепарин.*

Проблемы, связанные со свертыванием крови, были и остаются одними из наиболее сложных проблем теоретической биологии и клинической медицины.

Несмотря на всестороннее исследование нервно-рефлекторного и гуморально-гормонального механизма регуляции агрегатного состояния крови, тканевые факторы гемокоагуляции в различных органах и изучены очень скудно, особенно роль эпифиза в регуляции гемостаза.

С позиций современной биоритмологии вопросам адаптации, нормы и гемостаза без учета роли эпифиза невозможно не придавать значения, в зависимости от долготы светового и темнового режимов, а также после удаления эпифиза. Поэтому исследование тканевых факторов гемокоагуляции на фоне десятисуточного светового и темнового режимов в различных органах и тканях эпифизэктомизированных животных является актуальным [1,3].

Целью настоящего исследования являлось изучение изменений факторов гемокоагуляции в тканях селезенки, печени, сердечной мышцы, взрослых крыс при различных функциональных состояниях эпифиза, а также после его удаления [2].

Материал и методы исследования.

Эксперименты проводились на взрослых крысах-самцах линии Вистар.

Исследовали тканевые факторы гемокоагуляции в селезенке, печени, сердечной мышце взрослых крыс в норме и условиях светового и темнового режимов. Эпифиз удаляли модифицированным методом Д.М.Аулова (1969). Свободный гепарин определяли по Сирмаи, протромбиновый индекс определяли по Квику. Условия освещенности: в течение 10 дней животные содержались в постоянной темноте и 10 дней при постоянных световых условиях.

Экспериментальный материал статистически обработан.

Результаты исследования и их обсуждение.

Экспериментальные данные показывают, что у интактных животных свободный гепарин в ткани селезенки $7,0 \pm 0,3$ сек, в ткани печени – $14,0 \pm 0,4$ сек, в ткани сердечной мышцы – $5,0 \pm 0,3$ сек.; протромбиновый индекс – в селезенке – $213,0 \pm 4,9\%$, в печени – $123,0 \pm 5,2\%$, сердечной мышце – $105,0 \pm 6,4\%$.

В дальнейшем исследования проводились у животных, находившихся в различных условиях освещенности. Содержание животных в постоянной темноте в течение 10 дней показали, что свободный гепарин в селезенке, печени и сердечной мышце уменьшается ($5,0 \pm 0,3$ сек; $7,0 \pm 0,4$ сек; $3,0 \pm 0,1$ сек соответственно, $P > 0,001$); протромбиновый индекс в ткани селезенки уменьшается на 21,3%, в ткани печени не изменяется, а в сердечной мышце повышается на 63,8% ($113,0 \pm 1,2\%$, $123,0 \pm 1,8\%$, $172,0 \pm 3,6\%$ соответственно, $P > 0,0001$).

При содержании животных в 10 дневной световой фазе наблюдается повышение свободного гепарина $11,0 \pm 0,4$ сек (на 57,1%), в печени – $12,0 \pm 0,3$ сек (на 24%), в сердечной мышце $6,0 \pm 0,2$ сек (на 80%). В изменении протромбинового индекса наблюдается иная картина: в ткани селезенки протромбиновый индекс составляет $255 \pm 12,6\%$, в печени $190,0 \pm 7,0\%$, в сердечной мышце $300,0 \pm 3,2\%$. Полученные результаты достоверные.

У эпифизэктомированных животных свободный гепарин в селезенке составил $13,2 \pm 0,2$ сек, в печени – $200,0 \pm 14,2$ сек, в сердечной мышце – $9,0 \pm 0,2$ сек.; протромбиновый индекс в селезенке $422,0 \pm 7,0\%$, в печени $300,0 \pm 4,2\%$, в сердечной мышце – $146,0 \pm 2,0\%$. Результаты исследования достоверные.

В результате исследования выявлено, что эпифиз участвует в суточном ритме организма. Эндогенный ритм функции эпифиза контролируется супрахиазматическими ядрами гипоталамуса, в норме связан с конкретным временем суток за счет превалирующего суточного цикла освещенности, играющего существенную роль в гемостазе организма.

Выводы:

1. В условиях темнового режима свободный гепарин во всех исследуемых тканях повышается, активность факторов протромбинового индекса нарастает в селезенке и сердечной мышце, в печени – держится на уровне интактных животных.
2. В условиях светового режима свободный гепарин и активность факторов протромбинового индекса повышается во всех тканях.
3. У эпифизэктомированных животных в отличие от интактных животных наблюдается снижение свободного гепарина, активность факторов протромбинового индекса в селезенке и сердечной мышце, ослабевают в печени.
4. Эпифиз является регулятором суточного ритма организма во взаимодействии с хронофизиологическими реакциями гемокоагуляции.

Список литературы

1. Madatova V.M. Change thrombin time in the various experimental conditions// Phiziomedi, T.3, Articles of the II International Scientific and Practical Conference "High technologies, fundamental and applied research in physiology and medicine", October 26-28, 2011, St. Petersburg, ed. Polytechnic University, 2011, pp.176-179.
2. Madatova V.M. Ibragimova S. Sh., Babayeva R. Y. The influence of epyphysis on tissue factor coagulation change// European Science and Technology Materials of the X International Research and Practice Conference Munich, Germany, 2015/28/V
3. Madatova V.M. Hossein Rostami, Ali Aliyev, Mahsa Rostami, Mehri Golchin The impact of short-time exercise on some of hemostatic factors in different tissues of rats// Jomard Publishing, Advances in Biology & Earth Sciences, Vol.2, No.1, 2017

Economic sciences

THE ROLE OF DIGITAL STRATEGIES IN SUSTAINABLE PRODUCTION

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The concept of sustainable development has now become a major focus of scientific and technological progress and forms the basis of the UN General Assembly resolution "Transforming our world: the 2030 Agenda for Sustainable Development" (hereafter referred to as the 2030 Agenda) [1]. The 2030 Agenda comprises 17 interlinked Sustainable Development Goals (hereinafter referred to as SDGs) and 169 correlated targets that envisage balanced development in three areas:

- economic growth,
- social equity,
- environmental protection.

Thus, it can be stated that the economy is being transformed in an innovative way, focusing on digital technologies, preserving the natural environment, achieving a high standard of living and quality of life, and social equity [2, 3]. In the context of production, sustainability means transforming resources into economically valuable goods through socially and environmentally responsible processes. The highest priority innovative technologies at the moment are:

- Digital twin technology. This technology involves creating a virtual copy of a physical product or process. This allows manufacturers to simulate and optimise production processes, reducing waste and increasing efficiency. Virtual simulation of new processes or maintenance activities can help reduce energy consumption and optimise these activities. The use of augmented reality (XR) technologies, combining virtual reality (VR), augmented reality (AR) and mixed reality (MR), provides real-time information to improve production decision-making, enable remote maintenance/repair and train workers at low cost, ensuring a safe working environment.

- The Internet of Things (IoT) involves the use of sensors and other connected devices to collect data on production processes. The Internet of Things is a key technology, providing a range of benefits from maintenance to supplier logistics, product delivery and operational processes. By interconnecting data provided by terminals, sensors and other devices on the production floor, the system provides visibility into the efficiency of production processes and productivity both in real time and over time, enabling manufacturers to automate and therefore optimise their operational efficiency.

- Artificial Intelligence (AI) can be used to analyse production data and identify areas for improvement. It can also be used to optimise production processes, reduce waste and improve sustainability.

However, a number of digital challenges to sustainability can be highlighted:

- High initial investment. Implementing digital strategies can require significant up-front investment, which can be a barrier to implementation.

- Technical knowledge. Implementing digital strategies requires adequate technical knowledge, which can be a barrier to digital adoption.

- Data security. The use of digital strategies involves the collection and storage of sensitive data, which may be vulnerable to cyberattacks.

Thus, the following areas of anticipated research can be highlighted:

1. The impact of digital technologies on sustainable production. This area of research should focus on the impact of digital technologies such as the Internet of Things (IoT), artificial intelligence (AI) and big data analytics on sustainable manufacturing. The research can explore how these technologies can be used to optimise production processes, reduce waste and improve energy efficiency.

2. The role of digital strategies in reducing the carbon footprint. This area of research focuses on how digital strategies can be used to reduce the carbon footprint of manufacturing processes. The study

can look at how digital technologies can be used to monitor and reduce energy consumption, optimise transportation and logistics, and reduce waste.

3. *Impact of digital strategies on supply chain sustainability:* this area of research should focus on the impact of digital strategies on supply chain sustainability. The study can examine how digital technologies can be used to increase supply chain transparency, reduce waste and improve social and environmental performance.

4. *The role of digital strategies in the circular economy:* this research area focuses on how digital strategies can be used to advance the circular economy. The research can explore how digital technologies can be used to facilitate the reuse, repair and recycling of products and materials.

5. *Challenges and opportunities for implementing digital strategies for sustainable production.* This area of research can focus on the challenges and opportunities of implementing digital strategies for sustainable production. The study can explore the barriers to digital implementation, the skills and knowledge required for successful implementation, and the potential benefits of digital strategies for sustainable production.

Overall, research on the role of digital strategies in sustainable production can provide valuable insights into how digital technologies can be used to promote sustainable production practices and reduce the environmental impact of production processes.

References

1. UN General Assembly resolution "Transforming our world: the 2030 Agenda for Sustainable Development". [Electronic resource] Available at: www.un.org/sustainabledevelopment/development-agenda/ Date of access: 24.05.2023.

2. *How Information and Communications Technology can Accelerate Action on the Sustainable Development Goals* [Electronic resource] // The Earth Institute Columbia University. – Mode of 553 Available at: <https://www.oneworld.net/sites/default/files/resources/2016-06/ict-sdg.pdf>. Date of access: 24.05.2024.

3. *ICT Sustainable Development Goals Benchmark* [Electronic resource] // Huawei Technologies. – Available at: <https://www-file.huawei.com/-/media/corporate/pdf/sustainability/sdg/huawei-2019-sdg-report-en.pdf?la=en>. Date of access: 24.05.2024.

THE ROLE OF INDUSTRIAL POLICY IN THE DEVELOPMENT OF AZERBAIJAN INDUSTRY**Mehriban İmanova***Nakhchivan State University, Faculty of Economics and Management, Nakhchivan, Azerbaijan***Abstract**

The main purpose of the article is to determine the effectiveness of the policy of the Azerbaijani industry. For this, the current situation of the country's industry and its key areas has been studied, its development potential has been assessed, the relevant experience of foreign countries has been thoroughly studied and evaluated. Based on these, the principles, forms, goals and objectives of the policy, development trends and priorities were clarified. The effectiveness of the development program for the implementation of the pursued policy has been assessed. Through the years of industry experience the developed countries passed, it is clear that the development of competitive industry in the country is directly dependent on the regulatory work of the state. A great deal has been done in the country to regulate the development of industry in our country after gaining independence. In the coming years, the government has identified the development trends of the non-oil sector in the industrial sector, promoting the production of competitive industrial products and promoting the creation of export-oriented production areas, the rehabilitation and privatization of state-owned industrial enterprises or privatization to support the activities of enterprises, to technologically reconstruct production, and to undertake complex measures to train qualified personnel. The scientific article emphasizes the importance of implementing the technological and technical policy among the main directions of industrial policy and defining an investment strategy for this purpose. It was noted that the correctly implemented industry policy has a strong impact on the development of the non-oil sector and has a significant impact on the socio-economic development in the country. Keywords: Azerbaijan industry, non-oil sector, industrial enterprises, regional economic policy

Introduction

Today, industrial policy is one of the main directions of economic policy in many countries of the world. Such countries are investing heavily in the industry, innovations are increasingly being applied to the industrial sector, import and export of industrial products prevails in trade, and thus the industry has a specific weight in the structure of gross domestic product.

In the globalized world, the share of developing countries in global industrial production is increasing. Currently, about a quarter of the workforce is concentrated in the industrial sector. (Rzayev, 2018: 62) One of the key points is that high value-added jobs and services increase their share in the geographical structure of consumption by moving to developing countries.

As in many countries of the world, industrialization in Azerbaijan is one of the priorities of economic policy and our country has rich traditions in this area. For the first time in the world, oil production with industrial methods in Baku in 1848 was considered the beginning of industrialization in Azerbaijan. The first refinery and oil tanker were put into operation in Azerbaijan, and in 1900 our country was the world's first oil producer. During World War II, Azerbaijan provided more than 70% of the USSR's oil and oil refining products. Along with the oil industry, industrialization in 1945-1969 also penetrated the Azerbaijan regions and laid the foundations of Mingachevir and Sumgait cities. In Dashkasan ore-mining, aluminum production in Ganja and Sumgait, cement production facilities in Garadagh were put into use (Mustafayev, 2014: 140)

World experience shows that the state plays a crucial role in ensuring the normal functioning of each economic system. In all economic systems, the state intervenes in the economy and this intervention is usually aimed at addressing to avoid market shortages. The state adopts appropriate legislative acts, resolutions to carry out its regulatory functions and uses economic and administrative methods of influence on entrepreneurship and the national economy by pursuing a specific economic policy. The experience of industrialized countries suggests that one of the main directions of the state regulation of industrial economy in the country is the regulation of the organization of industrial production throughout the country.

Current state of the Azerbaijan industry

In recent years, the development of manufacturing industries, the creation of new businesses, and in particular the rapid development of the country's oil and gas industry have led to an increasing share

of industrial production in the GDP. Industry in our country accounted for 44.2% of GDP in 2018. 73.0% of industrial output was produced in the mining sector, 22.2% in the manufacturing sector, 4.1% in the electricity, gas and steam production, distribution and supply sectors, and 0.7% in the water supply, waste treatment and processing sector. Hence, this rapid growth was largely due to the successful oil strategy and oil sector in the country. This shows that the development of the country's industry still does not correspond to the industrial potential of our country. World experience shows that the socio-economic development of the country based on only one factor and the dependence of the economy on only one factor is not expedient, also creates a threat of crisis. (<https://www.stat.gov.az/news/index.php?id=4089>).

Due to a number of objective and subjective reasons, the inability of the country's enterprises to produce competitive products on the world markets limits Azerbaijan's ability to integrate into the world by exporting its final products. Production of competitive products, access to world markets, taking a position and strengthening there demand a long time and intense work for a young state. And the competition between the countries to gain a foothold in the international markets is becoming increasingly acute. Nevertheless, it is possible and necessary to reduce the dependence rate on the oil sector of the country's economy as a result of the dynamic development of all sectors of the economy. One of the main priorities of economic policy in our country today is to ensure further diversification of economic development, to take a special place there with effective integration into the globalized world economy. This makes it necessary to pursue a well-balanced industrial policy to address the existing industry problems.

Industrial policy and its promising directions

World experience shows that the state plays a crucial role in ensuring the normal functioning of each economic system. In this regard, the relationship between the state and the economy, determination of optimal ratio and limits of state intervention in the economy are the main problems of improving the state regulation of the economy in modern age.

One of the key elements of improving the state regulation of the economy is industrial policy. Industrial policy has become a means of regulating the government's economy and like other policies it incorporates various measures. Its main purpose is to provide economic growth and improve the welfare of the population. One can distinguish the export-oriented, import-substituting and innovative model of industrial policy. In the model of export-oriented industrial policy the measures for comprehensive stimulation of production for export are dominated and the development and maintenance of competitive industries is a key focus of industrial policy. Although Japan, Malaysia, Chile, South Korea, Singapore, Thailand, etc. have successfully pursued export-oriented industrial policy, Venezuela and Mexico have failed. The main purpose of the import substitution model is to ensure the stability of the national currency and provide employment, reflecting the strategy of meeting the demands of the domestic market. China and North Korea were able to improve the structure of the balance of payments in the 1980s, by favoring this model. During the implementation of the innovation model the economic development of the country is achieved based on high-tech and capital-intensive industries. This model has been successfully used in the US, Japan and South Korea (Huseynov, 2012: 69-70).

In the Republic of Azerbaijan, which separated from the Soviet Union and just gained its independence, the development of oil industry due to various investment, to some extent, stimulated the development of non-oil industries as well, and the foremost goal was to create exports that would replace imports. Implementation of structural policy of the industry was as follows (Abbasov, 2018: 47-48).

- technological restructuring of the industry;
- revival of industrial production in the regions of the country and ensuring the development of the regions;
- ensuring effective integration into the world economy;
- institutional reforms in the industry;
- complete privatization;
- adaptation of enterprises to market relations;
- provision of resources mobility

As a result of the state programs on socio-economic development of the regions, which have been implemented since 2004, and other targeted activities significant work has been done addressing issues of particular importance to industrial production, as well as the infrastructure of the industry has been considerably improved. Public investments along with infrastructure projects in the past were directed to a number of production-oriented projects, development of oil and gas extraction, oil refining and

petrochemical industries, alternative energy facilities and equipment, creation of aluminum processing, shipbuilding and defense industries. In general, within the framework of industrialization measures in recent years along with the success in the oil and gas, gold and other extractive industries, new powers have been put into operation, also industrial parks and industrial neighborhoods have been established. Provision of industrial development on the basis of modern innovations, techno parks as key strategic projects in industrialization were also reflected in the Development Concept "Azerbaijan - 2020: A Look into the Future". In addition, the State Program "Industrial Development in the Republic of Azerbaijan for 2015-2020" plays an important role in the policy of industrial development (8).

In spite of the significant progress made in the development of the industry in a short period of time, the country is dominated by the extractive industry, especially the oil industry. Because of the small weight of the processing industry and the service sector only a small proportion of the goods produced in the country are targeted for consumption by the population, and this makes it necessary to carry out structural transformation aimed at diversification of the economy, which is to increase the diversity of industries, products and services. World experience shows that several countries, such as Malaysia, Chile and Indonesia which are heavily dependent on the sale of mineral resources, have achieved sustainable economic growth by diversifying their economies. Some of these countries have developed their economies by focusing their economy on industrial production, and by expanding their range of export resources at the expense of large added value (Shakaraliyev, 2009: 42-43).

International experience shows that industry growth rates and development stages vary according to the level of the income of countries. As the countries develop, low-tech and leveraged food, light, and furniture industries give their leading positions to midtech metallurgy, shipbuilding, machinery and equipment industries. At the latest stage of industrialization, high-tech industries such as electronics, computer production, pharmaceuticals and the aerospace industry play a major role in the development of industry globally. Despite the success of these stages as a result of industrial policy implemented in Azerbaijan, there is still a need to solve a few problems in this area. To do this, an action plan should be developed and implemented to further improve the business environment, competition legislation and policies to gain and maintain competitiveness. At the same time, mechanisms to protect the rights of foreign and domestic investors should be improved, foreign trade procedures should be simplified, and measures should be taken to increase government support for local entrepreneurs in accessing international markets. At the same time, for the development of the non-oil industry, the involvement of natural and economic resources of the country in economic turnover should be expanded and a network of industrial, social, and market infrastructure that will serve its development and meet modern requirements should be created. Industrialization policy should be fully formed, and the main focus of this policy is to implement systematic and consistent measures to accelerate production and export diversification, production of competitive and export-oriented innovative technologies and goods.

Development of traditional industries of the non-oil sector, for example, chemical industry, metallurgy, mechanical engineering, electrical engineering, electronics, light industry, food industry, etc. and increasing export opportunities, creating new competitive industries should be a priority.

Conclusion

From what has been said above, we can conclude that the development of the non-oil sector is the main priority of the policy pursued to ensure the sustainable development of the Azerbaijani economy. Thus, important activities should be carried out in a planned way with the state support to attract investments in the non-oil sector to promote competitive production, to stimulate the use of modern technologies and intensive methods in the production process, to enhance access to financial markets, to adjust the quality of products and services in line with international standards, to improve the legislative framework in such a way that it can stimulate economic growth and to provide preferential loans in order to ensure the financial security of business entities. Separate action plans should be prepared for the development of traditional non-oil fields in our country, accordingly, businesses should be modernized, new technologies should be introduced and production of competitive products should be preferred. For this, towards the development of the key areas of the non-oil industry it is advisable to implement the following measures:

*- **Measures for the development of the chemical industry:** Territorial structure of the chemical industry and the range of products should be improved, local agricultural production should be expanded to provide agriculture with agrochemicals, processing of chemical products should be deepened to the optimal level of final product, primary and secondary oil refining, energy consumption in the chemical industry should be reduced, and the protection of environment should be taken seriously;*

- **Measures for the development of the engineering industry:** machine-building enterprises should be provided with modern technologies, modern certification and standardization and environmental standards should be applied in this area, effective use of scientific and technical potential should be established, necessary work should be undertaken in order to receive government orders for manufactured products;

- **Measures for the development of the metallurgical industry:** a modern manufacture complex, which includes stages from iron ore extraction to steel production should be established, the production of final products from aluminum, other non-ferrous metals and their scrap should be expanded in the country, production of precious metals (gold, silver, platinum, etc.) should be increased and quality indicators should be improved, study, research, exploration and development of new fields should be carried out;

- **Measures for the development of the energy industry:** construction of new stations and transmission networks, the use of alternative and renewable energy sources should be expanded, business activities in the energy sector should be supported, technical and technological losses in energy production and transmission should be minimized;

- **Measures for the development of the food and light industry:** the demand for light industry products based on local raw materials (cotton, wool, silk, leather) should be taken into account and the activities of existing industrial enterprises producing export products should be supported, manufacture of clothing and other consumer goods should be expanded in the light and textile industries and their quality should be improved, the manufacture of handmade carpets should be expanded, activities of enterprises operating in this area should be supported, anti-dumping policies should be applied to promote domestic food production, supply and equipment of packaging should be strengthened, all processes must be mechanized and automated, starting from raw materials to finished product packaging, the use of modern technologies should be encouraged.

Preparation and implementation of separate industrial development programs will strengthen the country's economy with a positive impact on industrial development in general.

References

1. Abbasov IM, Aliyev TN. Economics of non-oil industry. Textbook. Baku, 2018, 267 p.
2. Rzayev M.A. Diversification policy of production in industrial enterprises // Economy, management, law, №5, Baku, 2018, p.62-65
3. Mustafayev Sh. Azerbaijan industry: successful continuation of the historical way // Public administration, № 4 (48), Baku, 2014, p.139-144
4. Shakaraliyev. A.Ş. Economic policy of the state: realities and perspectives. Baku, 2009, 415 p.
5. Huseynov A. A. Possibilities of application of import substitution model in Azerbaijan industry / The sustainable development of economy and administration: problems and perspectives. Baku Engineering University, International Scientific and Practical Conference, 26-27 October, 2018, Baku, s. 68-71
6. Rustamov E. Economic modernization of Azerbaijan: challenges and solutions. M.: Econ-Inform, 2010, 367 p.
7. https://president.az/files/future_en.pdf Development Concept "Azerbaijan - 2020: vision for the future", December 29, 2012
8. <http://senaye.gov.az>. State Program "Development of Industry in the Republic of Azerbaijan in 2015-2020", Baku, December 26, 2014 9. <https://www.stat.gov.az/news/index.php?id=4089> Azerbaijan State Statistics Committee

Jurisprudence

BUILDING A STRONGER SINGLE MARKET: CHALLENGES AND OPPORTUNITIES FOR EU INTEGRATION

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Abstract

The European Union (EU) has been pursuing to establish a strong as well as integrated single market that is characterized by the free movement of people, capital, goods and services.

The paper's objective is to evaluate the opportunities and difficulties the EU experiences as it functions to strengthen and integrate the single market. It attempts to shed light on the challenges standing in the way of the single market's potential as well as chances for EU integration that might increase competitiveness and economic development.

The goal of the paper is to contribute to the existing conversations and legislative procedures about the creation of a more strong and integrated single market inside the EU by analyzing these challenges and opportunities.

The findings highlight a number of significant obstacles that prevent the full fulfillment of the single market's potential, including the sovereignty of the member states, insufficient harmonization of legislations, and restrictions on cross-border commerce. The article also emphasizes the effects of economic inequalities among member states, which may prevent all member states from participating equally in the single market.

To address these challenges, the article examines potential options for EU integration. It highlights how crucial it is to improve regulatory coherence and convergence among member states, streamline administrative processes, and foster digitalization and innovation within the single market where the EU can strengthen its position as a global economic powerhouse and guarantee prosperity for all of its member states.

Building a stronger single market and comprehending the accompanying difficulties and possibilities are relevant for supporting stability, lowering inequalities, increasing competitiveness, and encouraging economic growth within the EU.

Keywords: harmonization, legislations, the free movement of goods, services, capital, and individuals, innovation.

Methodology

The methodology used in this research mainly includes the methods applied in the social sciences. Quantitative and qualitative analysis as well as the method of analysis, synthesis and case studies have been applied in the research.

The key findings

Based on general knowledge and literature review, some potential results may include:

- **The identification of certain problems with the single market**, such as regulatory fragmentation, obstacles to international commerce, and economic inequality between member states.
- **Analysis of how these challenges affect the single market's effectiveness, viability, and growing potential.**
- **Exploring strategies to improve EU integration**, such as increasing regulatory convergence and coherence, reducing administrative processes, and encouraging innovations and technology.
- **Examining how EU institutions** including the European Commission and the European Parliament **contribute to the advancement of EU integration initiatives** and the resolution of recognized challenges.
- **Recommendations for legislative reforms**, policy adjustments, and tactical moves to meet the obstacles and benefit from the chances for EU integration.

Conclusion

The development of a stronger single market brings opportunity and challenges for EU integration. As an enormous success, the single market has promoted concurrence, increased economic development, and given consumers more options. It must, however, overcome a number of obstacles if it is to continue to be successful.

The requirement for more integration among EU member states is one of the primary challenges. The free movement of people, capital, goods, and services is still restricted regardless of improvements. It still takes a lot of political will and effective cooperation to harmonize legislations across member states.

The digital transition and advances in technology also provide possibilities and challenges. To handle new digital challenges like data protection, cybersecurity, and fair competition, the EU must modify its legislative structure. The future competitiveness of the EU single market will depend on supporting innovation and establishing equitable playing fields for digital companies.

A stronger single market can increase the EU's worldwide impact in terms of opportunities. By strengthening its economic position, the EU will be better able to influence international trade agreements and advance its values and standards. By easing the movement of products, services, persons and capital across member states, an integrated and strong single market may also act as a catalyst for economic recovery, particularly during times of crisis.

Building a stronger single market requires a comprehensive and collaborative approach. Effective coordination and cooperation among EU institutions and member states are essential for implementing policies and initiatives that strengthen the single market.

By addressing the identified challenges and seizing the opportunities, the EU can solidify its position as a global economic powerhouse, enhance its resilience to external shocks, and ensure sustainable economic growth and prosperity for all member states.

References

1. Armstrong, Kenneth A. "The Concept of an "Internal Market," Finance and Constitution Committee Briefing Paper, (2020): 4.
2. Beshi, Simeana, Peci, Bedri. "The importance of value-added tax harmonization in the European Union single market," Corporate & Business Strategy Review Volume 4, Issue 1, (2023): 151. DOI: 10.22495/cbsrv4ilart13.
3. Centre on Constitutional Change, "What is the EU Internal Market?" Accessed 22.11.2022, retrieved from <https://www.centreonconstitutionalchange.ac.uk/the-basics/what-eu-internal-market>.
4. Commission of the European Communities, "Completing the Internal Market White Paper from the Commission to the European Council," COM (85) 310 final. Accessed 10.01.2023, retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:51985DC0310&from=EN>
5. Completing the Internal Market, White Paper from the Commission to the European Council, COM (85) 310 final, (Milan, 28-29 June 1985). Accessed 30.09.2022, retrieved from <https://op.europa.eu/en/publication-detail/-/publication/4ff490f3-dbb6-4331-a2ea-a3ca59f974a8/language-en>.
6. Crosby, Scott. "The Single Market and the Rule of Law," European Law Review 16, (1991): 451-465.
7. Dahlberg, Erik, et al. "Legal obstacles in Member States to Single Market rules," 2020. Accessed 22.12.2023, retrieved from, [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/658189/IPOL_STU\(2020\)658189_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/658189/IPOL_STU(2020)658189_EN.pdf).
8. de la Feria, Rita. "The EU VAT System and the Internal Market." Vol. 16, Doctoral Series, Amsterdam: IBFD, 2009.
9. Hirofumi, Shibata. "The theory of economic unions: A comparative analysis of customs unions, free trade areas, and tax unions". In Fiscal Harmonization in Common Markets. Vol. II, edited by Editor Carl S. Shoup, 8-9. New York: Columbia University Press, 1967.
10. Kristoffersson, Elenor. "Comparative studies of national law in the EU harmonized VAT," Nordic Tax Journal 2016, no. 1, (2016): 29-40.
11. Lehner, Moris. "Limitation of the national power of taxation by the fundamental freedoms and non-discrimination clauses of the EC Treaty," EC Tax Review Volume 9, Issue 1, (2000): 5-6.
12. Lejeune, Ine. "The EU VAT Experience: What Are the Lessons?" Tax Analysts (2011): 264-265.

13. Morina, Fitore, Peci, Bedri. *"The Concept of the Common Market: Advantages and Disadvantages in the Spectre of Harmonization the Tax System and the Benefits for Kosovo"*. *EuroEconimica Issue* 2(36) (2017): 57.

14. Musgrave, B. Peggy. *"Harmonization of Direct Business Taxes: A Case Study"*. In *Fiscal Harmonization in Common Markets. Vol. II*, edited by Editor Carl Shoup, 8-9. New York: Columbia University Press, 1967.

Medical sciences

SIZE OF PATENT FORAMEN OVALE AND CRYPTOGENIC STROKE

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Abstract

Purpose : This case have analyzed the most suitable strategy for the diagnosis and quantification of PFO, for its assessment in clinical practice. We conducted one case for demonstration PFO, as general reason of presenting transient ischemic stroke and to rule out any other condition . PFO is persistence of a embryonic defect in the intraatrial septum. In Patent foramen ovale is the most common cause of paradoxal embolism in cryptogenic stroke . Hemodynamic alteration play a major role in determining the chances of paradoxal embolization, elevated right atrial pressure will increase the chance of right-to-left shunt

Case: Patient ,44 old women ,was admitted in emergency department with coma . Brain MRT detected multifokal area of acute stroke in both hemisphere ,cerebellum, brain stem ,gliosis in right lobar lobe and basal ganglia. Transthoracic contrast echocardiography detected agitated saline contrast passage from right to left atrium. TEE revealed little , 1mm width and 4mm length hole of intraatrial septum (Pict 1). After agitated saline contrast injection (bubbling) via the central vein catheter was detected provision of right heart with contrast and trustworthy signs of right to left shunt. This examination has determined patent foramen ovale .

Conclusion: patent foramen ovale (PFO) has been implicated in the pathogenesis of cryptogenic stroke through paradoxal embolization to the cerebral circulation. This case evaluated the relationship between morphological and functional size of the PFO by echocardiography compared with cerebral infarct volume identified on MRI. small size PFO was associated with significant strokes in brain. This case also have been analyzed the most suitable strategy for the diagnosis and quantification of PFO ,for its assessment in clinical practice

Keywords: patent foramen ovale, paradoxal embolism, cryptogenic stroke

Introduction:

PFO is 15emodynamic of a embryonic defect in the intraatrial septum. In Patent foramen ovale is the most common cause of paradoxal embolism in cryptogenic stroke or platypnea-orthodeoxia syndrome (postural hypoxemia with breathlessness). Paradoxal embolism from right to left passage through a patent foramen ovale is correctable cause of stroke . Hemodynamic alteration play a major role in determining the chances of paradoxal embolization, elevated right atrial pressure will increase the chance of right-to-left shunt., Paradoxal embolization is reported in PE patient .patient with right ventricular infarction or severe tricuspid regurgitation or, mechanical left ventricular assist device have increased risk of right-to left shunt through a PFO .Pelvic vein thrombi are reported to be found more frequently in young patient with cryptogenic stroke .Possible treatment modalities to prevent recurrent events ,treatment with warfarin or antiplatelet agents, percutaneous PFO closure (PFO 15emodyn) or surgical closure. This case have analyzed the most suitable strategy for the diagnosis and quantification of PFO, for its assessment in clinical practice. We conducted one case for demonstration PFO ,as general 15emody of presenting transient ischemic stroke and to rule out any other condition .

Case:

Patient ,44 old women ,was admitted in emergency department by ambulance, with headache, vomiting. At home ambulance detected convulsion. In history patient had episodes of syncope. CT scan did not reveal acute intracerebral process in brain. Neurological status: spontaneous eye opening ,localization of pain stimuli. Patient was intubated and was started mechanical ventilation. CSF was without signs of infection .

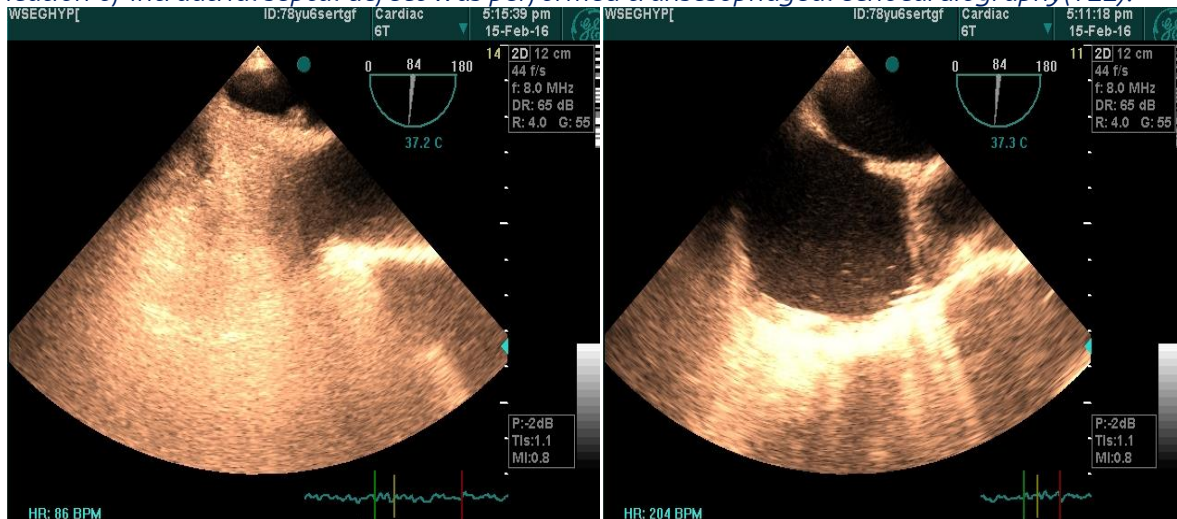
EEG revealed polymorphic dysrhythmia, with interhemisphere activity and without specific pathological activity.

Brain MRT detected 16modynami area of acute stroke in both hemisphere, cerebellum, brain stem, gliosis in right lobar lobe and basal ganglias.

By Lower extremities vessel ultra sonography was detected normal blood flow in superfital and deep veins, without thrombosis.

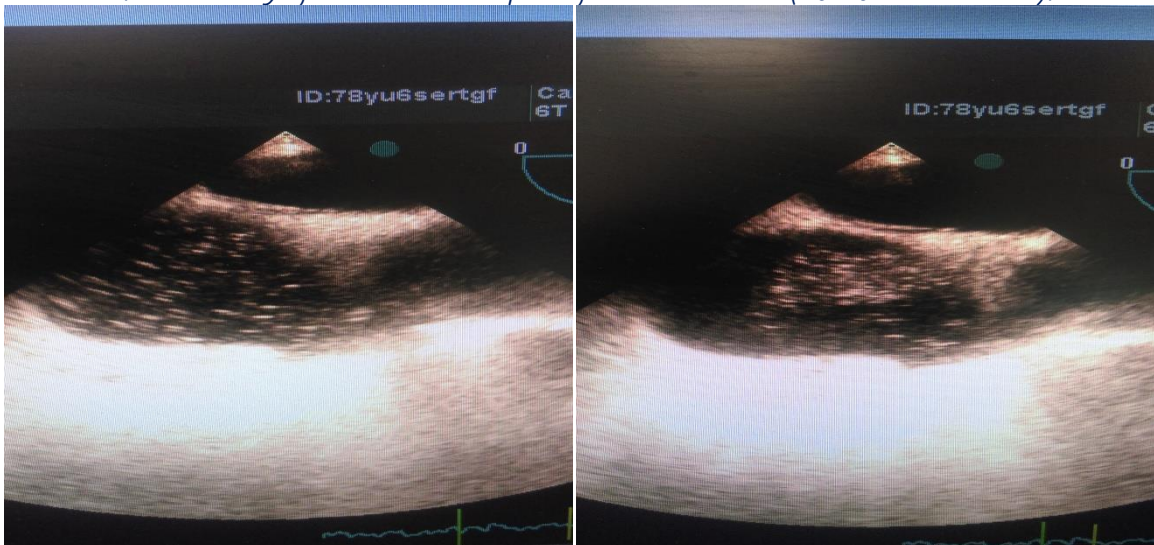
Intracranial vessels ultrasound evaluation revealed decrease blood flow in subclavian and carotid arteries, without 16modynamically important stenosis of this vessels. In brain arteries, basilar arteries, intracranial segment of vertebral arteries blood flow velocity and resistance indexes was simetrically decreased.

Transthoracic contrast echocardiography detected agitated saline contrast passage from right to left atrium. PFO was judged after appearance of microbubbles in the left cardiac chamber. For verification of intraatrial septal defect was performed transesophageal echocardiography (TEE).



Pict1.TEE

The defect of intraatrial septum or intraventricular septum was not detected, but revealed little, 1mm width and 4mm length hole of intraatrial septum (Pict1). After agitated saline contrast injection (bubbling) via the central vein catheter was detected provision of right heart with contrast and trustworthy signs of right to left shunt >20 bubbles. (Pict2). This examination has determined patent foramen ovale. The severity of the shunt was quantified as moderate (10-20 microbubbles).



Pict2.TEE after agitated saline

Discussion:

Paradoxal embolism through aPFO was first described in 1877 during an autopsy. Higher stroke rates also have been associated with the presence of an atrial septal aneurysm (ASA), dissections of the carotid and vertebral arteries or now recognized as relatively common causes of strokes. Hyperhomocysteinemia associated with greater risk of stroke (cohort and case control studies). Venous thrombosis is believed to be the source of paradoxal embolism in cryptogenic strokes associated with

PFO, higher incidence of pelvic thrombosis is identifiable causes of cryptogenic stroke, PFO as a conduit for paradoxical embolization, there are occasional case reports demonstrating venous thrombi trapped in a PFO in patients with central or systemic embolization. Nevertheless, other possible mechanisms of stroke cannot be excluded. According our example vessels ultrasonography did not detect thrombosis. Given that a PFO can be a tunnel-like structure with possibly a stagnant area of flow, in situ thrombus formation may occur. Also, patients with PFO may be susceptible to atrial arrhythmias with possible intra-atrial thrombus formation, leading to stroke.

It is logical to assume that larger PFO would be associated with an increased frequency of cryptogenic stroke, but data have been conflicting. It is possible for a large stroke to occur with a small PFO as according our case.

Transthoracic echocardiography and transesophageal echocardiography with saline contrast injection are used to detect PFO. PFO is judged to be present if any microbubble is seen in the left cardiac chamber within 3 cardiac cycles from the maximum right atrial opacification. Our evaluation of heart chambers after agitated saline injection detected right to left passage of bubbles.

Possible treatments modalities to prevent recurrent events include medical treatment with warfarin and antiplatelet agents, percutaneous PFO closure and surgical closure. Randomized studies comparing medical and percutaneous closure approaches are underway.

According of AHA/ASA guidelines 1. For patient with an ischemic stroke or TIA and a PFO, antiplatelet therapy is reasonable to prevent a recurrent event (Class IIa, Level of Evidence B) 2. PFO closure may be considered for patient with recurrent cryptogenic stroke despite optimal medical therapy (Class IIa, Level of Evidence C). Patient was treated with anticoagulants and antiplatelet drugs. After suitable treatment and management of all complications, patient state was improved and discharged from hospital with good condition and appropriate recommendations.

Conclusion: patent foramen ovale (PFO) has been implicated in the pathogenesis of cryptogenic stroke through paradoxical embolization to the cerebral circulation. This case evaluated the relationship between morphological and functional size of the PFO by echocardiography compared with cerebral infarct volume identified on MRI. Small size PFO was associated with significant strokes in brain. This case also have been analyzed the most suitable strategy for the diagnosis and quantification of PFO, for its assessment in clinical practice

References

1. Recurrent Cerebrovascular Events Associated with Patent Foramen Ovale, Atrial Septal Aneurysm, or Both, Jean-Louis Mas, M.D., Caroline Arquizan, M.D., Catherine Lamy, M.D., Mathieu Zuber, M.D., Laure Cabanes, Ph.D., Geneviève Derumeaux, M.D., and Joël Coste, Ph.D., for the Patent Foramen Ovale and Atrial Septal Aneurysm Study Group *N Engl J Med* 2001; 345:1740-1746 December 13, 2001
2. Closure or Medical Therapy for Cryptogenic Stroke with Patent Foramen Ovale. Anthony J. Furlan, M.D., Mark Reisman, M.D., Joseph Massaro, Ph.D., Laura Mauri, M.D., Harold Adams, M.D., Gregory W. Albers, M.D., Robert Felberg, M.D., Howard Herrmann, M.D., Saibal Kar, M.D., Michael Landzberg, M.D., Albert Raizner, M.D., and Lawrence Wechsler, M.D., for the CLOSURE I Investigators *N Engl J Med* 2012; 366:991-999 March 15, 2012
3. The Association of Patent Foramen Ovale Morphology and Stroke Size in Patients With Paradoxical Embolism, Andre Akhondji, Rubine Gevorgyan, Chi-Hong Tseng, Leo Slavin, Catherine Dao, David S. Liebeskind, Jonathan M. Tobis, *circulation:cardiovascular Interventions*. 2010.3:506-510
4. PREVALENCE OF PATENT FORAMEN OVALE DETERMINED BY TRANSESOPHAGEAL ECHOCARDIOGRAPHY IN PATIENTS WITH CRYPTOGENIC STROKE AGED 55 YEARS OR OLDER. SAME AS YOUNGER PATIENTS, REVISTA ESPAÑOLA DE CARDIOLOGÍA (ENGLISH EDITION). VOLUME 63, ISSUE 3, MARCH 2010, PAGES 315-322
5. Diagnosis and Quantification of Patent Foramen Ovale. Which Is the Reference Technique? Simultaneous Study With Transcranial Doppler, Transthoracic and Transesophageal Echocardiography, Teresa González-Alujas^a, Artur Evangelista^a, Estevo Santamarina^b, Marta Rubiera^b, Zamira Gómez-Bosch^a, José F. Rodríguez-Palomares^a, Gustavo Avegliano^a, Carlos Molina^b, José Álvarez-Sabín^b, David García-Dorado^a. *Circulation*. 2009;119:2743-7.
6. Closure or Medical Therapy for Cryptogenic Stroke with Patent Foramen Ovale Anthony J. Furlan, M.D., Mark Reisman, M.D., Joseph Massaro, Ph.D., Laura Mauri, M.D., Harold Adams, M.D., Gregory W. Albers, M.D., Robert Felberg, M.D., Howard Herrmann, M.D., Saibal Kar, M.D., Michael Landzberg, M.D., Albert Raizner, M.D., and Lawrence Wechsler, M.D., for the CLOSURE I Investigators *N Engl J Med* 2012; 366:991-999 March 15, 2012

7. Percutaneous Closure of Patent Foramen Ovale in Cryptogenic Embolism Bernhard Meier, M.D., Bindu Kalesan, Ph.D., Heinrich P. Mattle, M.D., Ahmed A. Khattab, M.D., David Hildick-Smith, M.D., Dariusz Dudek, M.D., Grethe Andersen, M.D., Reda Ibrahim, M.D., Gerhard Schuler, M.D., Antony S. Walton, M.D., Andreas Wahl, M.D., Stephan Windecker, M.D., and Peter Jüni, M.D., for the PC Trial Investigators*, *N Engl J Med* 2013; 368:1083-1091 March 21, 2013
8. A Comparison of Warfarin and Aspirin for the Prevention of Recurrent Ischemic Stroke
J.P. Mohr, M.D., J.L.P. Thompson, Ph.D., R.M. Lazar, Ph.D., B. Levin, M.D., R.L. Sacco, M.D., K.L. Furie, M.D., J.P. Kistler, M.D., G.W. Albers, M.D., L.C. Pettigrew, M.D., H.P. Adams, Jr., M.D., C.M. Jackson, M.D., and P. Pullicino, M.D., for the Warfarin–Aspirin Recurrent Stroke Study Group* *N Engl J Med* 2001; 345:1444-1451 November 15,
9. Patent foramen ovale and stroke, Shunichi Homma, Ralph L. Sacco. *Circulation* 2005;112:1063-1072
10. PATENT FORAMEN OVALE: ANATOMY, OUTCOMES, AND CLOSURE. PATRICK A. CALVERT, BUSHRA S. RANA, ANNA C. KYDD & LEONARD M. SHAPIRO ABOUT THE AUTHORS STROKE RESEARCH AND TREATMENT VOLUME 2013 (2013), ARTICLE ID 727842, 7 PAGES
11. Guidelines for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack. A Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association, 2014, Walter N. Kernan, Bruce Ovbiagele, Henry R. Black and others
13. Percutaneous Device closure of Patent Foramen Ovale for secondary stroke prevention. *Circulation*. 2009;119:2743-7.

Pedagogical sciences

USING NON-TRADITIONAL DRAWING TECHNIQUES AS A WAY OF DEVELOPMENT HAND MOTOR SKILLS IN PRESCHOOL CHILDREN

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ИСПОЛЬЗОВАНИЕ НЕТРАДИЦИОННЫХ ТЕХНИК РИСОВАНИЯ, КАК СПОСОБ РАЗВИТИЯ МОТОРИКИ РУК У ДЕТЕЙ ПРЕДШКОЛЬНОГО ВОЗРАСТА

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Abstract

The article considers one of the problems of the development of fine motor skills of hands in preschoolers through non-traditional drawing techniques. The characteristic features of the development of fine motor skills of hands in preschoolers and the role of drawing in this process are analyzed. A system of non-traditional drawing methods has been developed and tested.

Аннотация

В статье рассмотрена одна из проблем развития мелкой моторики рук у дошкольников посредством нетрадиционных техник рисования. Проанализированы характерные особенности развития мелкой моторики рук у дошкольников и роль рисования в этом процессе. Разработана и апробирована система нетрадиционных методов рисования.

Keywords: *fine motor skills of hands, artistic and aesthetic development, drawing, non-traditional drawing techniques*

Ключевые слова: *мелкая моторика рук, художественно-эстетическое развитие, рисование, нетрадиционные техники рисования*

Введение. Дошкольное детство – очень важный период в жизни детей. На всех этапах жизни ребёнка движение рук играют важнейшую роль. Все мы в детстве были художниками. Каждый ребенок с двух – трех лет и до подросткового возраста рисует грандиозные, многофигурные со сложным переплетением сюжетов композиции, рисует вообще все, что слышит и знает. Правда увлечение это проходит в большинстве случаев. Верными рисованию и живописи остаются только художественно одаренные люди. Дети

одного возраста на всех континентах в своих рисунках обязательно проходят одни те же стадии: «каракули», «голова ноги», «прозрачность», «добавочные носы детской логики». Их фантазия удивительно схожа. Зачем и почему рисуют дети? Это - один из путей совершенствования организма. Чем больше мастерства в детской руке, тем разнообразнее движение рук.

Умелыми пальцы становятся не сразу. Для развития тонкой ручной координации важно, чтобы ребенок систематически занимался разнообразными видами ручной деятельности. Это рисование, аппликация, лепка, ручной труд, выкладывание узоров из мозаики, конструирование, работа с ножницами.

Основная часть. Рисование помогает в развитии двигательных ощущений, мелкой моторики руки. Рисуя дети овладевают навыком свободного владения карандашом и кистью учатся регулировать свои движения в отношении темпа силы нажима в результате чего у них вырабатывается плавность движения руки, которые в дальнейшем необходимы для письма. Уровень развития мелкой моторики - один из показателей интеллектуальной готовности к школьному обучению. По мнению Артюхова. Н. А. [1]. одним из самых эффективных форм развития мелкой моторики являются занятия по изобразительной деятельности где по рисункам можно проследить как развивается ребёнок его мелкая моторика какого уровня она достигает на каждом возрастном этапе. Делая в своих работах акцент на формировании двигательных умений и навыков, необходимых для рисования.

Комарова Т.С. рекомендует включать в детское творчество различные художественные материалы и техники и обучать дошкольников способам работы с ними. Эту же позицию разделяет Венедиктова. И. А. [2]. результаты исследования, которой показали, что использование различных художественных материалов в процессе обучения дошкольников изобразительной деятельности приводит к активизации их творческих способностей. Благодаря использованию необычных материалов и использованию различных техники рисования у детей лучше развивается мышление, воображение, фантазия, творческие способности, чувства прекрасного. У ребенка развивается глазомер, он учится ориентироваться на листе бумаги. Вырабатывается внимание, усидчивость.

Проблемой развития мелкой моторики рук через нетрадиционные приемы рисования занимались Рузанова Ю.В., Никитина А.В. [3;4].

Здесь следует выделить несколько взаимосвязанных проблем:

–У детей слабо развита мелкая моторика пальцев рук и тонкая двигательная координация кистей рук.

–Слабо развито умение ориентироваться на плоскости.

–Дети плохо выполняют задания по образцу, слабо развита зрительно- моторная координация.

Это и определило тему нашего исследования развитие мелкой моторики рук у детей дошкольного возраста через нетрадиционные техники рисования.

Значение мелкой моторики очень велико. Ребенок, имеющий высокий уровень развития мелкой моторики, умеет логически рассуждать, у него развиты память, мышление, внимание, координация, воображение, наблюдательность. Связная речь, так же напрямую связана с полноценным развитием речи, так как центры мозга, отвечающие за моторику и речь, находятся рядом.

Известно, что около трети всей площади двигательной проекции в коре головного мозга занимает проекция кисти руки. Поэтому тренировка тонких движений пальцев рук оказывает большое влияние на развитие активной речи ребенка. Хорошая мелкая моторика у ребенка позволит ему совершать точные движения маленькими ручками и благодаря этому он быстрее начнет общаться, используя язык. Как правило, если развитие движений пальцев соответствует возрасту (норме), то и развитие речи тоже в пределах нормы, если же развитие пальцев отстает- отстает и развитие речи. В старшем дошкольном возрасте

работа по развитию мелкой моторики и координации движений руки должна стать важной частью подготовки к школе, в частности, к письму.

Систематические упражнения по тренировке пальцев рук являются и средством повышения работоспособности коры головного мозга.

Развитие навыков мелкой моторики важно еще и потому, что вся дальнейшая жизнь ребенка потребует использования точных, координированных движений кистей и пальцев, которые необходимы, чтобы одеваться, рисовать, писать, а также выполнять множество разнообразных бытовых действий.

Мелкую моторику развивает рисование, лепка, аппликация, выкладывание узоров из мозаики, пальчиковые игры и гимнастика, конструирование из мелких деталей и т.п.

Если работа по развитию мелкой моторики рук будет вестись в системе, то к концу дошкольного возраста кисти рук ребенка станут более подвижными и гибкими, что способствует успешному овладению навыками письма в будущем.

Нетрадиционное рисование - искусство изображать, не основываясь на традиции.

Рисование нетрадиционными способами, увлекательная, завораживающая деятельность, которая удивляет и восхищает детей. На занятиях с использованием нетрадиционных материалов и техник дети получают информацию о разнообразии окружающего мира, уточняют свои представления о цвете, форме и размере предметов и их частей, у них

развивается воображение, мышление, речь. Дети с удовольствием выполняют задания по изобразительной деятельности с использованием нетрадиционных материалов и техник, ведь эти задания им по силам, и результат своей работы они видят сразу. Во многом результат работы ребенка зависит от его заинтересованности, поэтому на занятии важно активизировать внимание дошкольника, побудить его к деятельности при помощи дополнительных стимулов. Такими стимулами могут быть:

- игра, которая является основным видом деятельности детей;
- сюрпризный момент – любимый герой сказки или мультфильма приходит в гости и приглашает ребят отправиться в путешествие;
- просьба о помощи, ведь дети никогда не откажутся помочь персонажу, им важно почувствовать себя значимыми;
- музыкальное сопровождение.

В процессе обучения необходимо обращать внимание ребят не только на технику, но и выразительную сторону изобразительной деятельности. Следует учить детей передавать форму и цвет предмета композицию в рисунке, ритм и цветовые сочетания в декоративном узоре.

На занятиях важно предлагать ребенку различные виды деятельности.

Например, дети рисуют елочку. Сопутствующими заданиями могут быть такие, как словесное описание или рассказ о ней, выкладывание елочки из палочек, счет елочек и определение размера (большая, маленькая). Для закрепления полученных знаний полезно проводить дидактические игры и упражнения по изучаемой теме. Кроме того, в процессе работы полезны игровые моменты и динамические паузы (физкультминутки).

Нестандартные подходы к организации изобразительной деятельности удивляют, и восхищают детей, тем самым, вызывая стремление заниматься таким интересным делом. Оригинальное рисование раскрывает креативные возможности ребенка, позволяет почувствовать краски, их характер и настроение.

Как сказал Сухомлинский В.И. «Ребенок – это не сосуд, который надо наполнить, а огонь, который надо зажечь». Поэтому считаю нужно зажечь в детях огонек творчества. И совсем не страшно, если наш маленький художник перепачкается, главное – чтобы он получил удовольствие от общения с красками и радовался результатам своего труда.

Нетрадиционные техники рисования развивают у детей логическое и абстрактное мышление, фантазию, наблюдательность, внимание и уверенность в себе.

Существует много техник нетрадиционного рисования, их необычность состоит в том, что они позволяют детям быстро достичь желаемого результата.

Например, какому ребенку будет неинтересно рисовать пальчиками, делать рисунок собственной ладошкой, ставить на бумаге кляксы и получить забавный рисунок. Ребенок любит быстро достигать результата в своей работе, а перечисленные нетрадиционные приемы способствуют этому.

Нетрадиционные техники рисования создают атмосферу непринуждённости, открытости, содействуют развитию инициативы, самостоятельности детей. Благодаря изодейтельности развивается зрительно-двигательная координация, происходит развитие функции руки,

совершенствуется мелкая моторика кистей и пальцев рук.

Знакомство детей с нетрадиционными техниками рисования начали с рисования пальчиками - это самый простой способ получения изображения, который вызывает эмоциональный отклик у дошкольников. Ребёнок опускает в гуашь пальчик и наносит точки, пятнышки на бумаге. Работу начинали с одного цвета, а потом давала два - три цвета.

Воспитанники освоили различные техники рисования такие как:

- рисование пальчиками
- рисование ладошками
- ватными палочками
- оттиск пробкой
- оттиск мятой бумагой
- рисование восковыми мелками и акварелью

И чтобы развитие мелкой моторики рук стало увлекательной игрой, использовали разнообразные игровые приемы, такие как пальчиковые игры, массаж рук пальцев и др. Главная задача на тот период была – познакомить детей нетрадиционными техниками рисования и желание экспериментировать с ними.

Знакомили с новыми техниками нетрадиционного рисования такими как:

- печатание листьев
- оттиск поролоном
- тычок жесткой кистью
- печать по трафарету
- рисование по мокрой бумаге

Использовали нетрадиционные техники рисования не только на занятии по изодейтельности, но и на других занятиях. Результат данной деятельности не может быть плохим или хорошим, работа каждого ребёнка индивидуальна и неповторима.

Работу с детьми начали в 2022 году. Проанализировав рисунки детей, отмечали, что в их работах прослеживается одноплановость, бесцветность, отсутствие аккуратности, одним словом, рисунки были однообразны и бедны в цветовом решении. Пришли к выводу применять на занятиях по рисованию и в самостоятельной детской деятельности приёмы нетрадиционных техник рисования, с целью развития мелкой моторики руки и творческих способностей детей.

Изучили научную и методическую литературу по развитию мелкой моторики рук и нетрадиционных техник рисования, используемых в работе с дошкольниками. (Ю.В.Рузанова «Развитие моторики рук в нетрадиционной изобразительной деятельности», А.В.Никитина «Нетрадиционные техники рисования в детском саду», Г.Н. Давыдова «Нетрадиционные техники рисования в детском саду» (часть 1 и 2), И.А. Лыкова «Программа художественного воспитания, обучения и развития детей 2-7 лет. Цветные

ладошки», а также ежемесячный журнал «Дошкольное воспитание», «Ребёнок в детском саду» и др.).

Консультации, рекомендации, памятки для родителей.

Создали условия для самостоятельной творческой деятельности детей с использованием материалов нетрадиционной техники рисования: штампики для печати - разные, разные кисточки (жесткие и мягкие), ватные палочки, разные виды бумаги – толстые, тонкие, цветные, разноцветную тушь, веревочки, ниточки, трафареты, зубная щетка, губки разного размера, гофрированная бумага, пищевые пленки). Все находятся в доступном для детей месте.

Для детей подготовительной к школе группы использовала задания:

- работа в тетрадях в клеточку – математические диктанты,
- рисунки по клеткам - развивать зрительно – двигательную координацию, пространственную ориентировку на листе бумаги.

Использовали нетрадиционные техники рисования не только на занятии по изодейтельности, но и на других занятиях.

Систематическая работа в данном направлении позволила получить положительные результаты в развитии детей: по результатам диагностики прослеживается динамика

развития мелкой моторики рук, дети могут самостоятельно выбрать вид продуктивной деятельности, осваивают различные техники нетрадиционного рисования, с желанием выполняют упражнения и предложенные нами задания.

Считаем, что использование в работе нетрадиционных техник, дети получают не только знания и навыки, но и радость и удовольствие, атмосферу непринужденности, открытости, самостоятельности, благоприятное отношение к деятельности.

Заключение.

Можно сделать вывод, что трудности в развитии мелкой моторики вполне преодолимы посредством использования нетрадиционных приемов рисования.

Изучение педагогического опыта свидетельствует о том, что в практике ДОО работа по проблеме обучения детей нетрадиционным приемам рисования не всегда находит свое место в жизни детей. Педагоги не всегда способны интересно организовать эту работу, недостаточно владеют сами этими приемами рисования и редко используют рисование с использованием нетрадиционного материала, как на занятиях, так и вне занятий, ограничиваясь, в основном, самыми простыми. В результате проведенной работы у детей вырос уровень развития творческих способностей. Они научились использовать в рисовании дополнительные нетрадиционные материалы. Дети самостоятельно используют нетрадиционные формы рисования, создают собственные творческие образы. У детей значительно повысился интерес к рисованию. Дети стали вести поисковую деятельность на нахождение новых нетрадиционных форм рисования, пробуют в рисовании новые дополнительные материалы, предметы. На основе знаний, они используют свои умения и навыки в самостоятельной деятельности дома. В данной работе активное участие принимали родители. Они с интересом следили за деятельностью детей.

Заканчивая экспериментальную работу, мы убедились в том, что планомерная и систематическая работа в ДОО по использованию нетрадиционных техник рисования, как средство развития изобразительных навыков дошкольников, формирует творческое отношение к продуктивной деятельности, самостоятельность и уверенность в своих возможностях, способствует развитию фантазии, воображения, у детей появляется познавательный интерес и эмоциональное отношение к изобразительному искусству.

Литература

1. Артюхова, Н. А. Использование нетрадиционных техник рисования в организованной образовательной деятельности с детьми старшего дошкольного возраста / Н. А. Артюхова [Электронный ресурс] / режим доступа: <https://urok.рф/library/ispolzovanie-netradicijonnyh-tehnik-risovaniya-v-or-121451.html>
2. Венедиктова, И. А. Проект на тему: «Использование нетрадиционных техник рисования в развитии творческих способностей дошкольников» / И. А. Венедиктова // Всероссийский сетевой журнал Дошкольник. рф. – 2019. - №8. – с. 94
3. Рузанова, Ю.В. Развитие моторики рук в нетрадиционной изобразительной деятельности – М.: Каро, 2010. – 176с.
4. Никитина А. В. Нетрадиционные техники рисования в детском саду. Планирование, конспекты занятий : Пособие для воспитателей и заинтересованных родителей / А. В. Никитина. — Санкт(Петербург : КАРО, 2016 — 96 с. + 16 с. цв. вкл.
5. Давыдова, Г. Н. Нетрадиционные техники рисования в детском саду. В 2 ч. Ч. 1: пособие для педагогов ДОО, начальной школы, гувернеров, руководителям кружков дополнительного образования / Г. Н. Давыдова. – М.: «Издательство Скрипторий 2003», 2007

PECULIARITIES OF LEARNING ENGLISH PHONETIC SYSTEM IN COMPARISON WITH KAZAKH LANGUAGE

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Abstract

This article deals with the problems that will arise in teaching English pronunciation to native speakers of Kazakh and thus to provide a guide for the solution to these and other problems; to provide an insight as to what will constitute a problem in language learning. The basis for the prediction of pronunciation problems is a contrastive analysis of the two languages. There are different methods in teaching foreign languages. Any method is useful and helpful when it is used relevantly and suitable for the aim of teaching different aspects of language and at different stages of teaching.

Introduction

Currently, English is taught in the classroom with the Kazakh language of instruction. Since students learn English on the basis of their native language, there is a need to compare the phonetics, vocabulary and grammar of English and Kazakh. Pronunciation plays a huge role both in mastering the skills of oral speech and in other types of language communication. Incorrect pronunciation of English sounds leads to a violation of the meaning of words, as well as distortion of speech intonation also leads to a misunderstanding of the meaning of the utterance.

Teaching a foreign language always requires knowledge and consideration of the peculiarities of the native language of the audience, since the main difficulty in teaching foreign pronunciation is that students perceive the sound of someone else's speech through the prism of the phonetic system of their native language. Having steady skills of hearing and pronunciation of sounds of the native language. [1, p. 97]

As in Kazakh, so in English, each sentence is formed by a certain type of intonation. It is a necessary component of the sounding speech. The intonation of a particular sentence may be different when pronounced by different people, because it depends on the individual characteristics of the speaker. [2, p. 40] And yet from this variety it is possible to distinguish such intonation types that have a socially developed character and perform communicative, syntactic, logical, evaluative and stylistic functions.

We have characterized the English vowel sounds that have a particular or other similarities with the vowels of the Kazakh language. As it can be seen from the description, almost all the vowels in English have more or less similar couples in the Kazakh language.

Several Kazakh vowels do not have similar in the English language - (ʏ), (ʏ) and so they usually do not caused influence of assimilation of English vowels. These vowels are specific for the Kazakh language.

Sounds (ʏ) and (ʏ) are brief, incomplete formation, lip, narrow, upper lift. In the formation of sound (ʏ) the language takes on the same position, and in the formation of sound (ʏ). When the lips are rounded and protrude forward, however, mouth hole turns out not so narrow as in formation (ʏ).

Vowels (ʏ) and (ʏ) mainly differ from each other only in hardness and softness: (ʏ) is solid, i.e back row, (ʏ) is soft, i.e of front row. The presence of these sounds is a distinctive feature in relation to each other is confirmed by the following comparison: ҫн (flour) - ҫн (voice), мҫп (stand) - мҫп (sort, kind), ҫу (fly) - ҫу (three). These sounds is used, mainly, in the first syllable of the word.

Requires special attention from the teacher to introduce students to new concepts for them, reflecting the phonetic system of the English language. One of these concepts is a complex vowel (diphthong). Each diphthong in the English language is a separate phoneme and is part of the vowels: [ai], [ei], [ei], [au], [ou], [iə], [εə], [uə]. Part of the English diphthongs can be likened to some combinations of vowels in Kazakh: аӱ (moon) қоӱ (sheep), ау (network). But such English diphthongs as [iə], [εə], [uə], [ou] does not have similar combination in the Kazakh language.

Above shown of the Kazakh vowels differ from diphthongs, they sound like two separate sounds, while top (nucleus) of the English diphthong pronounced quite clearly, then followed by sliding in the direction of the second sound. The main difference of English diphthongs from these similar of Kazakh vowels is that the latter falls easily into two syllables and can be separated by a morphological boundary (e.g. маӱ, ма-ый; боӱ, бо-ый; бау, ба-уыр). In English, such phenomenon is excluded. English diphthongs can not apart into two syllables. They are always pronounced together, i.e one effort with an emphasis on the core.

Each diphthong has lax, fading end. That is, the second element of the diphthong is a weak, sliding, extremely brief faint sound. His voice may not be identical to the sound of corresponding isolated vowel, as it is in the Kazakh language.

Although the transcription of the second element is transferred by sign of the vowel complete formation, it should be noted that this sign indicates only the movement of the speech organs to this vowel.

1) 3 diphthongs with a glide to [i]: [ei-ai-ei]

2) 2 diphthongs with a glide to [u]: [ou-au]

3) 3 diphthongs with a glide to [ə] [iə-εə-uə].

In setting up the pronunciation of diphthongs [ai], [ei], [ei], [au] is necessary to consider the inherent common patterns and contrast with the Kazakh diphthongs (aӱ), (eӱ), (oӱ), (ay). In the final position before pausing English diphthongs pronounced drawl, before a voiced consonant is some shorter, and before voiceless consonants is very briefly[4].

Compare	
Kaz.	Eng.
(ай) ай (moon) май (oil) бай (rich)	[ai] eye my buy
(ей) кейде (sometimes) бейне (image) мейлі (let)	[ei] case bay male
(ой) қой (sheep) той (holiday) бой (growth)	[ɔi] coy toy boy
(ay) тай (mountain) ай (network) бай (ligament)	[au] tower hour bow

Above description of the specific articulation of the vowel sounds allows us to identify the most important for the pronunciation production of differences between articulatory bases of Kazakh and English languages in the area of fields[5].

Concerning to the articulation of vowels there are also difficulties, even there are similar sounds, but articulation of them is different from vowel sounds in Kazakh. For example in English sounds [a:], [x], [o], [u], [u:] etc. look similar in Kazakh [a], [o], [y]. But their articulations are different. In Kazakh vowel sounds corresponding to English ones [a], [o], [u], are classified as labials, and in English they belong to complex nuclei. In Kazakh [u] is front sound, but in English it isn't. English [i:] and [u:] are long and slightly higher than the corresponding Kazakh vowels. For this reason, English [i:], [u:] tend to be identified by speakers of Kazakh with their [i], [u] and reproduced accordingly. In Kazakh thirty three consonants, English has twenty three (or twenty two, depending on how affricates are analyzed) consonants. What's new and unfamiliar for Kazakh speaking learners is: 1. There are also combinations of consonants readings of which are different from that of in the alphabet i.e their reading changes as exceptions. For example, consonant combinations such as th, ph, ng, wh, wr, sh, ch, etc. are read as one sound and sound different from their alphabet name. What is important to pay attention f to is that these combinations of consonants are read differently. In Kazakh all consonants are read corresponding to their name in

their alphabet. One consonant is read as one sound. There are no combinations of consonants. Kazakh has no sequences of more than two consonants. Since English has as many as four consonants in close transition, and as many as six or seven with intervening juncture, the Kazakh speaker has obvious difficulty with English consonant sequences and supplies intrusive vowels, which act as cluster breakers.² In English here may occur omission of consonants, which is also not acceptable in Kazakh. For example, in consonant combinations *kn, lf, sc, mb, bt, mn* one of the consonants is not read, i.e. combinations of two consonants are read as one consonant sound. That's why Kazakh speaking learners will encounter difficulties in reading English words *know, knife, knit, science, scissors, tomb, bomb, column, debt, cash, shelf* etc. English consonant sounds [ð], [θ], [w] don't occur in Kazakh[6]. Kazakh speaking learners usually substitute these sounds for [s, z, v]. Hence, English contrasts such as *thistle – this'll, ether – either, think – sink, bath – bus, breathe – breeze, will – yield, want – vote* are troublesome for Kazakh speaking learners. English [t], [d], are alveolar but in Kazakh they are dental. However this difference doesn't constitute a major problem in learning of English, since substitution of the dentals for the alveolars doesn't materially affect or impair communication in English. But in Kazakh dental consonant sounds are pronounced without any aspiration, and in English they pronounced with an aspiration especially at the end of the word or in an isolated word.

The conventional use of letter "r" in the transcription of English and Kazakh completely obscures the fact that the sounds so symbolized in the two languages are entirely different; in Kazakh 'r' represents an apical trill, in English a slightly retroflex resonant continuant. Kazakh speakers have no difficulties with 'r' in all environments and substitute [r] which acceptable to Kazakh speaking learners in items such as *girl, her, skirt, turn, sulfur* etc. English [ŋ] is not difficult for Kazakh speaking learners as far as such sound exists in Kazakh. Contrastive study of the phonetic systems of English and Kazakh shows that Kazakh speaking learners have difficulties with the segmental phonemes of English: differences in the number of contrasts, differences in the permissible sequences, and differences in the phonetic expression of similar contrasts. English has many more vowel contrasts, and more consonant contrasts than in Kazakh. Both English and Kazakh have consonants which are conventionally symbolized [t], [d], [s], [z][7].

In English, these present alveolus where as in Kazakh they present dentals. All of these mentioned differences constitute a major source of difficulties for the speaker of Kazakh. So by using contrastive method foreign language teacher can predict and describe the patterns that will cause difficulty in learning, and those that will not cause difficulty, by comparing systematically the language to be learn with the native of the student. Besides, the most efficient materials for teaching and learning are those that are based upon a scientific description of the language to be learnt, carefully compared with the parallel description of the native language of the learner. It is important, and helpful in writing language teaching materials and also less time consuming. Of cause, the usage of this method is possible for bilingual foreign language teachers who know both languages i.e native language of the learner and foreign language to be learnt. In most cases, similarities will facilitate learning, while the obvious differences will be problems simply they are different. Resulting from native habits of pronunciation which appear to be different from those of the foreign language. That's why foreign language teachers before writing language learning program will take into consideration and predict what structure or phenomenon of the target language cause more difficulties and to focus on them to prepare learners to cope with the problems. **It is chiefly a matter of knowing the learners beforehand, at least one respect, so less time and energy have to be spent on getting to know them at the moment of instruction[8].**

Conclusion

English is taught in many schools and high schools in the Kazakh Republic. Since the students will eventually learn English on the basis of mother tongue, there is a need for a number of research tools based on a comparison of phonetics, vocabulary and grammar of English and Kazakh languages. This article is considered the issues of teaching English pronunciation in attracting of such comparisons. In the practice of language teaching are mainly distributed two ways of teaching pronunciation. The first is based on imitation, i.e. by unconscious assimilation of phonetic phenomenon. On the basis of second is a meaningful learning. This means that teaching pronunciation skills can not be mechanical. 'Students need to maintain awareness of the linguistic features of foreign speech to the development of skills, and not vice versa, so this information is not given at all'. This method of teaching pronunciation is called analytical and imitative. For example, learning English sound by students of Kazakh [a:] is a difficulty. Students are inclined to change the English long vowel [a:] (in the words *garden, star*) qualitatively and quantitatively, it's different from Kazakh vowel (a) (in the words of the *ball-child*). Consequently, over the sound [a:] teacher have to work longer and more laborious, to prevent the influence of the corresponding sound of the native language of students. On the other hand, the pronunciation of the

English sound [h] are very easy to digest to Kazakh students, as the same sound is also in the Kazakh language (qaharman - hero, ah!, - Interjection).

Comparison of sound structure, stress and intonation of English and Kazakh languages allows brighter identify their characteristics, their identity, and provides a framework for teacher techniques work on English pronunciation, for effective speech exercises.

References

1. Torsuev G.P. "Teaching English pronunciation", M., 1956. – 224 p.
2. Jones D. "English Pronouncing Dictionary", 15th edition , Cambridge: Cambridge University Press, 1997. – 559 p.
3. Sh.B.Gumarova I.A.Baimuratova, Contrastive analysis of english and kazakh for the purpose of teaching, *Bulletin Abay Kazakh National Pedagogical University*, Almaty, 2015.
4. **Weinreich** Languages in Contact. The Hague: Mouton and Co., 1966.
5. A. Sultangubiyeva¹, R. Avakova², G. Kabdrakhmanova³. Learning English Pronunciation in Comparison with Kazakh Language, *American Journal of Linguistics*, e-ISSN: 2326-0769, 2013;2(3):pp.33-36
6. H.A. Phonology and Prosody of Modern English. University of Michigan Press, 1964.
7. A. Contrastive studies and the Language Teacher. *English Language Teaching*. 21 (1967)
8. Reed, david W., Lado, Robert; and Shen, Yao. "The Importance of the native Language in Foreign Language Learning" *Language Learning* 1 (1961)

DEVELOPMENT OF MUSICAL TASTE OF STUDENTS IN MUSIC LESSONS

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РАЗВИТИЕ МУЗЫКАЛЬНОГО ВКУСА УЧАЩИХСЯ НА УРОКАХ МУЗЫКИ

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Abstract

The article deals with the issues of education of musical taste in music lessons in elementary school. The effectiveness of the system of education of musical taste in music lessons is achieved by identifying and analyzing such indicators: interest in the perception of musical material; adequate and holistic perception and understanding of musical material; a clear meaningful statement about the perceived image; the ability to compare musical images, understand and interpret cause-and-effect relationships between musical means and the emotional content of musical material; performing skills. The concept of musical taste from the point of view of school education. Organizing a music lesson in elementary school based on the interaction of traditional and innovative approaches. The specifics of the music lesson as an art lesson, its types, structure, composition are revealed. The author draws attention to the artistic dramaturgy of the music lesson as an integral dynamic composition in the unity of the following elements: conclusion, solutions to the problem and the course of development, culmination. It is focused on the final result, which allows you to design music lessons, regulate the activities of teachers and students, flexibility and variability of lesson construction. Following the hierarchy in planning allows the teacher to see the purpose of a particular lesson related to the goals of teaching a music lesson as a whole. The summary (scenario) of the lesson is described, describing the content and course of the lesson, types of joint activities of the teacher and students, reflection of the lesson, fragments of the teacher's speech or full-text material. The characteristic of the equipment of the music lesson meeting modern requirements is given; examples of interfaces of computer programs used in the music lesson are given. Special attention is paid to the types of evaluation of the results of educational activities of younger schoolchildren.

Аннотация

В статье рассматриваются вопросы воспитания музыкального вкуса на уроках музыки в начальной школе. Эффективность системы воспитания музыкального вкуса на уроках музыки достигается путем выявления и анализа таких показателей: интерес к восприятию музыкального материала; адекватное и целостное восприятие и понимание музыкального материала; четкое содержательное высказывание о воспринимаемом образе; умение сравнивать музыкальные образы, понимать и интерпретировать причинно-следственные связи между музыкальными средствами и эмоциональным содержанием музыкального материала; исполнительское мастерство. Понятие музыкального вкуса с точки зрения школьного образования. Организации урока музыки в начальной школе на основе взаимодействия традиционного и инновационного подходов.

Раскрывается специфика музыкального урока как урока искусства, его виды, структура, композиция. Автор обращает внимание на художественную драматургию урока музыки как на целостную динамическую композицию в единстве следующих элементов: вывод, решения проблемы и ход развития, кульминация. Ориентирован на конечный результат, позволяющий проектировать уроки музыки, регулировать деятельность учителя и учащихся, гибкость и вариативность построения урока. Соблюдение иерархии в планировании позволяет учителю видеть цель конкретного урока, связанного с целями преподавания урока музыки в целом. Описывается конспект (сценарий) урока, описывающий содержание и ход урока, виды совместной деятельности учителя и учащихся, рефлексию урока, фрагменты речи учителя или полнотекстовый материал. Дается характеристика оборудования урока музыки, отвечающего современным требованиям; приводятся примеры интерфейсов компьютерных программ, используемых на уроке музыки. Особое внимание уделяется видам оценки результатов учебной деятельности младших школьников.

Keywords: music, lesson, taste, perception, creativity, genres

Ключевые слова: музыка, урок, вкус, восприятие, творчество, жанры

Большое внимание уделяется не только обучению навыкам и умениям, но и формированию разносторонне развитой личности, способной применять знания в практической деятельности. Чувствовать и ценить красоту окружающего мира. Одной из характеристик всесторонне развитой личности является уровень развития музыкальных вкусов ребенка. «В современном мире существуют различные музыкальные стили и направления: классический, фолк, техно (техно-данс, техно-рэп, техно-кантри, техно-джаз), рок-музыка (рок-н-ролл, хард-рок, хэви-метал, пост-рок), поп (поп-рок), рэп, хип-хоп, брейк-данс, джаз и североамериканская негритянская музыка. Поэтому основная задача школьного учителя музыки-научить учащихся понимать музыку в разных стилях и направлениях, не только слушать ее, но и слышать характер, настроение, цель музыки. Для точной оценки музыки необходимо сформировать музыкальный вкус. Б. А. Бечак, Л. В. Дмитриева, Д. Б.»[5].

Музыку ученики примут и полюбят только тогда, если она подойдет к ним просто, не в виде чего-то изобретенного взрослыми с воспитательными целями, а в виде действительно нужной вещи для развития их детского ума и чувства, чего-то настоящего, что есть во всем мире вокруг, чего нельзя не слышать. Над проблемой формирования умения слушать музыку, умения её внутренне интерпретировать, осваивать её как музыкальное творение работали учёные Ю. Б. Алиев [2], Л. А. Безбородова [3], Н. П. Корыхалова [7], И. В. Кошмина [8] и др. их учения говорят о том, что требуется соответствующая подготовка, руководство к воспитанию музыкального произведения.

«Хотя проблема развития музыкального вкуса школьников привлекла внимание многих исследователей, эта проблема остается актуальной и по сей день. Актуальность исследования заключается в том, что остро стоит проблема не сформировавшейся музыкальной культуры подрастающего поколения. К сожалению, современная музыка превратилась в практически неприемлемый шум, который способствует ее непрерывному звучанию по радио, телевидению, легкому доступу к загрузке в интернете, что приводит к ее обесцениванию, а затем к неспособности людей слушать ее серьезно и осмысленно. В соответствии с этим актуальны вопросы воспитания музыкального вкуса школьников, требуют всестороннего изучения и разработки стратегии преодоления обозначенной проблемы» [10].

Для художественной реализации этих целей вполне подойдет классическая и народная музыка. Есть два аспекта воспитания активного слушателя классической и народной музыки.

Первый обеспечивает организацию условий для активного восприятия музыки учащимися. Такое восприятие музыкального материала проявляется в эмоциональном переживании, то есть способности сопереживать музыкальному настроению, заражать эмоции и настроения, выражаемые композитором в музыкальном произведении. За этим следует эстетическая оценка услышанного произведения и понимание характера переживаний, обсуждение выразительных средств, использованных при изображении музыкального и художественного образа.

Сегодня в условиях модернизации социально-экономической жизни страны вся система образования направлена на создание условий, способствующих развитию личности на основе национальных и общечеловеческих ценностей, достижений науки и практики, формирование физически и духовно развитого гражданина Республики Казахстан, развитие конкурентоспособного человеческого капитала. Все это требует новых подходов к содержанию образовательного процесса, к содержанию учебных программ, направленных на развитие навыков критического мышления и навыков самостоятельного поиска информации. Организация учебного процесса, отражающего уровень современной науки и практики, а также эффективно использующего новые педагогические и информационные технологии, способствующие самостоятельному получению знаний, их обработке и применению в конкретных условиях, также требует обновленных подходов.

Особое внимание требует урок современной музыки, который является частью целостного образовательного процесса в начальной школе. Его содержание осуществляется на основе музыкальной программы, ориентированной на стандарты школьного образования и определяющей путь и способы усвоения содержания. На школьном уроке имеются обязательные требования к уровню подготовки учащихся, что означает, что урок должен быть не просто фактом встречи ребенка с образованием, результатом которого должны стать изменения в самом ребенке.

Опираясь на достижения современной дидактики, можно сделать вывод, что урок музыки – это форма организации педагогического процесса с использованием видов, средств и методов работы, при которых учитель руководствуется коллективными познавательными, музыкальными и другими действиями постоянной группы учащихся (класса) в течение определенного времени, создавая благоприятные условия с учетом особенностей каждого из них. Овладение ими основами урока музыки всеми учащимися непосредственно в процессе обучения, а также для воспитания и развития познавательных способностей и духовных сил учащихся. На уроке реализуются цели и задачи музыкального образования; обеспечивается освоение учащимися обязательного минимума содержания образовательной программы по музыке, предусмотренного государственным стандартом начального общего образования. Обеспечение достижения цели музыкального образования, направленного на формирование музыкальной культуры учащихся, возможно путем непосредственного вовлечения его в этот процесс, то есть в музыкальную деятельность.

Особенностью музыкального урока является то, что он объединяет различные виды музыкальной деятельности детей (музыкальное восприятие, музыкальное исполнение, музыкально-творческая деятельность, музыкально-познавательная деятельность), что требует формирования целостности урока как музыкально-педагогической композиции. Содержание и конструирование урока музыки в начальной школе во многом обусловлено тем, что учащиеся в силу возрастных особенностей долгое время не могут делать одно и то же, поэтому необходимо менять виды музыкальной деятельности, совмещенные с конкретной целью данного урока.

С точки зрения музыкальной дидактики существуют следующие виды занятий: вводный урок по теме; урок углубления темы; урок обобщения темы. Данная классификация отражает различный характер и этапы освоения обучающимися учебного материала. Учитель должен четко осознавать, что процесс усвоения информации на эмоциональном уровне требует как яркости первоначального восприятия, так и дальнейшего его укрепления, повторения, на основе чего можно расширять и углублять полученные идеи, знания, впечатления, а также необходимость их понимания на новом уровне. Определение учителем типа урока или сочетания нескольких видов на одном занятии является проблемой педагогической техники.

Педагоги-исследователи выделяют три вида организации учебной деятельности учащихся на уроках музыки в начальной школе:

- индивидуальная работа - это самостоятельная учебная деятельность учащихся по выполнению задания, выбранного в соответствии с возможностями обучения каждого учащегося (работа с карточками, работа на доске, работа с учебником, работа над разучиванием песни;

- заполнение таблицы, закончить музыкальную фразу;

- синквейн сочинение, сочинение по музыке, иллюстрации по художественному образу музыкального произведения).

Недостатком индивидуальной работы является то, что, способствуя воспитанию самостоятельности учащихся, она ограничивает их взаимодействие, стремление передавать свои знания одноклассникам;

Групповая форма способствует эффективности усвоения учебного материала, благотворно влияет на общение учащихся внутри группы, развивает личностные качества – инициативность, любознательность, коммуникабельность;

Урок музыки как дидактическое единство и основная форма музыкального обучения имеет свои особенности, которые:

- урок музыки - это урок искусства, художественно-педагогическое намерение которого (драматургия) раскрывается во взаимодействии субъектов образовательного процесса (актеров).

Музыка, учитель, учащиеся; реализация художественно-педагогической мысли осуществляется по интонационно-образному принципу в окончательной тематической структуре: осуществляется сотрудничество в восприятии, исполнении и создании музыки посредством создания рефлексивных условий на уроке, совместного поиска решений проблемных ситуаций;

Значимость музыкального вкуса для учащихся.

Если внимательно присмотреться к тому, как музыка входит в жизнь учащихся, то можно заметить большое количество строк, форм и в то же время частое отсутствие их взаимосвязи, последовательности, что приводит к серьезным проблемам в музыкальном развитии и воспитании подрастающего поколения. С широким распространением звуковых фильмов, радио и телешоу, плееров, магнитофонов современная жизнь кажется наполненной музыкой, и вам не нужно беспокоиться о музыкальной культуре детей. Спонтанно, удовлетворяя личные вкусы и интересы, музыка постоянно сопровождает современного человека, так как многие организации проводят музыкальные мероприятия на различные темы. Но нельзя сказать, что ничто в этой области духовной культуры не вызывает беспокойства. Уровень музыкального вкуса личности младшего школьника характеризуется такими проявлениями, как его способности, взгляды, знания, способности, оценки. Все эти формы или компоненты музыкально-эстетической культуры учащихся проистекают из его музыкальной деятельности и развитого музыкального сознания.

Музыкальный вкус учащихся формируется в процессе активной музыкальной деятельности. Так, во время пения, прослушивания музыки, игры на детских музыкальных инструментах учащиеся знакомятся с произведениями, учатся их понимать, усваивают знания, приобретают навыки и умения, необходимые для эмоционально-сознательного восприятия и выразительного исполнения. Поэтому развитие их музыкально-творческих способностей, формирование интересов, вкусов, потребностей разнообразно и активно.

Музыкально-эстетическая культура младшего школьника выступает как единство способностей, музыкально-эстетических знаний, умений, поведения, чувств, оценок. Он показывает себя:

1. В наличии и развитии музыкальных склонностей и способностей;
2. В содержании эстетических способностей ребенка, взглядов на музыкально-педагогическую деятельность;
3. В последовательности и глубине музыкального знания;
4. В музыкально-эстетической деятельности, проявляющейся в умениях и умениях как необходимых элементах музыкально-педагогического творчества;
5. В развитии чувственно-оценочного видения и образного мышления, позволяющее ориентироваться в многообразии музыкальных ценностей, формировать через механизмы восприятия, опыта, оценки, вкуса, ценностных ориентаций идеалов и установок.

Воспитание музыкального вкуса учащихся невозможно без развития музыкальных способностей, которые развиваются в их музыкальной деятельности. Чем он активнее и разнообразнее, тем эффективнее процесс музыкального развития и, следовательно, тем успешнее цель музыкального образования. Таким образом, развитие музыкальных способностей является важной предпосылкой успешного формирования музыкального вкуса.

Важность развития музыкальных способностей заключается в том, что она позволяет учащимся успешно проявлять себя в различных видах музыкальной деятельности и обеспечивает понимание особенностей музыкального языка, структуры музыкальной речи. Это,

в свою очередь, служит основой для формирования музыкальных вкусов, интересов, потребностей.

Музыкальные способности являются общими-необходимыми и специфическими для осуществления любой музыкальной деятельности. Для учителя музыки прежде всего важны общие музыкальные способности учащихся:

1. умение работать с музыкально-слуховыми выступлениями на добровольной основе;
2. чувствовать себя хорошо;
3. музыкально-ритмическое чувство.

Возможность волонтерской работы с музыкальными и слуховыми выступлениями.

Музыкальный слух - способность человека к полному восприятию музыки, необходимая предпосылка композиторской и исполнительской деятельности; основа музыкального мышления и музыкально-оценочной деятельности.

Овладение элементами музыкальной грамотности на начальном этапе направлено на развитие слуха учащихся, связывание музыкально-слуховых представлений с визуальными представлениями при различении высоты звуков в ограниченном диапазоне (высокий, низкий), динамике (тихий – громкий), темпе (быстрый – медленный – средний), контрастных регистрах (высокий и низкий). Также на основе развития интонационного слуха: осуществление постепенного перехода от начального периода к нотному, понимание интонации музыкальной речи, знакомство с нотными знаками через восприятие детской музыки: пение, пластическая интонация, игра на детских музыкальных инструментах, постановка, ритмическая и вокальная импровизация; закрепление и оформление основных понятий нотной грамотности.

Музыкально-ритмическое чувство - способность ориентироваться в длительности звуков в их временной последовательности. Это будет выглядеть так:

1. восприятие и воспроизведение равномерной пульсации метрических долей в музыке;
2. при прослушивании и исполнении различают сильные и слабые доли в музыке;
3. восприятие соотношений разной длины на примере простых, знакомых детских песен;
6. определение выразительной сущности высказывания на материале знакомых произведений.

Музыкально-ритмические действия младших школьников следует планировать следующим образом. Деятельность учителя должна быть направлена, в первую очередь, на активизацию дошкольного опыта детей, а также на развитие: танцевальных; физкультурных движений.

Закрепление представлений об элементах музыкальной речи, средствах выразительности происходит в творческих заданиях, связанных с импровизацией и драматизацией песен, пьес для прослушивания.

Музыкально-ритмическая деятельность учащихся на уроке направлена на закрепление ранее приобретенных навыков выразительного движения и овладение трудностями, умение творчески использовать знакомые движения в танцах. Опыт, полученный детьми при выполнении маршевых и танцевальных движений, способствует формированию представлений о пульсации сильных и слабых долей в музыке, соотношении двух ритмических единиц, а также овладению музыкальной нотой.

В ходе урока были выявлены следующие данные:

1. Учащиеся с высоким музыкальным вкусом характеризуются сосредоточенностью, эстетически-активным восприятием музыки, эмоциональным и интеллектуальным единством, дифференциацией слуховых ощущений;

2. Внутренний слух и музыкальные представления связаны со способностью слышать и чувствовать музыку самостоятельно.

3. Ученики воспринимают, понимают выразительные средства музыки, понимают, чего достигает эстетический эффект воздействия музыкального образа композитора на слушателя, устанавливают причинно-следственные связи между эмоциональным содержанием музыкального образа и средствами выразительности.

Анализ содержания каждой методики осуществляется по следующим критериям развития музыкального вкуса.

Высокая	Средняя	Низкая
- адекватное, эстетически-активное достижение «пика» в музыке, эмоциональное и интеллектуальное единство; - четкое содержательное заявление ребенка о просмотренных музыкальных сюжетах; - способность анализировать, сравнивать музыкальные образы, устанавливать причинно-следственные связи между средствами музыкальной выразительности и эмоциональным содержанием музыки; - умение оценивать процесс и результат восприятия музыкальных образов, представлять, сравнивать.	- достижение «высшего» состояния в музыке и понимание музыкальных образов не всегда имеет адекватный характер; - сознательное воспринимание простые, однозначные музыкальные образы; - желание и готовность принять мир музыкальных сюжетов и свой эмоциональный мир; - умение устанавливать причинно-следственные связи между музыкальным образом и средствами выразительности; - при интерпретации эмоционального содержания музыкального образа речь не раскрывается, ориентирована на общее понимание.	- нет интереса к музыкальному сюжету; - недостаточное восприятие и понимание музыкальных образов; - метод анализа содержания музыкального образа и средств выразительности характеризуется неустойчивостью; - в распознавании музыкальных образов речевое общение носит индивидуальный характер, но не соответствует содержанию произведений и имеет слабую эмоциональную окраску.

В итоге процесс развития музыкального вкуса прост, но необходимо соблюдать некоторые правила.

Чтобы привить ребенку музыкальные вкусы, родители должны любить и слушать только хорошую музыку. Там, где регулярно звучат произведения классических или легендарных исполнителей, никогда не бывает детей с плохим музыкальным вкусом.

Таким образом, если на уроке музыки используется сложные музыкальные композиции или выбирается неправильный подход, то можно не только потерять любовь к музыке, но и навсегда преодолеть желание ее слушать. Важно помнить, для этого нужно заранее продумать схему урока. Постараться развить интерес к музыке. Посещать вместе различные спектакли, выступления детских творческих коллективов, концерты классической или народной музыки. Все это не только формирует музыкальные вкусы, но и стимулирует творческие способности, личное и духовное развитие на уроке музыки.

References

1. Abdullin E. B. *Theory of musical education: textbook for students. Higher pedagogical institutions* / - Moscow: Publishing Center "Academy", 2014. - 336 P.
2. Aliyev Yu. B. *Methods of musical education of children* / - M.: Humanit. edition. Vldos Center, 2000. 336 p.: notes.
3. Bezborodova L. A., Aliyev Yu. B. *Methods of teaching music in general education institutions* / - M., 2012.
4. Bechak B. A. *Education in art* / -M.: Enlightenment, 1981. - 280 P.
5. Dmitrieva L. V., Chernovanenko N. M. *Primary school didactics: textbook and workshop for academic bachelor's degree* / - Moscow: Yurayt Publishing House, 2017.p. 253.
6. Kabalevsky D. B. *Programs of educational institutions. Music*. -M.: Enlightenment, 2014.204 P.
7. Korikhalova N. P. *Interpretation of music: theoretical problems of musical performance*. - M.: Enlightenment, 1979.
8. Koshmina I. V. *Interdisciplinary connections in elementary school*. - M.: Academy, 2009.
9. Lerner I. Ya. *Didactic foundations of teaching methods*. - M.: Enlightenment. 1981.
10. Radynova O. P. *Theory and methodology of musical education of preschoolers: textbook for academic bachelor's degree*. - Moscow: Yurayt, 2019, 296 P. <https://infourok.ru/vospitanie-muzykalnogo-vkusa-na-urokah-muzyki-4684197.html>

BENEFITS OF USING THE MIND MAP IN TEACHING AND LEARNING ENGLISH VOCABULARY**Zhanuzak Araitan Talaskyzy***2nd year Master degree student of Al-Farabi Kazakh National University,
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Almaty, Kazakhstan***Tausogarova Ayauzhan Kayratkyzy***Candidate of Philological Sciences, associated professor,
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Almaty, Kazakhstan***Abstract**

English vocabulary constitutes a challenge for English foreign language teaching and learning. Most students spend a lot of time studying English vocabulary, but the result is often frustrating and unsatisfactory when so many students learn vocabulary by rote memorization, which is boring and dampens students' enthusiasm for learning. Therefore, it is desirable to find an effective tool to help students learn English vocabulary.

This article analyzes the feasibility of using the Mind Map in teaching and learning English vocabulary theoretically. Prior to any trials or other empirical research, this initial study adopts the qualitative methodology, mainly analyzing the features of the Mind Map and the scientific basis for using the Mind Map in teaching and learning English vocabulary. The goal of this paper is to encourage English foreign language teachers and students to incorporate the Mind Map into their educational process as an effective technique for teaching and learning English vocabulary.

Keywords: *ESL, teaching vocabulary, mind maps, mind mapping technique, vocabulary maps,*

In a modern school, a student learns to get not just a simple knowledge of facts, but acquires the ability to widely use this information. In our work, to create visualization, structuring and classification of ideas, we use the method of intelligence maps. The intelligence of the map (in the original Mindmaps) is a tool that allows you to think using all your creative and intellectual potential. This is the development of Tony Buzen, a well-known writer, lecturer and consultant on the issues of intelligence, psychology of learning and thinking problems[1]. During his training, he was looking for a way effective memorization and systematization of information, which led to a mind map. This method existed in various forms long before that, but it was Tony Buzen who popularized the idea of the mind card as an effective way of working with information.

The intelligence map has a number of differences from the traditional linear form of providing information:

- ✓ the central image makes it easier to concentrate on the main idea,*
- ✓ radial branches define the list of main issues,*
- ✓ the significance of the facts depends on their distance from the center,*
- ✓ The multicolored and multidimensional nature of the image contributes to more effective memorization.*

It allows you to cover and formulate any topic as widely as possible, as well as consider it from different sides, relying on a fairly clear factual basis. Tony Buzen himself has slightly different instructions for creating smart maps in different sources, based on his own experience, we offer a more rational way to create Mindmaps.

In the center we draw a central image that will symbolize the theme. Words, ideas, tasks or other concepts are connected by branches that depart from the central concept or idea.

- ✓ Above the branches we write keywords or draw images that connect with each other.*
- ✓ Special attention should be paid to the possibility of using multiple colors.*

A self-made map, in addition to vision, involves a muscular sense, which contributes to better memorization. Using this method can be both at any stage of the lesson and as a homework assignment. The use of Mindmaps is reflected in the study of new material, its consolidation and generalization, in the preparation of a report, project, etc.

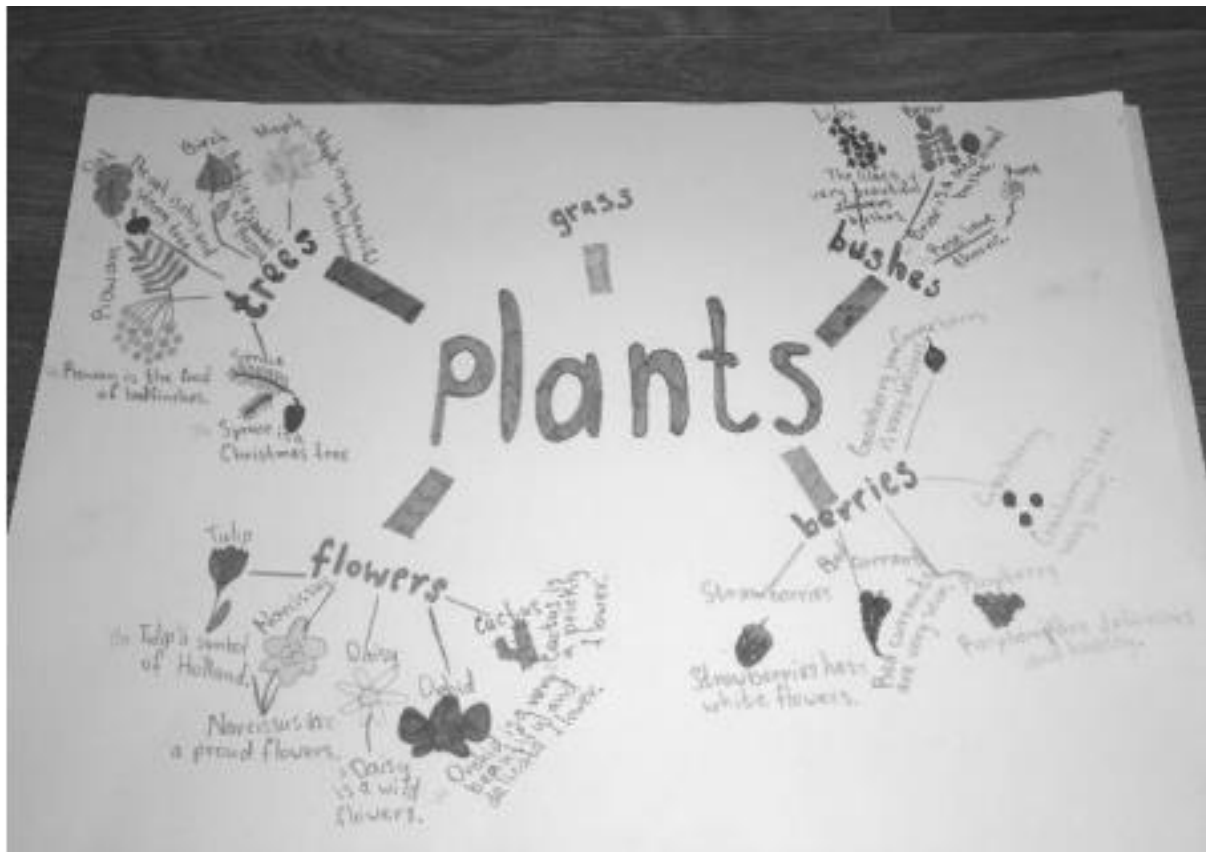


Figure 1. Lexical topics

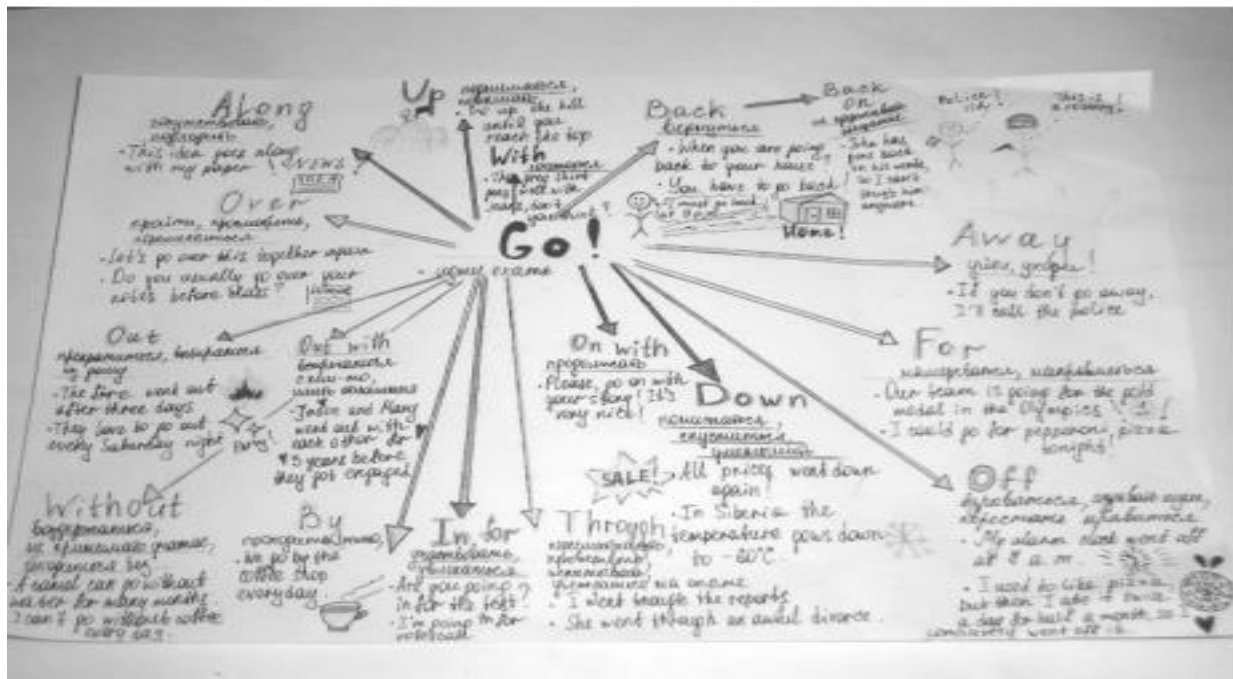


Figure 1. Phrasal verbs

The introduction of the Mind maps method takes place in stages in accordance with the age characteristics of students. At the initial stage, we are working with ready-made intelligence cards to expand vocabulary and speech development. The following tasks are offered: fill out the map, color it, tell it on the map. After the children have mastered certain skills of understanding the graphic image, group maps are compiled according to a given pattern[2].

The next stage of the work is the creation of individual intelligence maps on lexical topics and the compilation of monologue statements. In the classroom, students work independently with Mindmaps, using them also to study grammatical material, both in the classroom and at home.

Generally, teaching English can be defined as a teacher's attempt to share their language knowledge, as well as speaking, listening, writing and reading skills with other individuals, i.e. students, to make the target person learn something. As stated by Clarke and Erickson, "teaching is a professional practice, where teacher engages learners in the construction of knowledge related to a particular area of study" [3]. According to Brown, teaching implies demonstrating or assisting a person in gaining an understanding of how to do something, providing instructions, tutoring in the study [4]. On the other hand, teaching English does not mean a mere transfer of vocabulary knowledge or grammar rules. It is a process of filling the students' mind with new information for successful future use. It is a process systematically organized by a teacher, educational institution, curriculum, students, and other variables to attain the pre-determined goal. This study aims to examine the strategy of employing mind-mapping techniques to improve students' vocabulary learning and retention. It should be noted that mind-mapping is not a fresh idea. It goes back to the late 1960s, being first introduced and popularized by Tony Buzan, a famous British psychologist. The scholar drew an analogy between a mind map and a city map, considering both of them convenient for understanding and memorizing. Buzan highlighted that the center of the mind map is equal to the center of the city, whose arterial road resembles the major thought of the thinking process, while the peripheral thoroughfares are like the secondary, tertiary, etc. thoughts. He defined a mind map as "a thinking tool or a concept which illustrates how the human brain processes various thoughts and information that are related to each other" [5]. Later on, Buzan & Buzan revised this explanation: "mind map is a strong graphical technique which targets to utilize the brain with its full capacity" [6]. Michalko interprets mind map as an alternative to linear thought and as a technique that can uncover the thoughts, which the brain has about a certain thing or idea [7]. According to Kokotovich [8], mind mapping is a note-taking technique used to write down a person's thoughts, viewpoints, and ideas. In our opinion, a mind map is a visualized mental picture of an individual's ideas and thoughts that allows seeing the big image of the subject and organize the details. Budd explicates the given term as "an outline in which the major categories radiate from a central image and lesser categories are portrayed as branches of larger branches" [9]. Indeed, a traditional mind map has a tree-like structure that describes relationships between words, ideas, etc. around a central keyword. The parts of a mind map are as follows: a) the fundamental idea put in the heart of a mind map; b) branches that spread out from the center, i.e. the major themes of the topic; c) keywords/images that connect the theme to the main idea. They are placed at the end of the branch lines; d) secondary themes, which may be attached to this or that branch; e) nodal structure that arranges the aforementioned elements in a hierarchy. Since the 1970s, mind-mapping has turned into a potent tool of learning, note-taking, visual thinking, brainstorming, and problem-solving in a plethora of research fields, including education, management, writing, etc. For instance, Wycoff points out that mind maps are exceptionally useful for list-making, note-taking, decision-making meetings, collective discussions, presentations, self-improvement, and developing organization skills [10]. Erdem considered mind map to be a remarkable technique that helps to form individual and collective ideas, plan and organize events, thus converting ordinary note-taking into a strategical scrutinizing.

Methodology

Our study lasted for the spring semester of the 2022-2023 academic year and involved two groups, which were taken randomly from second-year groups of Two Foreign Languages Department of Al-Farabi Kazakh National University. Before randomly taken, all groups were given a pretest to check whether their knowledge of English vocabulary was equivalent. The two selected groups were the experimental group, $n = 12$ and the control group, $n = 14$. As the experimental group learns new vocabulary by employing mind maps, while students of control group enlarge their word stock by conventional memorizing and linear note-taking. Based on the documentation at university, the students' age ranged from 18 to 20 years old, with an average of 18.5, and there were twenty male and six female students in the cohort. For almost all of these subjects, English was the second language that they learned since their first language was Kazakh.

After the experiment, we asked students of the experimental group to answer the following questions:

- Was the mind-mapping technique useful for you? Why (not)?
- What are the advantages and benefits of mind mapping at English classes?
- What were the constraints of applying mind maps regularly?

It is generally accepted that vocabularies in the human brain create semantic networks similar to maps that represent their knowledge in form of interconnected nodes. Hence, mind mapping is a powerful tool to support learning vocabulary through the visualization of related information.

Data obtained during the interviews are presented below in the form of histograms.

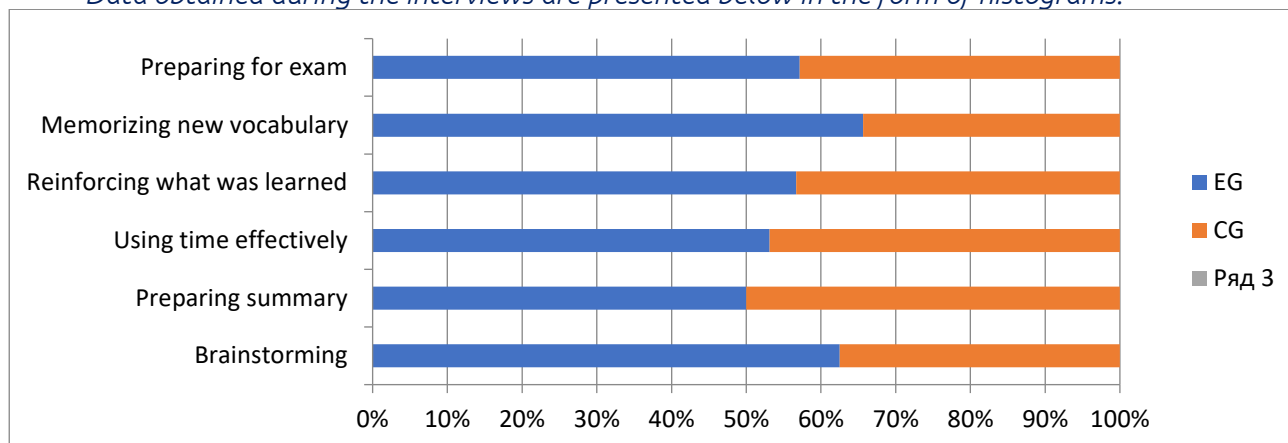


Fig 2. Answers to the question "Was mind-mapping technique useful for you? Why (not)?"

Figure 2 summarizes the students' answers given to the first question of the interview. All respondents found mind maps extremely useful not only for learning and reinforcing new vocabulary, but for brainstorming during discussion sessions, writing summaries of the texts they read, and for preparing for exams in general. The ability to make short, yet informative notes, to convert sentences and long passages into symbols or images an effective way to organize the learning process more effectively.

Conclusion

Vocabulary is crucial for language learning since a robust word stock ameliorates speaking, writing, reading, and listening. No wonder, learning vocabulary is considered to be one of the most complicated issues in teaching English as a second language. Numerous studies proved that typical repetition is no longer an effective method for that and tried to find cutting-edge solutions for facilitating vocabulary acquisition. Our research has stressed the importance of using the mind mapping technique as it delivers remarkable benefits and advantages, especially when learning engineering terms. Our study showed a positive significant effect of employing mind maps on the sophomores' vocabulary achievement at Rostov State Transport University. During a series of interviews, students reported on such beneficial aspects of mind mapping as assistance in preparing for exams, fostering brainstorming, developing multidimensional thinking and creativity, etc. We have obtained comprehensive results proving that engineering students adopt keywords, colors, and images, i.e. three basic components of a traditional mind map, much easier than words just written down on the blackboard

References

1. Buzan Tony. Memory cards. Use your memory 100%, 2007, p.96
2. D. Nunan, Teaching English to speakers of other languages (Routledge, 2015)
3. A. Clarke, G. Erickson, International handbook of self-study of teaching and teacher education on practice, (Springer, 2007)
4. H.D. Brown, Principles of language learning and teaching (Wesley Longman, 2003)
5. T. Buzan, The Ultimate Book of Mind Maps (Thorsons, 2005)
6. T. Buzan, B. Buzan, The Mind Map Book. (Edinburg, BBC Active, 2007)
7. M. Michalko, Cracking Creativity: The Secrets of Creative Genius (California Ten Speed Press, 2001)
8. V. Kokotovich, Design Studies, 29 (1), 49 (2008)
9. J.W. Budd, Journal of Economic Education, 35(1), 35 (2004)
10. J. Wycoff, Mindmapping: Your personal guide to exploring creativity and problem solving, (Berkley Books, 1991)
11. A. Erdem, Universal Journal of Educational Research, 5(12A), 1 (2017).

Philological sciences

"ANALYZING THE DISCOURSE STRATEGIES IN UKRAINIAN PRESIDENT ZELENSKYI'S SPEECH TO THE SAUDI ARABIAN SHURA COUNCIL: A STUDY OF PERSUASIVE TECHNIQUES AND SOCIOPOLITICAL CONTEXT"

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"АНАЛИЗ ДИСКУРСИВНЫХ СТРАТЕГИЙ В РЕЧИ ПРЕЗИДЕНТА УКРАИНЫ ЗЕЛЕНСКОГО ПЕРЕД СОВЕТОМ ШУРЫ САУДОВСКОЙ АРАВИИ: ИССЛЕДОВАНИЕ ТЕХНИКИ УБЕЖДЕНИЯ И СОЦИАЛЬНО-ПОЛИТИЧЕСКОГО КОНТЕКСТА"

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Abstract

This article presents a discourse analysis of Ukrainian President Volodymyr Zelenskyy's speech delivered to the Saudi Arabian Shura Council. The speech, which addresses the ongoing conflict in Ukraine, focuses on appealing for international support. The analysis examines the rhetoric and persuasive techniques employed by President Zelenskyy, the construction and conveyance of his political and ideological messages, and the larger sociopolitical context embedded within the discourse. The study highlights the strategic use of language, including the address to the audience, the call for help, the reiteration and direct appeals, and the emphasis on the consequences of inaction. By shedding light on these linguistic strategies, this research contributes to a deeper understanding of political discourse during times of conflict and its impact on shaping international relations.

Аннотация

В данной статье представлен анализ дискурса выступления президента Украины Владимира Зеленского перед Саудовским Шурейским Советом. В своей речи, посвященной продолжающемуся конфликту в Украине, Зеленский обращается за международной поддержкой. В анализе исследуются риторика и убеждающие техники, используемые президентом Зеленским, построение и передача его политических и идеологических сообщений, а также шире социополитический контекст, вкладываемый в дискурс. Исследование выделяет стратегическое использование языка, включая обращение к аудитории, призыв о помощи, повторение и прямые обращения, а также акцент на последствиях бездействия. Путем освещения этих языковых стратегий данное исследование способствует глубокому пониманию политического дискурса в периоды конфликтов и его влияния на формирование международных отношений.

Keywords: *discourse analysis, political speech, rhetoric, persuasive techniques, sociopolitical context, conflict, Ukraine, Volodymyr Zelenskyy, Saudi Arabian Shura Council, language strategies, international support, address to the audience, call for help, consequences of inaction, linguistic analysis.*

Ключевые слова: *анализ дискурса, политическое выступление, риторика, убеждающие техники, социополитический контекст, конфликт, Украина, Владимир Зеленский, Саудовский Шурейский Совет, языковые стратегии, международная поддержка, обращение к аудитории, призыв о помощи, последствия бездействия, лингвистический анализ.*

Introduction

In this comprehensive article, our focal point is a detailed discourse analysis of a significant political speech. The speech in question was delivered by Ukrainian President Volodymyr Zelenskyy to the esteemed Saudi Arabian Shura Council on May 19, 2023. Amidst an escalating conflict in his homeland, Zelenskyy made a poignant appeal for international support, highlighting the increasingly dire situation in Ukraine.

As we dive deep into this analysis, we seek to unfold the layers of Zelenskyy's political discourse, understanding its far-reaching implications and the subtleties of its influence. Political speeches are more than mere collections of words; they serve as a powerful conduit for transmitting messages, ideologies, and intentions, which can shape public opinion and international relations.

Our exploration will encompass several key areas. Firstly, we will dissect the rhetoric employed by Zelenskyy, paying close attention to the persuasive techniques woven into his address. These techniques often hold the key to eliciting the desired response from an audience and can offer valuable insights into the speaker's objectives.

Secondly, we will delve into the construction and conveyance of Zelenskyy's political and ideological messages. By looking closely at how these messages are framed and delivered, we can gain a greater understanding of Zelenskyy's stance on the issues he discusses, and how he seeks to influence his listeners.

Lastly, we will contextualize his discourse within the larger sociopolitical landscape. A speech, particularly a political one, does not exist in a vacuum; it is inherently intertwined with the broader sociopolitical context. This examination allows us to appreciate the external factors influencing Zelenskyy's speech and understand how it both shapes and is shaped by the prevailing political climate.

Through this multi-faceted analysis, we will illuminate the complexities and intricacies of Zelenskyy's political discourse, revealing the calculated strategies that underpin his plea for support in the face of the ongoing Ukrainian crisis.

Contextual Framework

To fully appreciate the gravity and significance of Zelenskyy's address to the Saudi Arabian Shura Council, it's imperative to situate his speech within the prevailing geopolitical context. We may notice that Zelenskyy took the stage not merely as the leader of a country, but as a representative of a nation embroiled in a violent conflict, earnestly seeking international support against an aggressive neighbor, Russia.

Throughout history, leaders have used the power of the spoken word to rally to convince us to support during times of war. For instance, British Prime Minister Winston Churchill's "We Shall Fight on the Beaches" speech in 1940 galvanized a nation against the looming threat of Nazi Germany (Churchill, 1940). We may notice big similarity in a way that, in his "Day of Infamy" speech following the attack on Pearl Harbor, US President Franklin D. Roosevelt sought to unite the American people and prepare them for the coming conflict (Roosevelt, 1941).

In a more recent context, former Iraqi President Saddam Hussein's defiant speeches in the face of the 2003 U.S. invasion sought to explain people to raise nationalistic fervor amongst his countrymen (Hussein, 2003). These speeches reflect the potential power and influence of rhetoric in galvanizing support, portraying enemies, and shaping international perception during wartime.

This is precisely the backdrop against which Zelenskyy delivered his speech. He was speaking not only to the Shura Council, but also to the world, representing the voice of Ukraine in its hour of need. Thus, his speech mirrors the realities and complexities of contemporary international relations, characterized by power struggles, alliances, and an ongoing commitment to preserving international law and order.

Understanding the political rhetoric used in such contexts is vital, as the stakes are high, with the outcomes influencing the course of nations and, sometimes, the world at large. By examining Zelenskyy's speech in this light, we can glean significant insights into the evolving dynamics of global power and diplomacy.

Addressing the Audience

President Zelenskyy's speech began with the salutations, 'Your Majesties, Your Highnesses, Your Excellencies.' These formal honorifics instantly established a respectful tone and were a recognition of the Shura Council's power and influence. They served as a tool to acknowledge the status of his audience, an important tactic in diplomatic communications. This strategy works to set a positive rapport and foster receptivity from the beginning of his discourse.

This form of address can be seen mirrored in other political speeches, particularly when delivered in front of an audience of high status or power. U.S. President John F. Kennedy's famous speech at the Berlin Wall in 1963 serves as a prime example. The phrase "Ladies and Gentlemen," was used to command respect and draw attention to the matter at hand, setting the stage for the rest of his powerful speech (Kennedy, 1963).

Moreover, President Zelenskyy's approach aligns with past instances where leaders have addressed the United Nations General Assembly. These addresses usually begin with the phrase, "Distinguished

delegates," or similar salutations, acknowledging the collective power of the states represented and the gravitas of the global platform (United Nations General Assembly, various years).

Such comparisons highlight how the opening of a speech can play a crucial role in setting the tone and establishing a respectful atmosphere, thereby promoting active listening and engagement from the audience.

The Call for Help

In the central portion of President Zelenskyy's speech, he emphasized the urgent need for international assistance and framed the conflict in Ukraine as a global threat rather than a localized issue. By doing so, he aimed to broaden the scope of concern and elicit a sense of collective responsibility from his audience.

This approach aligns with historical instances where leaders have appealed for help during times of crisis. For example, during World War II, British Prime Minister Winston Churchill delivered his famous "Blood, Toil, Tears, and Sweat" speech in 1940, rallying the British people and urging them to confront the challenges ahead (Churchill, 1940). Similarly, in his speech following the terrorist attacks on September 11, 2001, US President George W. Bush called upon the international community to stand together against terrorism (Bush, 2001).

In President Zelenskyy's speech, he transcended the immediate conflict between Ukraine and Russia and emphasized the broader implications for Europe and the world. By characterizing Russia's aggression as a direct threat to the security of all of Europe, he aimed to galvanize support by appealing to the shared interests and values of the international community.

Moreover, Zelenskyy highlighted Russia's willingness to use military force and violate international law to achieve its goals. By portraying Russia as a disruptor of global order, he aimed to evoke a sense of concern and solidarity among his listeners. This tactic is reminiscent of speeches made during the Cold War, where leaders emphasized the need to protect and defend the principles of democracy, freedom, and international law (e.g., Ronald Reagan's "Tear Down This Wall" speech in 1987).

President Zelenskyy's speech also drew parallels between the conflict in Ukraine and broader issues such as the global economy and the rules-based international order. By emphasizing the humanitarian crisis, economic disruptions, and the threat to the global order, he sought to convey the multifaceted impact of the conflict and the necessity for collective action.

By framing the conflict in Ukraine as a global concern and appealing for help, President Zelenskyy aimed to rally support and generate a sense of urgency among his audience. This strategic approach echoes historical speeches that sought to mobilize international solidarity and cooperation in times of crisis.

Reiteration and Direct Appeal

President Zelenskyy's speech employed strong reiteration and direct appeals to elicit a desired response from the audience and reinforce his message. Throughout his address, he utilized the phrases "I urge you" and "We must," emphasizing the urgency and importance of the situation in Ukraine. This repetition served to underscore the gravity of the conflict and the need for immediate action.

The use of repetition as a persuasive technique is not unique to Zelenskyy's speech. Political leaders often employ this strategy to reinforce key points and make their messages memorable. Former US President Barack Obama's 2008 campaign slogan "Yes We Can" was repeated throughout his speeches to rally supporters and emphasize the potential for change (Obama, 2008). Similarly, during the civil rights movement, Martin Luther King Jr.'s iconic "I Have a Dream" speech in 1963 incorporated repetition of the phrase "I have a dream" to amplify the aspirations and demands for racial equality (King Jr., 1963).

President Zelenskyy's direct appeal to Saudi Arabia, a key player in the Middle East, added weight to his plea for support. By recognizing Saudi Arabia's influential position in the world and calling upon them to use their voice, he sought to leverage their power and encourage their active involvement in resolving the conflict.

This approach of making direct appeals to specific nations or groups is often employed in political speeches. For example, in his 1987 speech at the Brandenburg Gate, US President Ronald Reagan directly addressed Soviet leader Mikhail Gorbachev, challenging him to "tear down this wall" and urging him to embrace freedom and openness (Reagan, 1987). Such direct appeals are designed to resonate with the intended audience and prompt them to take action.

President Zelenskyy's skillful use of reiteration and direct appeals in his speech contributed to the persuasive impact of his message. By emphasizing the urgency of the situation and making specific appeals, he sought to generate a collective commitment and mobilize support for Ukraine's cause.

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Consequences of Inaction

President Zelenskyy's speech emphasized the critical humanitarian and economic consequences that would result from inaction in the face of the ongoing conflict in Ukraine. By shedding light on these implications, he sought to underscore the urgency of the situation and generate a shared sense of responsibility among the global community.

Firstly, Zelenskyy drew attention to the humanitarian crisis unfolding in Ukraine as a direct consequence of the war. He highlighted the millions of people who had been displaced from their homes, forced to flee their communities in search of safety. This displacement resulted in immense human suffering, with families torn apart, lives disrupted, and the loss of basic necessities and access to healthcare and education. By highlighting these human costs, Zelenskyy aimed to evoke empathy and compassion from his audience, emphasizing the urgent need for intervention to alleviate the suffering of the Ukrainian people.

Moreover, Zelenskyy underscored the significant economic implications stemming from the conflict. He highlighted how the war had led to rising energy prices and disrupted supply chains, affecting not only Ukraine but also the wider international community. Energy markets play a crucial role in the global economy, and any disruption can have far-reaching consequences, impacting industries, trade, and the cost of living. By emphasizing the economic repercussions of the conflict, Zelenskyy sought to appeal to the self-interest of his audience, making it clear that the resolution of the conflict in Ukraine would benefit not only the Ukrainian people but also the global economy at large.

The emphasis on the humanitarian and economic consequences of inaction aligns with historical instances where leaders have sought to emphasize the potential negative outcomes of refraining from action. For instance, during World War II, leaders highlighted the moral imperative of intervening to prevent widespread suffering and the potential economic devastation that could result from the victory of aggressive forces. This approach was evident in British Prime Minister Winston Churchill's speeches, where he emphasized the importance of standing against Nazi Germany to protect human rights and preserve the economic stability of nations (Churchill, 1940).

By underscoring the humanitarian crisis and the economic ramifications, President Zelenskyy aimed to create a shared understanding of the global stake in resolving the conflict. He sought to foster a sense of collective responsibility and galvanize support for Ukraine's cause, emphasizing that the consequences of inaction would extend beyond the borders of his nation, impacting the global community as a whole.

Recognition and Solidarity: President Zelenskyy's Emphasis on the Ukrainian Muslim Community and the Crimean Tatar People

In President Zelenskyy's speech at the Arab League summit in Saudi Arabia, he explicitly acknowledged the Ukrainian Muslim community and highlighted the integral role of the Crimean Tatar people within Ukraine and the wider Muslim community. Zelenskyy emphasized the historical significance of the Crimean Tatars as an indigenous Muslim group whose home is Crimea, a center of Muslim culture in Ukraine. He drew attention to the fact that the Crimean Tatars were among the first to suffer from the Russian occupation, and the majority of those subjected to repression in the occupied Crimea are Muslims. Zelenskyy expressed gratitude for the positive experience with Saudi Arabia regarding the release of Ukrainian people captured by Russia and called for unity in saving people from the cages of Russian prisons. By addressing the Muslim community and acknowledging their plight, Zelenskyy sought to foster solidarity and garner support from the Arab League nations.

Conclusion

President Volodymyr Zelenskyy's speech to the Saudi Arabian Shura Council exemplified the power of rhetoric and persuasive techniques in political discourse during times of conflict. Through a careful analysis of his speech, we have observed several key elements that contributed to its effectiveness in conveying his message and garnering support.

Zelenskyy strategically addressed his audience, the Shura Council, with formal salutations, setting a respectful and receptive tone from the outset. This approach mirrored the practice of acknowledging the power and status of the audience seen in historical speeches delivered to influential bodies or gatherings.

The President's call for help was a central theme in his speech, where he broadened the perception of the conflict in Ukraine from a regional issue to a global threat. By emphasizing the consequences for Europe and the world, he aimed to evoke a sense of collective responsibility among his listeners. This tactic aligns with historical speeches during times of crisis, where leaders sought to rally support by appealing to shared interests and values.

Repetition and direct appeals were employed by Zelenskyy to reinforce his message and urge action. By reiterating phrases like "I urge you" and "We must," he emphasized the urgency and importance of the situation. This approach, combined with direct appeals to specific influential actors like Saudi Arabia, aimed to mobilize support and solidarity.

Furthermore, Zelenskyy highlighted the consequences of inaction, emphasizing the humanitarian crisis, economic disruptions, and the threat to the global order caused by the conflict in Ukraine. This strategy of highlighting the potential negative outcomes of inaction aligns with historical speeches that aimed to persuade by presenting a sense of urgency and the necessity of taking action.

In conclusion, President Zelenskyy's speech effectively employed rhetoric and persuasive techniques to convey his plea for international support in the face of the conflict in Ukraine. By addressing the geopolitical context, appealing to shared values, utilizing repetition and direct appeals, and emphasizing the consequences of inaction, he aimed to rally support and highlight the urgency of the situation. Through careful analysis of political speeches during times of war, we can better understand the art of persuasive discourse and its impact on shaping international relations.

References

1. The full video of Zelensky's speech in Saudi Arabia:
<https://www.youtube.com/watch?v=loXbJYNWh0c>
2. Churchill, W. (1940). *We Shall Fight on the Beaches*. House of Commons.
3. Roosevelt, F. D. (1941). *Pearl Harbor Address to the Nation*. U.S. Capitol.
4. Hussein, S. (2003). *Speeches during the Iraq War*. Baghdad..
5. Kennedy, J. F. (1963). *Ich bin ein Berliner Speech*. Berlin.
6. United Nations General Assembly (Various years). *General Debate of the General Assembly*. United Nations.
7. Churchill, W. (1940). *Blood, Toil, Tears, and Sweat*. House of Commons.
8. Bush, G. W. (2001). *Address to the Nation on the Terrorist Attacks*. Oval Office.
9. Reagan, R. (1987). *Tear Down This Wall Speech*. Brandenburg Gate.
9. Reagan, R. (1987). *Tear Down This Wall Speech*. Brandenburg Gate.
10. Obama, B. (2008). *"Yes We Can" Speech*. New Hampshire.
11. King Jr., M. L. (1963). *I Have a Dream Speech*. Lincoln Memorial.

BOTHO STRAUSS: ANCIENT MYTH AND CONTEMPORARY REALITY

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БОТО ШТРАУС: АНТИЧНЫЙ МИФ И СОВРЕМЕННЫЕ РЕАЛИИ

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Бото Штраус - одна из ключевых фигур в современной немецкой драматургии. Он вошел в литературу в начале 70-х, продолжив традицию «театра безысходности», воплотившуюся в творчестве Хильдесхаймера, Дюрренматта, Фриша и др. Его герои - это как правило, люди, в эпоху политической и общественной стагнации и потерявшие ориентиры и балансирующие между приспособленчеством и реализацией своего «Я». Из этой базовой ситуации Штраус разрабатывает в противоположность аналитическому свой «ментальный театр», в котором реалии современной автору действительности сопрягаются со сферой иррационально-фантастического.

Почти все исследователи творчества Штрауса отмечают мифологический характер его мышления, что проявляется как в настойчивом обращении драматурга к античной мифологии, так и в мифологизации истории Германии. В сложном и зашифрованном художественном мире Штрауса миф, отсылающий читателя к «детству человечества», высвечивает проблемы нынешнего общества, пороки и слабости наших современников. В одних случаях он обнажает измелчание человеческой натуры, одиночество и отчуждение человека от собственной природы (как это происходит в пьесе «Парк» («Der Park»), в которой автор переносит в наше время витальных мифологических божеств Оберона и Титанию). В других случаях он иронизирует над современным анемичным и нечистоплотным обществом потребителей, воплощенном в образе женихов Пенелопы в пьесе «Итака» («Ithaka»). И наконец, в драме «Финальный хор» («Schlußchor») встречаются обе характерные для Штрауса тенденции: использование античного мифа и мифологизация немецкой истории.

Пьеса «Финальный хор» была написана Б. Штраусом в 1989 году, вскоре после падения Берлинской стены и объединения Германии. Пьеса состоит из трех актов, первый под названием «Увидеть и быть увиденным», связан с попыткой фотографа сделать групповое фото. Мужчины и женщины перед объективом представляют собой современное немецкое общество в миниатюре. Фрагмент заканчивается смертью фотографа, растерзанного своими моделями.

Второй акт, «Лоренц перед зеркалом», также заканчивается смертью главного персонажа. Архитектор Лоренц случайно застаёт заказчицу Делию обнажённой. Надежды на то, что Делия станет его возлюбленной, не оправдываются, и Лоренц сводит счеты с жизнью.

В третьем акте речь идет о падении Берлинской стены и реакции персонажей на это событие. Казалось бы, эти три драматические миниатюры носят самостоятельный характер и не имеют ничего общего. Однако связь между ними существует, и соединительным звеном здесь как раз и выступает античный миф – миф о богине Артемиде (в греческой мифологии Диане-охотнице). Как известно, Актеон, случайно увидевший Артемиду обнаженной, вынужден был заплатить за это жизнью. Артемиду превращает Актеона в оленя, и его разрывают на куски его собственные охотничьи собаки. Штраус заимствует структуру этого мифа и накладывает ее на современную действительность.

В первом акте аллюзия к мифу заявлена уже в названии: «Видеть и быть увиденным». Здесь, как уже говорилось, представлена группа мужчин и женщин, собравшихся неизвестно по какому поводу. Автор предполагает, что речь может идти о маленьком юбилее предприятия, о выездном историческом семинаре или о встрече одноклассников, что, по сути, не важно. Персонажи не имеют имен (автор удостоивает их лишь буквой, указывающей на пол, и цифрой: «Ж1» или «М14» и т.д.). Они позируют для группового фото перед фотографом, который никак не может найти удачный ракурс. У него не получается «схватить» группу, где каждый сам по себе, как единое целое. Отчаявшийся фотограф восклицает: «Я буду фотографировать вас до

тех пор, пока вы не станете одним лицом. Одной головой – одним ртом - одним взглядом. Одним обликом!» [1 : 28] (здесь и далее перевод мой – Е.Ш). При этом из реплик персонажей и регулярных выкриков глашатая («Германия!») мы понимаем, что эта группа представляет собой срез современного немецкого общества после объединения Германии.

«Раздробленность», «единство», «разделение», «объединение» - концепты важнейшие для немецкой национальной концептосферы. Их бытование обусловлено природными, национальными, социально-политическими, историческими и психологическими причинами. На протяжении многих лет Германия являла собой пример государства раздробленного, измученного внутренними распрями. Со времен Просвещения требование единства стало ядром национальной идеологии. На разных этапах немецкой истории непреодолимая сила раскалывала и снова объединяла Германию: объединение «железом и кровью» 1871 года под Бисмарком, аншлюс 1938 года, раздел Германии на оккупационные зоны в 1945-м, многолетнее противостояние Восточной и Западной Германии и, наконец, воссоединение 3 октября 1990 года.

Как известно концепты являются источниками создания национальных мифов. В пьесе «Финальный хор» Штраус разрушает миф о единстве немецкого народа, сплоченности объединенной Германии. Однако одновременно, апеллируя к исторической памяти, он вводит в драму силу, способную объединить народ. Под воздействием громких, резких команд, раздающихся непонятно откуда, поначалу разнородная, распадающаяся на отдельные голоса группа вдруг становится единым хором, воскрешая образ Германии под властью фашистской диктатуры. Рушится и миф о немецком обществе как союзе индивидуальностей. Фотографирующая группа состоит из безликих, бесхарактерных персонажей: «Всегда быть с волками, просто немного дольше, чем вся стая. Это и есть ваша индивидуальная нота» [1:18], - заявляет женщина под номером 7.

В античном мифе Актеон заплатил жизнью за то, что увидел Артемиду обнаженной. В первом акте буквально воспроизводится этот мифологический сюжет: фотограф видит, как обнажается женщина под номером 7. Но гораздо важнее метафорический характер мотива обнажения и созерцания наготы как раскрытия тайны, познания сущности. Фотограф растерзан толпой за то, что увидел или попытался увидеть ее истинное лицо. Он вынужден заплатить жизнью за свое знание. Место фотографа занимает женщина. Она смотрит в объектив фотоаппарата и так же, как и фотограф, видит всех как инструмент смертоносного «видения» и поэтому женщину ждет, вероятно, та же участь, что постигла фотографа.

Одновременно Штраус пародирует создание мифов, персонажи стараются выглядеть такими, какими их должно увидеть в будущем. Их цель – увековечить себя. Автор фиксирует моменты настоящего, отходящие в прошлое. «Быть – это быть увиденным», - заявляет фотограф. [1:28]. При этом в объектив попадают произвольные гримасы, позы, выражения лиц, и эти случайные мгновения станут историей, послужат основой для сотворения мифов.

Помимо мифа об Артемиде и Актеоне к античности относит и образ хора, заявленный в названии пьесы. Правда, это не тот хор, что комментирует происходящее и дает ему объективную оценку. Фотографирующаяся группа, в которой поначалу нет единства, где все голоса звучат вразнобой, превращается в слаженный хор, в «единое существо» только под воздействием жестокой силы, грубого языка команд, «канонады коротких, громких приказов». Человек, который отдает команды, четко знает, каким должен быть хор, а значит, какой должна быть Германия. Эта аллюзия к эпохе третьего Рейха выдает исторический пессимизм автора. Характерен при этом сам набор команд, создающий вполне определенный образ Германии и немцев: «Вторая камера! Поиск! Резкость! Освещение! Пуск! Задержать дыхание! Дышать! Руку из кармана! Волосы со лба! Смена камеры! Идти, не тащиться! Держаться прямо! Мотив! Левый глаз, правый глаз! Думать! Идеи! Угол зрения! Контроль! Резкость! Общий вид! Наморщить лоб! Улыбаться! Шарм! Серьезность! Забота! Осмотрительность! Германия! На колени! Назад! На землю! Назад! Быстрее! Лечь Назад! Лежать! Раскрыть рот! Застывший взгляд! Не халтурить! Не дышать! Не дышать! Вырубить свет!» Темнота. Слаженный, многоголосый хор» [1: 28-29]. Штраус пародирует концепты немецкой ментальности: «дисциплина», «послушание», «серьезность», «подтянутость», «старательность», «рассудительность», которые в одном ряду с историческим концептом «подчинение сильной власти» приобретают зловещий оттенок.

Во втором акте под названием «Лоренц перед зеркалом» также воспроизводится модель мифа об Артемиде и Актеоне. Лоренц – архитектор, войдя в квартирную заказчицы Делии, он ошибается дверью. При этом он застаёт Делию обнаженной в ванной комнате – банальная случайность, в итоге приведшая его к гибели. Однако, как и в первом акте, миф здесь оказывается включенным в социальный контекст. Гости на приеме, который даёт Делия, также представляют срез современного общества. Но если в первом акте персонажи, отмеченные буквами и цифрами предельно схематичны, то во втором акте Штраус делает их носителями определенных качеств и социальных ролей, отразившихся в их именах «Ветреница» («Die Unbedachte»), «Озлобленный» («Der bittere Mann»), «Уродливый» («Der Haessliche»), «Тощий» («Der Hagere»), «Изворотливый» («Der gewandte Mann»), «Толстуха» («Die Belebte») и т.д.

Как и в первом акте, глашатай, постоянно скандирующий «Германия!», связывает происходящее с «немецкой судьбой». Благодаря ему и отдельным репликам персонажей, мы понимаем, что и здесь действие происходит в объединенной Германии. Присутствующих роднит единственно желание узнать, кто они есть на самом деле. Каждый из гостей Делии в тот или иной момент подходит к зеркалу и смотрит в него. Зеркало здесь играет ту же роль, что и объектив фотоаппарата в первом акте. Перед зеркалом раскрываются тайны, Лоренц только своему отражению он может поведать то, о чем думает, перед ним ему не нужно оправдываться, играть. Перед зеркалом мы узнаем о тайном сговоре «Обещанного» («Der Versprochene») и о револьвере в кармане пальто «Обещанного», который станет орудием смерти. «Женщина в зеленом» («Die Frau im Schilfrguen») перед зеркалом теряет рассудок. Каждый, глядящий в зеркало и познающий себя, одинок. Разобщенность здесь звучит пародией на «Оду к радости» Шиллера. Произошло официальное объединение страны, но не единение и братание народов, о котором мечтали немцы. Штраус показывает страну в состоянии кризиса национальной идентичности.

Действие третьего акта разыгрывается в маленьком ресторанчике в Западной Германии непосредственно после падения Берлинской стены. Этот акт называется «Отныне» («Von nun an»), что должно бы служить символом начала новой истории. Не случайно здесь звучит финальный хор Девятой симфонии Бетховена. Но звучит он пародийно, так как подлинного объединения так и не произошло. Жители бывшей ГДР (Штраус даёт их ироничный портрет: «скромные, кажущиеся какими-то бесформенными люди в серо-голубых блузонах» [1:86]) шокированы, растеряны, они не могут поверить, что наконец –то получили свободу, которую возвещает все тот же глашатай. Они попали в большой мир, чужой и непонятный. Но главное, они не знают, что им делать с этой новой свободой. На смену эйфории приходит чувство смятения и с той, и с другой стороны. Официальное объединение, как ни парадоксально, повлекло за собой утрату национальной идентичности. Несмотря на то, что немцы стали гражданами одной страны, пришло ощущение того, что они уже не принадлежат ни к прежней, когда-то существовавшей единой нации, ни к государству, в котором прожили большую часть жизни, ни к вновь образовавшейся стране.

Так же скептично отношение людей к тому, что все теперь переменится к лучшему: «Читатель: «Вы думаете, что теперь у вас все будет по –другому?». Женщина в блузоне: «И да, и нет. Не знаю, какое же должно произойти чудо. Слишком многое разрушено» [1:87]

Штраус дискретно вводит в пьесу важнейшие пласты немецкой истории XX века: от второй мировой войны и господства фашистской диктатуры до объединения Германии в 1990-м году. Важную роль в пьесе играет образ глашатая, наряду с прочим осуществляющего связь между тремя актами: в первом акте его функцию выполняет один из мужчин: «М8 ревет: Германия!» [1:15]; во втором акте глашатай упоминает реальные события и реальных политических деятелей. Так, явно намекая на Эрика Хонеккера, он обращается к собеседникам: «Вы вообще знаете, сколько миллионов отправил в Швейцарию этот кровопийца, этот недавно поверженный диктатор?» [1:63], после чего опять скандирует: «Германия!»; в третьем акте устами глашатая говорит история: «Германия! Это история, скажу я, здесь и сегодня, скажу я, Вальми, скажу я, Гете! И на этот раз мы при этом присутствовали. Границы открыты! Стена ломается! Восток... Восток свободен!» [1:86] Тем самым он называет основные составляющие немецкой исторической и культурной концептосфер, связанные с важными национальными мифами: Германия-страна Гете, Германия без границ, Запад несёт свободу Востоку и др. Но их постоянное сатирическое снижение и пародирование в пьесе ведёт к демифологизации.

Таким образом, Штраус, с одной стороны, обращается к античному мифу, чтобы постичь современные общественные, социальные и ментальные процессы, с другой стороны, драматург

разрушает бытующие национальные мифы, с третьей - вскрывает механизм создания мифов, а с четвертой – сам ремифологизирует современную историю.

Литература

1. *Strauß B. Schlußchor.- München: DTV, 1996.-98 S.*
2. *Елена Федорова «Символы и ассоциации Штрауса». – «Казахстанская правда»/6 апреля 2018 г <https://ru.wikipedia.org/>*
3. *Marieke Krajenbrink German Reunification and the Legacy of GDR Literature and Culture Series: <https://brill.com/view/title/35104>*

NON-VERBAL COMMUNICATION IN BUSINESS COMMUNICATION**Vezirova Leyla***Doctor of Philology, Professor. Azerbaijan, mountains.
Baku. Azerbaijan State Pedagogical University.***НЕВЕРБАЛЬНАЯ КОММУНИКАЦИЯ В ДЕЛОВОМ ОБЩЕНИИ****Везирова Лейла***доктор филологических наук, профессор. Азербайджан, гор. Баку. Азербайджанский
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This article is devoted to non-verbal communication in business communication. It also deals with non-verbal communication and its elements, as well as paralinguistics and paralinguistic means. Speaking about non-verbal communication, first of all, the movements of the hands and arms, the position of the body are examined. In a word, facial expressions and gestures, which are very convenient means for individualizing and typing images. The science of linguistics, paralinguistics, is studied here in the same way as it is interpreted. That is, as a field of linguistics that studies a number of factors - gestures, facial expressions, speech situation, accompanying voice speech communication and playing a role in providing information, and exploring non-verbal communication and methods.

Аннотация

Данная статья посвящена невербальной коммуникации в деловом общении. Здесь также рассматриваются невербальное общение и его элементы, а также паралингвистика и паралингвистические средства. Говоря о невербальном общении, прежде всего, исследуются движения кистей и рук, положения тела. Словом, мимика и жесты, являющиеся очень удобными средствами для индивидуализации и типизации образов. Наука о языкознании паралингвистика же здесь исследуется также как и трактуется. То есть как область языкознания, изучающая ряд факторов – жесты, мимика, речевая ситуация, сопровождающих голосовое речевое общение и играющих роль в предоставлении информации, и исследующая невербальную коммуникацию и методы.

Keywords: *non-verbal communication, paralinguistics, facial expressions, gestures, voice, timbre, body position, method, image, linguistics.*

Ключевые слова: *невербальное общение, паралингвистика, мимика, жесты, голос, тембр, положение тела, метод, изображение, языкознание.*

Невербальное общение и его элементы. Человек духовно и психологически богат и сложен. Требуется особое умение, чтобы выразить это богатство и сложность силой художественного слова. Чтобы во всех подробностях передать читателю все пережитые художником моменты, помимо внимания к его словам, голосу и поступкам, важно также обратить внимание на его радость, печаль, эмоции. Вот почему выразительные, осмысленные и многозначительные жесты используются в диалогах и спорах в литературных и художественных произведениях. При этом появляется возможность оживить состояние образа и имиджа более заметным образом.

В момент психологического напряжения, удивления, сожаления, изумления, ужаса, радости, печали и т.п. такие душевные моменты проявляются в заметном изображении на лице человека. Вот почему прозаики используют эти детали для создания портретного образа.

Сделать художественный образ более заметным и запоминающимся настоящий писатель может не только словами, но и с помощью мимики и жестов. Следует также отметить, что в большинстве случаев мимика и жесты более точны и надежны, чем слова, в передаче мыслей и чувств четко, осмысленно и выразительно. Мимика и жесты – наиболее естественные проявления психологического состояния человека. Таким образом, человек не может ни плакать, ни смеяться от души во лжи, не может создать искусственно трагическое изображение на

своем лице. В таких случаях могут проявиться мошенничество и лицемерие. Для сравнения отметим, что человек может что-то скрывать, лгать, обманывать и т. д. в зависимости от своих целей и намерений. Однако фальшивая мимика и жесты не могут правильно отражать психологическое состояние человека. А также, взгляды никогда не лгут. Не случайно глаза считаются зеркалом души.

Вербальная речь более полноценна при движениях кистей и рук, положении тела. Словом, мимика и жесты — очень удобные средства для индивидуализации и типизации образов.

Великие писатели (Гюго, Бальзак, Флобер, Толстой и др.) впервые испытали на себе духовно-психологические проблемы и потрясения образов. Именно тогда они смогли взволновать читателя, представив его на высоком художественном уровне. Читатель использует приёмы наглядного воображения, чтобы оживить в своём воображении художественные образы. В это время черты лица, мимика, движения рук, жесты и движения художественных образов и дают информацию о многом.

Мимика и жесты занимают большое место в искусстве театра и кино. Искусство пантомимы основано на мимике и жестах.

Фрагментарные же варианты мимики и жестов часто встречаются в произведениях искусства.

Люди могут обмениваться различными типами информации на разных уровнях понимания. Известно, что общение не ограничивается устными или письменными сообщениями. Тут также бывают задействованы эмоции, поведение и жесты партнеров. Поэтому важно обращать особое внимание не только на поведение собеседника, позу и мимику, а также и на жесты. Кроме того, успех любого дела зависит от умения установить тайную связь с собеседником. Эти отношения зависят не только от вашей речи, но и от вашего поведения.

Психологи определили, что 60–80 % общения между людьми осуществляется невербально, и только 20–40 % — вербально. Особенностью невербального языка является то, что его проявления формируются импульсами. Неспособность подделать эти импульсы позволяет нам полагаться на язык больше, чем на обычный вербальный канал общения. Потому, что не все могут контролировать свои жесты, мимику, позы. Глаза, движения являются своеобразными каналами утечки информации.

Можно перепроверить подлинность комментариев с помощью вопросов на уточнение и понимание. Этой возможностью не следует пренебрегать в деловых отношениях. Понимание языка мимики и жестов позволяет более точно определять позицию собеседника. Читая жесты, высказывается мнение, которое играет важнейшую роль во всем процессе делового взаимодействия. Сочетание жестов – важная составляющая таких отношений. Этим можно понять, вызывает ли речь собеседника у него одобрение или враждебность, является ли он открытым или закрытым, эгоцентричным или скучным? Если мы хотим добиться определенных результатов в отношениях с партнерами, собеседниками или просто коллегами, то нам необходимо знать хотя бы основы невербального общения.

В деловом общении каждый следит за собеседником, следит за темпом его действий и невербальным поведением. Умение «считывать» невербальные сигналы дает бизнесмену следующие преимущества:

можно распознавать изначально возникающие трудности на уровне отношений: «улавливать» сигналы о них, перестраиваться в ходе беседы, менять тактику беседы;

можно проверить правильность наблюдения, а также перепроверить правильность интерпретации полученных сигналов (например, появились слезы: они могут быть от боли и страдания, могут быть слезами радости и т. д.).

Паралингвистика и паралингвистические средства. Наука о языкознании под названием паралингвистика трактуется как область языкознания, изучающая ряд факторов (жесты, мимика, речевая ситуация и т. д.), сопровождающих голосовое речевое общение и играющих роль в предоставлении информации, и исследующая невербальную коммуникацию и методы.

Паралингвистика изучает все виды жестов (пантомимические, фонетические типы, громкость, тембр, тон, характерный эмоционально-экспрессивный тон, вариативность голоса и др.), все виды общения и другие семантически важные явления. Использование паралингвистических средств обусловлено характером общения. Такое общение наблюдается в живой речи, чаще в диалогической речи. Иногда более необходимо использовать в речи паралингвистические средства. В этом случае эмоциональный язык сопровождает вокальный

язык. В результате «характеризаторы» (смех, плач, шепот), «классификаторы» (высотность тона) и разделители (восклицания, кашель, чихание) и т. д. вызывает вокализацию.

Поскольку эмоциональность связана с психикой человека, то эмоции, радость, гнев, печаль, презрение и т.п. производятся языком тела. Предмет, изучающий семиотику движений тела, называется в лингвистике «кинезиологией».

К паралингвистическим средствам общения относится фонация. Здесь есть возможность определить характеристики человека по звуку. Фонация включает громкость, тембр, обертоны и дикцию.

Все паралингвистические средства могут быть объединены по своим функциям и служат для формирования информации.

Известный исследователь стилистики С. Балли показывает, что жесты и мимика играют вспомогательную роль в общении. Мимика может быть как произвольной, так и непроизвольной. О жестах С. Балли писал: «Жест на самом деле является материальной опорой человеческих эмоций».

Обычно, жесты проявляются двояко: символически и несимволически. В ритмических и несигнальных жестах жест в основном выражает функцию интонации, выделяет определенные речевые синтагмы, определяет синтаксические границы, подчеркивает логическое ударение.

В речи произношение предложений следует за ритмом. Сам ритм создается на основе повторения и замены однотипных жестов в результате повторения и замены одних и тех же интонаций. В результате возникает ситуация ускорения и замедления, усиления и ослабления речи. Монотонный характер ритма проявляется более отчетливо. Типы предложений понимаются через перечисление. Рецитация – это повторение сходных по интонации фрагментов речи. Все признаки в речевых фрагментах говорящий проявляет с помощью жестов. Жесты бывают эмоциональные, изобразительные, символические.

Эмоциональные жесты выполняют функцию соответствующих интонационных единиц. Только жестами невозможно передать какое-либо эмоциональное состояние. Жест, выраженный с помощью языковых единиц, еще больше усиливает интонационную выразительность.

Изобразительные жесты становятся прототипами жестов и на первый план выдвигаются их характерные стороны. Отличаются они друг от друга возможностью описания. В этих жестах какой-то языковой элемент становится представителем действия. Описательные жесты отражают конкретные внешние признаки.

Символические жесты отличаются от других жестов. То есть существует условная связь между означаемым и означающим. Символические жесты также имеют абстрактное содержание, причем абстрактное содержание связано с соответствующим жестом внутри определенного народа, племени. Самой главной чертой символических жестов является то, что их используют во время встречи и прощания.

Список литературы

1. Балли Ш. Общая лингвистика и вопросы французского языка (сборник) 2001.
2. Ботавина Р.Н. Этика деловых отношений: учебное пособие. – М.: Финансы и статистика, 2001. – 208 с.
3. Евгения Шестакова. Больше чем речь. Как управлять мимикой, жестами и интонацией. 2017-135с.
4. Пиз А. Язык телодвижения. Как читать мысли по жестам (Электронный ресурс) // Журнал «Флирт». – Электрон. журн. – Режим доступа: <http://flirtmag.com.ua/book/3/10>,
5. Пиз А. Харизма. Искусство успешного общения. Язык телодвижений на работе. 2019-111 с.

Philosophical sciences

TYPES OF FORECASTING AND ITS SIGNIFICANCE IN PLANNING TRANSPORTATION SYSTEMS

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Abstract

This article examines the interrelationship of forecasting with planning, programming, design, management and goal setting as one of the forms of concretization of scientific prediction in social and technical fields. It is also important to show parallel forecasting and planning, forecasting and designing. Studying based on setting goals for solving problems allows you to see the direction of the development of the problem in the future and identify emerging trends or causes that cause problems. This direction is developed in scientific theory, it is learned that the verification of any hypothesis is carried out by mental modeling of the future situation.

Keywords: forecasting, forecast development, technological forecasting, project, regulatory forecasting, Foresight method.

Forecasting, developing a forecast, in a narrow sense - is a special scientific study of specific perspectives of the development of the phenomenon. As one of the forms of concretization of scientific prediction in the social sphere, forecasting is interconnected with planning, programming, design, management and goal setting. It shows parallel forecasting and planning, forecasting and designing, developments. (targeted, planned, program, transport design, organizational forecasting). Research (genetic, research, research) and normative forecasting can be distinguished. The first goal, taking into account the observed trends, is aimed at obtaining a forecast of the future state of the object being studied, as they will not be changed by decisions (plans), projects, etc. The second means predicting ways to achieve the desired state of the object based on predetermined criteria, goals, standards.

Based on the target criterion, we can distinguish three types of predictions: normative, searching, complex:

Normative prediction - directed from the future to the present.

Search forecast - from the present to the future.

Complex prediction - includes elements of search and normative prediction. Complex forecasting also includes adaptive combined models that combine several adaptive models, which imply the formation of a basic set of the most promising models with a relatively simple structure.

The first two types of predictions (normative and exploratory) do not exist in their pure form (because they are interconnected and form continuous complexes).

The problem-oriented approach (method) of studying the future is the study of trends and emerging problems and the search for ways to solve them. The method involves scientific prediction. Developed by Russian scientist V.A. Bazarov-Rudnev.

Studying based on setting goals for solving problems allows you to see the direction of the development of the problem in the future and identify emerging trends or causes that cause problems. Historically, this direction developed in scientific theory, testing any hypothesis through mental modeling of the future situation. For example, any graph of quantities versus time shows the past, present, and future.

Search prediction (search, search) - defines the possible or expected state of a predictive event or object in the future. This means the conditional continuation of the development trends of the studied phenomenon in the past and in the present, on the basis of which they are abstracted from decisions or actions that can radically change the trends, in some cases can lead to self-change. execution or self-destruction.

Search prediction:

- in technological forecasting - one of two approaches to the future (the second approach is normative forecasting);

- in predicting social sciences (as opposed to natural science) - identifying emerging problems; search for possible (as a rule, problematic) cases of the studied object;

- in management systems - provides the ability to determine the prospective conditions of development, forms the main indicators describing the limitations of resources, directions of development, the possible state of science, technology, economy and culture.

Research predictions answer the question: "What might happen if current trends continue?" For example: A "greenhouse effect" is possible when the earth's temperature continues to rise.

The search forecast is built on a certain scale (area, spectrum), where the probability level of the predicted event is determined.

Types of search forecasting: design, research, search, trend, genetic, etc. The most commonly used project forecast is also available.

Project (prediction project, design prediction) - predicting accurate images of a certain event in the future, taking into account a number of conditions that do not yet exist. Such a prediction is intended to facilitate the selection of optimal options for long-term design, on the basis of which the actual, current design should be placed later. The project forecast answers the question: "how (more precisely) is it possible, what can it look like?". A combination of research and regulatory developments is also important here.

Normative forecast - determines the ways and times of reaching the possible state of the event, which is considered as a goal. In normative forecasting, the current situation is studied, its desired future state is selected, and a sequence of events is created that will ensure this state (it means predicting the achievement of desired states based on predetermined standards, ideals).

Normative prophecy "What are the ways to achieve what you want?" answers the question. Normative prediction (unlike search) is made in the reverse order: from the given state to the observed trends. This makes it similar to regulatory planning, software or project development. Such a forecast helps to develop recommendations to improve the level of objectivity and, as a result, the effectiveness of decisions.

Normative forecasting in management systems determines the level of needs based on the main task of social development. The social order of society is formed on its basis.

Normative environmental prediction takes into account the possibility and duration of additional processing of industrial and agricultural waste extraction and processing facilities with reduction of pollution sources. Types of normative prediction: targeted, organizational, programmatic, planned.

The goal is a prediction of the desired state, in which the construction of the possibilities of the pure evaluation function is carried out on a certain scale (field, spectrum), that is, distribution functions (orientation) of preference: undesirable - less desirable - more desirable - most desirable - optimal (compromise on several criteria with arrival).

A target prediction is "exactly what and why?" answers the question.

Organizational - prediction of current decisions (in relation to the management area) to achieve the intended desired event, set goals. Comparison of the results of research and regulatory developments should cover the entire range of organized activities and thereby increase the overall level of management. Organizational prediction is "in what direction should the decision be directed to achieve the goal?" answers the question.

Programmatic is a prediction of possible methods, measures and conditions for achieving the expected desired state of the predicted event. Program prediction answers the question: "what exactly is needed to achieve the desired thing?". Both research and normative predictive developments are important to answer this question. The first identifies the problems that must be solved to implement the program; the second defines the implementation conditions. Program forecasting should form a hypothesis about the possible interaction of various factors, indicate the hypothetical time and sequence of achieving intermediate goals on the way to achieving the main thing. This completes the selection of development opportunities for the research object, which began with planned forecasting.

Planned - a prediction of the progress (or failure) of plans. It is the development of research and regulatory forecasting data to select the most optimal planning standards, tasks, instructions, which identify the undesirable alternatives that need to be eliminated and comprehensively determine the direct and long-term, indirect consequences of the planned decisions.

Planned prediction answers the following question: "How to direct the planning in this direction, to more effectively achieve the set goals?"

Forecasts must precede plans, assess the consequences of the implementation (or failure) of plans, cover everything that cannot be planned and resolved. A forecast and a plan differ in the way they process information about the future. They can develop independently of each other. But for a plan to be

effective and acceptable, it must be preceded by a continuous forecast that allows scientific justification of this and subsequent plans.

For example, there are several methods for forecasting the transportation industry. Although there are expert methods, developed countries such as Germany, Japan, Great Britain are currently actively using the popular Forsite technology method. This is to determine the ways of science and technology development and to assess their impact on socio-economic development.[1] The foresight method is based on the opinion and intuition of experts, its essence is based on the development of new technologies, which consists in the formation of consistent views of experts about prospects [2].

Management processes The Forsaint method, despite its widespread use, has a number of obvious disadvantages. For example, participants can support the ideas of an experienced or qualified expert. It is often possible for an expert to reject new facts that contradict his worldview, to conclude according to his own opinion. Subjectivism can be stronger. it is impossible not to talk about scientificity created with the help of formalized, that is, about the methods of forecasts. For example, the Price Waterhouse Coopers Corporation (USA) and their "World in 2050" forecast [3] is based on mathematical modeling based on a simplified model of endogenous economic growth, taking into account human development. RAND Corporation forecast "Global technological revolution 2020" [4]. Unfortunately, it is not yet possible to assess the accuracy of these forecasts, and their compilation requires significant costs, and it is quite difficult to apply them in practice in underdeveloped or developing countries.

An important advantage of the ForFITS model is that the availability of data to make forecasts of the development of transport systems and CO2 emissions in countries such as France, Montenegro, Hungary, and Chile. requires the development of new models of creation. The initial calculations in the ForFITS model of the development parameters of the passenger transport subsystem of Uzbekistan, including all types, show the main types of private motorized and non-motorized transport, as well as the main types of public transport from taxi to airplane.

The trends formed during the years of independence are causing negative dynamics of the basic gross income.

The current situation in Uzbekistan does not allow to meet the high requirements of complex mathematical models for planning the development of transport systems. It requires the use of predictive models at the initial stage of planning, they need to realistically assess the main parameters of industrial activity while maintaining the existing development trends. A good tool for such compilation is used by the organization of the European Economic Commission, the United Nations, and several countries with successful examples [6]. However, the use of this model for Uzbekistan, which indicates that there are trends in the transport sector at the stage of economic restructuring, leads to an overly pessimistic long-term forecast for the development of the passenger. In order to obtain a realistic forecast, it is necessary to thoroughly study and evaluate all input parameters of the model, the level of influence of each parameter on the forecast result, and shorten the forecast time by at least 15-20 years. The long-term forecast, however, according to a number of indicators, it enters the negative region. The main reason for this is the initial level of initial data estimation, often by expert method, which does not allow reasonable calibration of the model. Therefore, first of all, it is necessary to form a reliable and calculated base of information for transfer.

References

1. Горбачев П.Ф. Самчук А.А. Анализ метода прогнозирования развития транспортных систем. Восточно-Европейский журнал передовых технологий // 2/3 (68) 2014. СТР 29-34.
2. Салимьянова, И. Г. Форсайт как инструмент определения приоритетных направлений науки и технологий [Электронный ресурс] // Современные наукоемкие технологии. – 2011. – № 1 – С. 95–97. – Режим доступа: www.rae.ru/snt/?section=content&op=show_article&article_id=6724// – 24.02.2014. – Загл. с экрана.
3. Pricewaterhouse, Coopers. The World in 2050. The perspectives of development of the economics of the countries with developing markets in process and competition of OECD [Text] / Coopers Pricewaterhouse, 2006. – 22 p.
4. Richard, S. RAND, The global technology revolution 2020: in depth analyses: [Text] / S. Richard, S. Philip, D. Howell, A. Wong. – RAND, 2006. – 314 p.
5. Wilson, D. Dreaming with BRICs: The Path to 2050 [Text] / D. Wilson, R. Purushothaman. – Goldman Sachs Global Economics Paper 99, 2003. – 24 p.

6. Кузык, Б. Н. Прогнозирование, стратегическое планирование и национальное программирование [Текст]: учеб. / Б. Н. Кузык, В. И. Кушлин, Ю.В. Яковец; 2-е изд., перераб. и доп. – М.: Экономика, 2008. – 575 с.

Technical sciences

INNOVATIVE APPLICATIONS AND OBSTACLES OF ARTIFICIAL INTELLIGENCE IN THE DIAGNOSIS AND TREATMENT OF HIGH MYOPIA AND PATHOLOGIC MYOPIA IN THE FIELD OF OPHTHALMOLOGY

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Abstract

Myopia, a prevalent global health concern, has witnessed a substantial rise in high myopia cases over the past several decades. The significant incidence of myopia and its potential to cause vision-related complications highlight the necessity for automated screening methods to identify high myopia and its severe variant, known as pathologic myopia (PM). In the medical field, artificial intelligence (AI)-based applications have been extensively employed, particularly in the analysis of ophthalmic images for disease diagnosis and prognostication. However, unlike disorders primarily characterized by pathological changes in the fundus, high myopia and PM generate a larger volume of data, requiring analysis of both ophthalmic information and morphological alterations in the retina and choroid. In this review, we elucidate the utilization of AI techniques in diagnosing and managing high myopia, PM, and other ocular conditions. Furthermore, we discuss the current capabilities of AI in supporting the prevention of high myopia.

Keywords: *diagnosis and management; high myopia; pathologic myopia; artificial intelligence; machine learning; deep learning*

Introduction

Myopia represents a significant global health concern, with a notable increase in prevalence over the past five to six decades [1]. In urban regions of countries such as China, Taiwan, Hong Kong, Japan, Singapore, and South Korea, approximately 80-90% of high school students exhibit myopia, and 10-20% of them suffer from high myopia [1, 2]. Similar prevalence rates have been observed in North America, Germany, Spain, and Russia [2]. This worldwide surge in myopia and pathologic myopia (PM) prevalence suggests a future escalation in myopia-related visual impairment on a global scale [2]. The scarcity of specialized myopia practitioners has become a pressing concern for governmental authorities, leading to the implementation of national policies to control myopia, notably in China [2].

In eyes affected by PM, there is an elongation of the axial length and the presence of a posterior staphyloma, an abnormality of the posterior segment of the eye [1]. The resulting deformation of the sclera mechanically damages the neural retina, leading to visually impairing pathological changes within the macular region. This condition, referred to as myopic maculopathy, represents the primary vision-threatening complication. Furthermore, the financial burden associated with myopia is substantial, with reported costs exceeding \$700/year per myopic patient in Singapore and \$17,000 over their lifetime [2]. In China, it is estimated that myopia-related productivity loss amounts to approximately \$244 billion annually [2]. These figures underscore the escalating severity of myopia as a public health issue and its significant economic impact. Due to the progressive and irreversible nature of myopic maculopathy, interventions aimed at preventing the progression of myopic eyes to PM, continuous monitoring, and strategies to slow down the progression of PM are strongly recommended.

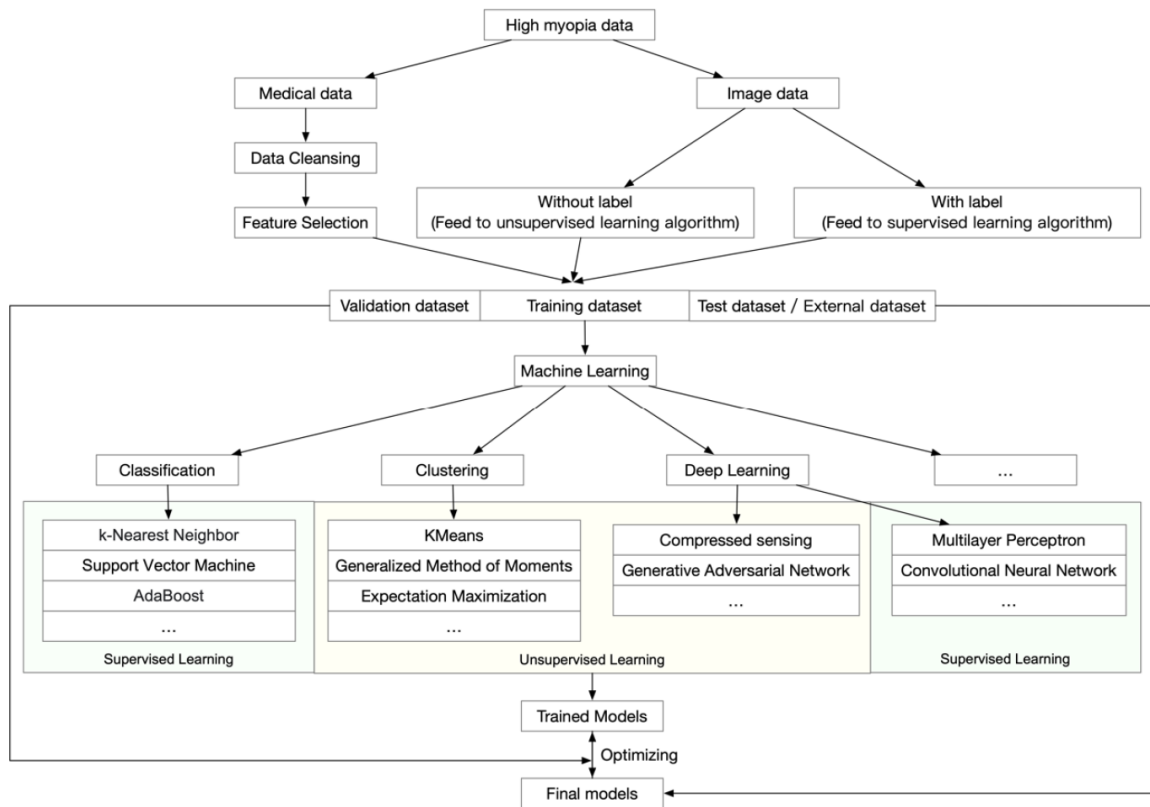


Figure 1 illustrates the overall process flow of artificial intelligence (AI) analyses conducted for the examination of high myopia and pathologic myopia.

In this review, we explore the application of artificial intelligence (AI) in diagnosing and managing high myopia and pathologic myopia (PM).

AI Driven by Data in the Context of High Myopia and Pathologic Myopia

Pathologic myopia (PM) is characterized by elongation of the axial length of the eye, leading to morphological changes in various ocular structures such as the sclera, choroid, Bruch's membrane, retinal pigment epithelium, and neural retina. Additionally, highly myopic eyes often exhibit high refractive errors and related ophthalmic changes, which can be further exacerbated by refractive or cataract surgeries. Consequently, the long-term follow-up of high myopia generates a substantial amount of data that requires efficient methods for analysis and interpretation.

In the past, data collection in the context of myopia management suffered from non-integrated and fragmented procedures, resulting in redundant and inconsistent data. This compromised the accuracy of diagnosis and impeded effective management of myopic eyes. However, the advent of digital hospital information systems has provided an opportunity for more comprehensive and theoretically sound understanding of PM through the analysis of larger datasets.

Data-driven studies employing artificial intelligence (AI) techniques, particularly machine learning (ML), have proven effective in extracting valuable information and patterns from extensive datasets. ML algorithms such as kernel ridge regression, support vector machines (SVM), nearest neighbors, Gaussian processes, naive Bayes, random forests, neural networks, extreme gradient boosting (XGBoost), and light gradient boosting machine (LightGBM) have been utilized to categorize and predict data in the context of high and pathologic myopia. These models have demonstrated the ability to predict refractive errors and the risk of high myopia in school-aged children, with high performance metrics such as coefficient of determination (R^2), root mean square error (RMSE), mean absolute error (MAE), and area under the receiver operating curves (AUC).

Given the high incidence of myopia in various regions, early monitoring of high myopia becomes crucial, prompting the need for AI-assisted screening techniques. Several data-driven studies have employed deep learning (DL) models to address real-world problems associated with high myopia. ML models have also been developed to analyze eyes with high myopia, utilizing techniques such as wavefront aberrometry values and the XGBoost algorithm to predict subjective refractive errors with good accuracy.

In summary, data-driven AI approaches, particularly ML and DL, have demonstrated their potential in diagnosing and managing high myopia and PM. These techniques leverage large datasets and powerful

algorithms to provide insights, improve clinical practice, inform health policy-making, and enable precise individualized interventions for myopia control.

Research	Year	Materials	Participants	AI Methods	Main Outcome	Evolutions and Performance
Lin, H. et al. [50]	2018	Refraction data	School-aged children	ML	Predicting the presence of high myopia	AUC: 0.802–0.976
Kaya, C. et al. [53]	2018	electrooculographic data	Adults (25–65 years old)	ML	Detecting hypermetropia and myopia refractive disorders	Sensitivity: 95.5%; specificity: 96%; classification accuracy: 90.91%
Ye, B. et al. [55]	2019	luminance, ultraviolet light levels, and step number data	Myopia patients	ML	Differentiating indoor and outdoor locations	Accuracy: 0.827–0.996; AUC: 0.90–0.99
Rampat, R. et al. [51]	2020	Wavefront aberrometry data	General population	ML	Predicting subjective refraction	mean absolute error: 0.094–0.301 diopters
Tang, T. et al. [54]	2020	Medical data	School-age myopic children	ML	Estimating physiological elongation of axial length	R square equals 0.87
Wei, L. et al. [52]	2020	Medical data	Myopia patients	ML	Improving the accuracy of IOL power predictions	mean absolute error: 0.25–0.29; median squared errors: 0.06–0.09 Accuracy equals 0.92–0.93; Precision equals 0.95; Sensitivity equals 0.94; f1 equals 0.94; AUC equals 0.98; Specificity equals 0.94 Combined weight: 77%; Accuracy: over 80%
Yang, X. et al. [56]	2020	Medical data	Primary school children	ML	Studying influence of related factors on incidence of myopia in adolescents	
Li, S.M. et al. [57]	2022	Medical data	Primary school children	ML	Detecting risk factors for myopia progression	

Table 1. Overview of data-driven artificial intelligence (AI) models applied in the context of high myopia and pathologic myopia.

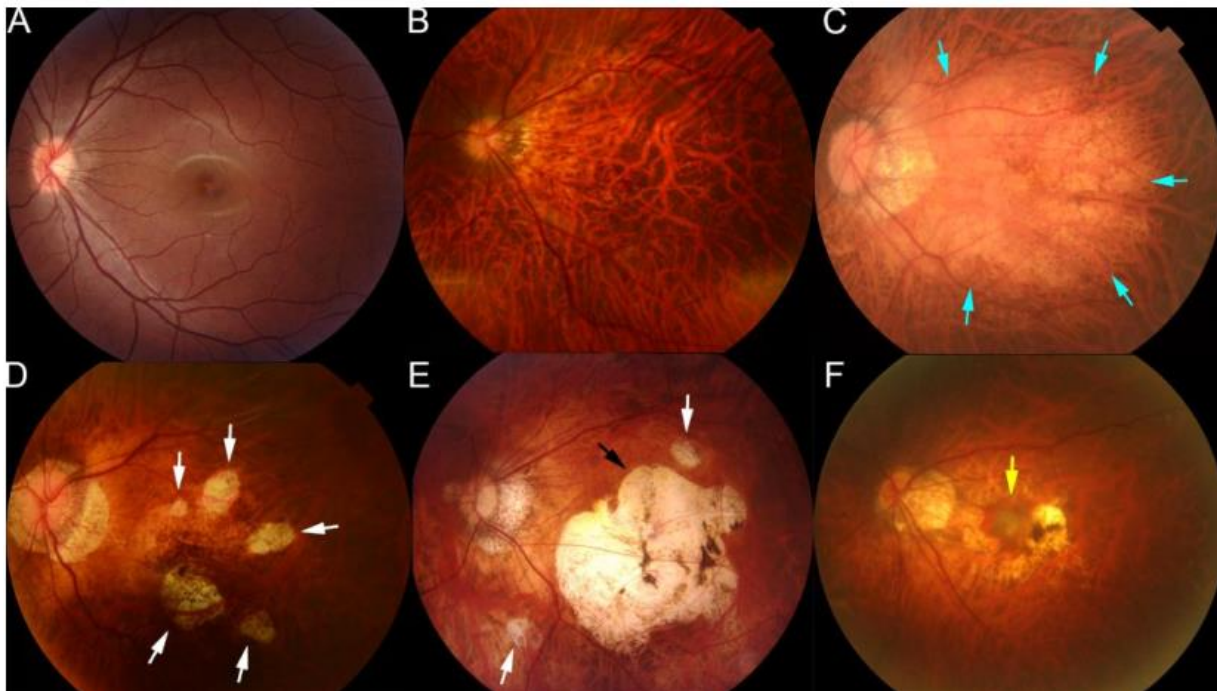


Figure 2 illustrates a collection of representative fundus photographs showcasing various types of maculopathy lesions in eyes affected by pathologic myopia. The images captured depict: A) A normal fundus image. B) Tessellated fundus. C) Diffuse atrophy surrounding the optic disc and posterior fundus (indicated by blue arrows). D) Patchy atrophy fundus (indicated by white arrows). E) A

fundus image from a left eye displaying macular atrophy at the center of the posterior fundus (indicated by a black arrow). Patchy atrophy (white arrow) and a background of diffuse atrophy are also visible. F) Fundus image exhibiting myopic choroidal neovascularization at the center of the fundus (indicated by a yellow arrow).

This figure has been reproduced from the publication "Deep Learning Approach for Automated Detection of Myopic Maculopathy and Pathologic Myopia in Fundus Images" (Volume 5, Pages No. 1235-1244), with permission granted by Elsevier.

Conclusion

In summary, the prevalence of high myopia and pathologic myopia (PM) is rapidly increasing, necessitating long-term monitoring and timely interventions. Given the uneven distribution of medical resources, future studies utilizing artificial intelligence (AI) should prioritize telemedicine, as it can be easily and efficiently deployed in rural areas where access to myopia specialists is limited. This approach would greatly aid in the screening and management of high myopia in underserved regions. To facilitate personalized monitoring and treatment for highly myopic eyes, there is a need for rational policy support and deeper collaboration. However, the relevance and effectiveness of AI in myopia management remain subjects of debate. Before the widespread adoption of AI in high myopia healthcare, it is crucial to address various technological and clinical challenges.

References

1. Morgan, I.G.; Ohno-Matsui, K.; Saw, S.M. Myopia. *Lancet* 2012, 379, 1739–1748. [CrossRef]
2. Dong, L.; Kang, Y.K.; Li, Y.; Wei, W.B.; Jonas, J.B. Prevalence and time trends of myopia in children and adolescents in China: A Systemic Review and Meta-Analysis. *Retina* 2020, 40, 399–411. [CrossRef] [PubMed]
3. Lin, L.L.; Shih, Y.F.; Hsiao, C.K.; Chen, C.J. Prevalence of myopia in Taiwanese schoolchildren: 1983 to 2000. *Ann. Acad. Med. Singap.* 2004, 33, 27–33. [PubMed]

Veterinary sciences

THE DYNAMICS OF CALVES' VIABILITY AND GROWTH RELATED TRAITS UNDER THE EFFECTS OF UNIDIRECTIONAL BREEDING PROGRAM -(STUDY REPORT)-

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Abstract

The aim of the current study was to investigate the dynamics of calves' herds' structure according to viability and growth related traits, over the years. The share of viable calves records an increasing trend according to the dams parity (71.62 % in the first lactation compared to 75.55 % in the 5th lactation, $p > 0.36$). Calf body weight at birth recorded an increasing dynamics in the sequence of experimental periods (34.15 ± 0.43 kg to 37.55 ± 0.28 kg, $p \leq 0.001$). The average body weight of calves at 90 days recorded a decreasing tendency in the subsequent study intervals (101.79 ± 1.16 kg to 98.33 ± 0.83 kg, $p \leq 0.016$). The viable calves highlighted at the age of 90 days an average body weight that is clearly superior (101.47 ± 0.48 kg) compared to morbid calves (95.92 ± 0.16 kg), $p \leq 0.001$, also a significantly increased growth rate (0.729 ± 0.08 kg / day) compared to morbid calves (0.669 ± 0.09 kg), the differences computed being significantly ($p \leq 0.001$). The obtained outcomes could be successfully include in the early assessment of animal welfare under actual rearing systems. Moreover, the results could constitute a solid argument for new approaches in appraising the extent to which varied environmental and technical factors have an influence on the welfare of animals of economic interest.

Keywords: calves welfare, rearing system, Romanian Spotted, viability

Introduction

The current survey aimed the changes in calf welfare under the effects of several non-genetic influential factors. Concurrently, the issues of ensuring 0-3 month-old calf welfare is approached from a new angle, based on the dynamics of calf livestock structure according to potentially influential factors. The proposed topic is entirely in line with current scientific concerns, as seen both at a national and international level as regards the identification of factors that have an influence on animal welfare, the degree of their influence and also in respect to new methods of assessing animal welfare in order to optimize process flows in farms.

The obtained outcomes could be successfully include in the early assessment of animal welfare under actual rearing systems. Moreover, the results could constitute a solid argument for new

approaches in appraising the extent to which varied environmental and technical factors have an influence on the welfare of animals of economic interest.

The survey on the dynamics of calf livestock structure, as related to certain influential factors, offers a relatively precise image on how processes of genetic improvement and used husbandry technology can influence animal welfare. In the same respect, the study of certain biometrics data for size and relationships between varied body measures of animals, as related to experiment periods, the order of delivery and dam productivity level, supplies elements that can reveal the influence of these factors on the viability of conception products in a close relationship with their welfare and also as related to the degree and path of animal genetic improvement.

Materials and method

All tests related to the current research were observational and non-invasive. Ethical issues of this study were evaluated according to the European Union's Directive for animal experimentation (Directive 2010/63/EU). The study was approved by the Scientific Council at the Research and Development Station for Bovine Arad through the Decision no. 51 issued on November 11, 2015.

Location: The study was performed at the Research and Development Station for Bovine Arad, Romania (location: 46° 10' 36" N, 21° 18' 4" E, 107 m altitude).

The study aimed at a dynamics assessment in the calves' livestock structure in relation to experiment periods, order of lactation of dams and their productivity level, respectively. The survey also proposes an assessment of effects that improvement programs implemented in adult cattle livestock to enhance their productive capacity have over the welfare of new-born calves. In this case, calf welfare has been appraised based on the viability given by type of delivery, how calving took place in direct relation to cow age and productive level.

The biologic material consisted in a total count of 407 calves and 305 dams, from the Romanian Spotted breed (Bălțată Românească). The structure of calf livestock was based on the following criteria:

- calf viability: viable, morbid, non-viable;
- order of lactation in dams: 5 orders of lactation were taken into consideration (L1-L5);
- dam productivity: Level 1 (5,000-6,000 kg milk / normal lactation), Level 2 (6,001-7,000 kg milk / normal lactation), Level 3 (over 7,000 kg milk / normal lactation).

Calf viability was assessed in the first 30 minutes after birth based on respiratory rate, response to nasal stimulation and pedalling reflex.

The dynamics of calves' body weight at birth was recorded and statistically processed related to the body weight at birth of calves included in the survey. A livestock of 407 head from the Romanian Spotted breed (Bălțată Românească) was included. Calves were weighted immediately after birth. The study wants to appraise calf body weight at birth in relation to experiment period, calving season as well as the gender of conception products. Body weight at birth is also assessed in relation to calf viability, aiming to establish a match between them and, eventually, a certain direction of the influence that initial weight may have on viability. Body weight at birth was also appraised in relation to dam dependent factors, and we mention here: order of lactation and dam productivity, in an attempt to establish a correlation between their metabolic state and new-born calf well-being. Last but not least, the present study proposes a dynamics appraisal for calf body weight at birth in relation to their viability, type of delivery that produced them and how their calving took place. The development in time for this parameter comes to complete the overview of effects that some improvement programs applied to adult cow livestock and not only have (some aimed even at an increase in the weight of calves at birth) exerted on new-born calf well-being. Dynamics of calves' body weight at 90 days of age aim to appraise the calves' development (total increase, average daily increase) in the 0 – 90 days age interval. Surveys were conducted on a livestock of 373 head from the Romanian Spotted breed (Bălțată Românească). In-house performances were thus appraised as regards development rate, the influence level of studied factors and differences occurring in terms of body weight at the end of the experiment period for varied groups of calves. Development was appraised based on the individual daily average increase recorded; experiment data were statistically processed and, based on generated results, conclusions were drawn pertaining to how studied influence factors determine the process of development. Factors having a potential to influence and that were taken into consideration were the year of birth in order to appreciate the in-time dynamics of this parameter and, implicitly, the effect that improvement programmes applied to increase body weight at birth have on calf capacity to gain weight, the birth season in order to identify a potential effect it may have on growth rate and, implicitly, the optimization of rearing and caring conditions, calf gender. The impact that calf viability exerts on calf development rate in the 0-90 days interval underlines potential productive losses caused by a poor welfare of calves in the livestock. Calf

development rate was also appraised in relation to dam dependent factors, and an assessment was conducted on the impact that lactation order and, implicitly, the general state of adult cows have on the capacity of body weight gain in conception products. The effect of dam production level on calf growth performances was also studied via the impact that improvement programmes have on their physiological capacity to deliver viable conception products, capable to externalize their productive potential for production and, later on, for reproduction.

The dynamics of calf growth rate during the 0-90 day's interval, in the sequence of experiment periods, lactation orders, as well as productive levels was conducted in relation to their viability, the type of delivery that produced them and how their calving took place.

Differences between means were tested with the posthoc qi square test and were defined as being statistically significant at $p < 0.05$. The analysed data were expressed as least square means and standard errors of the mean. All the statistical inferences were carried out using the software package Statistica (StatSoft Inc., Tulsa, OK USA).

Results

The assessment of the calves' livestock structure dynamics. In the first experiment period, observations were conducted on a livestock of 89 head, representing 21.86 % of the livestock total. In the second experiment period, observations were conducted on a livestock of 200 head, representing 49.15 % of the livestock total. In the third experiment period, observations were conducted on a livestock of 118 head, representing 28.99 % of the livestock total.

The monotocic calf livestock consists of 351 calves, representing 86.24% of the livestock total. The twin calves livestock consists of 56 calves representing 13.76% of the livestock total.

The eutocic calf livestock consists of 310 calves representing 76.16% of the livestock total. The dystocic calf livestock consists of 97 calves representing 23.84% of the livestock total.

The viable calf livestock consists of 285 calves representing 70.02% of the livestock total. The morbid calf livestock consists of 88 calves representing 21.62% of the livestock total. The non-viable calf livestock consists of 34 calves representing 8.36% of the livestock total.

The share of viable calves records a rising trend in relation to the order of lactation in dams, 71.62 % consisting of 53 head in the first lactation as compared to 75.55 % consisting of 34 head in the 5th lactation, $p > 0.36$. The share of morbid calves records a decreasing trend in relation to the order of lactation in dams, 17.56 % consisting of 13 head in the 1st order, as compared to 13.33 % consisting of 6 head in the 5th lactation, $p > 0.2$. The share of non-viable calves records a decreasing trend in the sequence of the first four orders of lactation in dams, 10.82 % consisting of 8 head in the 1st order as compared to 5.14 % consisting of 4 head in order 4, $p \leq 0.001$. The share of calves produced in monotocic deliveries shows a decreasing trend in the sequence of lactation orders, 89.18 % consisting of 66 head in the 1st order as compared to 77.77 % consisting of 35 head in order 5, $p \leq 0.043$. The share of calves produced in eutocic deliveries shows a rising trend in the sequence of the first three orders of lactation, 72.97 % consisting of 54 head in the 1st order as compared to 80.8 % consisting of 80 head in order 3, $p \leq 0.02$. The share of calves produced in eutocic deliveries shows a decreasing trend in the sequence of the higher orders of lactation, 71.11 % consisting of 32 head in order 5 and these values are comparable to those recorded in order 1, $p > 0.09$. The share of calves produced in dystocic deliveries shows a decreasing trend in the sequence of the first three orders of lactation, 27.03 % consisting of 20 head in the 1st order as compared to 19.2 % consisting of 19 head in order 3, $p \leq 0.007$. The share of calves produced in dystocic deliveries shows a rising trend in the sequence of higher orders of lactation, 28.89 % consisting of 13 head in order 5 and these values are comparable to those recorded in the 1st order, $p > 0.06$. The share of viable calves shows a decreasing trend in the sequence of productive levels in dams, 75.89 % consisting of 148 head for the 1st level as compared to 60.86 % consisting of 28 head for the 3rd level, $p \leq 0.001$. The share of morbid calves shows a rising trend in the sequence of productive levels in dams, 18.46 % consisting of 36 head for the 1st level as compared to 30.43 % consisting of 14 head for level 3, $p \leq 0.001$. The share of non-viable calves shows a rising trend in the sequence of productive levels in dams, 5.65 % consisting of 11 head for the 1st level as compared to 8.71 % consisting of 4 head for level 3, $p \leq 0.001$. The share of calves produced in monotocic deliveries shows a decreasing trend in the sequence of productive levels in dams, 90.76 % consisting of 177 head for the 1st level as compared to 78.26 % consisting of 36 head for level 3, $p \leq 0.001$. The share of calves produced in twin deliveries shows a rising trend in the sequence of productive levels in dams, due to their high capacity for metabolic rebalance, 9.24 consisting of % 18 head for the 1st level as compared to 21.74 % consisting of 10 head for level 3, $p \leq 0.001$. The share of calves produced in dystocic deliveries records a rising trend in the sequence of productive levels, in conjunction with a rise in the share of calves produced in twin deliveries,

22.57 % consisting of 44 head for the 1st level as compared to 37.79 % consisting of 16 head for level 3, $p \leq 0.008$. The share of calves produced in eutocic deliveries shows a slightly rising trend in the sequence of experimental periods, 79.77 % consisting of 71 head in the first period as compared to 80.5 % consisting of 95 head in the 3rd period, $p > 0.47$. The share of calves produced in dystocic deliveries records a decreasing trend in the sequence of experimental periods, 20.23 % consisting of 18 head in the first experiment period as compared to 19.5 % consisting of 23 head in the 3rd period, $p > 0.62$.

The study underlines medium matches between calf viability level and some factors bearing influence potential (year of delivery, type of delivery, how calving took place). A specific dynamics in calf groups can be noted in gathered data in relation to experiment periods, type of delivery and how calving took place.

The dynamics of calves' body weight at birth

Calves were weighted immediately after birth. The study wants to appraise calf body weight at birth in relation to experiment period, calving season as well as the gender of conception products. Body weight at birth is also assessed in relation to calf viability, aiming to establish a match between them and, eventually, a certain direction of the influence that initial weight may have on viability. Body weight at birth was also appraised in relation to dam dependent factors, and we mention here: order of lactation and dam productivity, in an attempt to establish a correlation between their metabolic state and new-born calf well-being. Last but not least, the present study proposes a dynamics appraisal for calf body weight at birth in relation to their viability, type of delivery that produced them and how their calving took place. The development in time for this parameter comes to complete the overview of effects that some improvement programs applied to adult cow livestock and not only have (some aimed even at an increase in the weight of calves at birth) exerted on new-born calf well-being. Calf body weight at birth shows a decreasing dynamics in the sequence of experimental periods. Thus, the first period records average weights of 34.15 ± 0.43 kg, followed, in the second period, by average values that reach the threshold of 36.04 ± 0.29 kg, generating statistically supported differences ($p \leq 0.001$). The third experiment period records average values for calf body weight at birth of 37.55 ± 0.28 kg, which are significantly higher ($p \leq 0.001$) than the baseline.

In the sequence of lactation orders, calf body weight at birth shows a decreasing trend for higher orders of lactation, without significant differences. In this respect, average values were computed for calf body weight at birth as related to dam lactation order, and the results were 36.43 ± 0.46 kg for calves produced by primipara cows, 35.95 ± 0.41 kg for calves produced by secundipara cows ($p > 0.44$), 36.03 ± 0.38 kg for calves belonging to the 3rd order of lactation in dams ($p > 0.5$), 35.67 ± 0.48 kg in the 4th order of lactation ($p > 0.25$), and 35.58 ± 0.55 kg, respectively, for calves produced by cows in the 5th order of lactation ($p > 0.24$). High productivity reduces calf body weight at birth, but the recorded differences are not statistically supported. Calves coming from dams with a low milk production (production level 1) have an average weight at birth of 35.75 ± 0.27 kg as compared to values belonging to the 2nd production level of dams (36.3 ± 0.31 kg) for which differences do not prove statistical support $p > 0.19$. High milk productions lead to a slight reduction in calf body weight at birth, as recorded values are 35.68 ± 0.68 kg and differences bear no statistical significance $p > 0.17$. Body weight at birth proved to be a feature strongly related to year ($R = 0.29$) and calving season ($R = -0.17$), offspring gender ($R = 0.52$) and type of delivery ($R = 0.31$). Body weight at birth does not have a significant correlation to calf viability ($R = -0.04$), although there are mathematical differences recorded in this respect. Thus studies reveal an average body weight of viable calves at birth of 35.84 ± 0.21 kg, average values of 35.62 ± 0.52 kg for morbid calves and 37.92 ± 0.63 kg for non-viable calves, respectively. Recorded differences between viable and morbid calves did not prove to be statistically supported $p > 0.7$, but differences from the group of non-viable calves were significant $p \leq 0.003$.

Dynamics of calves' body weight at 90 days of age

The dynamics of calf growth rate during the 0-90 day's interval, in the sequence of experiment periods, lactation orders, as well as productive levels was conducted in relation to their viability, the type of delivery that produced them and how their calving took place. In the sequence of experiment periods, both calf growth rate and calf body weight at the age of 90 days show a decreasing trend.

The first experiment period records an average body weight of calves at 90 days of 101.79 ± 1.16 kg corresponding to a growth rate of 0.751 ± 0.01 kg / day. Calves enrolled in the survey in the second experiment period show, at the age of 90 days, an average body weight of 100.54 ± 0.62 kg corresponding to a growth rate of 0.72 ± 0.005 kg / day. The decreasing trend of this parameter does not show significant differences in relation to body weight ($p > 0.34$). Statistically supported differences are generated for growth rate, $p \leq 0.012$. The average body weight of calves belonging to the third

experiment period reach the threshold of 98.33 ± 0.83 kg, corresponding to a growth rate of 0.67 ± 0.008 kg / day. Significant differences ($p \leq 0.016$) were calculated as related to the average body weight recorded in the first experiment period. Moreover, the growth rate belonging to the third experiment period is significantly low; differences are statistically supported ($p \leq 0.001$).

Calves coming from primipara cows had, at the age of 90 days, an average body weight of 98.59 ± 1.08 kg, following a growth rate of 0.691 ± 0.08 kg / day. Calves coming from secundipara cows had, at the age of 90 days, an average body weight of 100.76 ± 0.89 kg, following a growth rate of 0.724 ± 0.08 kg / day. No significant differences were recorded as compared to values pertaining to the 1st order of lactation $p > 0.12$ for body weight and $p > 0.26$ for growth rate. Calves belonging to the 3rd order of dam lactation showed, at the age of 90 days, an average body weight of 100.02 ± 0.99 kg, which values are comparable to those of calves coming from primipara cows ($p > 0.33$). The growth rate of 0.697 ± 0.09 kg / day does not generate statistically supported differences as compared to values belonging to calves coming from primipara cows ($p > 0.34$). Calves belonging to the 4th order of dam lactation showed, at the age of 90 days, an average body weight of 100.66 ± 0.91 kg, values which are comparable to those of calves coming from primipara cows ($p > 0.14$). The growth rate of 0.723 ± 0.07 kg / day does not generate statistically supported differences as compared to values belonging to calves coming from primipara cows ($p > 0.91$). Calves belonging to the 5th order of dam lactation showed, at the age of 90 days, an average body weight of 100.67 ± 1.69 kg, values which are comparable to those of calves coming from primipara cows ($p > 0.3$). The growth rate of 0.721 ± 0.1 kg / day does not generate statistically supported differences as compared to values belonging to calves coming from primipara cows ($p > 0.86$).

Calves coming from dams enlisted in the first production level (5000-6000 kg milk) show, at the age of 90 days, an average body weight of 100.42 ± 0.58 kg related to a growth rate of 0.72 ± 0.07 kg / day. Calves coming from dams enlisted in the second production level (6000-7000 kg milk) show, at the age of 90 days, an average body weight of 100.22 ± 0.83 kg related to a growth rate of 0.713 ± 0.09 kg / day. As compared to calves belonging to the first production level, no statistically supported differences were recorded as compared to average body weight ($p > 0.84$) and growth rate ($p > 0.41$) respectively. Calves coming from dams enlisted in the third production level (> 7000 kg milk) show, at the age of 90 days, an average body weight of 98.83 ± 1.54 kg related to a growth rate of 0.733 ± 0.09 kg / day. As compared to calves belonging to the first production level, no statistically supported differences were recorded as compared to average body weight ($p > 0.33$) and growth rate ($p > 0.26$), respectively.

Viable calves show at the age of 90 days an average body weight that is clearly superior (101.47 ± 0.48 kg) as compared to morbid calves (95.92 ± 0.16 kg) and differences computed for comparison beeing statistic significance ($p \leq 0.001$). Viable calves show a significantly increased growth rate (0.729 ± 0.08 kg / day) as compared to morbid calves (0.669 ± 0.09 kg) and differences computed for comparison bear statistic significance ($p \leq 0.001$). Body weight at the end of the survey period is strongly linked to body weight at birth ($R=0.49$), on which it is mostly dependent, and it is also linked to the type of delivery ($R=0.36$) or to calf viability ($R=-0.25$).

Conclusions

The survey on the dynamics of calf livestock structure, as related to certain influence factors, offers a relatively precise image on how processes of genetic improvement and husbandry could influence the animal welfare. In this respect, the current study offer several supplies elements that could reveal the influence of these non-genetic factors on the calves' viability, in a close relationship with their welfare and also as related to the degree and path of animal genetic improvement.

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